

Predictive Role of Social Capital and Mental Health in Tendency to Risky Behaviors in Students

Hananeh Daliri Khomami^{1*}, Zohreh Sadeghi Afjeh²

¹ M.A., Department of Psychology, Varamin-Pishva Branch, Islamic Azad University, Varamin, Iran

² Assistant Professor, Department of Psychology, Varamin-Pishva Branch, Islamic Azad University, Varamin, Iran

* **Corresponding author:** Hananeh Daliri Khomami, M.A., Department of Psychology, Varamin-Pishva Branch, Islamic Azad University, Varamin, Iran. Email: hananehdaliri.psy@gmail.com

Received 2021 January 27; Accepted 2021 September 21

Abstract

Background: The identification of the factors that affect high-risk behaviors is of utmost importance in the prevention of these behaviors. The present study aimed to determine the predictive role of social capital and mental health in the tendency toward high-risk behaviors in female students of Shahid Beheshti University.

Methods: The present study was conducted based on a correlational design. The statistical population included all female students of Shahid Beheshti University of Tehran in the first semester of 2018-2019. Out of this population, 150 students were selected via stratified random sampling. Data were collected using the Iranian Youth Risk Assessment Scale, General Health Questionnaire, and Social Capital Questionnaire. Data were analyzed in SPSS software (version 22) using the Pearson correlation coefficient and multiple regression.

Results: The obtained results pointed to a negative relationship between the components of social capital and the tendency toward risky behaviors. Moreover, a positive relationship was observed between general health components and the tendency towards high-risk behaviors ($P < 0.001$). There was a relationship between social capital and the tendency towards risky behaviors ($P < 0.001$).

Conclusion: Based on the results, it can be concluded that social capital and mental health play a predictive role in the tendency toward high-risk behaviors in female students.

Keywords: Social capital, Mental health, Risk-taking, Students

Introduction

Among the effective variables, family as the first social institution and parents as the first behavioral models play a crucial role in leading young people's experiences through direct and indirect education and supporting them. Balanced or traumatic behaviors of adolescents are determined by parental behavior, educational style, supervision, control, quality of family relationships, emotional or contradictory atmosphere, value and normative family system, economic and social status, time spent with adolescents, and employment of mothers (1). Although friends and peers exert a deeper impact on adolescents' sociality, it is the family that shapes one's behaviors and choices, helps them to increase their preparedness in the face of challenges in society, and reduces their involvement in high-risk behaviors. Therefore, the recognition of socialization mechanisms and family social capital in the reduction of risk in Iran is a priority to achieve a desirable level of human development and quality of life (2).

Social capital in the family provides a support network for family members that help in times of poverty and unemployment, reducing substance abuse and domestic violence (3). Moreover, mothers'

social relationships are negatively correlated with child abuse risk and social problems of adolescents. Shared values and norms arising from social capital can reduce violence in society and prevent the occurrence of crime and violence. Trust among individuals increases communication among family members, friends, and neighbors, groups, and communities. It brings about non-adherence to laws, antisocial behavior, suicide, violence, and other social problems (4).

Social capital indicators are positively correlated with health and negatively correlated with mortality rate. In the meantime, the trust which has significant effects on mental health is rooted in trusting competent and credible persons, and it is usually the result of one's first experiences in life. Therefore, trust reduces anxiety and creates a sense of continuity and order in events and existing security (5). Another variable that has been studied concerning risk-taking is general health which is closely related to social issues. Social phenomena, such as poverty, social inequality, alienation in social relationships, and individualism can threaten the mental health of people in society (6). On the other hand, mental illnesses and injuries reduce the

possibility of adaptation to the environment, as well as acceptance and conformity with social norms (7).

The identification of factors that affect high-risk behaviors is a key to the prevention of these behaviors. Therefore, the present study strived to address the high-risk behaviors of young people (e.g., smoking, drug and psychotropic substance abuse, alcohol, violence, dangerous driving, and high-risk sexual behaviors). Moreover, the effect of public health and social capital on high-risk behaviors of young people was assessed. In light of the aforementioned issues, the present study aimed to determine the predictive role of social capital and mental health in the tendency toward high-risk behaviors in female students of Shahid Beheshti University.

Methods

The present research was conducted based on a descriptive-correlational design. The statistical population of this study includes all 2,869 female students of Shahid Beheshti University in the first semester of the 2018-2019 educational year. Out of this population, 150 students were selected via stratified random sampling from 19 faculties of Shahid Beheshti University, three faculties of educational sciences and psychology, management and accounting, and earth sciences. Some students were selected from each of these three faculties according to the number of students (proportional to the number of students in each faculty). The faculty of educational sciences and psychology (n=73), the faculty of management and accounting (59), and the faculty of earth sciences (Earth Sciences) were selected. The sample size was calculated at 142 cases using the Cochran formula ($d=0.08$) which increased to 150 considering sample attrition.

The inclusion criteria entailed: 1) undergraduate, postgraduate, or Ph.D. students, 2) age range of 20-35 years, and 3) being a student during the research. On the other hand, the exclusion criterion was incomplete information. The ethical considerations of the present study were as follows: all subjects received written information about the research and participated in the research if they wished. They were assured that all information would be confidential and be only used for research purposes. Participants' first and last names were not registered in order to respect their privacy.

Risk Tendency Scale in Iranian Youth: The Iranian Youth Risk Assessment Scale (IARS) was developed by Zadeh Mohammadi et al. (8) and used to measure the tendency to risky behaviors. In this scale, 50 items were adjusted to assess Iranian adolescents' vulnerability to six groups of high-risk behavior (dangerous driving, violence, smoking, drug use, alcohol consumption, and sexual risk-taking) and evaluated by experts. The items are rated on a 5-

point Likert scale ranging from 0= disagree to 5=completely agree. All items are in the same direction, there is no need for an inrun impact score, and a higher score indicates a higher risk. The results of the factor structure of the questionnaire confirmed the results of the exploratory factor analysis based on the six factors of the questionnaire, and the research data graced the obtained model. Cronbach's alpha coefficients were calculated as follows: risk-taking scale: 0.93, alcohol subscale: 0.93, dangerous driving: 0.88, smoking: 0.91, substance abuse: 0.83, risky sexual behavior: 0.85, and violence: 0.77 (8).

General Health Questionnaire (GHQ-28): This 28-item questionnaire was developed by Goldberg in 1972. It can determine the probability of a mental disorder in an individual. This questionnaire consists of four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. The scores of 0-3 are assigned to options a-d. The total score of mental health used in this study is obtained from the total scores of the questionnaire. As a result, the individual's score in the whole questionnaire will range from 0-84. In this questionnaire, lower scores are suggestive of better mental health (9). Based on the results, the scores of 0.72, 0.60, 0.68, 0.57, and 0.58, were obtained for the whole questionnaire, somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression (9).

Social Capital Questionnaire: Social Capital Questionnaire has three structural, communicative, and cognitive conditions that examine seven subscales of networks, trust, cooperation, mutual understanding, relationships, values, commitment. It contains 28 items which are rated on a 5-point Likert scale (I very agree=5, I agree= 4, I have no idea=3, disagree= 2, and I disagree very much=1). Cronbach's alpha was reported as 0.93 (10).). Moreover, the Cronbach's alpha coefficient was obtained at 0.91 for all three sections of the questionnaire, and its validity was confirmed (11).

For statistical analysis, the raw data were obtained using descriptive and inferential statistics. Descriptive statistics were used to calculate frequencies, measures of central tendency and dispersion, charts, and tables. Moreover, regarding inferential statistics, Pearson correlation coefficient, and multiple regression were employed to investigate the effect of predicted variables on the criterion variable. The data were analyzed in SPSS software (version 22).

Results

Regarding age, the participants were within the age ranges of 20-25 years (n=70), 26-30 years (n=43), and 31-35 years (n=37). In terms of

education, they hold bachelor's (n=111), master's (n=35), and Ph.D. (n=4) degrees.

A prediction model for the tendency to risky behaviors is indicated in Table 3. In this model, the tendency to risky behaviors was included in the regression equation as a criterion variable, while general health and social capital were predictor variables. The results of the current study suggested that all subscales of general health, trust, and cooperation, as well as the total score of social capital, could predict the tendency to risky behaviors. Therefore, there were multiple relationships between

general health and social capital predictors. As illustrated in Table 3, somatic symptoms (Beta=0.20; t=3.90), anxiety and insomnia (Beta=0.19; t=3.71), social withdrawal (Beta=0.16 ; t=3.45), depression (Beta=0.35; t=1.98), mental health (Beta=0.23; t=5.46), trust (Beta=-0.27; t= -6.35), cooperation (Beta=-0.10; t=-3.36) and social capital (Beta=0.43; t=11.64) could predict 27% of the variance of tendency to risky behaviors (P<0.001; F= 49.36; R²=0.27). Therefore, the strongest predictors were depression and social capital.

Table 1. Descriptive statistics of the study's variables

	Variable	Mean	SD	Min	Max
General health	Somatic symptoms	25.75	4.10	8	28
	Anxiety and insomnia	20.71	3.44	9	28
	Social withdrawal	10.67	2.04	1	28
	Depression	27.45	4.54	10	28
	The total score of general health	58.79	12.19	39	72
Social capital	Networks	12.34	4.16	4	20
	Trust	14.89	5.22	4	20
	Cooperation	18.90	6.13	4	20
	Mutual understanding	14.72	4.33	4	20
	Relationships	15.04	4.52	4	20
	Values	13.34	3.59	4	20
	Commitment	10.41	3.32	4	20
	The total score of social capital	88.44	12.33	49	140
	The tendency to risky behaviors	43.75	11.84	28	85

Table 2. The summary of results for the correlation of social capital and general health with a tendency to risky behaviors

Variables		r	r ²	pr	P-value
Social capital	Networks	-0.43	0.18	0.15	0.001
	Trust	-0.35	0.12	0.10	0.001
	Cooperation	-0.50	0.25	0.20	0.001
	Mutual understanding	-0.35	0.12	0.11	0.001
	Relationships	-0.50	0.25	0.22	0.001
	Values	-0.43	0.18	0.16	0.001
	Commitment	-0.35	0.12	0.10	0.001
	Total score of social capital	-0.47	0.22	0.20	0.001
General health	Somatic symptoms	0.51	0.26	0.20	0.001
	Anxiety and insomnia	0.49	0.24	0.21	0.001
	Social withdrawal	0.46	0.21	0.18	0.001
	Depression	0.57	0.32	0.27	0.001
	Total score of general health	0.62	0.38	0.32	0.001

Table 3. Regression for the tendency to risky behaviors based on general health and social capital

Variable	R	R ²	Adj R ²	F	P	Beta	t	P
Constant						-	11.65	0.001
Somatic symptoms	0.52	0.27	0.25	49.36	0.0001	0.20	3.90	0.001
Anxiety and insomnia						0.19	3.71	0.001
Social withdrawal						0.16	3.45	0.001
Depression						0.35	1.98	0.04
Mental health						0.23	5.64	0.001
Networks						-0.07	-1.81	0.07
Trust						-0.27	-6.35	0.001
Cooperation						-0.10	-3.36	0.01
Mutual understanding						-0.02	-0.03	0.97
Relationships						0.69	1.03	0.30
Values						-0.04	-0.24	0.80
Commitment						0.13	0.78	0.43
social capital						0.43	11.64	0.001

Discussion

The present study aimed to determine the predictive role of social capital and mental health in the tendency to high-risk behaviors in female students of Shahid Beheshti University. The results pointed to a negative relationship between the components of social capital and the total tendency to risky behaviors. In other words, the tendency toward risky behaviors decreases with an increase in social capital. Furthermore, social capital has a negative correlation with the tendency to high-risk behaviors, that is to say, people with higher levels of social capital have a lower tendency to high-risk behaviors.

Although limited studies have been conducted on the relationship between social capital and high-risk behaviors in young people and adolescents, the results of related studies all confirmed a significant negative relationship between the two variables. In their study, Ellison et al. (12) concluded that the existence of social capital helps adolescents to use effective methods in dealing with social harm. The findings of this study confirm the results of the research by Estrin et al. (13) who found a significant relationship between risk and social capital. This means that students with higher levels of social capital are at lower levels of risk. The results of this study also pointed to a significant and negative correlation between cognitive and social capital risk-taking.

Therefore, it can be argued that social capital performs an important and decisive role in high-risk behaviors in young people and adolescents. Frank et al. (14) emphasized that what endangers young people and adolescents is the lack of social control on the activities of organs and weakened obligations of adolescents towards society. The variations in the findings can be considered different from the dependent variable, the statistical society, and the used tools, as well as the structural changes in the studied population.

According to the results, it can be concluded that there is a significant positive relationship between general health components and a tendency to high-risk behaviors (higher scores signify lower levels of general health). In other words, an increase in physical symptoms, anxiety and insomnia, social dysfunction, and depression are associated with an increased tendency to risky behaviors. This finding is in line with the results of the study carried out by Goryakin et al. (15).

The findings of the present study regarding the relationships between mental health dimensions and high-risk behaviors highlight the importance of identifying psychological characteristics and their interactive effect on the emergence of high-risk behaviors in adolescents. Moreover, they emphasize the necessity of effective assessment and

interventions to eliminate negative indicators and strengthen positive mental health indicators in adolescents in an effort to reduce high-risk behaviors. What is remarkable is that only prevention or treatment of emotional and mental disorders and problems in adolescents cannot guarantee the health of adolescents and protect them against risky behaviors. Nevertheless, efforts to prevent adolescents' high-risk behaviors will come to fruition when promoting positive mental health, especially such features as self-efficacy or acceptance, and helping them to flourish. Talents and highlighting their advantages and strengths should also be in line with programs and interventions (16).

This finding can be justified on the ground that high-risk adolescents are more exposed to abnormal behaviors. According to the theory of optimal arousal, individuals with risk-taking personalities need new experiences to reach the level of arousal, and some people may choose substance abuse as a new experience. The need for new experiences and escaping from uniformity in high-risk people with sensation-seeking personalities can be a risk factor for substance abuse. Along the same lines, Ho (17) pointed to the significant relationship of risk-taking behaviors with alcohol consumption, substance abuse, aggressive behavior, and illegitimate behavior. In addition, considering that adolescence is associated with the process of identity formation, a part of this developmental process is risk-taking, which manifests unhealthy behaviors, such as smoking and other substances (18).

The statistical population of the study was all eligible people residing in Tehran; therefore, the generalization of the results to a wider population and other cities should be made cautiously. It is suggested that future studies be conducted on other statistical populations to investigate and validate according to different cultural and demographic backgrounds, such as girls, and compare it with boys. Moreover, it is recommended to employ other scales related to social capital and tendency to risky behaviors, as well as such qualitative methods as interviews, to obtain information. According to the findings of the present study on the predictive role of social capital and mental health in risky behaviors, these results can be used by educational centers, especially universities. University professors use different educational strategies in their teaching methods to increase social capital and general health. Psychologists and university counselors should hold workshops to improve social capital and public health. Furthermore, it is suggested that psychologists and counselors design workshops to reduce high-risk behaviors among students.

References

1. Adger WN. Social capital, collective action, and adaptation to climate change. *Der klimawandel*. 2010;327-45.
2. Baheiraei A, Bakouei F, Mohammadi E, Majdzadeh R, Hosseini M. Association between social capital and health in women of reproductive age: a population-based study. *Global health promotion*. 2016 Dec;23(4):6-15.
3. Benotsch EG, Snipes DJ, Martin AM, Bull SS. Sexting, substance use, and sexual risk behavior in young adults. *Journal of adolescent health*. 2013 Mar 1;52(3):307-13.
4. Burke M, Kraut R, Marlow C. Social capital on Facebook: Differentiating uses and users. In *Proceedings of the SIGCHI conference on human factors in computing systems* 2011 May 7 (pp. 571-580).
5. Campbell JA, Walker RJ, Egede LE. Associations between adverse childhood experiences, high-risk behaviors, and morbidity in adulthood. *American journal of preventive medicine*. 2016 Mar 1;50(3):344-52.
6. Card D, Giuliano L. Peer effects and multiple equilibria in the risky behavior of friends. *Review of Economics and Statistics*. 2013 Oct;95(4):1130-49.
7. Carey JW, Mejia R, Bingham T, Ciesielski C, Gelaude D, Herbst JH, Sinunu M, Sey E, Prachand N, Jenkins RA, Stall R. Drug use, high-risk sex behaviors, and increased risk for recent HIV infection among men who have sex with men in Chicago and Los Angeles. *AIDS and Behavior*. 2009 Dec;13(6):1084-96.
8. Chang HH, Chuang SS. Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & management*. 2011 Jan 1;48(1):9-18.
9. Charach A, Carson P, Fox S, Ali MU, Beckett J, Lim CG. Interventions for preschool children at high risk for ADHD: a comparative effectiveness review. *Pediatrics*. 2013 May 1;131(5):e1584-604.
10. Cohen MA, Piquero AR. New evidence on the monetary value of saving a high risk youth. *Journal of Quantitative Criminology*. 2009 Mar 1;25(1):25-49.
11. D'Amico EJ, Edelen MO, Miles JN, Morral AR. The longitudinal association between substance use and delinquency among high-risk youth. *Drug and alcohol dependence*. 2008 Jan 11;93(1-2):85-92.
12. Ellison NB, Steinfield C, Lampe C. Connection strategies: Social capital implications of Facebook-enabled communication practices. *New media & society*. 2011 Sep;13(6):873-92.
13. Estrin S, Mickiewicz T, Stephan U. Entrepreneurship, social capital, and institutions: Social and commercial entrepreneurship across nations. *Entrepreneurship theory and practice*. 2013 May;37(3):479-504.
14. Frank JL, Bose B, Schrobrenhauser-Clonan A. Effectiveness of a school-based yoga program on adolescent mental health, stress coping strategies, and attitudes toward violence: Findings from a high-risk sample. *Journal of applied school psychology*. 2014 Jan 2;30(1):29-49.
15. Goryakin Y, Suhrcke M, Rocco L, Roberts B, McKee M. Social capital and self-reported general and mental health in nine Former Soviet Union countries. *Health Econ. Pol'y & L.*. 2014;9:1.
16. Graham SM, Mugo P, Gichuru E, Thiong'o A, Macharia M, Okuku HS, van der Elst E, Price MA, Muraguri N, Sanders EJ. Adherence to antiretroviral therapy and clinical outcomes among young adults reporting high-risk sexual behavior, including men who have sex with men, in coastal Kenya. *AIDS and behavior*. 2013 May;17(4):1255-65.
17. Ho CY. Better health with more friends: the role of social capital in producing health. *Health Economics*. 2016 Jan;25(1):91-100.
18. Hoza B, McQuade JD, Murray-Close D, Shoulberg E, Molina BS, Arnold LE, Swanson J, Hechtman L. Does childhood positive self-perceptual bias mediate adolescent risky behavior in youth from the MTA study?. *Journal of consulting and clinical psychology*. 2013 Oct;81(5):846.
- 19.