Original Article

The relationship between social capital and the way of spending leisure time, based on physical activities

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ABSTRACT

Background: Today, social capital is a need in the society. Also, leisure time and physical activities are among the most important productive sources of social capital, which have been realized recently. This study aims to find the relationship between social capital and physical leisure time of the faculty members of Isfahan University of Medical Sciences. Materials and Methods: A descriptive correlation method was used in this study. Two questionnaires were used for data collection. Social capital questionnaire is based on SCAT Model. Also, leisure time questionnaire was made by the researcher for which face and content validity was verified by experts. Reliability coefficients by using Cronbach's alpha coefficients were calculated as 0.92 and 0.82, respectively. Sample population was calculated by Cochran's formula, and 150 people were selected as the sample using multiple cluster sampling by taking the sex and college into consideration as the variables. Findings: According to the findings, there was a direct relationship between a combination of social capital parameters (including commitment, attitude, trust, participation, mutual relationship, social norm, and unity) and the way of spending physical leisure time (R = 0.659, P = 0.000). Among the parameters, "commitment" was significant with a beta coefficient B = 0.293 and P = 0.044 and social norms was significant with a beta coefficient B = 0.196 and P = 0.047, but the rest of the factors were not significant. Conclusion: Playing sport and doing physical activities in the leisure time and also taking part in group activities and their membership provide a situation for people to respect the group interests through communication. Such activities can cause the level of social capital and its factors to be increased.

Key words: Leisure time, physical activities, social capital

INTRODUCTION

Human beings always encounter different kinds of problems and they try hard to solve them. Today's diverse facilities are the result of the earlier trials and perseverance. Obviously, even the contemporary people face their own problems, but in the last two decades, such problems were focused more.

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Philosophers and scientists analyzed them and each one of them has offered some solutions. One of these is leisure time and its spending, which is a serious and effective issue in different aspects of human community, considering the social changes and the progress of science and technology.^[1]

Leisure time means entertainment, hobby, and every activity that is done after daily works. Absolutely, its main achievements include refreshment, entertainment,

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recreation, and the growth of personality. [2] Finix believes that entertainment and leisure time refers to people's free time during which they can rest and relax. [3] Leisure time refers to the special part of time in which people are not forced to work or earn money and also they have special voluntary programs to have fun and enjoy themselves. [4] In line with Romney, Bracho, Caldo, Green, and Gray's definition about the word "recreation," Carlson *et al.* added that recreation also refers to every voluntary experience in leisure time by which people are expected to be satisfied and pleased. [5]

On the other hand, social capital is a new concept that refers to the economic and social studies. Social capital is an interdisciplinary concept which first entered sociology, then economics, literature, and at last management; then, social capital role and effect was emphasized in different institutes. It is possible to say that social capital is a result of the relationship which is based on understanding and trust between the manager and employees of an organization. This relationship refers to those which are formed in the nature of social relationship of an organization and they satisfy the social life in the organizations.^[6]

According to Puntam (2000), the definition of social capital is: "A set of sources which form through the interpersonal relationship, social networks, mutual norms and trust. Social capital talks about social organ or organization characteristics like trust, norms and networks which make possible those activities which need social capital and the people." [7]

Undoubtedly, the social capital of a community is composed of the social capital of different small groups. With regard to the level of knowledge, the attitude, and investment, it is expected that different people with different occupations would have different levels of social variables. Researches prove that sports are necessary for the improvement of a society, especially as a leisure activity which plays an integral role in the production and increase of social capital. The belief and behavior of teachers or university professors has a great effect on youth. This fact shows that mind training among these people is more important and sensitive than other jobs. As a result, spending leisure time is a necessity for them.

The quality and the characteristics of leisure time and also the nature of its activities depend on the level of people's knowledge, awareness, attitude, and dominant values of different groups of the society. Therefore, the way of spending leisure time in different groups of the society under the effect of social capital is different, which consequently has different social and cultural outcomes. Another issue to be considered is that because of the intergenerational relationship in multitudinous leisure time, people would have social capital. Hemingway believes that multitudinous leisure time and obtaining substantial benefit of it, when people with different ages are included, is a method which boosts the intergenerational relationship in a broad and limited form. This method is useful for internal and intergenerational social capital too. [10]

A limited number of researches have been conducted on social capital and leisure time. They are as follows. Ghafari (2010) conducted a survey entitled "Interaction between social capital and young people leisure time." The results showed that participating in group activities of leisure time like sports and physical activities plays a crucial role in the promotion and development of social capital level.[11] Sharepoor and Hosseini Rad (2009) proved that there is a positive correlation between friendly relationship and participation in sport activities. [9] Also, Parsamehr and Jesmani's (2011) research entitled "The role of social capital on sport consumption" showed that there is a positive and significant relationship between these two variables. In addition, they proved that people with higher educational and social position have fewer tendencies toward sports.[12]

Much lengthy and comprehensive research has been conducted by non-Iranian researchers around the world about social capital and leisure time. Ward and Tampubolon (2011), in an article entitled "Social capital, networks and leisure consumption," believed that social capital is gained as a result of friendship and sports and recreation activities.[13] Downward et al. (2010) conducted a study entitled "Sport, trust and social capital," with emphasis on the trust variable which is an important part of social capital. They reported that the effect of playing sport on trust and social capital is different in different countries, which may be due to the differences between sports in different countries. In some countries sports act as an instrument to spread and develop the social capital. [14] Collin et al. (2011), in an article entitled "Sport, leisure, culture and social capital," believed that sports and cultural and artistic activities are important ways to involve people in an effective decision making about society. Obviously, presence of people in the community and their cooperation and collaboration cause the formation of networks.^[15] Lindstrom (2011), in a study entitled "Social capital, tendency to the increase of physical activities in the leisure time," observed that there is a positive and significant relationship between lower level of trust in social capital and the absence of physical activities in leisure time. [16] Legh-Jones and Moor (2007), in an article entitled "Network social capital, social participation, and physical inactivity in an urban adult population," believed that those people who do not participate in any formal company and also do not have any physical activities would enjoy more social capital, in comparison with those who participate in formal companies and have physical activities.[17]

By analyzing the relationship between social capital and the way of spending physical leisure time among the faculty members of the University of Medical Sciences, this survey aims to identify unknown aspects of the effective parameters on the social capital of the faculty members. The main hypothesis is that there is a significant relationship between social capital parameters and the way of spending leisure time.

MATERIALS AND METHODS

This was a descriptive correlational study which was conducted on 680 faculty members of Isfahan University of Medical Sciences in 2012. After conducting a primary study and calculating the estimated variance by using Cochran's formula, the sample size was determined to be 150 people. They were selected by stratified random sampling based on their sex, in proportion with the number of members of each college. For example, Medical Science College with 388 members comprised 58% and Rehabilitation College with 30 faculty members comprised 4.5% of the sample size. In order to assess social capital, the standard questionnaire for social capital based on SCAT Model^[18] was used. This is a 47-item questionnaire which scored on a 5-point Likert scale (from strongly disagree to strongly agree), including seven factors (trust, mutual relationship, commitment, participation, attitude, social norms, and unity). The maximum score earned by a subject can be 235 and the minimum can be 47. Another questionnaire which was used is a "questionnaire designed by the researcher" on leisure time, which included 29 items in the frame of 20 closed questions scored by a 5-point Likert scale and 9 open questions related to the quality of spending leisure time. In this part, the maximum score earned by a subject can be 190 and the minimum score can be 38. In the meantime, because the measurement scale was 5, the average and cut-off point were considered as 3. In order to assess the questionnaire's face validity and content validity, academic scholars confirmed the social capital and leisure time questionnaire. In addition, a pilot study had been done on 30 faculty members of Isfahan University of Medical Sciences to measure the reliability of questionnaire. The results gave 92% and 82% for social capital and leisure time, respectively, on using Cronbach's coefficient alpha. Descriptive and inferential statistical methods were used for data analysis. Mean and standard deviation were used for the descriptive data analysis. Furthermore, Kolmogorov–Smirnov test, normality test, and multiple regressions were used for the inferential analysis of findings. The result in the level of $(\alpha \le 0/05)$ was analyzed by the 17th edition of SPSS Software.

FINDINGS

Statistical results showed that a sample of 120 participants included 81 men (67.5%) and 29 women (32.5%). The faculty members with assistant professor degree formed the largest number of the sample population (38.3%), which was followed by associate professors (29.9%) and instructors (17.5%), and full professors were the least in number (14.2%). More than 50% of the sample population was between 41 and 50 years old. Work experience of 40% of the sample population was 11–20 years. Fifty-nine people (about 50%) of the sample

population were from the medical college. The rest belonged to dentistry, nursing, rehabilitation, pharmacy, and sanitary college. Also, 61% of the sample populations were clinical specialists and 39% were science specialists. One hundred and twenty questions were completed by 150 participants. Findings showed that with regard to the mean of social capital scores which are = 0.541 and `Mean = 3.82 and the mean of leisure time scores which are = 0.406 and Mean = 3.48, it is possible to say that organizational social capital of Isfahan University of Medical Sciences and also people's physical leisure time is more than the normal level.

As it is shown in Table 1, considering the social capital result scores which are Z=0.832 and $P\geq 0.05$ and leisure time result scores which are Z=1.06 and $P\geq 0.05$, because P is more than the error (=0.05), the data normality based on null assumption will not be rejected. So, it is possible to say that score distribution and social capital and leisure time data, with the probability of 95%, are normal. In addition using parametric tests will be possible too.

$$R = 0.659, R2 = 0.435, =0.399$$

As it is shown in Table 2, the coefficient of multiple correlations for the combination of social capital and physical leisure time factors is 0.659 and the coefficient of determination is 0.435. It shows that 43.5% of the variance of physical leisure time score by a combination of social capital factors can be defined and described. The value of *F* with degrees of freedom 7 and 112 shows that the results of coefficient correlations and coefficient of determination are not significant statistically; therefore, the results of statistical population are generalizable.

As it is considerable in Table 3, it is observed that just the beta factors of commitment and the beta factors of social norms are 0.293 and 0.196, respectively, in which t at least is in the level of (=0.05) and is significant, but the other social capital factors are not significant statistically. As a result, the equation of foreseeing physical leisure time is as follows:

$$y = 0.293 \times 1 + 0.196 \times 2.$$

DISCUSSION AND CONCLUSION

Statistical analysis shows that sport and physical activities in leisure time among the faculty members of Isfahan University of Medical Sciences are more than the average level, which cannot guarantee physical and mental health in an ideal situation. The organization's executives can provide proper situations to enhance the level of physical leisure time by analyzing the effective factors on physical activities in the

Table 1: Normality test for data distribution									
Indices variables	n	Mode	Middle	Mean	S	Q1	G3	Z	P
Physical leisure time	120	3.41	3.48	3.44	0.43	3.19	3.75	1.06	0.263
Social capital	120	3.14	3.57	3.47	0.55	3.21	4	0.832	0.493

Table 2: The explanation of physical leisure time based on social capital parameters (analysis of variance (ANOVA))

	Sum of the squares	Freedom degree	Mean of the sum of squares	F	Р
Between groups	16.56	7	2.367	12.298	0.001
Within group	21.55	112	0.192		
Total	38.112	119			

 $R=0.659, R2=0.435, R_{ADJ}=0.399$

Table 3: Separated correlation coefficient of social capital parameters							
Indices variables	P	t	Beta	Std. error	β		
Fixed score	0.074	1.803		0.400	0.772		
Trust	0.163	1.405	0.117	0.112	0.157		
Mutual relationship	0.547	0.605	0.080	0.132	0.080		
Commitment	0.044	2.042	0.293	0.148	0.302		
Participation	0.676	0.419	0.050	0.132	0.055		
Attitude	0.900	0.125	0.016	0.134	0.017		
Social norms	0.047	2.011	0.196	0.125	0.237		
Unity	0.658	-0.444	-0.046	0.143	0.143		

leisure time of organization members. Different researches have shown that sport and physical activities have direct relationship with the decrease of stress, depression, anxiety, and also the increase of mental health and feeling revitalized. Sport and physical education's social functions play a crucial role in developing the social relationships; obviously, it has a great effect on the society's structure and the relationship between different social groups. By considering the social capital mean score of faculty members is more than the average level, so it is concluded that Isfahan University of Medical Sciences does not have enough social capital. It shows that the position of the said organization is not suitable. It is recommended that managers think about effective activities for making the social capital better. It is possible that the available social capital including relationships, norms, and trust in a particular environment can be copied into another social environment. So, it has a great effect on social exchange pattern. Suitable social organizations can provide a potential network for people to give them some sources like knowledge and information. This exchange can be done well by the cognitive and relational dimension of social capital. [6] The results of statistical analysis show that there is a significant relationship between social capital, sport, and physical activities on people's leisure time.

By considering social capital and physical leisure time, it is inferred that the presence and the absence of each of them, either at an individual level or in a social level, has a great effect on the growth and development of the people and society. Therefore, it is possible to say that social capital is a manageable phenomenon; it means that we can help forming the process. In fact, this matter can be right if high-positioned managers and policymakers of organizations would have correct information about the current situation's

social capital. Considering the importance of this matter, if managers would get familiar with different levels of this concept, they can decrease the costs by putting out this social capital, and then can have big processing and structure changes in the organization in the next step. [19] Also, leisure time and physical activities as one of the most important social capital products in organizational and individual level could be a trustful way to enhance the level of social capital for the managers and organization managers.

Overall, considering the findings of this study, it is observed that the results are in line with the results of Ghafari, [11] Parsamehr and Jemani, [12] Ball et al's, [20] Hezar Jiribi and Mardookhi,[21] Lindstrom et al.,[16] Mummery et al.[22], and Ball et al.[20] But to some extent, they are contrary to the results of Seippel. [23] Ghafari, in his research entitled "The interaction between social capital and leisure time," observed the same results. In addition, this survey's results are in line with the results of Hezar Jiribi and Mardookhi's study, which was about social welfare include leisure time.[11] Parsamehr and Jesmani's research entitled "The effect of social capital on consumption" showed that people with higher economic and social level have lesser tendency to do sports activities, which is in line with the result of this survey. [12] This fact is true as reported in Lindstrom et al.'s study entitled "Social capital and physical leisure time."[16] They showed that there is a positive and significant relationship between social capital and physical leisure time. However, the results showed that there is a direct relationship between these two factors, but Seippel pointed out that trust forms in social capital by participating in group activities and doing sport activities.^[22] To some extent, the result of Mummery et al's study is in line with that of the present study. They reported that some social capital factors like social participation, social norms, commitment, and trust have significant relationship with physical activities in leisure time. [22] Also, Ball et al's study entitled "Social capital, crime, and physical activities in leisure time" proved that sport can enhance the social capital level and improve social norms among women, in particular. Also, it decreases crime and delinquency of people in the society.[20]

Doing sport and physical activities in leisure time and participating in group activities and having membership provide a situation for individuals to respect group interests by having relationship with the other group members. Such activities cause the increase of social capital and its factors such as trust, social norms, mutual relationship, commitment, involvement, and participation. Those organizations which are about to find a solution to make their members' social capital better and consequently have an increase in the organizational social capital level can achieve this important target by focusing on sport, just like many other countries and famous organizations in the world. [20] Reaching this important target can be possible just through exact programming and providing proper situation for people to participate in sport activities in their leisure time.

Applicable suggestions

- Findings of this study show that the level of organizational social capital of Isfahan University of Medical Sciences is less than the mean, which is not satisfying. Managers of organizations can compensate this gap by conducting training workshops and holding special related courses
- Findings show that the level of physical leisure time of organizational individuals is less than the mean. Managers can provide perfect conditions and facilities for individuals to participate in sports activities in leisure time by analyzing and determining the effects of relevant factors on the level of physical activities in the leisure time of the individuals
- Considering the results of this study and those of similar studies, it is inferred that physical social capital is one of the most suitable methods to increase and even produce social capital and productivity. Managers of the organizations can achieve the aim by having a particular viewpoint about the physical activities and physical leisure time and also by planning applicable and practical programs.

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Conflicts of interest

There are no conflicts of interest.

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