

Research Article

A Study of Social Capital on the Social Health of Students (Field Survey of First Secondary Schools in Shahrood City)

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Abstract

Social health is defined as how a person evaluates his or her performance against social. So the issue of health and well-being is socially structured. Social health is affected by many factors. In this study, students' social health has been researched under the influence of the effective factor of family social capital. This research is a descriptive and survey research in terms of applied purpose and in terms of data collection. The statistical population of the study consists of students of public schools in Shahrood, which is equal to 6200 people, and according to Cochran's formula, 291 people were selected to collect research data. According to random sampling, three schools (Ikhlas, Moallem and Motahhari) were selected from public schools to collect information. The theoretical foundations selected and used in this study were combined. Keyes and Shapiro theories were used for the dependent variable of the research and theories were used to analyze the relationship between the independent variable and the dependent variable: Keys, Reef, Larsen, Block & Breslow, Francis Fukuyama, Robert Putnam, James Coleman, Pierre Bourdieu, Marx and Durkheim. The results showed that all three components of social capital (family social trust) had a positive and strong relationship with Pearson coefficient: 0.61 and (family social cohesion with relationship coefficient: 0.54 and family social participation with relationship coefficient: 0.47) with dependent variable (Social health of Shahrood students) has had a positive and direct impact on the average. Family social trust in the first place and family social cohesion in the second degree were able to explain 39% of the variance of the dependent variable.

Keywords

Family Social Capital, Social Trust, Social Cohesion, Social Participation and Students' Social Health

1. Introduction

"The issue of health has been discussed since the beginning of mankind and in many centuries. But whenever it is mentioned, generally its physical aspect is taken into considera-

tion and less attention is paid to other aspects of health, especially its social aspect. From the point of view of the World Health Organization, health is one of the main human rights

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Received: 16 November 2024; **Accepted:** 2 December 2024; **Published:** 30 December 2024



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and as a result, all human beings should have access to basic resources to ensure health [18].” “The issue of health and youth health is the product of the emergence of the youth period and it is also the result of modernity and the expansion of the new urban society. Although the issue of health and health behaviors of young people and adolescents, focusing on high-risk behaviors, reached the public opinion, later, almost every behavior related to health became a part of the more general topic of youth and adolescent health [9].” “The concept of social health was investigated for the first time in 1972 in a research by Block and Breslow. A few years later Donald and her colleagues extended it in 1978. They believed that social health is actually both a part of the pillars of health status and can be a function of it. In general, the social dimension of health includes the levels of social skills and social functioning and the ability of each person to recognize himself as a member of the larger society. In this sense, everyone is considered a member of the family and a member of a larger society. In measuring social health, attention is paid to the way a person communicates in the network of social relationships. The importance of paying attention to the social dimension of development as well as the World Health Organization's emphasis on social health, along with physical health, has caused this until today, social health has become a common concern of sociologists and social planners in every society. The importance of social health is to the extent that people with social health can more successfully cope with the problems caused by playing the main social roles. They live in families that are more stable and coherent and can probably participate in more collective activities, and it should be expected that they are more compatible with social norms. This situation can play a role in preventing social deviation, which has dimensions beyond the realm of individual behavior [20].”

“Wyatt, Oswalt & Ochoa showed that the prevalence and severity of health problems among college students have increased and these issues are a threat to their health and academic performance [30].” “Health effects are seen on 11.9% of children and adolescents, as well as mental health effects on adults. Meanwhile, children and teenagers suffer from certain vulnerabilities compared to adults. Also, children and adolescents have attachments with adults that can moderate exposure to stressful and problematic mental health risks [10].”

“One of the types of health can be mentioned the social health of students. Social health is how a person evaluates his performance in front of society. A socially healthy person considers society as a meaningful, comprehensible and potential group for growth and prosperity, and feels that he belongs to society, is accepted by society, and contributes to its progress. This concept originates from a sociological and psychological principle. In this concept, the dimensions of social health are related to dimensions and aspects of collective life, such as how does a person get along with others? How do others react to her/him and how does he/she interact

with social institutions and norms? Meanwhile, social health is measured at the interpersonal level with social trust and support, at the social level with social capital and social efficiency. Each level of social health affects other levels and is affected by them [22].” “The concept of social health is a concept that is considered along with the physical and mental dimensions of health, and its social aspect is examined by focusing on the individual. It should be acknowledged that social health is one of the fundamental principles in improving mental illnesses in society. In 1349, the World Health Organization defined the concept of social health as focusing on the criteria of social activities, social well-being, social communication, interpersonal communication, social support, satisfaction and participation in social roles [27].”

“Regarding the importance of health, many researches have shown that despite the fact that health issues are specific to all groups of society, they are more important in the group of students. The National Student Studies Union in America has reported that twenty percent of students are involved in mental and social health problems. Other studies have indicated the increasing desire of students (twenty-five percent of girls and forty percent of boys) to use drugs due to mental abnormalities and social imbalances [12].” “Various factors may affect the social health of students. One of these factors can be social capital. Social capital refers to the characteristics of social and cultural organization such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated actions. Sources of social capital, including trust, norms, and networks, are usually self-reinforcing and self-enhancing, and this process leads to a social equilibrium that is associated with a high level of cooperation, trust, reciprocity, civic participation, and collective well-being, on the contrary, the absence of these characteristics. It is also self-reinforcing. Mistrust, deception, disorganization and stagnation, intensify and reproduce each other. Social capital can reduce negative life events and be beneficial for people during life changes and challenges [24].” “Social capital is defined as aspects of social and cultural life, networks, norms, and social trust that enable participants to more effectively accomplish common goals [23].” Empowering students to live in the current era is one of the duties of the education institution. This institution is considered the foundation of development and progress and is trained the future architects of the country. Among the educational courses, secondary level is of high importance and fateful as a link between school and society. Graduates of this level need to enjoy social health as a component for a better life in the current era. On the other hand, the researcher himself, in the role of a teacher, sought to investigate what is the relationship between the social capital within the family and the social health of students. Therefore, the researcher seeks to answer this issue, does the social capital within the family have an effect on the social health of the first high school students? And what is the mechanism of this effect?

Research questions: The current research seeks to find

answers to these questions:

- 1) Does the social capital of students' families affect their social health?
- 2) Does the social trust of students' families affect their social health?
- 3) Does the social cohesion of students' families affect their social health?
- 4) Does the social participation of students' families affect their social health?

2. Theoretical Foundations of Research

"Despite the beliefs that we all have in our minds about health and illness, defining the word health seems to be very complicated and difficult. And maybe this complexity comes back to the many interpretations that each person has based on personal experiences and cultural learning, beliefs and attitudes. More than any action, dealing with the concept and scope of words has been used in the standardization of terms. The last action in this regard was done in 2000. Every 10 years, the American Association of Health Education forms a special group called the Adjunct Committee on Terminology of Health Education and Health Promotion to review and update the terms of this field, and the first meeting of this committee was held in 1927 [26]."

"After the Second World War, with the formation of the World Health Organization, which had an international presence, the term health took a new form. Around this time, the United States Laboratory of Health was renamed the National Institutes of Health. In 1948, the World Health Organization defined health according to its structure as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." and after that, many criticisms were made during the recent years of this definition [3]." "Health has different dimensions, the most obvious of which is physical. The dimensions mentioned in different sources for health, they are: physical dimension, psychological dimension, spiritual dimension, emotional, emotional or emotional dimension, cultural dimension, economic dimension, occupational dimension, devotional dimension, moral dimension, spiritual dimension, religious dimension, communication dimension, social dimension, etc. [26]."

"Social health refers to the relationship between the two concepts of health and society, considering that the community itself is a valid concept and its external truth depends on each and every person who formed it, in examining the society, one should study the people of the society more than anything else. Social health is achieved when families and individuals enjoy relative health and each citizen feels responsible for her/his community and considers her/his happiness in the health of the community [4]."

Social health is necessary for citizen health and has important characteristics as follows:

- a) Active participation in social life and acceptance of re-

sponsibility

- b) b) Knowing your rights and duties as a citizen
- c) Knowing the rights and duties of others and respecting their rights
- d) Respecting the environment and trying to preserve it
- e) Knowledge of culture and social values
- f) Avoiding violence and having patience and tolerance with others, social participation

"In this index, people come to believe and feel that they have something valuable to offer to the society and their activities are important for the society [19]."

"Keyes presents the dimensions of social health by considering the health model. In fact, Keyes' multifaceted model of social health includes five aspects, including 1. Social flourishing 2. Social solidarity 3. Social acceptance 4. Social participation 5. Social cohesion [16]."

"During the last few decades, in addition to the human, physical and economic capitals ... mentioned in the traditional perspectives of development, social capital has also been paid attention to the development discussions. Social capital is a cross-disciplinary concept between humanities that deals with the role of social forces in the development of societies and economists and sociologists pay attention to this concept in economic and social surveys of developed societies. This approach shows the importance of the role of social structures and relations on the economic, social and cultural variables of societies. On the other hand, the study of the growth and development process of countries shows the fact that other capitals, if social capital is used, cause the growth and development of a society. When there is social capital, social actions are facilitated and the cost of interactions is reduced. Social stability and cohesion, along with social cooperation and participation, which are components of social capital, are necessary conditions for development [7]."

"James Coleman created an important work in the literature of development sociology with his article "Social capital in the creation of human capital". After him, Robert Putnam in 1993 published the book "Efficient Democracy Foundation; Civil traditions" and the article "One-man bowling, the reduction of American social capital" in 1995 caused more public attention to the idea of social capital and how to increase, decrease and restore it in America [1]."

Bourdieu believed that it is impossible to understand the social world without understanding the role of different forms of capital that are presented in economic theory. In general, his theory focuses precisely on the methods of using connections (communications between members of a group) by some groups to gain more profit, and he emphasizes that inequality should be explained through production and reproduction, and this is where he defines social capital as follows: "A capital of social relations that provides useful support when needed; That is, the capital of honor and dignity, which is often absolutely necessary if a person wants to attract clients in important social situations, and may be presented in the form of a type of currency, including in a political career". It can be

concluded: According to Pierre Bourdieu, social capital consists of situations and relationships that increase people's access to opportunities, information, material resources and social status within groups and social networks.

"Bourdieu considers the abuse of social capital as possible, especially from those who, in his words, are able to represent institutionalized social capital; like family elders and aristocrats who benefit from the institutionalized connections of the aristocracy. In addition, Bourdieu believes that social capital is one of the assets of the rich and a means to maintain their superiority. In his theory, there is a place for the possibility of exploiting others; it means that there are no poorer people or groups than these social links. Bourdieu sees social capital in the service of increasing the wealth of capitalists and reducing the wealth of the weak; because he analyzes social phenomena from a Marxist point of view [1]."

"Coleman is an American sociologist and his definition of social capital and its forms is based on this foundation and rightly, he is the most important person who caused the development of this theory in contemporary sociology (Rational choice theory believes that all behavior originates from people's pursuit of profit); Therefore, from Coleman's point of view, social interaction is considered as a form of exchange and social capital for him is a means to explain how people cooperate and cooperate with each other to earn profit. As a result, he emphasizes the usefulness of social capital; and considers it a source of cooperation, bilateral relations and social development. According to Coleman, social organization creates social capital and it facilitates the achievement of goals that could not be achieved without it or could be achieved at a higher cost [3]."

"The researches of Putnam and his colleagues created a new insight in the theory of social capital. The subject of this research was to examine the performance of these government institutions in different regions based on 12 indicators indicating the sharp difference between the north and the south of Italy. Putnam asked this question after some time of study that despite the specific and identical policies of the central government, the democratic institutions in northern Italy work more efficiently than in the south. In addition, what factor explains the difference in economic growth between northern and southern Italy. The results of Putnam's research and investigations led to a definition of the concept of social capital and its aspects and forms, which include: Social capital is various aspects of social organization, such as trust, norms and networks, which can improve the functioning of society by facilitating coordinated actions. In fact, this concept, social capital, refers to the links between the members of a network as a valuable resource that, by creating norms and mutual trust, leads to the realization of the goals of the members [31]."

"Heydarabadi et al. studied the sociological relationship between social capital and social health (a case study of students in district 5 of Tehran) in a research. The results of the research showed that there is a positive and significant relationship between social capital and its dimensions (structural

social capital and cognitive social capital) with social health. The results of multivariate regression analysis showed that 31% of the variance of social health can be explained by social capital [13]."

"Islam Dost investigated the relationship between social capital and social health among citizens over 20 years old in Urmia city. The findings from the data analysis showed that there is a significant relationship between social capital and social health and between social and economic base and social health [14]."

"Ghorbani et al. investigated the relationship between psychological and social capitals and social health according to the mediating variable of social support. In order to evaluate the relationships between the variables, the method of path analysis was used in structural equations. The results of the path analysis showed that only the coefficients of the paths of social capital to social support, psychological capital to social health and the path of social support to social health are positive and significant [9]."

"Omidian and Esmaeilpour Ashkaftaki conducted a research among the students of Chaharmahal and Bakhtiari provinces with the title "Prediction of social support of students based on the components of social capital and psychological capital in the crisis of the Corona epidemic". The obtained results showed that social capital and psychological capital are positively correlated with social support of students [21]."

"Solhi et al. conducted a research titled "Relationship between background variables and social capital in Iranian medical students". Improving the social capital of students should be one of the main goals of university officials in the trust dimension, as well as improving students' housing and employment conditions [28]."

Wu conducted a research titled "Social Capital and COVID-19: A Multidimensional and Multilevel Approach" in 2021. Growing evidence suggests that pandemic outbreaks like the COVID-19 pandemic are better managed in places where social capital is high.

"Ji et al. (2020) conducted a study titled "Family Socio-economic Base, Family Social Capital, and General Health in Chinese Adults: Examining Their Relationships and Gender Differences." The results provide strong support for a positive association between family socioeconomic base, family social capital, and adult health. Family intervention programs should focus on creating a harmonious family relationship to mobilize family support, especially for families with low cohesion and low family socioeconomic base [15]."

Hashemipour et al. came to this conclusion in a research titled "Relationship between social capital and health-promoting lifestyle in nursing students" that the average scores of social capital and lifestyle promoting health were 2.44 and 2.47, respectively [11]."

"Carrillo Alvarez et al. conducted a study entitled "Family Social Capital and Health - A Systematic Review and Redirection". Our findings are consistent with the idea that family

social capital is multidimensional and its components have different effects on health outcomes. To understand the mechanisms by which family social capital is related to health as well as determining the most valid methods for measuring family social capital, more research is needed [5].”

“McPherson et al. concluded a study entitled "Relation between social capital and mental health and behavioral problems in children and adolescents: an integrated systematic review" that, to date, this is the most comprehensive review of the evidence on the relationship between social capital and psychological/behavioral problems in children and adolescents. This shows that the social capital created and mobilized at the family and community level can affect the consequences of psychological behavior/problems in youth [17].”

3. Research Method

The method of this research is documentary and survey and descriptive and explanatory. Conceptual and theoretical dimensions of the subject have been examined using the documentary method. Before setting up the data collection tool (interview-questionnaire), the researcher has benefited from participatory observation for a year and a half.

“Survey does not mean a special technique in gathering information. Although questionnaires are mainly used in it, other techniques such as in-depth and structured interviews, content analysis, longitudinal studies and others are used. The distinctive features of the survey are the method of data collection and their analysis method [6].”

The statistical population of the present study includes all students of the first secondary level of Shahrood city in the year 1400. The number of these students is about 1214 people.

First, three schools were randomly selected from all public schools, according to Cochran's formula and according to the statistical number of 6200 people, 291 people were randomly selected from three schools of Ekhlās, Moalem and Motahhari as a statistical sample.

$$\text{Cochran formula } n = \frac{N \cdot t^2 \cdot p \cdot q}{N \cdot d^2 + t^2 \cdot p \cdot q}$$

$$n = \frac{6200 * .3.84 * .0.25}{6200 * .0.0036 + 3.84 * 0.25} = 265.95$$

3.1. Conceptual and Operational Definitions of Variables

A) Dependent variable: “Goldsmith introduces social health indicators as one of the most basic health indicators of any country and social health is defined by the evaluation of significant positive and negative behaviors of a person in relation to others [9].” The social health questionnaire was created by Keyes (2004). This scale has 20 items with a five-point Likert scale (strongly disagree to strongly agree)

where each question has a value between 1 and 5.

b) Independent variables: “Social capital, like the concepts of physical capital and human capital, refers to the characteristics of social organization such as networks, norms and trust which facilitates coordination and cooperation to obtain mutual benefits. Also, social capital increases the benefits of investment in the field of physical capital and human capital [8].” Since the social capital within the family should be measured in relation to the students and their educational conditions, also a limited number of questions should be kept in mind for the conditions of the respondents, so the questions related to the independent variable of the research (social capital) with its three dimensions (social trust, social cohesion and social participation) were designed with the guidance of the supervisor of this research, which is made by the researcher. This scale has 18 items with a five-point Likert scale (very high to very low) and each item (index) has a value between 1 and 5.

Table 1. Cronbach's alpha test results for the measurement tool.

Variables	Number of Item	Reliability
Family Social trust	7	0.90
Social cohesion of the family	5	0.88
Social participation of the family	6	0.83
Social capital	18	0.94
Social prosperity	4	0.79
Social Solidarity	3	0.76
Social solidarity	3	0.91
Social acceptance	5	0.81
Social participation	5	0.84
Social health	20	0.91

Table 1 shows the approved and acceptable alpha of all research variables, which are higher than the minimum alpha (0.7).

3.2. Research Assumptions

- 1) There is a significant relationship between the social capital of students' families and their social health.
- 2) There is a significant relationship between the social trust of students' families and their social health.
- 3) There is a significant relationship between the social cohesion of students' families and their social health.
- 4) There is a significant relationship between the social participation of students' families and their social health.

4. Research Findings

4.1. Characteristics of the Sample Population

Table 2. One-dimensional distribution of frequency and frequency percentage of students' father's education, family social capital and family social health.

variables	Family social health variable			Family social capital variable			Students' father's education		
	High	Moderate	Low	High	Moderate	Low	Master's degree and higher	Master's degree and bachelor's degree	Diploma and below
Groups	106	161	24	180	88	23	27	92	172
Frequency	36.4	55.3	8.2	61.9	30.2	7.9	9	32	59
Percent									

Table 2 is the one-dimensional distribution of frequency and frequency percentage of students' father's education, family's social capital and family's social health. The results obtained from the data of the present research show that out of the total number of 291 respondents, according to the education of the students' fathers: 172 of them (59%) have a diploma or lower, 92 of them (32%) have a post-graduate diploma and bachelor's degree, and 27 of them have 90 percent) were graduate and above. According to the evaluation of the social capital of the family by the students themselves: their evaluation of the social capital of their family; 23 of them (7.9%) were from the lower class, 88 of them (30.2%) were from the middle class, and 180 of them (61.9%) were from the upper class. According to the level of social health of the family: 24 of them (8.2%) were from the lower class, 161 of them (55.3%) were from the middle class, and 106 of them (36.4%) were from the upper class. which shows the higher

number of high school diploma level and lower number of students' fathers, the upper class of family social capital and the middle class of social health of the research respondents' families.

4.2. Inferential Findings

The desired hypotheses were evaluated using univariate and multivariate regression tests and the following results were obtained. Tables 3 to 7 show the relationship of each of the independent variables with the dependent variable. Considering that the measurement level of the dependent variable (social health of Shahrood students) and the independent variables (social capital and its three components: social trust, social cohesion and social participation) is a distance from the regression test to examine 4 research hypotheses.

Table 3. Regression results to test the relationship between two variables of social capital of Shahrood students' families and their social health.

Variable	R	R ²	Standard error	T-Value	Sig
The social capital of Shahrood students' families	0.62	0.38	0.040	13.382	0.000

Examination of the hypothesis 1. There is a significant relationship between the social capital of Shahrood students' families and their social health. In this research, it is expected that with the increase of social capital of the students' families, their social health will increase.

Table 3 shows the univariate regression analysis to test the relationship between the social capital of Shahrood students'

families and their social health. The findings confirm the relationship between the above two variables. The direction of the relationship is also positive. That is, the greater the social capital of Shahrood students' families, the greater and stronger their social health. The value of the regression correlation coefficient between the two relevant variables (0.62) which shows the strong relationship and significant effect of the

social capital variable of Shahrood students' families with their social health. In order to obtain the coefficient of determination between the two variables of the social capital of Shahrood students' families and their social health, a one-variable regression test was performed. R^2 shows that 38% of the changes in the social health of Shahrood students de-

pend on the social capital within the family. ($\beta = 0.62$) indicates a positive and direct relationship between the above two variables. And in addition to that, the B coefficient obtained is an expression that for each unit increase in the independent variable, 0.54 units are added to the dependent variable.

Table 4. Regression results to test the relationship between the two variables of social trust of Shahrood students' families and their social health.

Variable	R	R^2	Standard error	T-Value	Sig
Social trust of Shahrood students' families	0.60	0.36	0.092	12.952	0.000

Examination of hypothesis 2. There is a significant relationship between the social trust of Shahrood students' families and their social health. In this research, it is expected that when the social trust of students' families increases, their social health will increase.

The results of the Pearson correlation test show that there is a significant relationship between these two variables (the social trust of Shahrood students' families and their social health) at the 99% confidence level. The results of the Pearson correlation test show that there is a significant relationship between these two variables (the social trust of Shahrood students' families and their social health) at the 99% confidence level. The intensity of this correlation is evaluated according to the Pearson coefficient (0.60) at a strong and direct level. Based on the results of the Pearson test, the main

hypothesis of the research is confirmed in the sense of the existence of a relationship between the social trust of students' families and their social health. This means that with the increase in the social trust of Shahrood students' families, their social health variable increases (Table 4). In order to achieve the coefficient of determination between the two variables of the social trust of Shahrood students' families and their social health, a one-variable regression test was performed. R^2 indicates that 36% of the changes in the social health of Shahrood students depend on the social trust within the family. The amount of $\beta = 0.60$ (Beta) shows the positive and direct relationship between the above two variables, and in addition to that, the coefficient B obtained is an expression that for each unit increase in the independent variable, 1.195 units are added to the dependent variable.

Table 5. Regression results to test the relationship between the two variables of social cohesion of Shahrood students' families and their social health.

Variable	R	R^2	Standard error	T-Value	Sig
Social cohesion of Shahrood students' families	0.54	0.29	0.112	10.780	0.000

Examination of hypothesis 3. There is a significant relationship between the social cohesion of Shahrood students' families and their social health. In this research, it is expected that by increasing the social participation of Shahrood students' families, their social health will increase.

Pearson's test was performed to test the third hypothesis of the research and the variable relationships of family social cohesion of Shahrood students and their social health. According to the Pearson correlation coefficient (0.54) and significance level ($\text{sig}=0.000$), the relationship between the

above two variables is evaluated at a medium to high level. The direction of their relationship is positive and direct, which means that with the increase in the social cohesion of the Shahrood students' families, their social health increases in a medium to high level, and with 99% certainty, the results of the research can be generalized to the statistical community. Based on the results of the Pearson test, the third hypothesis of the research means that there is a relationship between the social cohesion of Shahrood students' families and their social health (Table 5).

Table 6. Regression results to test the relationship between the two variables of social participation of Shahrood students' families and their social health.

Variable	R	R ²	Standard error	T-Value	Sig
Social participation of Shahrood students' families	0.47	0.22	0.146	9.126	0.000

Examination of hypothesis 4. There is a significant relationship between the social participation of Shahrood students' families and their social health.

In this research, it is expected that when the social participation of Shahrood students' families increases, their social health will increase. By performing Pearson's correlation test, the result was that there is a significant relationship between these two variables (social participation of Shahrood students' families and their social health) at the 99% confidence level. The intensity of this correlation is evaluated according to Pearson's coefficient (0.47) at a medium and direct level. Based on the Pearson test, the main hypothesis of the research is confirmed in the sense of the existence of a relationship between the social participation of students' families and their

social health. This means that with the increase in the social participation of Shahrood students' families, their social health variable increases. In order to achieve the coefficient of determination between the two variables of social participation of Shahrood students' families and their social health, a one-variable regression test was performed. R² indicates that 22% of changes in the social health of Shahrood students depend on social participation within the family. The amount of $\beta = 0.47$ (Beta) shows the positive and direct relationship between the above two variables, and in addition to that, the obtained B coefficient indicates that for each unit increase in the independent variable, 1.330 units are added to the dependent variable (Table 6).

Table 7. Multivariate regression coefficient for independent variables included in the regression model.

Variables	Non-standard coefficients		Beta Coefficient	T Coefficient	Sig
	B	Std. Error			
constant	31.229	2.613		11.953	0.000
1 Social trust of Shahrood students' families	0.887	0.123	0.450	7.192	0.000
2 Social cohesion of Shahrood students' families	0.517	0.141	0.229	3.658	0.000

Table 7 shows the results of multivariate regression analysis (step by step) for the dependent variable "social health of Shahrood students". The independent variables that had a significant relationship with the dependent variable were included in the equation, and out of the 3 relevant independent variables of the study, 2 variables were included in the equation. These 2 independent variables were able to explain 0.39% of the variance of the dependent variable (social health of Shahrood students). To draw the path analysis diagram, first, a multivariate regression test is performed with three components of the independent variable (social trust of students' families, social cohesion of students' families, and social participation of students' families) with the dependent variable (social health of Shahrood students). The results showed that out of the three components of the independent variable, only two components had a direct and direct correlation with the dependent variable:

1) Social trust of students' families (with a coefficient of

0.45)

2) Social cohesion of students' families (with a coefficient of 0.23)

In the three components of the independent variable of social capital of the students' families, two components were considered more important in the regression method and a direct correlation was seen with the variable of social health of Shahrood students without the influence of other factors. In order to achieve the path analysis model, each time one of the two components (the social trust of the students' family and the social cohesion of the students' families) is placed as the dependent variable in the multivariate regression test and the effect of other factors on them is measured. In this way, the indirect effects are obtained after measuring the direct effects and are shown by arrows that point towards the dependent variable, and the corresponding Beta coefficients (standard effect coefficient) of each variable are written on its own arrow. This is shown in Figure 1.

Table 8. Statistics of 3 times of multiple regression test, based on which chart 1 was prepared and designed.

The dependent variable	The three independent components of research	R	R ²	SEE (Standard error)	R ² Adjusted	F Test amount (p-value)
Social health of Shahrood students	1. Social trust of students' families 2. Social cohesion of students' families 3. Social participation of students' families	0.629	0.395	10.457	0.391	94.166 (0.000)
Social trust of students' families	1. Social cohesion of students' families 2. Social participation of students' families	0.760	0.577	4.436	0.574	196.514 (0.000)
Social cohesion of students' families	1. Social trust of students' families 2. Social participation of students' families	0.712	0.507	4.179	0.504	148.189 (0.000)

The correlation coefficient (R) of the multivariate regression between the components of the independent variable (1. social trust of students' families and 2. social cohesion of students' families) with the dependent variable (social health of Shahrood students) was 0.629. If we raise this obtained coefficient to the power of two, we get $R^2=0.39$. And it is analyzed in such a way that 39 percent of the changes in the

dependent variable of the research are analyzed and explained by the above two components. In other words, 61 percent ($1-0.39=0.61$) of the changes in the social health of Shahrood students are determined by other factors that need to be investigated. And the explanation of 39% by these two explanatory components seems reasonable and appropriate.

Table 9. The total effect (direct and indirect) of the three components of the social capital of Shahrood students' families on the dependent variable of the research.

Components	Direct effect (without intermediary)	Indirect impact (mediated)	The effect of the total components
Social trust of students' families	0.45	$0.49 * 0.45 = 0.22$	0.67
Social cohesion of students' families	0.23	$0.42 * 0.23 = 0.10$	0.33
Social participation of students' families	-----	$0.43 * 0.67 = 0.29$ $0.29 * 0.33 = 0.10$	0.39

How to calculate the total impact is as follows; the amount of direct effect is written as Beta, the standard coefficient of the effect of the independent variable on the dependent variable. The amount of indirect effect is also written from the product of the coefficient values of the path vectors from the independent variable to the dependent variable. The effect of the social participation component of students' families is also obtained by multiplying its direct effect on the total coefficient of the components of social trust of students' families and social cohesion of students' families. And the total effect of all three components is calculated by summing the direct effect and the indirect effect.

Figure 1 shows direct relationships (two variables of family

social trust and family social cohesion) and indirect relationships (family social participation variable) with the dependent variable of the research. As can be seen in the above relationships, the two variables of family social trust and family social cohesion, in addition to having a direct relationship, also have an indirect relationship with the dependent variable. But the social participation variable of the family only has an indirect effect on the dependent variable. It is clear that the variable of family social participation has an effect on the social health of Shahrood students through two variables of family social trust and family social cohesion, which is evident in Figure 1.

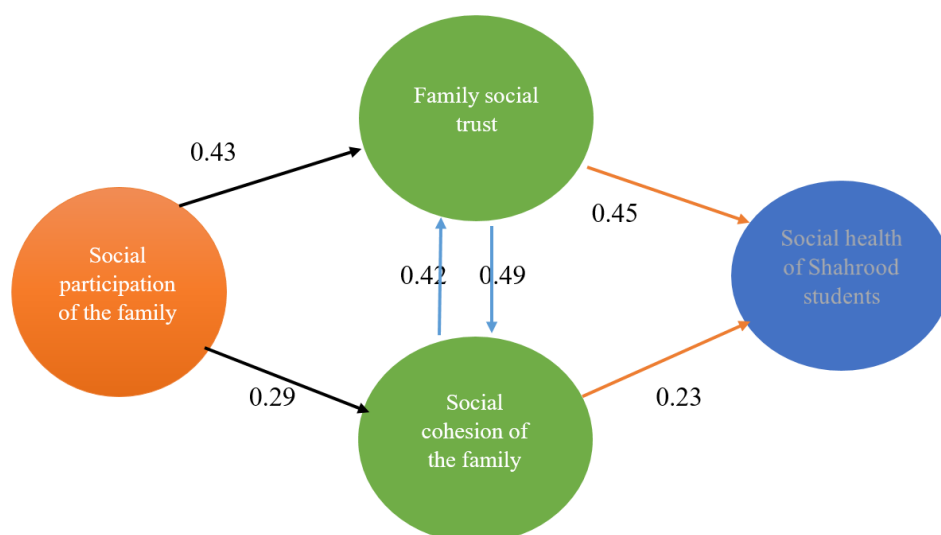


Figure 1. Factors affecting the social health of Shahrood students (along with path coefficients).

5. Discussion and Conclusion

In order to explain and mentally analyze and gain theoretical knowledge, the experimental results obtained from this research are compared and exchanged with other research results that are presented in the second chapter of this research. In the majority of previous researches, this common result was obtained that social capital with all its components had a positive and significant effect on the dependent variable of the research (social health of Shahrood students).

In some researches, social capital has been able to show a direct and positive effect on emotional-psychological health, physical health, facilitating people's actions and one of its most important effects is social health, and on the other hand, social capital has shown a negative and inverse effect on negative attitudes such as alienation, mental disorders and depression, negative performance such as academic failure, low quality of life and lack of job productivity. Which will be mentioned separately in previous researches.

Kerry Wu concluded that the Corona pandemic was better managed in places with high social capital. As a result, she showed that social capital has often had an impact on the Corona response through facilitating collective actions, promoting public acceptance and observing control measures in the form of trust and norms at the individual level [33]. Ganji et al. (2021) concluded that women who are economically disadvantaged are overweight, obese, and have high blood sugar levels, and are also at greater risk for treatment due to low social capital and, as a result, lack of blood sugar control. Therefore, interventions related to increasing social capital in these groups should be considered with more attention and strength. That increasing social capital is one of the main approaches to improve health. Islam Dost (2019) found a significant relationship between social capital, social and

economic base and social health. Omidian and esmaeilpour (2019) concluded that social capital and psychological capital were positively correlated with social support of students. Ghorbani et al. (2019) showed that social capital and psychological capital without intervening variables have a positive and significant effect on social health. Jay et al. (2020) concluded that the social capital of the family and the socio-economic base of the family had a strong and significant relationship with the health of adults. Hashmipour et al. (2020) showed that social capital had a significant relationship with health promoting lifestyle. In their research, Selahi and others (2018) concluded that one of the dimensions of social capital (group participation) had the highest average, and the variables of employment status, educational level and residence status showed a significant relationship with social capital. Carrillo Alvarez and others (2016) stated that social capital fluctuates in three macro levels (national level), medium level (workplace, schools, neighborhoods) and individual level. Social capital with its multiple dimensions has had different effects on health outcomes. McPherson and others (2014) concluded that the social capital created and mobilized at the family and community level can have a great impact on the consequences of psychological-problem behavior in youth.

The experimental result obtained in this research is consistent with all the results obtained in previous researches. In other words, this research reached the conclusion that social capital with all its three components (family social trust, family social cohesion and family social participation) had a positive and significant effect on the social health of Shahrood students. So that the two components of family social trust and family social cohesion both directly and indirectly have been able to have a positive effect on the social health of Shahrood students, and explain 39% of the variance of students' social health. In Hyderabad et al.'s research (2020), they came to the conclusion that 31% of the variance of social health can be explained by social capital. The result of this

research is in line with most of the researches mentioned and especially the recent research.

In this research, social capital with its three main components (social trust of the family, social cohesion of the family and social participation of the family) has been included as an independent variable and has an effect on the dependent variable of the research (social health of Shahrood students). All four hypotheses of this research were confirmed and showed a positive or direct relationship with the social health variable of Shahrood students.

The findings of this research show that among the 3 independent variable components of students' family social capital, two components (students' family social trust, students' family social cohesion) are considered more important in the regression method, and there was a direct correlation with the social health variable of Shahrood students without the influence of other factors. The correlation coefficient (R) of the multivariate regression between the components of the independent variable (1. social trust of students' families and 2. social cohesion of students' families) with the dependent variable (social health of Shahrood students) was 0.629. If we raise this obtained coefficient to the power of two, we get $R^2=0.39$. And it is analyzed in this way that 39% of the changes in the dependent variable of the research are analyzed and explained by the above two components. In other words, 61 percent ($1-0.39=0.61$) of the changes in the social health of Shahrood students are determined by other factors that need to be investigated. And the explanation of 39% by these two explanatory components seems reasonable and appropriate.

Abbreviations

WHO	World Health Organization
PNU	Payam NOOR University
TMU	Tarbiat Modares University

Conflicts of Interest

The authors declare no conflicts of interest.

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