



## The Effects of Financial Knowledge and Financial Socialization on Financial Satisfaction: The Role of Attitude towards Financial Risk and Financial Behavior

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### ABSTRACT

The aim of this study was to evaluate the effects of financial knowledge and financial socialization on financial satisfaction considering the role of attitude towards financial risk and financial behavior. This study was a descriptive-correlation based on gathering information and an applied research based on its purpose. The statistical population of research consists of all investors in investing funds in Tehran whom have active trading code in year 1397. Referring to Cochran's sampling formula, a number of 384 investors were selected among 2333558 investors through in access sampling method and validated questionnaires of study distributed among them. The validity of questionnaires assessed by experts and its reliability evaluated by Cronbach's alpha, which found greater than 0.7 for all variables. The structural equation modeling used to analyze data and test hypotheses. Findings showed that there is positive and significant relationship between financial knowledge and financial socialization with attitude toward risk and investors financial behavior. Also, the attitudes toward risk and investors financial behavior have positive and significant effects on the financial satisfaction. The results showed that financial knowledge and financial socialization have direct and inverse effect on the financial satisfaction respectively and, two variables attitude toward risk and financial behavior, have mediating role in their relationship with financial satisfaction.

### Keywords:

Financial Knowledge, Financial Socialization, Financial Satisfaction, Financial Behavior.

## 1. Introduction

In the developed and developing countries, the policy makers are increasingly getting to know about the importance of financial knowledge and allocating resources to financial education plans and improving the level of financial knowledge accordingly. In all over the world, Comprehensive and international plans and investments have been done by international banks and other funds (charities). Considering the volume of studies in the field of financial education and literacy, no time is more appropriate than now for checking the existing documents. Financial literacy can include concepts like financial awareness, related knowledge about financial institutions, financial products or concepts like the ability of calculating the compound interests and money management and financial planning in general, although these concepts overlap in practice (Dianati and Hanife zade, 2013). These concepts can have different ways of implementation which is due to the level of countries' incomes (Atkinson and Messy, 2012). For example, in high-income countries, the financial knowledge is mostly considered as a supportive supplementary for the customer. Therefore, the importance of this task has been emphasized more and more by moving the responsibility of financial planning from public sector to people. In low-income countries, the financial development happens much more limited and the advanced and specific products are available for the minority of people and because of this, the role of financial knowledge has been noticed in having more availability and financial services.

So far, many different researches have been done in financial knowledge domain and its consequences on people's financial behavior and investment, but the role of financial knowledge on desirability of people's financial performance in form of financial satisfaction, has been noticed less specially in our country. Considering the lack of researches in the field of "the financial knowledge and financial socialization role in financial satisfaction", this research becomes necessary.

## 2. Literature review

### 2.1. Financial Satisfaction

During the recent years, much attention has been paid to the factors and consequences of welfare and life satisfaction in general. It is expected that the

people's income has an important and positive effect on their mental welfare. Whatever determines the level of satisfaction of the income and financial performance is called as financial satisfaction. In fact financial satisfaction points at the people's mental and inner pleasant feelings towards financial performance and their earnings. Over the recent years, financial satisfaction in the field of financial planning has been noticed by researchers. Financial satisfaction is an integral part of the sense of financial welfare perceived by one which, in turn, relates to general psychological welfare (Archuleta et al., 2013). Financial satisfaction points at a level of self-satisfaction which is related with different aspects of one's financial situation like (current income, the ability of action to financial emergencies and ability to response to basic needs (Plagnol, 2011). Financial satisfaction studies have significant usage in financial planning and development of public policies because increasing the knowledge and better perception of financial satisfaction and determinant factors will help the policy makers to enhance people's financial satisfaction. In some studies, financial satisfaction is considered as a vital factor in life satisfaction. Nowadays, the process of financial decision is one of the concerns of the people, professional financial planners and public policy makers. Therefore, understanding the effective factors on people's financial satisfaction can lead to recognition of practical approaches related to enhancement of general satisfaction of life, capital and accumulated money overflow to the market and as a result welfare and economy development. In parallel, many studies have been done in recognition of different types of factors and the way they work on the level of people's financial satisfaction.

The effective factors on people's financial satisfaction can be divided to two categories; personal and environmental. But when it comes to the investors' financial satisfaction, personal factors stand out more. Since, the investors' financial satisfaction is much more affected by their personal attitude towards investment risk and returns and precision of assessment in investment activities than any other factor. But, the role of environmental factors in creating the investors' attitude towards investment cannot be ignored. Therefore, paying attention to the collection of these factors can give a comprehensive coverage on the effective factors of the investors'

financial satisfaction. In this study, personal factors are considered as financial knowledge, attitude towards financial risk and the financial behavior of investors while the financial socialization is used for assessing the effect of environmental factors.

This category, Saurabh and Nandan (2018), Sahi (2013), Joo and Grable (2004), Power and Hira (2004), Hira and Mugenda and studies done by other researchers are shown that various factors like social economy, demographic features, financial knowledge, financial pressures, financial attitudes and financial behavior are effective in financial satisfaction. However, according to Saurabh and Nandan (2018) only a few researches have been done to understand the effect of mental factors, specifically people's perception of financial satisfaction. Moreover, the relation between constructs and financial satisfaction and direction of this relationship has not been confirmed integrally. Therefore, Saurabh and Nandan (2018) have much emphasized on the role of financial knowledge and financial socialization.

Saurabh and Nandan (2018) have shown that one's financial attitude and financial risk act as effective factors on financial satisfaction. Likewise; financial socialization also has direct and indirect effect on financial satisfaction. Foundations of this study show that financial socialization affects the financial satisfaction. With giving appropriate and on-time information provided by financial planner or advisers about investment options to the customers, they can invest in this field to increase their customers' financial satisfaction. Sharing these kind of information can also enhance financial knowledge of investors and result in more financial satisfaction. Bongomin et al. (2016) have confirmed the intermediary role of social capital in relation with financial literacy and financial capacity. The financial literacy has no direct and meaningful effect on financial capacity but through complete intermediary of social capital, financial literacy can have meaningful effect on financial capacity and with lacking social capital, financial literacy may not increase the level of financial capacity of poor rural families in Uganda. Ali et al. (2015) have shown that the general level of financial literacy of investors was higher than the medium level and its effect on the investors' financial satisfaction has been reached in a meaningful direction. According to the findings of this study, the people with higher level of financial literacy are more satisfied with their

income management. Archuleta et al. (2013), have assessed the effect of debts and financial satisfaction on financial anxiety of students and show that increase in the amount of debt will result in financial anxiety and increase in financial satisfaction will lead to anxiety reduction. Therefore, the direct relation between debt and financial anxiety and on the other hand, inverse relation between financial satisfaction and anxiety have been confirmed. Bashir et al. (2013) have checked self-learning, psychological capabilities and personality features as effective factors on investors' financial literacy. The results of this study have shown that the enhancement in people's self-learning ability and psychological capability have direct relation with their financial literacy. Findings also show that extrovert people have more financial knowledge than introvert ones. Hansen (2012), has also shown that the investors trust more in financial institutions which have managers with higher financial knowledge and financial health. Moreover, higher level of financial satisfaction of investors, results in more trust in financial institutions. Outcomes of this study generally show that with increasing the level of financial satisfaction, financial health and financial literacy of financial institutions, more risk in investments would be imposed on the investors.

In the field of researches which are done inside the country, Shirazian (1397) has also shown that financial literacy and money management have positive and meaningful effect on personal financial management of Tehran securities exchange, too. Rezaei (1397) has also checked the relationship among saving for security, technical financial knowledge, joint venture fund knowledge, market knowledge and attitude towards risk in active joint venture funds in the securities Exchange. The results of this study showed that financial literacy, attitude towards risk and saving for security have a meaningful effect on stock sales of joint venture funds. Ghalmeq et al. (1395) have understood that there is a meaningful relation between the level of investors' financial literacy and behavioral biases in a positive way. Ziaei poor and Miladian (1395), show in their study that financial literacy has a positive and direct effect on the overconfident behavioral orientations in prediction, loss aversion and a negative impact on the indicative orientations of sample size failure, accounting and parochialism. As the reviews show, although the great focus of studies inside the country was on the level of financial literacy

and evaluation the personal and environmental factors on it, the role of investors' attitudes and financial socialization in building financial satisfaction have not been noticed.

## 2.2. The role of financial knowledge

Previous researchers have found that the financial knowledge is one of the anticipators of financial satisfaction (Norvilitis and MacLean, 2010). Joo and Grable (2004) also found out that there is a relationship among a person's financial knowledge, financial satisfaction and financial attitude. But, the direction of the relationship between financial knowledge and financial satisfaction is not proven yet. However the relationship between financial knowledge and financial satisfaction is expected (Saurabh and Nandan, 2018). Since, the level of people's financial knowledge can determine the level of true perception of risk and return in investment activities, so their financial behavior in the market or in the routine life can be affected by this knowledge. The people, who have a higher level of financial knowledge, will have a better perception towards the relationship among risk, return and income management and they would also get affected much less by the environmental factors. The people who have a higher level of financial knowledge and behave appropriately based on that, have a higher feeling of satisfaction of financial performance and consequently are expected to experience a better feeling of financial satisfaction.

## 2.3. The role of financial socialization

Many factors are effective in people's decision making that financial decisions are not exceptions, either. Maybe, the socialization is one of the involved factors in making general and financial decisions, because the society has a significant effect on the process of thinking and information processing of people. People act differently in dissimilar situations. Saurabh and Nandan (2018) quoting from Prechter and Parker (2007) state that people make different decisions in personal or group situation which is affected by the process of socialization. Quoting from Hira et al. (2013), they also claim that the socializing starts from childhood and continues during life and people earn knowledge and skill through socialization process. Financial socialization, according to the definition of Hira et al. (2013), is a process of creating

attitude, knowledge and behavior in people that helps making financial welfare. The socialization theories show how the effect of society and parents on children starts from childhood and leads to various financial behavior in the future (Sahi and Kalra, 2013). Therefore, the effect of financial socialization on the level of people's financial satisfaction which influences financial decision making is expected.

People's policy in income management and investment is determined by the quality of financial socialization. As long as financial learning are not institutionalized, having a great financial performance and optimal income and costs management cannot be expected and therefore, the level of financial satisfaction in these people will be lower than others as expected. Although, there is no doubt in importance of financial learning correctness in form of financial socialization, but with the assumption of correctness of financial socialization process, it can be expected that people with better level of socialization, show a better financial behavior and experience a better financial performance as well. Finally, it will result in raising the level of financial satisfaction.

## 2.4. The role of financial behavior and the attitude

It is expected that these two factors, financial knowledge and financial socialization, must have a significant effect on financial satisfaction and perceived level of financial welfare. But, since the level of people's financial knowledge determines their attitude towards financial risk taking and consequently their financial behavior, so it seems that the attitude towards risk could have a great contribution in this respect. Since, a great level of financial socialization in people without a right attitude towards financial risk, cannot lead to financial satisfaction. Having a right attitude towards financial risk, risk aversion and risk taking can be considered as strong factors in controlling people financial behavior. Falahati et al. (2012), show that financial knowledge is one of the important factors of financial behavior improvement and therefore, effective in financial satisfaction. Joo (1998) has also created a model of financial satisfaction which indicates both financial knowledge and financial behavior can change people's attitude towards financial satisfaction (Saurabh and Nandan, 2018). The presented definition of financial knowledge

states that the level of one's financial knowledge has an effect on his attitude towards financial risk and perceived financial satisfaction. On the other hand, it is expected that financial socialization has also an effect on one's financial behavior and attitude. While, the one's attitude towards financial risk improves through the process of socialization (mostly by parents and friends) during the time, it is not unexpected that the financial socialization could affect their attitude towards financial risk and financial behavior which results in changing the level of welfare and perceived financial satisfaction. Based on previously literature, the research hypotheses are defined as follows:

- Hypothesis 1:** Financial knowledge has a significant effect on financial satisfaction.
- Hypothesis 2:** Financial socialization has a significant effect on financial satisfaction.
- Hypothesis 3:** Financial knowledge has a significant effect on financial risk.
- Hypothesis 4:** Financial knowledge has a significant effect on financial behavior.
- Hypothesis 5:** Financial socialization has a significant effect on financial behavior.

**Hypothesis 6:** Financial socialization has a significant effect on attitude towards financial risk.

**Hypothesis 7:** Attitude towards financial risk has a significant effect on financial satisfaction.

**Hypothesis 8:** Financial behavior has a significant effect on financial satisfaction.

**Hypothesis 9:** Financial knowledge has a significant effect on financial satisfaction considering the mediation role of attitude towards financial risk.

**Hypothesis 10:** Financial knowledge has a significant effect on financial satisfaction considering the intermediary role of financial behavior.

**Hypothesis 11:** Financial socialization has a significant effect on financial satisfaction considering the intermediary role of attitude towards financial risk.

**Hypothesis 12:** Financial socialization has a significant effect on financial satisfaction considering the intermediary role of financial behavior.

The Conceptual model of study has been drawn in order to visualize the examined recognitions in research hypotheses.

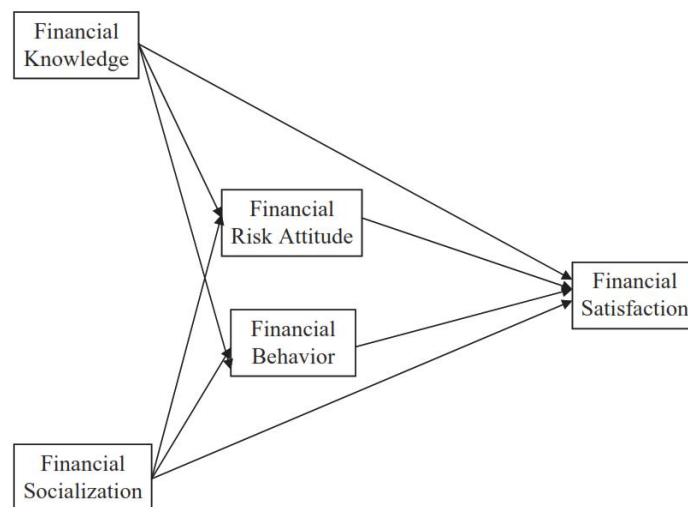


Figure 1: conceptual model

### 3. Methodology

The current study in terms of the aim, method, time and the way of data collection is practical, correlation, descriptive and cross-sectional and the questionnaire is used for data collection. The questionnaire is retrieved from Robb and Woodyard

(2011). Financial knowledge has been measured through 3 questions. For measuring this variable, items like deal with routine financial affair, being good in calculation and following financial and economic news have been used. Financial socialization has been measured by a questionnaire which is retrieved from

Hira et al. (2013) including 3 questions. For measuring this variable, items like emphasizing and trying by parents from the childhood concerning reaching for money, the importance of money saving for the future and the way of investment have been used. Financial behavior has been measured by a questionnaire which is retrieved from Grable and Joo (2001) including 6 questions. For measuring this variable, items have been used in order to assess people in economic saving, retirement thoughts, financial goals, cost budgeting, policy of payment in cash or non-cash and bank card balance management. Attitude towards financial risk has been measured by a questionnaire which is retrieved from Grable and Joo (2004) including 5 questions. For measuring this variable, items have been used in order to assess people in the level of risk aversion, belief in luck in investment and importance of returns. Financial satisfaction has been measured by a questionnaire which is retrieved from Hira and Mugenda (1998) including 6 questions. For measuring this variable, items have been used in order to assess people in regular savings, level of debt, financial satisfaction, and ability in responding to financial goals and emergencies and skills in money management. In order to assess the validity of questionnaire, content validity is used and the questions have been approved and judged by the experts. In order to assess the reliability of research tools, the Cronbach's alpha coefficients are used and the value of this index for each variables of this research is at least about 0.776. Statistical population of this study includes active investors in Tehran stock

exchange with active trading codes in year 1397. During the period of study, the stock code holders were 2333558. Considering the fact that some of these people do not trade in the stock market actively or are not available, so some of them have been omitted and because of that, the volume of statistical population has been considered unknown. A number of 384 investors are considered as minimum sample for the study. In access sampling method is used for questionnaire distribute. In order to test the variables associations, the structural equation model in AMOS software is used and to determine linear relationship between variables, linear correlation coefficient (and also normal variables distribution test) in SPSS software is used. To assess the precision of results of structural model of study, indicators like Normalized Fit index (NFI), Tucker-Lewis index (TLI), The comparative Fit index (CFI), The goodness of Fit index (GFI), The adjusted goodness of Fit index (AGFI), and The Root mean square error of approximation (RMSEA) have been used.

#### 4. Results

Table (1) shows the descriptive statistics of variables evaluated by 384 questionnaires.

In order to test the linear correlation and determine the type of test (Parametric/Nonparametric), the normality assumption of empirical distribution of variables is a basic assumption. For this purpose, the Kolmogorov-Smirnov test is used. Table (2) shows the results of Kolmogorov-Smirnov test.

**Table1: Descriptive statistics of variables**

variable	Mean	Median	S.D.	Min	Max
FINKLG	3.4531	3.6667	0.8362	1	5
FINSOC	2.2656	2.3333	0.7010	1	4.33
ATR	3.3516	3.40	0.7613	1.4	5
FINBHV	2.9184	3	0.6898	1.5	4.83
FINSAT	3.8038	3.8333	0.7037	1.67	5

(FINKLG represents financial knowledge, FINSOC represents financial socialization, ATR represents attitude toward risk, FINBHV represents financial behavior and FINSAT represents financial satisfaction)

**Table2: The results of Kolmogorov-Smirnov test**

variables	K-S statistic	P-value
FINKLG	2.372	0.094
FINSOC	2.842	0.059
ATR	1.494	0.323
FINBHV	1.784	0.133
FINSAT	1.845	0.102

Considering the significance levels in the test, the assumption of normality for distribution of variables has been approved with the type I error level of 0.05. Therefore, it can be accepted that each of the variables follows normal distribution.

To estimate the linear correlation coefficients, considering the confirmation of normal distribution of variables, Pearson parametric test has been used. Table (3) shows the results of estimated Pearson correlation coefficients of variables.

Considering the significance levels, it is observed that each of tested paired relationships was significant with the type I error level of 0.05. With respect to the correlation coefficients, it can be seen that the linear relationship among each of the variables like financial knowledge, financial socialization, attitude towards

risk, financial behavior and financial satisfaction, is positive. Therefore, there is a significant and direct relationship between each of the paired variables.

In order to test hypotheses, the structural equation model has been fitted. To evaluate the goodness of fit, it is referred to the results of Chi-square test and criteria like GFI, AGFI and also RMSEA. Among these measures, the higher values of GFI and AGFI, and smaller values of Chi-square statistic and also RMSEA, show a great goodness of fit. Table (4) shows the results of goodness of fit test measures.

**Table3: Pearson correlation coefficients of variables**

variables	Index	FINKLG	FINSOC	ATR	FINBHV	FINSAT
FINKLG	Corr.	1	0.365	0.475	0.498	0.627
	P-value	-	0.0001	0.0001	0.0001	0.0001
FINSOC	Corr.	0.365	1	0.569	0.450	0.294
	P-value	0.0001	-	0.0001	0.0001	0.0001
ATR	Corr.	0.475	0.569	1	0.364	0.560
	P-value	0.0001	0.0001	-	0.0001	0.0001
FINBHV	Corr.	0.498	0.450	0.364	1	0.348
	P-value	0.0001	0.0001	0.0001	-	0.0001
FINSAT	Corr.	0.627	0.294	0.560	0.348	1
	P-value	0.0001	0.0001	0.0001	0.0001	-

**Table4: The goodness of fit tests**

Index	Acceptable range	Model findings	result
NFI	0.90≤	0.918	desirable
TLI	0.90≤	0.897	desirable
CFI	0.90≤	0.919	desirable
GFI	0.90≤	0.949	desirable
AGFI	0.90≤	0.920	desirable
RMSEA	0.05>	0.023	desirable
CMIN/DF	3>	2.742	desirable
P-value	0.05<	0.0001	Not desirable

The results of table 4, shows that this model has a proper goodness of fit. The P-value of Chi-square test which examines the structural model saturation has reached a value of 0.0001 that is smaller than the type I error (0.05). But, the statistical ratio of Chi-Square to degree of freedom which shows fairer results to goodness of fit equals to 2.742 and is smaller than empirical value 3. It is also seen that GFI, AGFI and TLI are estimated greater than 0.8 which shows the appropriateness of model and its high ability to explain the variables relationship. The RMSEA is equal to 0.023 which shows minor measurement error. NFI has been found equal to 0.918 which is greater than the

experimental value 0.9. Therefore, it can be accepted that the statistic ratio of estimated Chi-square test in this model, was great and appropriate enough. Also, the CFI equals to 0.919 and this value shows that the structural model has the goodness of fit. According to the results of table (4), appropriateness of model has been confirmed. So, in order to conclude about the hypotheses, we point to the coefficients estimated in model which are shown in figure (1) .

Estimation of effects of variables on each other shows that the investors' financial knowledge has a direct effect on attitude towards risk, financial behavior and financial satisfaction, despite the fact that

financial socialization has a direct effect on attitude towards risk and financial behavior and an inverse effect on the investors' financial satisfaction. The factors, attitude toward risk and investors' financial behavior also have a direct effect on financial satisfaction which indicates the direct effect on the investors' financial satisfaction. Table (5) shows the results of path significance tests.

According to the results of table 5, it is observed that financial knowledge, financial socialization,

attitude towards risk and financial behavior have direct and significant effect on the investors' financial satisfaction. The effect of financial knowledge and financial socialization on the investors' attitude on risk is also positive and significant. In relationship between financial knowledge and financial socialization with the investors' financial satisfaction, two variables attitude towards risk and financial behavior, have a significance intermediary role and therefore, all of the hypotheses have been approved.

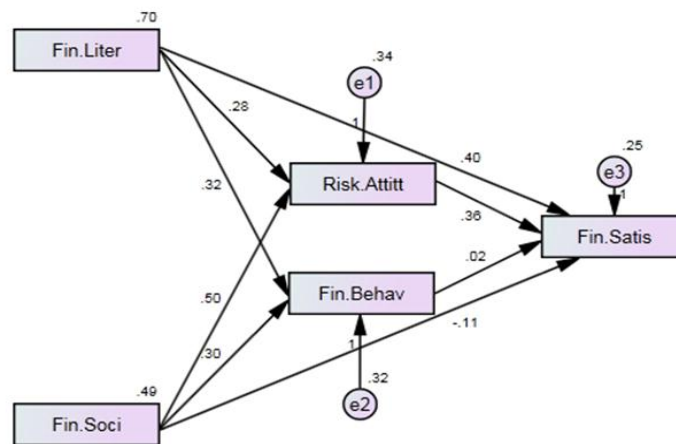


Figure2: Path coefficients of model

Table5: The results of path significance tests

Independent	Mediator	Dependent	Beta	t-statistic	P-value
FINKLG	-	FINSAT	0.397	10.990	0.0001
FINSOC	-	FINSAT	-0.110	-2.458	0.0140
FINKLG	-	ATR	0.280	7.820	0.0001
FINKLG	-	FINBHV	0.318	9.223	0.0001
FINSOC	-	FINBHV	0.304	7.386	0.0001
FINSOC	-	ATR	0.496	11.595	0.0001
ATR	-	FINSAT	0.362	8.278	0.0001
FINBHV	-	FINSAT	0.920	25.555	0.0001
FINKLG	ATR	FINSAT	0.101	5.684	0.0001
FINKLG	FINBHV	FINSAT	0.292	8.675	0.0000
FINSOC	ATR	FINSAT	0.179	6.737	0.0000
FINSOC	FINBHV	FINSAT	0.279	7.095	0.0000

### 5. Discussion and Conclusion

In current study, the effects of financial knowledge and financial socialization on financial satisfaction have been assessed considering the role of attitude towards risk and financial behavior. According to the

results, by changing the investors' attitude towards risk, their financial knowledge could have a positive effect on financial satisfaction. It seems that the people's financial knowledge would influence their perception towards risk and lead to more accurate



assessment of risk and return investment. A better perception of risk and return can result in more profitable and safer financial decisions and brings more financial satisfaction along. The findings show that financial knowledge can lead to more financial satisfaction, not only in a direct way but also with changing in investors' behavior. With creating more accurate attitude towards investment issues, financial knowledge can make fundamental changes in financial approaches and risk aversion behavior or investment priorities of investors. As a result, changing the investors' financial behavior in order to lower the level of risk-taking (by emphasizing on unsettled economic condition of our country during this research) can lead to higher financial satisfaction. While the people's financial knowledge as an acquired process and independent of environment, is effective on their attitude towards risk, the effect of environment and people around on the level of financial awareness is also effective on their attitude. In other words, financial socialization can be considered as a process for earning financial knowledge and these two will be inseparable. Financial socialization does not have always positive results and consequences unless it comes with financial knowledge, otherwise it would lead to behavioral biases in investors. According to study outcomes, financial socialization could provide more financial satisfaction through influencing people's attitude on risk. The results also show that financial socialization can provide more financial satisfaction by changing the investors' financial behavior. The way financial socialization influences the investors' financial behavior, is not discussed here. In other words, the way financial socialization influences risk-taking or risk aversion behavior, refers to the correctness of perceived financial knowledge during the process of socialization. The reason why "risk aversion behavior of investors leads to more financial satisfaction" would refer to their personality features and unsustainable economic conditions. So it is expected that the investors who have gained the majority part of their financial knowledge through the financial socialization, would be affected more by the behavior of other investors and so, the performances of others would act as a secure base for their financial decisions. Therefore, changing in behavior along with the other investors is expected and considering the fact that losses does not happen for the mass of investors all the time, and a mass behavior is always along with

profit so, changing financial behavior in order to a mass behavior would always result in more financial satisfaction. These results can be considered in accordance with the findings of Shirazian (1397), Ghalmeq et al. (1395), Ziaei poor and Miladian (1395), Saurabh and Nandan (2018) and Ali et al. (2015).

According to the results above, it is better that the necessary trainings be given to the investors before entering the capital market in order to recognize mass behavior, risk levels and probable returns in each of financial tools. Some tests must be taken by the securities exchange organization from them in order to determine their level of awareness towards risk and financial tools and the level of access and kind of access to the trading must be defined, accordingly. Therefore, the group and social training can be useful with the focus on introducing the different types of risks, risk assessment tools and approaches towards facing financial risks.

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