**ORIGINAL ARTICLE** 

# Social capital and related factors in Western Iran students

Z. REZAEI<sup>1</sup>, G. KARIMIANPOUR<sup>2</sup>, A. VAHABI<sup>3</sup>, A. LATIFI<sup>4</sup>, M. AMANI<sup>2</sup>, M. MORADI<sup>5</sup>

<sup>1</sup> Department of Health Education & Health Promotion, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran; <sup>2</sup>Student Research Committee, Kurdistan University of Medical Sciences, Sanandaj, Iran; <sup>3</sup>Social Determinants of Health Research Center, Research Institute for Health Development, Kurdistan University of Medical Sciences, Sanandaj, Iran; <sup>4</sup>Department of Public Health, Maragheh University of Medical Sciences, Maragheh, Iran; <sup>5</sup>Research & Technology Deputy, Kurdistan University of Medical Sciences, Sanandaj, Iran

#### Keywords

Social capital • Trust • Relationships in social networks • Community participation • Group participation

#### Summary

**Background and aim**. Social capital involves a set of norms available in social systems which improves the interaction between people and reduces the costs of interactions and communications. The purpose of this research was to study the social capital of the students of Kurdistan University of Medical Sciences and its related factors, 2017.

**Material and methods**. The method of this study was the descriptive survey. The statistical sample of this study included all students of Kurdistan University of Medical Sciences among whom 378 students were selected randomly as the study sample. Delaviz questionnaire of social capital was employed for data collection and data analysis was performed using SPSS software, through

#### Introduction

Social capital is a relatively new concept, whose application began to expand in the 1990s in scholarly and academic circles, with the works of scholars such as James Coleman, Robert Putnam, Francis Fukuyama, and Pierre Bourdieu [1]. There are many definitions for this concept. Nahapit and Ghasal (1998) considered social capital as the sum of resources and values that exist within the network of personal and organizational relationships [2]. According to Fukuyama, social capital is a set of norms in social systems that promotes the level of cooperation of members of that society and reduces the costs of exchanges and communications [3]. Vilanova and Josa (2003) considered social capital as a management phenomenon with characteristics such as trust (norms), shared values and behaviors, relationships, cooperation, understanding, mutual commitment, and reciprocal networks [4].

The concept of social capital, which has a sociological root, is a lever of success and a suitable platform for the productivity of humans as well as physical capital and a way to achieve success and improve the performance of the organization [5]. The importance of social capital is that it brings individuals together (groups and organizations) and supports the successful accomplishment of tasks [6] by creating norms and mutual trust. In this way, it can fulfill the goals of the members [1] and enables individuals to descriptive statistics (mean, standard deviation) and Inferential statistics (U-Mann Whitney, Kruskal-Wallis).

**Results.** The mean of social capital was 70.56  $\pm$  10/88. The minimum and maximum mean was measured for "participation in local community" and "group participation", respectively. In this study, there were significant associations between social capital and gender; field of study as well as marital status (p < 0/01).

**Conclusions.** Social capital is known as the most important factor for people dealing with stressful situations, and can facilitate toleration of problems for them. It can also support the health and life satisfaction of students.

engage in collective actions which improve interaction with each other [7]. This concept, as one of the social determinants of health, has been effective in mortality, mental disorders, and stress and has attracted a great deal of attention. In societies with a high social capital, the crime rate is lower, and as it improves, the quality of life of increases [8].

Social capital has an important role in various ways such as facilitating and accelerating the circulation of information and knowledge (whether tacit knowledge and codified knowledge) within the university, facilitating the formation of human capital, reducing costs such as control and monitoring costs, and facilitating access to individuals inside and outside the organization. In this way, the organizational goals can be achieved faster and more smoothly. Meanwhile, educational centers and universities, through education, play an important role in building up social capital and in enhancing social cohesion, participation, and confidence-building. In other words, the university can transfer the capital to cover the ideas, values, norms, and social trust of academics [9]. In relation to social capital and its positive effects on research students, the results of Razavizadeh et al.'s research revealed that the mean of social trust dimensions was 91.56, the average social support dimension was 54.22, and the average dimension of interpersonal relationships in students was 34.95. According to them, these three dimensions of

social capital in interaction of each other were associated with reduction of anxiety and depression, showing a positive and significant effect [10]. Also, the results of the research by Khosravi Shahi et al. indicated that the average social capital of the students was 54.56 and the mean of psychological well-being was 50.24. Further, there was a positive and significant correlation between social capital and psychological well-being of the students [11].

Indeed, social capital governs all the moments of everyday life and can affect the attitude of human beings [12]. It also plays a more important role than physical and human capital in societies, which is the coherence of division between human beings and organizations. Since students are the most important human capital and future resources of the country, when social capital and its dimensions are formed and spread among students, it helps students make extensive efforts for the country's comprehensive development. Identifying the effective factors in strengthening or weakening social capital is therefore important. In this regard, knowledge about their social capital and their relationship with each other is necessary for their social and cultural planning. Considering the importance of social capital in students and its positive effects, the purpose of this research was to study the social capital status of students of Kurdistan University of Medical Sciences and its related factors.

## Method

This research is descriptive-analytic (cross-sectional). The statistical population of this study consisted of all students of Kurdistan University of Medical Sciences. The samples were selected using simple random sampling. The optimal sample size was obtained as 364 people using the Cochran formula and with a 5% error. Considering 10% of loss in the sample, a total of 400 individuals were considered as the sample. Further, 378 questionnaires were completed and analyzed. The data were collected using a social capital questionnaire. The questionnaire consisted of two parts of demographic questions (age, sex, grade, college, marital status) and the main questions of the research, ranked through the Likert scale of 5 degrees (score 4) to the opposite (score 0). This questionnaire has four components of trust (Questions 1 to 5), relationships in social networks (questions 6 to 13), community participation (questions 14-21), and group participation (questions 22-27). The content validity of the questionnaire was approved and Delaviz reported the reliability of this questionnaire with Cronbach's alpha 0.85 [13]. SPSS software version 22 was used for data analysis. Specifically, descriptive statistics (mean, standard deviation, frequency) and inferential statistics (Mann-Whitney and Kruskal-Wallis) were applied.

### Results

The results of the data analysis revealed that 157 (41.5%) of the subjects were male and 221 (58.5%) were female. The age group of 20-22 years old claimed the largest frequency

(40.7%). Also, 345 (91.3%) subjects were single and 25 (8.7%) were married, and 315 people were undergraduate students. The highest frequency of the college was related to Faculty of Paramedical Sciences (37.8%) while the minimum frequency belonged to dental school (4.5%). Further, the highest frequency was in the field of laboratory sciences (10.3%) and the lowest frequency was found in the field of master's courses (3.2%).

.....

Table I presents the possible range, the observed range, as well as mean and the standard deviation of the social capital and its subgroups. The average total score of social capital was  $70.56 \pm 10.88$  out of a total of 108. The highest scores belonged to the subgroup of group participation with a mean score of  $16.85 \pm 3.52$  while the lowest score occurred in the subgroup of participation in local community with a mean score of  $18.96 \pm 3.90$ .

The results of the study indicated that there is a significant relationship between the gender of the students and the total score of social capital (p < 0.016), where the average total score of social capital of female students was higher than that of male students (Tab. II). Also, the mean scores of trust components, relationships in social networks, and group participation in girls were higher than in boys, but this difference was statistically significant only in the dimension of relationships in social networks (p < 0.001). The participation component in the local community was higher in boys than in girls, but this difference was not statistically significant (p < 0.05). The results also showed that the total score of social capital and its components was higher in married individuals than in single individuals, and these differences were statistically significant (p < 0.05) (Tab. II).

According to the results, the total social capital score of the 25-year-old and older group was the highest among all, but there was no significant difference between the age groups (p < 0.05). On the other hand, there was a significant difference only in the component of participation in the local community, among the components of social capital, in the subgroups of the age groups and the score of the age group was 25 and older, above all the total score of social capital and its components in PhD students was higher than other levels of education but there was no significant difference between them (Tab. III).

Based on the results, there was a significant relationship between the college of students' education and the total score of social capital (p < 0.034) where the highest social capital score of students was found at the faculty

 $\ensuremath{\text{Tab. I}}$  . Ranges, mean and standard deviation of social capital and Its components.

| Component                           | Possible<br>range | View<br>range | M ± SD        |
|-------------------------------------|-------------------|---------------|---------------|
| Trust                               | 0-100             | 0-100         | 66.79 ± 15.28 |
| Relationships<br>in social networks | 0-100             | 12.50-100     | 66.84 ± 13.16 |
| Community participation             | 0-100             | 12.50-93.75   | 59.25 ± 12.19 |
| Group<br>participation              | 0-100             | 29.12-99.84   | 70.12 ± 14.68 |
| Social capital<br>(total score)     | 0-100             | 23-89.24      | 64.92 ± 10.01 |

of medicine with a mean and standard deviation of  $75.26 \pm 12.32$  while the lowest mean score of social capital belonged to dental school with mean and standard deviation of  $68.29 \pm 7.58$  (Tab. III).

The results of the data analysis showed that there was a significant relationship between the students' academic curriculum and the total score of social capital and its components (p < 0.05). Medical students with the mean and standard deviation of 75.96  $\pm$  12.37 had the maximum, while the radiotherapy students with the mean and standard deviation of 65.25  $\pm$  15.44 had the lowest overall score of social capital compared to other students (Tab. IV).

.....

Tab. II. Difference of social capital and its components by gender and marriage.

|          |         |               |         |        | Mean and                               | standaı    | d deviation | of social capital          | l and it | s compone       | ents                   |         |        |                                 |         |                 |
|----------|---------|---------------|---------|--------|--|------------|-------------|----------------------------|----------|-----------------|------------------------|---------|--------|---------------------------------|---------|-----------------|
| Variable | Group   | Trust         | p-value | 95% CI | Relationships<br>in social<br>networks | p-value    | 95% CI      | Community<br>participation | p-value  | 95% CI          | Group<br>participation | p-value | 95% CI | Social capital<br>(total score) | b-value | 95% CI          |
| Gender   | Male    | 65.82 ± 18.49 | 0.86    | (0.85- | 64.23 ± 14/65                          | 0.00       | (0.00-      | 59.78 ± 11.30              | 0.77     | (0.77-<br>0.78) | 70.72 ± 15.34          | 0.2     | (0.24- | 63.50 ± 11.78                   | 0.01    | (0.01-<br>0.01) |
|          | Female  | 67.48 ± 12.51 |         | 0.87)  | 68.70 ± 11.67                          | 70 ± 11.67 | 1 0.001)    | 58.49 ± 13.35              |          | 0.78)           | 70.92 ± 14.17          | 5       | 0.26)  | 65.93 ± 8.41                    |         | 0.017           |
| Marital  | Single  | 66.69 ± 14.75 | 0.33    | (0.32- | 66.78 ± 12.80                          | 0.99       | (0.99-      | 59.12 ± 12.30              | 0.8      | (0.79-          | 69.83 ± 14.53          | 0.2     | (0.24- | 64.78 ± 9.98                    | 0.05    | (0.79-          |
| status   | Married | 67.87 ± 20.23 |         | 0.34)  | 67.51 ± 16.64                          |            | 0.99)       | 60.61 ± 11.12              |          | 0.80)           | 73.11 ± 16.04          | 4       | 0.25)  | 66.37 ± 10.34                   |         | 0.81)           |

| יוקט און אראש און אראש אראש אראש אראש אראש אראש אראש ארא | d its components by age groups, educational level and colleg | age groups, educational level a | mponents by age | capital and its co | Difference of social | Tab. III. |
|--|--|---------------------------------|-----------------|--------------------|----------------------|-----------|
|--|--|---------------------------------|-----------------|--------------------|----------------------|-----------|

|             | Mean and standard deviation of social capital and its components |               |         |                 |  |         |                 |                            |         |                 |                        |         |                 |                                 |         |                   |
|-------------|--|---------------|---------|-----------------|--|---------|-----------------|----------------------------|---------|-----------------|------------------------|---------|-----------------|---------------------------------|---------|-------------------|
| Variable    | Group  | Trust         | p-value | 95% C           | Relationships<br>in social<br>networks | p-value | 95% CI          | Community<br>participation | p-value | 95% CI          | Group<br>participation | p-value | 95% CI          | Social capital<br>(total score) | p-value | 95% CI            |
| Age         | Under 20   | 66.05 ± 13.65 | 0.44    | (0.43-          | 68.39 ± 11.34                          | 0.35    | (0.34-          | 58.36 ± 12.32              | 0.05    | (0.04-          | 69.07 ± 15.21          | 0.81    | (0.80-          | 64.74 ± 9.03                    | 0.61    | (0.60-<br>0.62)   |
| groups      | 22-20  | 66.52 ± 16.69 |         | 0.45)           | 65.38 ± 14.88                          | -       | 0.36)           | 59.37 ± 11.19              |         | 0.05)           | 70.53 ± 13.77          |         | 0.82)           | 64.56 ± 10.64                   |         | 0.62)             |
|             | 25-23  | 66.96 ± 12.78 |         |                 | 67.01 ± 10.80                          |         |                 | 58.03 ± 11.94              |         |                 | 69.68 ± 15.16          |         |                 | 64.54 ± 9.41                    |         |                   |
|             | 25 and up  | 68.88 ± 19.38 |         |                 | 69.53 ± 15.22                          |         |                 | 64.40 ± 15.62              |         |                 | 71.87 ± 16.32          |         |                 | 68.03 ± 10.83                   |         |                   |
| Educational | B.S. student   | 66.27 ± 15.59 | 0.1     |                 | 66.50 ± 13.49                          | 0.70    | (0.69-<br>0.71) | 59.17 ± 11.75              | 0.85    | (0.85-<br>0.86) | 69.36 ± 14.84          | 0.1     | (0.09-<br>0.10) | 64.53 ± 10.04                   | 0.29    | (0.28-<br>0.30)   |
| level       | M.Sc. student  | 65.71 ± 1.81  |         | -0.11)          | 67.41 ± 8.64                           | ]       |                 | 59.37 ± 4.58               |         |                 | 73.09 ± 11.95          |         |                 | 65.58 ± 4.52                    |         | 0.50/             |
|             | MD student   | 70.63 ± 15.02 |         |                 | 69.01 ± 11.90                          |         |                 | 59.70 ± 16.24              |         |                 | 47.34 ± 13.67          |         |                 | 67.33 ± 10.76                   |         |                   |
| Faculty     | Medicine   | 72.64 ± 14.20 | 0.11    | (0.11-<br>0.12) | 70.40 ± 11.36                          | 0.19    | (0.18-          | 64.15 ± 14.88              | 0.00    | (0.003-         | 73.53 ± 14.90          | 0.27    | (0.26-<br>0.28) | 69.24 ± 11.34                   | 0.03    | (0.032-<br>0.039) |
|             | Dentistry  | 65.88 ± 14.27 |         | 0.12)           | 65.80 ± 12.52                          | 1       | 0.20)           | 51.83 ± 14.28              | 5       | 0.006)          | 72.67 ± 11.21          |         | 0.28)           | 62.83 ± 6.97                    |         | 0.059)            |
|             | Nursing &<br>midwifery   | 68.00 ± 12.69 |         |                 | 68.61 ± 9.35                           |         |                 | 60.44 ± 9.35               |         |                 | 66.73 ± 14.96          |         |                 | 65.26 ± 7.33                    |         |                   |
|             | Paramedical  | 65.34 ± 16.86 |         |                 | 64.96 ± 14.96                          |         |                 | 58.26 ± 11.31              |         |                 | 70.05 ± 15.26          |         |                 | 63.79 ± 10.59                   |         |                   |
|             | Public<br>health   | 66.27 ± 14.87 |         |                 | 67.21 ± 13.14                          |         |                 | 59.40 ± 13.07              |         |                 | 70.90 ± 13.96          |         |                 | 65.15 ± 10.40                   |         |                   |

Tab. IV. Difference between social capital and its components in terms of academic disciplines.

|                         |               |         |             | Mean                                   | and st  | andard de   | viation of social of       | apital an | d its comp | onents                 |         |                 |                                 |         |                  |
|-------------------------|---------------|---------|-------------|--|---------|-------------|----------------------------|-----------|------------|------------------------|---------|-----------------|---------------------------------|---------|------------------|
| Academic<br>discipline  | Trust         | p-value | 95% CI      | Relationships<br>in social<br>networks | p-value | 95% CI      | Community<br>participation | p-value   | 95% CI     | Group<br>participation | p-value | 95% CI          | Social capital<br>(total score) | p-value | 95% CI           |
| Nursing                 | 71.40 ± 12.78 | 0.02    | (0.02-0.02) | 68.00 ± 9.47                           | 0.02    | (0.02-0.02) | 57.12 ± 10.95              | 0.002     | (0.001-    | 69.72 ± 9.85           | 0.04    | (0.03-<br>0.04) | 65.39 ± 6.47                    | 0.01    | (0.008-<br>0.01) |
| Medicine                | 73.12 ± 14.52 |         | 0.02)       | 71.28 ± 11.12                          |         | 0.02)       | 64.45 ± 15.30              |           | 0.003)     | 74.49 ± 14.84          |         | 0.04)           | 69.89 ± 11.38                   |         | 0.01)            |
| Dentistry               | 65.88 ± 14.27 |         |             | 65.80 ± 12.52                          |         |             | 51.83 ± 14.28              |           |            | 72.67 ± 11.21          |         |                 | 62.83 ± 6.97                    |         |                  |
| Medical<br>emergency    | 66.04 ± 21.86 |         |             | 72.39 ± 14.47                          |         |             | 66.92 ± 14.18              |           |            | 69.85 ± 17.08          |         |                 | 68.61 ± 11.98                   |         |                  |
| Laboratory<br>sciences  | 68.97 ± 11.81 |         |             | 65.38 ± 12.42                          |         |             | 56.08 ± 10.94              |           |            | 69.44 ± 15.12          |         |                 | 63.81 ± 8.79                    |         |                  |
| Public health           | 65.39 ± 10.74 |         |             | 64.63 ± 12.75                          |         |             | 59.45 ± 11.83              |           |            | 67.76 ± 13.46          |         |                 | 63.55 ± 7.78                    |         |                  |
| Occupational health     | 64.58 ± 18.83 |         |             | 66.05 ± 14.13                          |         |             | 56.85 ± 15.04              |           |            | 70.37 ± 16.35          |         |                 | 63.63 ± 12.84                   |         |                  |
| Environmental<br>health | 69.26 ± 15.42 |         |             | 70.68 ± 12.78                          |         |             | 62.22 ± 13.08              |           |            | 74.75 ± 11.92          |         |                 | 68.40 ± 10.35                   |         |                  |
| Midwifery               | 65.60 ± 12.60 |         |             | 69.25 ± 12.68                          |         |             | 64.12 ± 10.32              |           |            | 70.88 ± 17.29          |         |                 | 67.01 ± 8.72                    |         |                  |
| Anesthesia              | 60.22 ± 15.31 |         |             | 63.21 ± 9.97                           |         |             | 57.24 ± 8.14               |           |            | 70.72 ± 14.35          |         |                 | 62.18 ± 7.73                    |         |                  |
| Surgical<br>technology  | 67.14 ± 12.20 |         |             | 69.04 ± 2.18                           |         |             | 59.37 ± 2.61               | ]         |            | 58.43 ± 13.88          | ]       |                 | 63.08 ± 5.91                    |         |                  |
| Radiology               | 70.02 ± 4.20  | 1       |             | 68.22 ± 8.18                           |         |             | 59.37 ± 8.90               |           |            | 70.02 ± 12.45          | ]       |                 | 65.93 ± 4.46                    | ]       |                  |
| Radiotherapy            | 61.42 ± 22.18 |         |             | 58.75 ± 20.82                          |         |             | 55.35 ± 10.54              |           |            | 68.46 ± 16.61          | ]       |                 | 60.03 ± 14.21                   | ]       |                  |
| M.Sc. field             | 65.00 ± 3.21  |         |             | 65.62 ± 7.99                           |         |             | 57.81 ± 2.49               |           |            | 74.88 ± 12.03          |         |                 | 64.86 ± 4.49                    |         |                  |

## Discussion

The results of the study indicated that the average total score of social capital was  $70.56 \pm 10.88$ . The average of students' social capital was higher than moderate. This result was in line with the findings of the other studies [11, 14, 15]. Further, the highest score was found in the subgroup of group participation with a mean score of  $16.85 \pm 3.52$  while the lowest score occurred in the subgroup of participation in the local community with an average score of  $18.96 \pm 3.90$ . In explaining the high level of social capital of students, some reasons can be mentioned such as ethnic and religious commonalities, speaking in mother tongue, and intergroup communication [16]. As evidence, most of the students of this university were Kurdish and had ethnic and religious commonalities. Indeed, students of Kurdistan University of Medical Sciences have a greater willingness to participate in social and group activities and have a great deal of trust in other people because of the characteristics mentioned.

The results also indicated a significant relationship between the gender of the students and the total score of social capital (p < 0.016). The average total score of social capital of female students was higher than that of male students, which is consistent with the results of studies by Sam Aram et al., Bagheri Yazdi, Gharibi et al., Muradyan Sarykhlyla, and Onyx and Boolen [17-21].

Further, the mean score of trust components, social networking relationships and group participation in girls was higher than that of boys, but this difference was statistically significant only in the dimension of relationships in social networks (p < 0.001). This finding was in line with the findings of Sa'idi, Hasanzadeh and Gharibi et al. [19, 22]. On the other hand, the participation component in the local community was significantly higher in boys than in girls, but this difference was not statistically significant (p < 0.05). This was consistent with the study of Gharibi and colleagues [19]. In explaining this finding, it can be stated that this situation is in part attributed to the socio-educational background of women and men in our society.

In addition, sociocultural factors may affect this finding. In explaining the high level of confidence in girls, women can be more confident as they have a personality trait making them more likely trust institutional trust compared to men.

The results also showed that the total score of social capital and its components was higher in married individuals than in single subjects (p < 0.05). This was in line with the study of Steel, Gribi et al. as well as Onyx and Bullen [14, 19, 22]. In explaining this finding, it can be said that marriage increases the range of interactions and participation in relationships and interpersonal, group, family, and social relationships, thereby increasing the ability of individuals in terms of social capital. Also, the association between married people and family as well as spouse's families and expansion of the scope of family-group interactions has increased the awareness of their emotions and their abilities. Further, due to the

marital needs and community expectations of new roles, their trust and their formal participation also improve.

.....

The results of data analysis indicated that there was a significant relationship between the students' academic curriculum and the total score of social capital and its components (p < 0.05).

In general, medical and nursing students had a higher degree of trust in social capital than in other fields. In explaining this finding, it can be said that since most medical and nursing students are in the educational-cultural environment and more than other students involved in human relationships with patients, they also feel that their interpersonal and social skills and abilities may be affected by these professional conditions. Finally, the results of this study showed no significant relationship between age or educational variables and social capital (p < 0.05).

### Conclusions

The results of this study suggested that the average social capital of students was above average and the demographic factors of gender, marriage, and field of study were associated with social capital. Since social capital is the most powerful coping force for successful and easy confrontation at times of conflict with well-known challenging situations, it facilitates the management of problems. Further, given the importance of social health for students, social capital as a an important factor can support life satisfaction.

Studies have shown that the higher the social capital is, the lower the risk of alcohol, cigarettes, drugs, and sexual risk-taking will be [18]. So, it is important to recognize the factors that affect it. Therefore, it is recommended that this study be conducted in different cities and geographic areas. It can also be conducted in other ways such as interview or direct observation. Also, since social-communicative capabilities in the present age, including the need for strong social interaction and trust and security in human relationships, are essential, it is suggested that social abilities and adaptations be taught at different levels of family- social and educational background. This can be an important step in promoting the level of human relations and increasing social capital.

#### Acknowledgements

The authors of this article appreciate all the students who collaborated with us on for implementation of this project and completed the questionnaires.

Funding sources: we also thank the Student Research Committee of Kurdistan University of Medical Sciences for their cooperation in approving this project and financing the research in the form of a student research project. The cost of conducting this research on December 28, 2010 was provided by the Deputy of Research and Technology of Kurdistan University of Medical Sciences with Grant number 272/94.

## **Conflict of interest statement**

The authors declare no conflict of interest.

## Authors' contributions

Study design: ZR, GHK and AL. Data collection: MA. Data analysis: MM and AL. Study supervision: AV and AL. Manuscript writing and revisions: ZR, GHK and AV.

#### References

- Bhandari H, Yasunobu K. What is social capital? A comprehensive review of the concept. Asian J Soc Sci 2009; 37:480-510. https://doi.org/10.1163/156853109X436847
- [2] Nahapiet J, Ghoshal S. Social capital, intellectual capital, and the organizational advantage. Acad Manage Rev 1998;23:242-66. https://doi.org/10.2307/259373
- [3] Fukuyama F. Social capital, civil society and development. Third World Q 2001;22:7-20. https://doi.org/10.1080/713701144
- [4] Sayadi E, Hayati A. The relationship between social capital and organizational commitment of employees in Zanjan education organization:(a case study). International Journal of Academic Research in Economics and Management Sciences. 2014;3:166. https://doi.org/10.6007/IJAREMS/v3-i5/1219
- [5] Maurer I, Bartsch V, Ebers M. The value of intra-organizational social capital: how it fosters knowledge transfer, innovation performance, and growth. Organization Studies 2011;32:157-85. https://doi.org/10.1177/0170840610394301
- [6] Cohen D, Prusak L. In good company: how social capital makes organizations work. Harvard Business Press 2001.
- [7] Halimatussadiah A, Resosudarmo BP, Widyawati D. Social capital to induce a contribution to environmental collective action: results from a laboratory experiment in Indonesia. International Journal of Environment and Sustainable Development 2017;16:397-414. https://doi.org/10.1504/ IJESD.2017.10007708
- [8] Ehsan A, Klaas HS, Bastianen A, Spini D. Social capital and health: a systematic review of systematic reviews. SSM Popul Health 2019:100425. https://doi.org/10.1016/j. ssmph.2019.100425
- [9] Shabani Varaki B, Ahanchian N. Academic leadership and social capital, a sociological approach to the management of higher education. New Thoughts on Education 2006;1:39-58. https://doi.org/10.22051/jontoe.2006.293

- [10] Razavizadeh N, Noghani M, Yousefi A. The relationship between social capital and mental health among students of Ferdowsi University of Mashhad. Journal of Social Sciences 2013;9:25-51. https://doi.org/10.22067/jss.v0i0.17665
- [11] Pang H. Exploring the beneficial effects of social networking site use on Chinese students' perceptions of social capital and psychological well-being in Germany. International Journal of Intercultural Relations 2018; 67:1-11. https://doi.org/10.1016/j. ijintrel.2018.08.002
- [12] Khodayari, S, Jahanbakhsh, Haghighatian, M. The relationship between social capital and cognitive law, sociological explanation. Social Capital Management 2017;4:265-82. https://doi. org/10.22059/JSCM.2017.235786.1393
- [13] Delaviz A. The role of social capital in the development of political attitudes of teachers Marivan [Master thesis]. Tabriz: Tabriz University 2005.
- [14] Rezaei F, Saghafipour A, Babakhanloo S, Soltani N, Mohammadbeigi A. Study on social capital in female students of Arak University of Medical Sciences, Central Iran. JBE 2019;5:66-73. https://doi.org/10.18502/jbe.v5i1.1908
- [15] Aghamirzaee mahali ma T, Aghatabar J, Rahimpour B, salehi omran E. Evaluation of the factors influencing students' social capital: a step towards social development. Educ Strategy Med Sci 2018;11:64-72 https://doi.org/10.29252/edcbmj.11.03.08
- [16] Shiani M, Mousavi M, Madani Ghahfarokhi S. Social capital of young people in Iran. Iranian Journal of Sociology. 2009;3:57-84.
- [17] Sam Aram E, Khaksari A, Gh A, Hosseini A. Effective factors on amount of social capital at Allameh Tabatabaei University. Journal of Social Sciences 2009:40-80. https://doi.org/10.22054/ qjss.2011.6818
- [18] Bagheri Yazdi HS. The relationship between social capital and risk taking behaviors in undergraduate students of Tehran's Allamah Tabatabaii University. Social Welfare Quarterly 2010;11:223-50.
- [19] Gharibi H, Gholizadeh, Gharibi J. Predicting students' social capital based on demographic variables. Educational Administration Research Quarterly 2009;2:136-54.
- [20] Moradian Sorkhkalaee M, Eftekhar Ardebili.H, Rostami Z, Saiepour N. Social capital among Tehran University of Medical Sciences students in 2011. J Health Syst Res 2014;10:267-258
- [21] Bullen P, Onyx J. Measuring social capital in five communities in NSW: a practitioners guide. Coogee NSW. Management Alternatives 2005. https://doi.org/10.1177/0021886300361002
- [22] Saiedi M, Hassan Zade D. The effect of social capital appreciation of teachers on family, school and community. Research and Family Journal 2005;2:1-23

.....

Received on May 12, 2019. Accepted on January 8, 2020.

**Correspondence:** Ghaffar Karimianpour, Student Research Committee, Kurdistan University of Medical Sciences, Emam Blvd, Shahid Beheshti Avenue, Ehsan 9 Alley, Salas Babajani, 67771-35116 Kermanshah, Iran - Tel. +989188858172 - E-mail: karimiangh@gmail.com

How to cite this article: Rezaei Z, Karimianpour G, Vahabi A, Latifi A, Amani M, Moradi M. Social capital and related factors in Western Iran students. J Prev Med Hyg 2020;61:E241-E245. https://doi.org/10.15167/2421-4248/jpmh2020.61.2.1280

© Copyright by Pacini Editore Srl, Pisa, Italy

This is an open access article distributed in accordance with the CC-BY-NC-ND (Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International) license. The article can be used by giving appropriate credit and mentioning the license, but only for non-commercial purposes and only in the original version. For further information: https://creativecommons.org/licenses/by-nc-nd/4.0/deed.en