A Study of the Relationship between Mental Health and Social Capital among Tehran School Students

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Abstract
This study aimed to investigate the relation between mental health and social capital. The method of research was descriptive and correlation. The population consisted of all 400 school students of middle and high schools in Tehran city that were chosen randomly. Social capital was assessed by the DELAVIZ questionnaire that has accepted reliability and validity. Also GHQ questionnaire has been used for measuring mental health. Results show a significant positive correlation between social capital index and their three dimensions with mental health index and all dimensions among school students. These relations are very strong about severe depression, anxiety and insomnia and social dysfunction subscales of mental health, respectively. Results indicate that the negative relation between relationship on social networks and all dimensions of mental health. This relationship shows that the social capital plays an important role in adolescent and youth people’s mental health.

Keywords: Mental health, Social capital, Social dysfunction, Severe depression, Social trust.

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1. Introduction

According to Putnam (1994), social capital is an aspect of social organizations such as social networks, norms and trust that facilitate cooperation and coordination among community members, enabling them to pursue shared goals efficiently. He uses social capital synonym with other concepts such as social solidarity, social cohesion, and even fraternity. These concepts mention that working together is better than being alone. In the heart of the concept of civil society, there are values such as solidarity, cooperation, trust and participation. In fact, such norms are the foundation of social capital (Fukuyama, 2001, p. 92). Social capital is a tangible example of an informal norm that promotes cooperation between two or more person (Tajbakhsh, 2003). For Bourdieu, social capital is a set of actual and potential resources that results in ownership of a durable network of institutional relationships between individuals and groups, and more simply, a member of the group (Sharepour, 2006, p. 102).

The definition of social capital is based on several interpretation and application. David Halpern mentions that the popularity of social capital for policy makers is due to its dual mode, resulted from its strong economic spirit in the statement of categories importance. The popularity of this concept for researchers is, partly, due to the wide range of results that can be justified by social capital (Halpern, 2005). The multiplicity of applications has led to a multiplicity of definitions. Social capital is often used to describe the superior management performance (Moran, 2005), improve the efficiency of different exercise groups (Evans & Carson, 2005), the value of alliances of convenience (Coca & Prescott, 2002), and strengthen supply chain relationships (McGrath & Spark, 2002).

Some studies show several hypotheses about relationship between resources embedded in social networks and mental health (Berkman & Glass, 2000). The most obvious association is that involvement in social networks provides different forms of social support that may influence mental health by functioning as ‘basic factors’ for stress (Bartley, 2004). Also social influence is another pathway between social networks and health (Berkman and Glass, 2000). The influence of peers on health behaviors such as smoking is clearly documented in health promotion (Merzel & D’Afflitti, 2003). Further, social participation provides opportunities to learn very new skills and confers a sense of helpful and belonging to others. Thus, social participation can influence health directly by activating cognitive systems, and indirectly by giving a sense of coherence and meaningfulness. More recently hypothesis relates about individual position and individual characteristics or status in the social hierarchy of one's social network or community. Finally, group membership can also provide
access to material resources and services with a direct bearing on mental health, such as sense about having well job opportunities and health service (Berkman and Glass, 2000). Marmot discusses this in terms of the ‘status syndrome.’ Having more opportunities than others within the same environment gives status; status is believed to influence health by the positive feelings of being privileged as well as by decreasing stress (Marmot, 2005).

The important links between social capital and mental health are still heavily debated. One possible pathway is that social capital play a mediating role between income inequality and health. This hypothesis was first developed by Wilkinson (Wilkinson, 1996). His work built on studies showing that health is better and life expectancy is longer in populations with low degrees of income inequality. Wilkinson's explanation is that equal societies are more socially cohesive than less equal societies. Thus, equal income distribution leads to a positive social environment which is characterized by trust and social cohesion among all citizens. Correspondingly, unequal societies have greater differences in status between citizens, creating mistrust and a decline in social cohesion, as well as high levels of crime and social anxiety (Wilkinson, 1996).

In their early writings, Kawachi and Berkman viewed social capital as a pure collective feature that is clearly distinguished from the research field of social networks (Kawachi and Berkman, 2000). According to them, social capital should be viewed as a feature of the community or neighborhood to which the individual belongs. When discussing how (collective) social capital can affect individual health, Kawachi and Berkman end up with similar explanations for social networks and health, namely that collective social capital influences health by influencing behaviors, access to health services, and psychosocial processes. This reasoning is problematic since it seems reasonable that social capital as a ‘pure collective characteristic,’ distinct from social networks, would have more ‘pure collective effects’ on health.

Woolcock (2001) and Grootaert and van Bastelaer (2002) offer a solution for this when they recognize collective action and trust as consequences of (collective) social capital. This distinction may clarify how individual, as opposed to collective social capital, is related to health in different ways. In an article entitled, "Social Capital and Health in Indonesia" The Role of social physical investment and mental health of 10,000 adults Indonesian who family participated in the survey from 1993 to 1997 were reviewed.

To determine the role of social capital in the creation of health, the internal relations of social capital and human capital in the creation of health were considered.
The results show that based on the level of social capital and health, there is a positive relationship, but clear proof of the relationship between human and social capital and mental health was not seen (Douglas 2006).

According to a study conducted in the city of Cali, in Colombia, a number of 1168 young people 15 to 25-year-old were examined. The aim in this study was to evaluate the mental health of the whole 20-item self-reports using the social capital structure. In this study, demographic and social capitals were as factors in mental health which were considered. A significant relationship was shown between social capital and mental health, as the decline in confidence towards others (Trudy, 2004).

In an article titled "social ties and mental health", the basic effect and processing mental stress reactions, mental suffering, anxiety, depression and mental health are based on two check patterns.

Woolcock and Narayan in their analysis of social capital, in terms of synergy benefits they got found that social capital is limited in three dimensions or in a group, Connection or out-group social capital and social capital survey respectively. According to Woolcock and Narayan, improving the quality of life in general and mental health in particular requires a synergy between the three dimensions of social capital (Ghaffari & Nazmohammad, 2001). Many scientists believe that the main function of media is satisfying different motivations and needs of the audience. The underlying assumption is that the audience is actively looking for the content that provides the greatest satisfaction for them. The amount of this satisfaction depends on the needs and interests of the individuals (Windal, Sygnayzr & Olson. 1997, p. 274).

The mental health, in general, includes the assessments, opinions and value judgments of the various issues amidst programs, speeches, news and entertainment programs to incorporate in an overt and covert way (Mehrdad, 2002, 9). It is believed that the mental health audiences have greater impact on thought and behavior of the audiences than to ethnic, social or interpersonal communications (Sabri, 2012). So, governments with more equipped communication media will experience more cultural development (Minoo, 1998).

According to Bourdieu, social capital is defined as social relation and position in social networks and groups that promote the access to opportunities, financial resources and social (Rezaian, 2006, p. 20). Bourdieu believes that there is a correspondence between social position and behaviors, for example, what kind of exercise, beverage, and political attitudes and so on are preferred by higher social class. He is interested in social class endurance and other forms of violence in the issue of injustice. His most concern in prominent political economy is what he calls
cultural capital. In his view, cultural capital is spread within a social space and then by transferred heritage and eventually investment in culture (Rouholamini, 1996).

Fukuyama refers to two points concerned with social capital:

1. Social capital is belonged to the group and not the individual; in other words, norms that constitute the foundation of social capital are meaningful if more than one person is involved in it.

2. Cooperation in all social activities (whether good or bad) is necessary. The values and norms can be positive and negative (Alageband, 2006).

Rasouli and Pakniat (2011) in their study investigated the role of mass media in the formation of social capital among citizens of Yazd City. Their research showed a correlation between the use of mass media and social capital. They also confirmed the correlation with the dimensions of social capital.

The aim of this study is to determine the relation between mental health and social capital among Tehran school students and try to understand if such the rate of social capital is associated with higher or lower mental health related psychological symptoms.

2. Research Method

The research is a cross-sectional study conducted in the Tehran, at the high schools in Tehran, Region 2, in the period between May and July 2015.

The author used survey method for this research. Also method of this research is descriptive and correlational.

2.1. Statistical Population and Sample Size

The statistical population of the study consists of all high school students (first and secondary grade) in Tehran's 2nd district. All population of this study, based on the available information on education and training organization was about 24900 people (all students of high schools in Tehran, Region 2) with the following composition:

- Boy: first school: 6100 persons
- Girl: second school: 6400 persons
- Boy: second school: 6000 persons
- Girl: fist school: 6380 persons

The sample size based on the Cochrane formula in the high schools is 400 people (200 people at first grade and 200 people at secondary grade school).

2.2. Instruments

To measure social capital, DELAVIZ social capital questionnaire (2006) was used.
This is a validated questionnaire to measure social capital. The questionnaire includes 27 questions and 4 subscales (trust, collaboration, participation in community and relationships on social networks) and scoring method is based on the whole Likert score of 18, 19 and 20 and other questions in reverse order of strongly disagree (4) and strongly agree (0) were scored.

The study tested the reliability of the questionnaire; Cronbach's alpha coefficient was used. Its value was 0.86 and showed the stability and internal consistency. Also we used GHQ questionnaire for measuring mental health. This questionnaire has 28 questions about different aspects of human mental health.

### 2.3. Statistical methods

In order to describe the questions in the questionnaire, descriptive statistics were used such as mean, frequency table and standard deviation to describe the variables in the research community. Also to test the hypotheses, Pearson correlation coefficient (to test hypotheses about the relationship between mental health indicators and dimensions of social capital) and the t-test are used to compare the means of two social capital groups (first and second high school) students.

### 3. Results

Table 1 arranged on basis of the frequency of mental health rates. 120 percent of respondents, on average, has less or not problem in mental health. The largest number of respondents, including more than 50 percent has Suspected of problem at a rate of 6 to 14 score of mental health. 18% of respondents have high level of disorder (less mental health) than up to 16 score of mental health rate. Mental health by school students on a scale from zero to a maximum of 84 is mean equal 33.09 and SD 18. 3.

We concluded that the mental health, district 2 of Tehran, moderate, respectively.

<table>
<thead>
<tr>
<th>Mental health</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less or not problem</td>
<td>(0-5)</td>
<td>120</td>
</tr>
<tr>
<td>Suspected of problem</td>
<td>(6-14)</td>
<td>208</td>
</tr>
<tr>
<td>Top disorder</td>
<td>(up 14)</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>400</td>
</tr>
</tbody>
</table>

The average of the four dimensions of social capital in Tehran schools in Region 2 shows the data in Table 2 as follows: Average subscale of "collaboration" in the 15.94
range (0-28) with a standard deviation of 3.92, "participation in the local community" with an average of 15.49 in the range (28- 0) with a standard deviation of 6.51, after "social trust" with an average of 15.32 in the range (0-28) SD 5.56, and " social networks relationships "with an average of 14.83 in the range (0-28) SD 4.06. In general, the collaboration between school students in Region 2 than the other dimensions of social capital is Tehran. Social capital is the weakest aspect of relationships on social networks, but the differences noted are minor greatly.

Table 2. Variables studied in statistical indicators

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Sd</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration.</td>
<td>15.94</td>
<td>3.92</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Participation in the local community.</td>
<td>15.49</td>
<td>6.51</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Social trust.</td>
<td>15.32</td>
<td>5.56</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Relationships social networks.</td>
<td>14.83</td>
<td>4.06</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Social capital index.</td>
<td>61.48</td>
<td>16.56</td>
<td>0</td>
<td>112</td>
</tr>
<tr>
<td>Mental health.</td>
<td>33.09</td>
<td>18.3</td>
<td>0</td>
<td>84</td>
</tr>
</tbody>
</table>

In order to test the hypotheses based on the research goal, there is a significant correlation between the use of mass media and social capital among students of middle and high schools in Tehran City and the minor ones related to all aspects of social capital. Then the Pearson Correlation Coefficient test was used and the results obtained from the four aspects of the relationship between social capital indicators and mental health among school students of Tehran in Zone 2 shown in table 2.

All correlations were significant with the amount of mental health among school principals of Region 2 in Tehran. Participation in the local community has the highest correlation (+0.36) which indicates the mental health. So in this case the main hypothesis is accepted with the confidence level in 99% and the null hypothesis is rejected. Social networks with a correlation coefficient of - 0.16 is the second strongest correlation.

Social trust has the lowest correlation (-0.11). This means that by increasing the mental health, social trust will be reduced. In all of the above, the main hypothesis (at 95 and 99 percent of collaboration for social trust and relationships on social networks) will be rejected.

The main hypothesis which tests the correlation between social capital indexes of consumer media written in the last row of Table 2. So the main hypothesis at the level of 99% is accepted and the null hypothesis is rejected.
A Study of the Relationship between Mental Health and Social Capital

Table 3. Correlation of social capital and mental health among school students of Tehran in Region 2

<table>
<thead>
<tr>
<th>Social capital dimensions</th>
<th>mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td>social trust</td>
<td>-0.11*</td>
</tr>
<tr>
<td>collaboration</td>
<td>-0.15**</td>
</tr>
<tr>
<td>participation in the local community</td>
<td>0.36**</td>
</tr>
<tr>
<td>relationships social networks</td>
<td>-0.16**</td>
</tr>
<tr>
<td>Social capital index</td>
<td>0.135**</td>
</tr>
</tbody>
</table>

Note *= p < .05, **= p < .01  N = 400 for all analyses.

Other hypotheses are related to the differences between the averages of social capitals in two high schools of Region 2 in Tehran. The information contained in Table 3 indicates that there is no significant difference between social capitals among school students based on the first and second periods in Tehran of Region 2.

The average amount of social capital in high school students in the first period equals to 61.55 with a standard deviation of (SD) 11.19 and average of 61.33 to 12.23 SD. The results of tests, in \( t = 0.89 \) with 0.39 error, indicates that there is no statistically significant difference between the means of two groups. The main hypothesis is rejected and the null hypothesis is accepted. So the average of social capital won't be differed within two groups of school students.

Table 4. Comparison between the social capital in the first and second periods

<table>
<thead>
<tr>
<th>groups</th>
<th>mean</th>
<th>sd</th>
<th>df</th>
<th>t</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>first school</td>
<td>61.55</td>
<td>11.19</td>
<td>398</td>
<td>0.89</td>
<td>0.39</td>
</tr>
<tr>
<td>second school</td>
<td>61.33</td>
<td>12.23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Conclusion and Discussion

The results showed that there is no significant difference between the average of social capital among men and women. These findings are consistent with the findings of Abram Jessica (2010). The hypothesis test showed that there is an inverse relationship between the use of mental health and social trust. These results are in line with findings of Messenger and Coleman and Putnam (2003) which showed that by increasing of mental health in arena of links to information and confidence among people, based on feelings and illusions, will be reduced. According to Putnam, one of the factors influencing the decline of social trust is mental health. According to
Douglas (2006), there is an internal relationship between the social capital and human capital in the creation of health. According to Kawachi and Berkman (2000), social networks and health will be influenced by behaviors, access to health services and psychosocial processes. Also from the perspective of cultivation theory having mental health is an important factor in socialization of attitudes, behaviors, values and our perception of the real world. The main hypothesis test result showed a significant correlation between the mental health and investors. This finding is consistent with results of Messenger and Clean (2012), Kawachi & Berkman. (2000), Douglas (2006), but not in line with the findings of Ghaffari (2001) in which he claimed overall outcome of mental health during their. Social participation provides opportunities to learn very new skills and confer a sense of helpfulness and belonging to others. Thus, social participation can directly influence health by activating cognitive systems and a sense of coherence and meaningfulness indirectly.

References