

Modeling factors affecting financial health using structural equations

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Abstract

Financial health is a state in which a person can fully meet their current and future financial obligations and, at the same time, feel secure in their financial future, and the choices they make in this direction allow them to enjoy life. Considering the importance of financial health and its effect on the mental and physical health of people, the present research intends to model the factors affecting financial health with the help of structural equations. Active traders in the Tehran Stock Exchange with at least 5 years of trading experience are examined and questioned as a statistical population. Because the number of members of the statistical community is unlimited, therefore, using the Cochran sampling formula, the sample size will be determined, and the sample members will be selected using the simple random sampling method. In this study, the sample size is 384 people using Cochran's sampling formula. To analyse the data obtained from the distribution of the questionnaire, descriptive statistics indicators such as frequency, percentage, tables, and graphs have been used to review and analyse the information related to the general characteristics of the respondents. The relationships between research variables were tested using the Kolmogorov-Smirnov test, correlation test, confirmatory factor analysis, and structural equation modelling. The results showed that demographic components, personality components, financial sociability, financial knowledge, financial behavior, self-efficacy, financial factors, cultural factors and economic factors are among the most important factors affecting the financial health of people. The factors paid the necessary attention.

Keywords: financial health, financial status, financial attitude, financial well-being
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1 Introduction

Health, both individually and collectively, is undoubtedly the most important aspect of life. On the one hand, the importance of the health of the people in society is affected by several factors and it is considered one of the important indicators of the development of societies; on the other hand, it can play an essential role in the development of the society. Based on the long-term perspective of the Islamic Republic of Iran, providing health in various dimensions, especially social and spiritual health with its deep meaning, is a long-term strategy of the country and considering

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that different physical, mental, social and spiritual dimensions of health influence each other. Complete health will not be achieved without providing all those dimensions [17].

Health is a concept that is as old as human life. Since the formation of human societies, the concepts of illness and health have been discussed, and various definitions have been presented. According to the most accepted definition, health is complete physical, mental and social well-being and not only the absence of disease and disability [25]. Health is a comprehensive and multidimensional concept that includes financial satisfaction, the objective state of the financial situation, financial attitudes and behaviour that cannot be evaluated; when people are satisfied, it can be said that their financial health is "high" (or is a "good" person). People with a healthy financial status have a positive financial attitude and exhibit healthy financial behaviour [10].

Long-term financial problems can have destructive effects on people's well-being and health [4, 5, 18, 19]. Despite the widespread recognition of economic hardship as a determinant of health, it has mainly been assessed through income inequality, food and housing insecurity, and other basic needs [5, 24]. Broad solutions such as efforts to improve financial knowledge, financial attitudes, and financial behaviour to prepare individuals for financial shocks through savings and reduce income uncertainty among the poor in developing countries are missing from the public health domain [8]. This issue becomes increasingly important and relevant during a pandemic such as COVID-19, where increased levels of psychological stress have been repeatedly highlighted in the literature [2, 3, 12].

Having financial problems is associated with a lower sense of belonging to society and community [7, 22]. Research shows that this relationship may be bidirectional. On the one hand, people with financial problems experience: they feel that they are treated as a burden, as unworthy and responsible for their situation [16]. In addition, they are often financially unable to participate in social activities, tend to be shunned [22], and may experience shame, humiliation, and fear of stigma and negative stereotypes from society. withdraw [16, 20, 21, 22]. Accordingly, research among student populations suggests that greater financial concerns predict lower levels of belonging one year later [15].

In general, it can be inferred that the financial status of each person has a positive or negative effect on their health; Considering what was mentioned and considering the effect of various factors on financial health, it is necessary to have a financial plan and plan for the future; Therefore, it seems necessary to conduct a research in this regard and to raise awareness about the unknown effects of various factors on the financial health of society.

By reviewing the existing literature in this field, it can be seen that so far few kinds of research have been conducted in this field, especially in Iran, regarding financial health, and by examining them, we can understand the existing theoretical gaps in this field. In other words, we are facing a lack of resources and information in this field, which clarifies the need for more research in this regard. Therefore, by carrying out this research, we can help to enrich the existing literature. The distinguishing feature of the current research is that after library and field investigations and receiving the opinions of experts, a comprehensive model has been presented that can help the stakeholders in making optimal decisions.

2 Research basics and background

During the last decade, several concepts have emerged that aim to describe financial health from different perspectives; Vosloo [23] defined financial well-being as the perceived ability of individuals to effectively control the use of their resources. In this regard, one of the most controversial theories in the study of people's behaviour is that wealth and financial well-being allow them to take useful and effective actions to improve their happiness. In this regard, Gardner and Oswald [6] experimentally showed that if people receive a windfall in a particular year, they will have less psychological stress and more happiness in the following year. The traditional view of understanding and analyzing people's well-being is strongly related to their monetary (financial) income. Johnson and Krueger [9] in examining the validity of the assumption that wealth (income) has a direct contribution to people's satisfaction, concluded that the perception of control over the financial situation has a direct relationship with people's satisfaction. In addition, greater access (and better quality) to affairs is associated with stronger financial health. Higher education is inextricably linked to financial health. People with financial health can better take advantage of educational opportunities, and completing an affordable and quality higher education program, in turn, promotes the principles of financial health [14].

The following are the results of some of the most important studies conducted in this field:

Zamani Harouni and Aflaki Fard's temporal research [26] examined the impact of financial problems, status and stress on the mental health of selected students of an elementary school in the city of Stan Abarkoh; The statistical sample size is equal to 125 people using Cochran's formula. For data analysis, the method of structural equation

modelling has been used. The results showed that there is a significant relationship between financial status, financial stress and financial problems with students' mental health.

In the research of Rashidi et al. [13], the impact of creditors' rights and financial health on investment efficiency in companies listed on the Tehran Stock Exchange was investigated. The results of the research showed that the effect of the independent variable of financial health on the dependent variable of investment efficiency of the company Tehran Stock Exchange is positive and significant and it indicates that the increase in financial health will lead to a reduction of agency costs, increase in credit and demand for company shares and improvement of financial decisions and ultimately lead to increase in the efficiency of the company's investment. Also, the results of the research showed that the effect of the independent variable of creditors' rights on the dependent variable of the company's investment efficiency in the Tehran Stock Exchange is positive and significant, and it indicates that the increase of creditors' rights leads to an increase in credit and demand for the company's shares and an increase in monitoring in the way of improving financial decisions. And finally, it will lead to an increase in the efficiency of the company's investment.

In their study, Khajavi and Mosalla Nejad [11] analyzed the differences between financial coaching and financial therapy; Through a review study, they first identified the experiences of financial coaches and finally introduced the types of qualifications needed (including experiences, abilities, knowledge and awareness) to perform the tasks assigned to them based on the knowledge obtained. Their findings showed that financial therapists (e.g., financial therapists) have a distinct ability to address dysfunctional money characteristics as well as financial disorders and cover a broader time spectrum for treating a person's past problems and chronic financial complications. Also, another difference between financial coaching and financial therapy that is considered in this research is related to the coordination of services and individual benefits.

Aguila et al. [1] used ownership of a bank account to examine the impact of financial inclusion on health. Their study focused on US Hispanics between the ages of fifty-one and ninety, as this older age group is more likely to have difficulty accessing basic financial services (due to cultural background or lack of acculturation). them). Panel data analysis found that owning a bank account was positively associated with improved mental (but not physical) health in older Hispanics. This study provided supporting evidence of a positive association between owning a bank account and improved mental health.

3 Research methodology

Active traders in the Tehran Stock Exchange with at least 5 years of trading experience are examined and questioned as a statistical population. Because the number of members of the statistical community is unlimited, therefore, using the Cochran sampling formula, the sample size will be determined and the sample members will be selected using the simple random sampling method.

To analyze the data obtained from the distribution of the questionnaire, descriptive statistics indicators such as frequency, percentage, table and graph have been used to review and analyze the information related to the general characteristics of the respondents. The relationships between research variables were tested using the Kolmogorov-Smirnov test, correlation test, confirmatory factor analysis, and structural equation modelling. There are 384 related companies in Tehran. For sampling, the available sampling method and Cochran's formula were used, and the sample size was calculated to be 200 people.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}. \quad (3.1)$$

First, based on the findings of the theoretical foundations and background of the research, he designed a questionnaire, and then to obtain the reliability of the questionnaire, an initial random sample of 30 people was selected and using Cronbach's alpha test (calculated as 0.96), the reliability of the questionnaire Made by a researcher, it has been measured. Cronbach's alpha was generally calculated using the following equation.

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^k S_i^2}{\sigma^2} \right), \quad (3.2)$$

in these relationships, k is the number of questions, the variance of the i -th question, the variance of the total number of questions, the average variance between the questions, and the average variance of the questions.

After confirming the reliability and validity of the questionnaire, it has been distributed among the entire sample population. Considering the maximum variance (success and failure equal to 0.05) and the limit error of 0.05, the

number of 200 people has been estimated as a statistical sample. To measure the validity of the researcher's questionnaire, the opinions of academic experts have been used. Their shared opinion on the items was based on the validity of the target measure.

- Quality Control

For the researcher to be able to use the qualitative findings in the analysis, he must code them.

Inter-coder reliability is a widely used term that refers to the degree of agreement that independent coders obtain when evaluating the features of a message or text. The specific term for consistency in content analysis is "agreement between coders". Determining validity and reliability is a critical step in the qualitative data analysis process.

The Kappa method is one of the statistical decision-making tools that examines the amount of agreement and coordination between two individuals, phenomena, or sources of decision-making, each of which is measured separately.

Kappa coefficient is a numerical measure between -1 and +1, the closer to +1 indicates the presence of proportional and direct agreement, the closer to -1 indicates the presence of inverse agreement, and the opposite and values closer to zero indicate the opposite of agreement. To give

$$k = \frac{p_o - p_e}{1 - p_e} \quad (3.3)$$

in this regard, p_o it is equal to the ratio of the units about which there is an agreement p_e is also the ratio of units that are likely to be a random agreement

- Interpretive structural method

The interpretive structural modelling method is an interactive learning process. In this technique, a set of different elements is structured in the form of a comprehensive systematic model. Such a model that is formed, draws the structure of a complex issue or a problem in the form of a carefully designed pattern in the form of a diagram. This method is an interpretive model in which a group of experts decide whether and how the elements are related, and it is a structural model in that it extracts complex components based on the relationship of the structure and specific relationships through the modelling method. and explains the overall structure as a diagram model. This method is a tool to create order in the complexity of relationships between variables and is a suitable option for dealing with complex issues, especially when using systematic and logical thinking.

The various steps involved in the ISM technique are shown in the figure above. These steps ultimately lead to the creation of an ISM model, which is explained in the following steps:

Step 1) Identification of variables related to the problem: The ISM method begins with the identification of variables that are related to the problem or topic under discussion. These variables are obtained through the study of the subject literature, past studies, through receiving the opinions of experts or through questionnaires.

Step 2) Formation of the structural matrix of internal relations of variables (SSIM): This matrix (structural self-interaction matrix) is a matrix with the dimensions of the variables, in which the variables are mentioned in the first row and column respectively.

Step 3) Create the achievement matrix (RM) or the received matrix: by converting the symbols of the SSIM matrix to the numbers zero and one, the achievement matrix can be reached. By following these rules, the initial acquisition matrix is prepared.

Step 4) Adapt the achievement matrix: After the initial achievement matrix is obtained, its internal consistency should be established. For example, if variable one leads to variable two and variable two leads to variable 3, then variable one should also lead to variable 3, and if this state was not established in the initial achievement matrix, the matrix should be modified, and the relationships that were missed be replaced.

If we have n criteria as described in c_1, c_2, \dots, c_n and their pairwise comparison matrix is as follows:

$$A = [a_{ij}], \quad I, j = 1, 2, \dots, n$$

where a_{ij} shows the preference of element c_i over c_j , if we have in this matrix:

$$a_{ik} \times a_{kj} = a_{ij}, \quad I, j, k = 1, 2, 3, \dots, n$$

Then we say that the matrix A is consistent.

- Inconsistent matrix

In this part, we want to know that if the matrix of pairwise comparison is inconsistent, what is the amount of inconsistency of the matrix and how do we measure it? Before starting the inconsistency measurement criterion, some important issues about each pairwise comparison matrix are mentioned:

In this part, we want to know that if the matrix of pairwise comparison is inconsistent, what is the amount of inconsistency of the matrix and how do we measure it? Before starting the inconsistency measurement criterion, some important issues about each pairwise comparison matrix are mentioned:

Theorem 3.1. If $\lambda_1, \lambda_2, \dots, \lambda_n$ are eigenvalues of the pairwise comparison matrix A , the sum of its values is equal to n :

$$\sum \lambda_i = n.$$

Theorem 3.2. the largest of this special value (λ_{\max}) is always greater than or equal to n , in this case some λ 's will be negative.

$$\lambda_{\max} \geq n.$$

Theorem 3.3. If the elements of the matrix deviate a little from the compatible state, its eigenvalues will also deviate a little from their compatible state.

$$A \times w = \lambda w,$$

where λ and w are the eigenvalue and eigenvector of matrix A , respectively. In the case that matrix A is consistent, one eigenvalue is equal to n (greater than eigenvalue) and the rest are equal to zero. Therefore, in this case it can be written:

$$A \times w = n \times w.$$

In the case that the pairwise comparison matrix A is inconsistent, according to Theorem 3.3, λ_{\max} is slightly different from n , which can be written:

$$\lambda_{\max} \times w = A \times W.$$

The reason for using λ_{\max} according to theorem 3.3 is that it will have the smallest distance from n . Since λ_{\max} is always greater than or equal to n , and if the matrix deviates from the compatibility mode, λ_{\max} will deviate from n , so the difference between λ_{\max} and n ($n - \lambda_{\max}$) depends on the value of n , and to solve this dependence, the scale can be defined as follows, which we call the inconsistency index (I.I.).

$$I.I. = \lambda_{\max} - n / n - 1$$

For each matrix, the result of dividing the inconsistency index (I.I.) by the inconsistency index of the random matrix (II R.) is then a suitable criterion for judging the inconsistency, which we call the inconsistency rate (I.R.). If this number is smaller than 0.1, the compatibility of the system is acceptable, otherwise you should reconsider your judgments.

Calculate the inconsistency rate:

Step 1. Calculation of the weighted sum vector: Multiply the matrix of pairwise comparisons by the "relative weight" column vector. Call the new vector that you get in this way, the weighted sum vector (Weighted sum Vector=WSV).

Step 2. Calculation of compatibility vector: Divide the elements of the weighted sum vector by the relative priority vector. The resulting vector is called compatibility vector (Consistency Index = CI).

Step 3. Obtaining λ_{\max} gives the average of the elements of the compatibility vector λ_{\max} .

Step 4. The formula for calculating the compatibility index: The compatibility index is defined as follows:

$$CI = \frac{\lambda_{\max} - n}{n - 1} \quad (3.4)$$

where, n is the number of options in the problem.

Step 5. Compatibility ratio calculation formula: The compatibility ratio (Random Index = RI) is obtained by dividing the compatibility index by the random index

$$CR = \frac{CI}{RI}. \quad (3.5)$$

A compatibility ratio of 0.1 or less indicates compatibility in comparisons.

Step 6. Determining the level and priority of variables: In this step, using the final achievement matrix, the set of output and input for each variable is obtained. To determine the level and priority of the variables, the achievement set (output) and the prerequisite set (input) are determined for each variable.

Step 7. Drawing the model: after determining the relationships and level of the variables, they can be drawn in the form of a model. For this purpose, first, the variables are adjusted according to their level from top to bottom. At this stage, according to the levels obtained from the variables and the final matrix, an initial model is drawn and the final model is obtained by removing transferability in the initial model. The relationship between the variables and the direction of the arrow is determined from the final matrix.

Step 8. Analysis of penetration power and degree of dependence (MICMAC): MICMAC or the mutual influence of matrix multiplication applied for classification; The purpose of this analysis is to identify and analyze the power of penetration and the dependence of the variables. At this stage, by summing the entries of ((1)) in each row, the power of penetration and also the sum of the entries of ((1)) in each column, the amount of the dependence of the variables is obtained.

4 Research findings

Descriptive statistics of research variables are presented in the following table:

Table 1: Description of the studied sample

Frequency	Abundance	Age
14%	53	30 years and less
24%	91	31-40
34%	132	41-50
28%	108	Over 51 years old
Frequency	Abundance	Education
62%	235	Bachelor's degree
23%	89	Master's degree
15%	60	Doctorate
Frequency	Abundance	History
22%	86	Under 10 years old
41%	159	11 to 20 years
25%	96	21 to 30 years
12%	43	Over 31 years old
100	384	Total

As can be seen in the above table, the most people (132 people) from the statistical sample equal to 34% are in the age range of 41 to 50 years and the least of them are 30 years and below (14%). It can also be seen that most people (235 people) from the statistical sample equal to 62% have a bachelor's degree. In addition, it is observed that most people (159 people) from the statistical sample, equal to 41%, have work experience of 11 to 20 years.

Semi-structured interviews with experts were used to collect the necessary information for designing the questionnaire questions. The reason for using a semi-structured interview is that, in addition to the possibility of exchanging ideas and thoughts, the discussion and the subject of the interview can be directed to achieve the goals of the research. Also, during the interview process, it is possible to observe the feelings and reach the beliefs and convictions of the interviewees about the research topic. Before the start of the interview, a summary of the research plan, the results of the background check, along with the goals and research questions for study and initial preparation were sent to the interviewees via email, and at the beginning of the interview session, the work done was briefly explained. Then the interview questions were asked and the interview process was carried out. The results of these interviews showed that demographic components, personality components, financial sociability, financial knowledge, financial behaviour, self-efficacy, financial factors, cultural factors and economic factors are among the most important factors affecting people's financial health. A questionnaire was designed based on the mentioned components.

In this research, the valid Kolmogorov-Smirnov test was used to check the assumption of normality of the research data. The result of this test is shown in Table 2.

Table 2: Kolmogorov-Smirnov test results

Test result	Significance level	Kolmogorov statistics	Variables
normal	0.241	0.831	Demographic components
normal	0.157	1.131	Personality components
normal	0.332	0.954	Financial socialization
normal	0.257	1.013	Financial knowledge
normal	0.097	1.230	Responsible financial behavior
normal	0.267	0.995	Efficacy
normal	0.059	1.287	Financial factors
normal	0.057	1.334	Education
normal	0.172	1.108	Cultivation
normal	0.412	0.874	Cultural components
normal	0.485	0.628	Economic components
normal	0.164	1.118	Financial skills
normal	0.305	0.659	Financial results

Because the sig (significance level) obtained in the above table for all variables is greater than 5%, it can be concluded that the research hypothesis is rejected and the null hypothesis is confirmed. As a result, the data distribution of these variables is normal. These variables are used in the structural equations section. In the following, the correlation matrix between the research components is presented:

Table 3: Correlation matrix between variables

Consequences	Strategies	Interferer	Ground conditions	Key factors	Causal components	Components
					1	Causal components
				1	0.721**	Key factors
			1	0.573**	0.747**	Ground conditions
		1	0.743**	0.598**	0.754**	Interferer
	1	0.605**	0.599**	0.378**	0.499**	Strategies
1	0.270**	0.121*	0.150*	0.170*	0.130*	Consequences

The above table shows that the relationship between the main indicators of the research is established at the significance level of 0.01 and 0.05. In this research, confirmatory factor analysis was used in the first step. First order confirmatory factor analysis:

Table 4: Item analysis of demographic components

Construct significance	T statistic	Factor load	Object
The structure has meaning	7.41	0.49	Gender
The structure has meaning	7.60	0.43	Age
The structure has meaning	7.09	0.46	Education
The structure has meaning	3.29	0.28	Condition of marital status

In the table above, the factor loadings of the used demographic components are between 0.26 and 0.49, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 5: Analysis of personality components items

Construct significance	T statistic	Factor load	Object
The structure has meaning	3.67	0.26	Risk aversion
The structure has meaning	7.12	0.54	Objectivism
The structure has meaning	5.39	0.41	Risk tolerance level

In the table above, the factor loadings of the used personality components items are between 0.26 and 0.54, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

In the table above, the factor loadings of the used components of financial socialization are between 0.49 and 0.53, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

In the table above, the factor loadings of the items of the above components are between 0.42 and 0.47, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 6: Analysis of financial socialization items

Construct significance	T statistic	Factor load	Object
The structure has meaning	7.05	0.53	Financial status of parents
The structure has meaning	7.13	0.52	Financial behavior of parents
The structure has meaning	8.35	0.53	Parent-child financial relationship

Table 7: Analysis of social components items

Construct significance	T statistic	Factor load	Object
The structure has meaning	5.82	0.37	General cash management
The structure has meaning	5.84	0.36	Saving
The structure has meaning	6.72	0.49	Budgeting
The structure has meaning	4.84	0.32	Investment
The structure has meaning	6.34	0.56	Risk management
The structure has meaning	5.97	0.62	Retirement planning

Table 8: The fit of responsible financial behavior

Construct significance	T statistic	Factor load	Object
The structure has meaning	5.99	0.44	Financial knowledge
The structure has meaning	5.92	0.47	Financial expertise
The structure has meaning	5.28	0.49	Investment knowledge

In the table above, the factor loadings of the items used in the components of responsible financial behavior are between 0.32 and 0.49, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 9: Status of the structure of indicators of self-efficacy components

Construct significance	T statistic	Factor load	Object
Component confirmed	6.78	0.50	Financial self-efficacy
Component confirmed	6.99	0.51	Financial inclusion
Component confirmed	6.74	0.43	Personal self-efficacy

In the table above, the factor loadings of the used self-efficacy components are between 0.43 and 0.51, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 10: The status of the structure of indicators of financial components

Construct significance	T statistic	Factor load	Object
Component confirmed	6.40	0.41	Financial satisfaction
Component confirmed	8.85	0.63	Financial attitude
Component confirmed	6.83	0.50	Financial situation
Component confirmed	7.84	0.65	Financial orientation
Component confirmed	6.78	0.62	Financial Management
Component confirmed	8.23	0.58	Financial services

In the table above, the factor loadings of the used financial components are between 0.41 and 0.63, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 11: The status of the structure of the indicators of cultural components

Construct significance	T statistic	Factor load	Object
Component confirmed	4.91	0.39	Long-term orientation
Component confirmed	5.82	0.63	Consumer behaviors
Component confirmed	7.63	0.83	Consumerism

In the table above, the factor loadings of the items of the cultural components used are between 0.39 and 0.83, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

In the table above, the factor loadings of the used social components items are between 0.38 and 0.63, and the value of the T statistic is higher than 1.96, which indicates the confirmation of the research indicators.

Table 12: The status of the structure of indicators of social components

Construct	significance	T statistic	Factor load	Object
Component confirmed		9.18	0.63	Economic fluctuations
Component confirmed		8.99	0.57	Economic Growth
Component confirmed		8.27	0.49	Inflation
Component confirmed		6.90	0.46	The unemployment rate
Component confirmed		6.37	0.44	Market Structure
Component confirmed		6.66	0.38	Fluctuations in exchange rates, gold, etc.

5 Conclusion

Financial health refers to the overall well-being and stability of a person's or organization's financial situation. It covers various aspects like income, spending, savings, investment and debt management. People's financial health refers to a state in which a person can meet their financial needs and goals, manage financial risks properly, and have the strength to change course in the face of unforeseen financial problems, such as the occurrence of economic crises or income instability. life, illness and other events maintain financial stability. Achieving and maintaining good financial health is critical to long-term financial success and security.

Financial health provides an alternative and intermediate outcome on the path to economic progress. Perhaps improved financial health is a more realistic outcome to strive for and may ultimately reduce poverty. Greater access to financial services can have positive and negative consequences. According to the results of the research and general approval of the model, the following suggestions are presented:

- The requirement for financial health is to increase financial inclusion, and to increase the quality of life in society, we need both factors. That is, we must provide the ground for all members of the society to have access to jobs and minimum income, and then empower them in terms of thinking and financial literacy skills. It is also necessary to provide the necessary tools for effective management and continuous improvement of the quality of financial life at the disposal of individuals and organizations of society. Financial institutions can play a role in all these three areas, i.e., job creation, community empowerment, and the development of life financial management tools. To promote financial health and financial inclusion in the society, they can put measures such as the following on the agenda:
 - Redesigning and redefining the basics of defining financial products and services to adapt them to the needs of specific customer groups.
 - Investing in improving the financial literacy of society, especially its customers.
 - Diversification to different financial management tools for customers within the framework of laws and regulations and innovation in products and services.
 - Consolidation of financial (and even non-financial) products and services in the form of a single platform that can be accessed through various offline channels, such as the web, mobile applications, phone banking, etc.
- It is recommended to teach people investment approaches, models and techniques to maintain purchasing power in inflationary conditions using software; In this regard, training courses and workshops to familiarize people with the safe investment of surplus funds in the short term and to familiarize people with investment tools and techniques can be fruitful. Also, considering the effect of basic financial knowledge in increasing the level of financial literacy of people in the capital market, increasing the level of knowledge regarding basic knowledge of financial tools such as savings, budgeting, investing, knowing the concept of purchasing power of money, time value of money, individual financial accounting, having Be taught information on inflation, taxation, debt management and market risk.
- It is suggested that to reduce fear, reduce high uncertainty and greed, provide laws, approaches and necessary training and specialized workshops, and even in educational needs assessments, counselling and psychology programs of people are examined and also by developing knowledge and capabilities Technologically, people can increase their knowledge in the field of financial systems and financial literacy in virtual spaces, which membership in virtual channels or networks, following news and the duration of using virtual space can greatly help them.
- It is suggested that to increase the level of financial health of people, special attention should be paid to their cultural approaches in such a way that they can do on the subsistence subculture and the lack of proportionality

of income with financial and work approaches, as well as the development of the investor's economic culture in the form of educational and cultural programs in comment.

- It is suggested that companies and organizations plan on improving the level and approach of people's financial behaviour and try to remove their behavioural obstacles, using psychology and organizational behaviour approaches and correcting existing errors in this direction can improve their behavioural capabilities in their financial activities. take action.
- It is suggested that instead of holding educational workshops and seminars, holding medium-term and long-term training courses, using magazines, brochures, and animations, including them in textbooks and course headings, creating widespread culture through the national media, educating families to involve their children in financial decisions. Effective measures should be taken.

It is worth mentioning that there were limitations in the process of conducting this research, such as the possibility of providing incorrect answers and the cross-sectional nature of the research, which led to the difficulty of concluding causality. Also, the lack of familiarity of all respondents with financial concepts made it difficult for the researchers.

References

- [1] E. Aguila, M. Angrisani, and L.R. Blanco, *Ownership of a bank account and health of older Hispanics*, Econ. Lett. **144** (2016), 41–44.
- [2] M. Ali, Z. Uddin, and A. Hossain, *Economic stressors and mental health symptoms among Bangladeshi rehabilitation professionals: a cross-sectional study amid COVID-19 pandemic*, Heliyon **7** (2021), no. 4.
- [3] Y. Cao, Z.F. Ma, Y. Zhang, and Y. Zhang, *Evaluation of lifestyle, attitude and stressful impact amid COVID-19 among adults in Shanghai, China*, Int. J. Envir. Health Res. **32** (2022), no. 5, 1137–1146.
- [4] M. Chilton, M. Knowles, and S.L. Bloom, *The intergenerational circumstances of household food insecurity and adversity*, J. Hunger Envir. Nutrition **12** (2017), no. 2, 269–297.
- [5] D.A. Frank, P.H. Casey, M.M. Black, R. Rose-Jacobs, M. Chilton, D. Cutts, E. March, T. Heeren, S. Coleman, S.E. de Cuba, and J.T. Cook, *Cumulative hardship and wellness of low-income, young children: multisite surveillance study*, Pediatrics **125** (2010), no. 5, 1115–1123.
- [6] J. Gardner and A. Oswald, *Does money buy happiness? A longitudinal study using data on windfalls*, Mimeo, Warwick University, 2001, Retrieved from: <http://repec.org/res2002/Gardner.pdf>.
- [7] S. Gundert and C. Hohendanner, *Active labour market policies and social integration in Germany: Do 'One-Euro-Jobs' improve individuals' sense of social integration?*, Eur. Soc. Rev. **31** (2015), no. 6, 780–797.
- [8] S.J. Heckman and S.D. Hanna, *Individual and institutional factors related to low-income household saving behavior*, J. Fin. Counsel. Plan. **26** (2015), no. 2.
- [9] W. Johnson and R.F. Krueger, *How money buys happiness: genetic and environmental processes linking finances and life satisfaction*, J. Personal. Soc. Psycho. **90** (2006), no. 4, 680.
- [10] S. Joo, *Personal financial wellness*, J.J. Xiao, (eds), Handbook of consumer finance research, New York, NY: Springer New York, 2008, 21–33.
- [11] S. Khajavi and A. Mosalla Nejad, *Financial coaching and financial therapy: differences and boundaries*, Financ. Behav. Res. Account. **2** (2022), no. 2 (consecutive 5).
- [12] H.-L. Liu, E.S. Lavender-Stott, C.L. Carotta, and A.S. Garcia, *Leisure experience and participation and its contribution to stress-related growth amid COVID-19 pandemic*, Leisure Stud. **41** (2022), no. 1, 70–84.
- [13] H. Rashidi, J. Satari and M. Abdi, *Investigating the impact of financial health and creditors' rights on the efficiency of company investment in the Tehran Stock Exchange*, First Nat. Conf. Health Promot. Legal Med. Challenges Facing it, Maragheh, 2023.
- [14] S.B. Raskin, *Why is the fed spending so much money on a dying industry?*, New York Times **28** (2020).
- [15] M. Reid, D.C. Jessop, and E. Miles, *Explaining the negative impact of financial concern on undergraduates'*

- academic outcomes: Evidence for stress and belonging as mediators*, J. Further Higher Educ. **44** (2020), no. 9, 1157–1187.
- [16] L.I. Reutter, M.J. Stewart, G. Veenstra, R. Love, D. Raphael, and E. Makwarimba, “Who do they think we are, anyway?”: Perceptions of and responses to poverty stigma, Qual. Health Res. **19** (2009), no. 3, 297–311.
- [17] E. Sam Aram, J. Hezarjaribi, M. Fadakar, M. Karami, and M.M. Shamsaei, *Spiritual health: Framework, scope, and components based on the teachings of Islam*, Soc. Dev. Welfare Plann. **4** (2013), no. 14, 1–26.
- [18] M. Sandel, R. Sheward, S.E. de Cuba, S. Coleman, T. Heeren, M.M. Black, P.H. Casey, M. Chilton, J. Cook, D.B. Cutts, and R. Rose-Jacobs, *Timing and duration of pre-and postnatal homelessness and the health of young children*, Pediatrics **142** (2018), no. 4.
- [19] A.B. Siddique, S.D. Nath, M.S. Islam, T.H. Khan, S. Pardhan, M. Ziaul Amin, M. Imran Al Amin, Z.B.Z. Shawon, and K.N. Koly, *Financial difficulties correlate with mental health among Bangladeshi residents amid COVID-19 pandemic: Findings from a cross-sectional survey*, Front. Psych. **12** (2021), 755357.
- [20] G.M. Slavich, A. O'Donovan, E.S. Epel, and M.E. Kemeny, *Black sheep get the blues: A psychobiological model of social rejection and depression*, Neurosci. Biobehav. Rev. **35** (2010), no. 1, 39–45.
- [21] M.J. Stewart, C.G. Maher, K.M. Refshauge, R.D. Herbert, and M.K. Nicholas, *Patient and clinician treatment preferences do not moderate the effect of exercise treatment in chronic whiplash-associated disorders*, Eur. J. Pain, **12** (2008), no. 7, 879–885.
- [22] M.J. Stewart, E. Makwarimba, L.I. Reutter, G. Veenstra, D. Raphael, and R. Love, *Poverty, sense of belonging and experiences of social isolation*, J. Poverty **13** (2009), no. 2, 173–195.
- [23] W. Vosloo, *The relationship between financial efficacy, satisfaction with remuneration and personal financial well-being*, PhD diss., The Potchefstroom Campus of the North-West University, 2014.
- [24] E.B. Weida, P. Phojanakong, F. Patel, and M. Chilton, *Financial health as a measurable social determinant of health*, PloS One **15** (2020), no. 5, e0233359.
- [25] World Health Organization, *Mental health: A state of wellbeing*, www.who.int/features/factfiles/mental_health/en/, 2014.
- [26] M.H. Zamani Harouni and H. Aflaki Fard, *Investigating the impact of problems, situation and financial stress on the mental health of elementary school students: A case study of an elementary school in Abarkoh city*, First Int. Conf. Psycho. Soc. Sci. Educ. Sci. Phil., Babylon, 2023.