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The effect of educational Intervention based on Health Belief Model (HBM) on the promotion of teachers social capital in Baft in 2015



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ABSTRACT

Background: This study aimed to determine the effect of a training program based on Health Belief Model for the promotion of teachers' social capital in the city of Baft.

Methodology: The present research is an experimental and interventional study. The sample size was 100 school teachers in the city of Baft who were selected randomly from among 500 teachers using Cochran sample size formula and assigned to two groups of 50 experiment and control. The instruction was conducted in 9 two-hour sessions in the form of pamphlets, lectures, and group discussions and the post-test was performed after 3 months. Data collection tools included the author-made 36-item HBM questionnaires and 36-item Bohlen social capital questionnaire. Data analysis methods included correlation coefficients of the regression slope (b), beta

values or standardized regression coefficient, T values for each variable, determining their significant levels, and covariance analysis carried out.

Results: Comparison of the pre-test and post-test means among components of the health belief model and social capital of in both experiment and control groups showed that there was no significant difference between the two groups in the pre-test; however, comparison of results in post-test the showed significant difference. Levene test calculation, T, and covariance confirmed these differences and reflected the impact of intervention and implementation of a training program on the experiment group.

Conclusion: According to the results, the impact of training programs implementation to increase levels of social capital was approved.

Keywords: social capital, health belief model, teacher

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INTRODUCTION

The concept of social capital and the development of methods and strategies for maintaining or enhancing it has been widely noted recently. The concept can be considered as a means to restore the functions of social organizations and the rate of success, effort, and the popularity of social institutions, groups, and associations.

The concept of social capital first was used by Hani Van Reed served in the US state of Virginia Education. For Hani van, social capital includes assets that are in the individual daily life such goodwill, camaraderie and friendship, sympathy and social relations among individuals and families who make up a social unit. Then, social capital in the book by Jacobs titled "Life and Death of Great American Cities" in 1961 was discussed and its role in maintaining cleanliness, dealing with street crime and criminal in the countryside and urban areas.¹ Glenn Lowry, economist and Ivan Light, sociologist, used the term of social capital in the 1970s to describe the problems of economic development within the city.² Halpern believes the popularity of this concept among the researchers somehow is due to the outcomes that social capital can justify.

Bourdieu has defined social capital as the sum of actual and potential sources that are concerned with membership in a group which each of the members provides with the support of social capital.

Coleman has defined social capital through its function. In his view, social capital is a social-structural resource which is accounted for people assets and capital. These assets are not a unit thing but some characteristics that are in the social structure and make people enter more easily into social action.

From Putnam's perspective, social capital refers to some characteristics of social organizations such as networks, norms, and trust that facilitate cooperation and coordination for mutual benefit.

According to Fukuyama, social capital can simply be defined as a certain set of informal norms or values that may be shared by the group members that collaboration and cooperation are allowed among them. The norms that create social capital must basically include virtues in the production such as honesty, commitment, and bilateral relations.³

Social capital refers to forms of social organization such as trust, norms, and networks that can facilitate the performance of the community

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through appropriate actions. To measure social capital, indices such as social trust, participation, social interaction, religion, and self-esteem are considered.

A capitalist economy requires a great deal of social capital that depends on the capital supply in the community. The issue of social capital is answered to on two levels; one is the individualistic level, and another level is the society as a whole, including the issues related to social policies. Regarding the individualistic units, social capital can be created through direct public investment in education and training in the field of cooperation skills. However, regarding the creation of cooperative societies, much has been written in the field of Commerce that is nothing but training the organization's staffs and teaching them a series of norms that make them interested in working together and creating the sense of group identity.⁴

In educational planning, one of the most important actions is the choice of model or theory based on conditions, recognition of problem, and alignment of efficiency and objective of the model or theory with objective of the training program. Health belief model (HBM) is one of the models used in this study due to the prevalence of weak social capital in the region and the threat felt and action to prevent it. There are few studies which use HBM to raise awareness, attitude and performance of society to control and prevent weak social capital. However, the present study uses its application and its effect on interventional planning of health education in relation to promotion of social capital.

Health belief model is one of the oldest health behavior theories and one of the first models derived from behavioral science theories for solving health problems. This model is still one of the most well-known theories which has the most application in health behaviors. This model has been used for nearly half a century with great success in various health topics, so that it can be claimed that it is the great mother of the most modern health education theories.

The objective of this study is to determine the effect of a HBM-based training program for promoting social capital of teachers living in Baft.

Literature review

Ghaffari and Ownegh (2006) in a research as social capital and quality of life in the city of Gonbad-e Qabus using the survey method showed that the relationship between the two structures of social capital and quality of life was a significant relationship at the confidence level of 99%. In addition, social capital based on four measures of local security, give and take, perception about the neighborhood and association membership

accounted for 36% of changes in quality of life. Also on the scale neighborhoods studied, the results showed the differences in social capital and consequently the difference in their quality of life.¹⁰ Robert Putnam namely in their study between the social capital index and the index of the welfare of children in the United States found a strong and positive relationship. Child welfare included indicators such as infant mortality, the rate of juvenile offenders, poverty, school dropout, juvenile unemployment, and crime.¹¹

Brenda O'Neill (2004) in his Study entitled "Gender, religion, social capital and political participation" emphasized on religious commitment orientation as an element of social capital and political participation among women in the United States and sight to study the relationship between the participation of women in religious organizations and the creation of social capital.¹²

Vienna Londez (2004) has done a study entitled "Women social capital and political participation". He has considered the concept of social capital in explaining differences in patterns of political participation among women and men and intends to prove that social capital could help in explaining the differences in women and men political engagement patterns (preoccupation).¹³

Health belief model

HBM is one of the oldest health behavior theories and among the first patterns that have been taken from behavioral science theories to solve health issues. This pattern is still one of the most well-known theories with the most widely used of health behaviors. This pattern is used almost half a century with great success in various health topics so that it can be said that it is the most grandmother of health education modern theories.

The pattern component in the view of Rosen Stock

Rosen's primary health belief model created in 1966, was based on the following four structures: Perceived Susceptibility: a study of the individuals in terms of the risk of a disease.

Perceived Severity: a study of the individuals in terms of disease seriousness and its potential implications. Perceived barriers: study of the individuals in terms of facilitating and preventing effects of the encouraged behavior.

Perceived benefits: a study of the individuals in terms positive results of the behavior that has been accepted.

The four component pattern is explained as perceived susceptibility, perceived seriousness, perceived benefits, and perceived barriers. These

concepts have been proposed to explain the readiness for action. It is the added concept (signs for practice) for preparation and behavior fulfillment mobility. The concept of self-efficacy or the individual's confidence in the successful ability of the behavior has been added to the model newly. In the late 1980s, HBM was expanded and covered the concept of self-sufficiency as well. Since then, this model was used in a variety of health behaviors and now is among the most popular models.¹⁴

In fact, the health belief model provides the opportunity to examine the potential psychological factors influencing the individuals' decision. The model has considered 6 areas that are likely to affect the people's seek help for health-related issues.

The concept and definition of social capital

The concept of social capital is among the modern concepts used in social science discourse and contemporary political circles at different levels. Although this concept doesn't have an old history, its use gradually has increased from the 1990s up-to-date in academic researchers and papers particularly in the fields of sociology, economics, politics, and education in the works by people like James Coleman, Pierre Bourdieu, Robert Putnam, and Francis Fukuyama. According to Coleman, the concept of social capital is an analytical tool for social research. Coleman was on the belief that social capital in clarifying one of the most important problems of social analysis or what is called micro and macro link can play an important role. Also,

the use of the social capital concept, due to globalization and weakening of national governments, as an executable solution to development problems at the local community level has been taken into consideration by the policy-makers, planners, and social policy officials.

Social capital is a complex concept that captures how people are connected, both between and within social groups, and includes both the relationships that exist between people and the access to material and political goods that these relationships can provide.¹⁵ Although definitions of social capital vary, one prominent theorist, Robert Putnam, defines social capital as "the networks, norms, and social trust that facilitate co-operation for mutual benefit."² Putnam delineates two main forms of social capital: bonding and bridging.¹⁶ Bonding social capital refers to relationships within a social group, whereas bridging social capital refers to interactions across or between social groups. Other definitions of social capital place emphasis on its role in relation to the socio-economic conditions of and inequalities within society.¹⁷

The common definition of social capital in the mainstream of American sociology, especially in its functional version is the bilateral relations of networks and interactions that appear among human groups and the trust level found among groups and communities as a result of certain obligations connected with the social structure. In contrast, European sociologists have used this concept in studying the issue that how the mobility of social networks concerned links boost social hierarchy and differentiated power. Despite this, the common points between these two views are on the usefulness of social capital in increasing some features such as education, social mobility, economic growth, political advantage, and ultimately development. In addition to the above definitions, other definitions have been provided for social capital. One of the proposed definitions is that "social capital is the available norms in the social system that promotes collaboration level of the community members and thereby decreases the transaction and communications costs. Based on this definition, concepts such as civil society and social institutions are also associated closely with the concept of social capital. The World Bank also knows the phenomenon of social capital as a result of the influence of social institutions, human relationships, and norms on the quality and quantity of social interactions. The experiences of these organizations have shown that this phenomenon has a significant impact on the economy and development of various countries."¹⁸

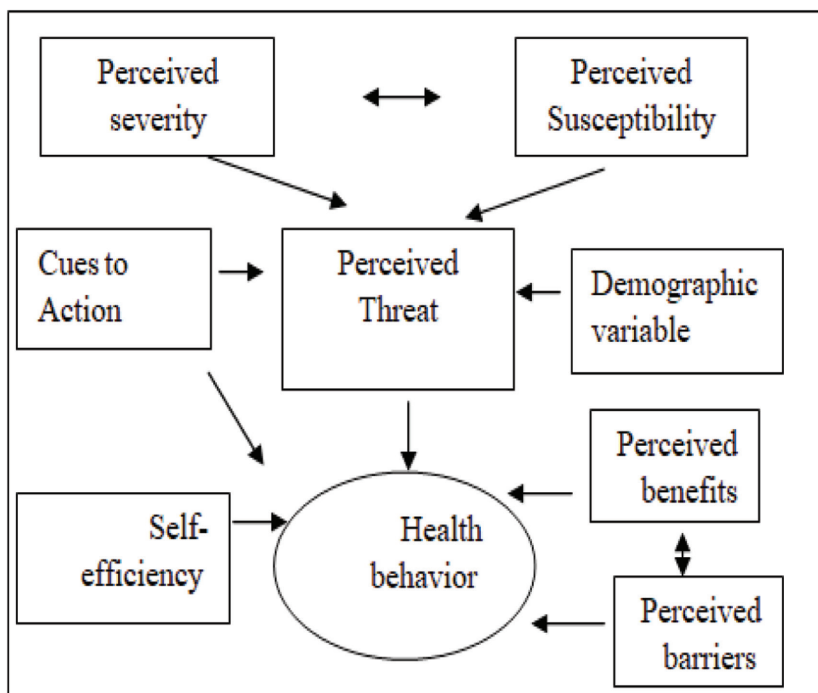


Figure 1-1 HBM

Social capital, unlike other capitals, is not in the physical form but the result of social and group norms interaction, and on the other hand, its increase could cut down on a serious increase in the cost of the society administration and the corporate operating costs. Elements that can be used in the operational definition of social capital include:

Social capital depends on social interaction among the individuals and collective action of people is an integral part of that. Search for cooperative solutions and struggle for bilateral sources in this concept gets essential centrality. In most definitions, there is participating in social networks, willingness to cooperate, and trust among people. Social capital can be considered as the result of a social system in the following phenomenon: mutual trust, reciprocal social interaction, social groups with the sense of group and collective identity, a sense of common image of the future, team-working.¹⁹

Different forms of social capital

The theoretical development of social capital has led to important distinctions between different forms of social capital.²⁰ Krishna and Shrader²¹ describe cognitive social capital as the less tangible side of social capital; norms of trust, solidarity, and reciprocity. Structural social capital, on the other hand, refers to the composition, extent, and activities of local level institutions and networks.²¹ In short, structural social capital refers to what people do, while cognitive social capital refers to what people feel with regard to social relations.²⁰

Another important construct is the distinction between bonding, bridging, and linking social capital. Bonding social capital is characterized by strong ties within a network that strengthen common identities and functions as a source of help and support among members. Bridging social capital is characterized by weaker ties that link people from different networks together and become important sources of information and resources.²² Szreter and Woolcock²³ introduced linking social capital which consists of vertical ties between people in different formal or institutionalized power hierarchies.

MATERIALS AND METHODS

Type & Methods of Study

The present study is of empirical research kind conducted in the pre and post form between experiment and control groups.

Sampling Procedure

The statistical population consisted of all the school teachers in the city of Baft who approximately were 500 individuals. Due to the size of the population,

a sample of 100 participants was set using sample size formula Cochran and used for data gathering. The studied teachers were first divided randomly into both groups of control and experiment, and 50 were assigned to in the experimental group and 50 to control group.

Data collection method

Data was collected with the help of two questionnaires as follows:

- A - questionnaire of health belief model (HBM)
- B - Bullen's social capital designed questionnaire

Training program

After the first phase and completion of the questionnaire, a training program is developed that aims to raise the teachers' awareness, attitude, and performance towards promotion of behaviors based on social capital. The content of the educational materials depends on the respondents' answers to the questions on the indicators of social capital. However, the program content generally includes group discussion, lectures, and pamphlets which were conducted in 9 sessions of 2 hours. Three months after the intervention, questionnaires were completed for both groups so that the intervention programs impact on the investigated sample is determined and evaluated at the end.

Purposes of the study

1. Specification of the status of social capital indicators in both experiment and control groups before and after the intervention;
2. Specification and comparison of the average scores of health belief model components of teachers' social capital in the city of Baft in the context of promoting behaviors related to social capital in both experiment and control groups before and after intervention;
3. Specification of the correlation between social capital indicators among the school teachers' social capital in the city of Baft;
4. Specification of the results of covariance analysis on the post-test of experiment and control groups concerning social capital

RESULTS

After comparing the above table, the changes in the mean and standard deviation can be considered, and at the end, a comprehensive package can be provided to educate increasing social capital. After 9 training session, significant changes have occurred in the teachers' social capital on post-test.

After comparing the above table, the changes in the mean and standard deviation can be

Table 1 Comparison of the results of the of post-test components of social capital in both experiment and control groups

Variable	Control group		Experiment group		P
	Mean	SD	Mean	SD	
General social capital	89.94	14.94	109.44	11.77	0.001
Local participation in society	16.78	3.80	19.90	4.00	0.012
Social agency	19.64	2.98	24.08	2.48	0.006
sense of security and confidence	12.86	2.12	16.74	1.73	0.021
Interactions with family and friends	8.52	1.43	9.92	0.75	0.019
Tolerance of differences	4.46	1.59	6.14	1.24	0.022
Life calue	5.96	0.94	6.24	0.59	0.004
Job interactions	8.90	1.34	10.38	0.75	0.000

Table 2 Comparison of the results of the Health Belief Model (HBM) components on post-test between experiment and control groups

P	Experiment group		Control group		Variables
	SD	Mean	SD	Mean	
0.013	1.93	20.88	2.53	18.94	Perceived Sensitivity
0.007	1.31	19.34	2.23	15.40	Perceived Severity
0.033	1.26	19.40	1.63	17.06	Perceived benefits
0.028	2.28	15.52	3.77	14.54	Perceived barriers
0.000	1.58	29.08	2.39	22.14	Self- efficacy
0.030	0.50	7.52	0.60	6.58	Cues to action

Table 3 Descriptive data concerning social capital

SD	Mean	Frequency	Group
14.94536	89.9400	50	Control
11.71456	109.4400	50	Experiment
16.56801	99.6900	100	Total

Table 4 Results of covariance analysis on the post-test of experiment and control groups concerning social capital

Sig.	Value F	Mean Square	Degrees of freedom	Sum of squares	Source
.000	5512.059	993809.610	1	993809.610	Post-test
.000	52.725	9506.250	1	9506.250	Groups (group membership)
16.56801	99.6900	180.297	98	17669.140	Error value
			100	1020985.000	Total

a. R Squared =.350 (Adjusted R Squared =.343)

considered, and at the end, a comprehensive package can be provided to improve social capital based on the Health Belief Model (HBM). After 9 training

session, significant changes have occurred in the teachers' social capital improvement on post-test.

The hypothesis testing results using covariance analysis

In this section, the validity of this hypothesis is dealt with covariance analysis. This analysis is to answer this question: does training intervention effect on the teachers' promotion of social capital in the city of Baft?

To investigate this question, the following statistical hypotheses were tested:

H1. The meanscores ofsocial capitalon thepost-test are differentbetween experimentand controlgroups. HO. The mean scores of social capital on the post-test are not different between experiment and control groups.

As can be seen in table 6, the mean scores of both control and experimental groups differed on post-test, and this difference indicates that the training intervention was effective in the experimental group.

As can be seen in table 7, because sig= 0.001 and this value was smaller than the error level of 0.05, so it can be concluded that the training intervention was effective on teachers' promotion of social capital in the city of Baaft. In other words, this assumption is confirmed with 0.99 reliability. So, it can be said: The mean scores of social capital on the post-test of experiment and control groups were different.

DISCUSSION AND CONCLUSION

The present study aimed to provide a training program for the promotion of teachers social capital in the city of Baft based on HBM and showed that implementation of a training program for the promotion of social capital was successful, and according to information provided last season, the teachers' social capital has significantly increased. Results in table 1 show that mean of the teachers' social capital on pre-test was 88/74 for experiment group but increased to 109/44 on post-test. Accordingly, each of the social capital components was upgraded. The table 2 results showed a significant difference about the mean change score of HBM components on post-test in both control and experiment groups tested by calculating the Loven test and T-test. These results suggest that education based on health belief model can improve attitudes and behaviors of teachers in the field of social capital.

Farahbod et al. (2014) In a study entitled "The Association between Social Capital and Burnout in Nurses "showed that nurses under study had

high burnout in emotional exhaustion, moderate burnout in depersonalization and low burnout in a reduced sense of personal accomplishment. The results specified an inverse association between social capital and burnout. Therefore, attempts should be made to increase social capital so as to reduce burnout. Given the inevitability of job stress in a nursing environment, authorities in charge should plan on improving the working conditions and training techniques. Social communications can be facilitated by holding social meetings in hospitals in which nurses participate in groups. In order to increase social capital, promoting it in general training to nurses and other medical staff should be considered.²⁴

In the present research, the results showed that the implementation of the educational program can be increased components of social capital in the teachers and to improve their family and career life.

LIMITATIONS

The greatest limitation of this study was problems related to consent of teachers to participate in the training course and to respond the questionnaire questions.

IMPLICATIONS

1. Self-efficacy can be improved by expressing abilities of people in the training course to improve the indicators of social capital.
2. It is suggested to promote perceived susceptibility of learners by introducing the characteristics of people who do not have social health.
3. By introducing successful people who have social health, perceived interests can be promoted in treating learners.
4. It is suggested to develop a comprehensive training program for promoting social capital and quality of life of parents and teachers.
5. It is suggested to conduct this study in relation to family and measure social capital of parents and perform training program.

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REFERENCES

1. Sharifian Sani, M. Social Capital: Basic Concept & Theoretical Framework, Refah Ejetemaii Quarterly, 2001; NO.2:5-18
2. Fukuyama, F. End of order (social capital and maintain it), Translate by Tavasoli, Tehran, Jammeh Iranian publication. 2000, 56
3. Fukuyama, F. Social capital, and civil society, The Institute of public policy, George Mason University. 1999, 112
4. Schein E.H. Organizational Culture And Leadership. San Francisco: Jossey-Bass. 1985
5. Rezaii, M. Quality of work life, Tehran: Ney press. 2010, 76
6. Asayesh, H. Quality of life Measurement in one hundred largest cities of the world, Jostarhaye Shahrsazi Quarterly, 2001; NO.8 :12-18
7. Moradian Sorkhkolaii, M., & et al, The study of relation between social capital and quality of life in employee of Behdasht VA Darman Ray, journal of Razi Medical Sciences University, 2013; NO.114 :69-77
8. Rajabi Gilan, N., & et al, The study of relation between social capital and quality of life about Teachers health, Journal of Zanjan Medical Sciences University, 2013;NO.88: 95-107
9. Majedi, S.M.,& Lahsaiizadeh, A., The relationship between the variables of social capital and satisfaction of life quality in Villagers of Fars province, Journal of Village and Development, 9th year, 2006; NO.4: 91-135
10. Ghafari, Gh.,& Onagh, N.M., Social capital and Quality of life in Gonbad Kavos, Social Studies Journal, 2006; NO.1
11. Majedi, S.M.,& Lahsaiizadeh, A., The relationship between the variables of social capital and satisfaction of life quality in Villagers of Fars province, Journal of Village and Development, 9th year, 2006; NO.4:91-135
12. O Neill 'Brenda, "Gender Religion Social Capital and political participation." Prepared for delivery at the Annual Meeting of the American Political Science Association.1, 2004
13. Lowndes 'Vivien, "Getting On or Getting By? Women Social Capital and Political Participation BJPIR 2004; vol 6 45-64.
14. Safari M., Shojaezadeh D, Ghofranipour F, Heydarnia A, Pakpour A, Health education & promotion theories, models & methods, Tehran are Siobhan, 2009, 55
15. Hawe P, Shiell A. Social capital, and health promotion: a review. Soc Sci Med. 2000; 51(6): 71-85.
16. Putnam R. Bowling Alone: the collapse and revival of American community. New York: Simon & Schuster; 2000.
17. Bourdieu P. Outline of a theory of practice. Cambridge: Cambridge University Press; 1977.
18. Fukuyama, F. Social capital, and civil society, The Institute of public policy, George Mason University. 1999
19. Alavi, Babak, The role of social capital in development, Tadbir Monthly, 2005; NO. 116
20. Harpham T, Grant E, Thomas E., Measuring social capital within health surveys: key issues. Health Policy Plan; 2002; 17: 106-11.
21. Krishna A, Shrader E., Cross-cultural measures of social capital: a tool and results from India and Panama. The social capital initiative, working paper No. 21. Washington, DC: The World Bank; 2000
22. Putnam RD. Bowling alone: the collapse and revival of American community. NY: Simon & Schuster; 2000.
23. Szreter S, Woolcock M., Health by association? Social capital, social theory, and the political economy of public health. Int J Epidemiol; 2004; 33: 650-67.
24. Farahbod, F., Goudarzvand Chegini, M., Kouchakinejad Eramsadati, L., Mohtasham-Amiri, Z., The Association between Social Capital and Burnout in Nurses, Acta Medica Iranica, 2014; Vol. 53, No. 4:23-31



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