



Social Capital and Happiness Among Health Sector Personnel in Iran

Seyed Ramin Ghasemi,¹ Nader Rajabi-Gilan,^{2,*} Sohyla Reshadat,¹ and Ali Zakiei¹

¹Center of Excellence for Community Oriented Medicine Education, Social Development and Health Promotion Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran

²Social Development and Health Promotion Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran

*Corresponding author: Nader Rajabi-Gilan, Social Development and Health Promotion Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran. Tel: +98-8334216143, Fax: +98-8334216143, E-mail: nrgilan@kums.ac.ir

Received 2016 July 18; Revised 2016 November 19; Accepted 2017 April 13.

Abstract

Background: Happiness and its associated factors are of critical importance in human health.

Objectives: This study was conducted to examine the association between social capital (social relations) and happiness among health personnel in Iran.

Methods: In this cross sectional study, 537 health personnel were selected from the West of Iran through stratified random sampling. The study tools included a demographic checklist, a social relations questionnaire, and Oxford happiness inventory (OHI). For statistical analysis, independent t test, ANOVA, Pearson's correlation test, and multiple regression analysis were performed, using SPSS version 18 and AMOS software.

Results: Among happiness dimensions, the mean score of "sense of vitality" was significantly higher in men, compared to women ($P < 0.05$). The results of multiple regression analysis showed that family relations had the greatest direct effect on "life satisfaction" (β , 298; $P < 0.01$) and "positive affect" (β , 0.257; $P < 0.01$). Gender played a mediating role only between workplace relations and happiness ($P = 0.004$). In addition, canonical correlation analysis indicated that 23.5% of variance in the happiness components could be predicted by the components of social relations, based on the Wilks' lambda (0.765).

Conclusions: The findings showed that family and family relations are still the most important sources of happiness. Reinforcement of social relations, as the central aspect of social capital, can play an essential role in increasing happiness in different social groups.

Keywords: Happiness, Health personnel, Social relations

1. Background

The world health organization (WHO) has continuously emphasized on the importance of happiness as a major component of health (1). The concept of happiness, alongside social capital, has played a key role in recent social sciences studies and has been applied more frequently (2). According to Haybron (2003), there are 4 reasons which encourage social scientists to study the concept of happiness: its significance in decision-making, evaluation of family's position, prediction of behavioral patterns, and explaining behaviors (3).

Many theorists consider happiness as an equivalent to subjective wellbeing and use the terms interchangeably. Happiness refers to people's cognitive and affective assessment of their lives and is defined as overall satisfaction with life, positive feelings, and lack of negative feelings (4). Some consider happiness not as an impulse, but as one's judgment and comparison of reality with his/her expectations and wishes (5). Social relation is a major compo-

nent of social capital (6). Harfam (2004) believes that social capital reduces health stressors (7). In addition, Giddens (1999) emphasizes on trust with caution towards abstract systems, cautious reliance on professional systems for life affairs, transformation of intimacy, and formation of pure relationships as a source of happiness (8).

Research has indicated a relationship between happiness and factors including economic status, marital status, age, and education (9-11). The correlation of social interaction with happiness involves many complexities. For instance, a negative correlation has been reported between formal social interactions (eg, membership in a professional interest group) and happiness (12, 13). Nevertheless, involvement in nonpolitical and noneconomic organizations or clubs has been accompanied by higher levels of happiness (12). In this regard, Chalabi and Mousavi in 2009 reported that trustful social relations have a profound impact on happiness, and family was reported as the most important source of happiness (14). Moreover, Jokar and Rahimi in 2007 analyzed the effect of communication pat-

terns on happiness and reported consensual and pluralistic communication patterns as promoters of happiness (15).

Based on recent findings, Iran is ranked 61 out of 69 countries in terms of happiness, which is quite unsatisfactory (14). On the other hand, health system is one of the key components of service delivery systems in every country, providing one of the most fundamental outputs and services, ie, health. The most important component of this system is human resources with the greatest impact on the provision of desired services.

Previous studies have focused on the positive relationship between happiness and various aspects of achievement in work environments, as happy people express a greater tendency to make money, show better performance, and assist their colleagues more than others (16); therefore, they generally show a more effective performance. With this background in mind, evaluation of happiness among the health personnel is of great importance.

2. Objectives

The present study was carried out to analyze the association between social capital and happiness among the health personnel in the West of Iran.

3. Materials and Methods

3.1. Participants

In this cross sectional study, the population comprised of the health personnel (including physicians, pharmacists, dentists, healthcare personnel, midwives, and nurses) in Kermanshah, West of Iran. The data for each group were collected from the healthcare centers and nursing systems. The study population included 5 171 participants, 358 of whom were selected according to the Cochran's formula (d , 0.05; p and q , 0.5). To increase the accuracy of the study, the sample size was increased to 537 (1.5 times more).

Sampling was performed via multistage stratified sampling method. The inclusion criteria consisted of informed consent for participation in the study and noninvolvement in administrative activities of hospitals or headquarters during the study. Eventually, 480 valid and reliable questionnaires were analyzed (response rate, 89%) out of 537 questionnaires, which were administered by trained interviewers at health centers, hospitals, offices, and pharmacies. Since the number of unanswered questions for the main variables of the study was trivial, the values were estimated using missing value analysis.

3.2. Data Collection Tools

3.2.1. Demographic Checklist

It includes items about age, gender, night shift, daily hours of work, work experience, job title, marital status, and job appeal.

3.2.2. Social Relations (Social Capital) Questionnaire

It is a researcher-made questionnaire, derived from studies by Reshadat et al. in 2013 and Chalabi and Amir Kafi in 2004 (17, 18). Many theorists believe that social relation is a major component of social capital (6). Accordingly, in designing the questionnaire, social relation was considered as the core of social capital assessment. In addition, social capital dimensions (cognitive dimension: trust, attitude, and commitment; structural dimension: structure and collective activities in the society) were regarded as the core concepts of social relation dimensions. For instance, in the dimension of work relations, the concepts of trust and honesty among colleagues were integrated in both interpersonal relationships and collective activities at work.

The questionnaire consists of 37 items, which measure intimate and trustful social relations at 3 levels family relations (13 items), workplace relations (15 items), and community activities (9 items). The items are rated on a 5-point Likert scale, ranging from 1 to 4. The minimum and maximum scores for the subscales of family relations, workplace relations, and community relations are 0 - 52, 0 - 60, and 0 - 36, respectively; higher scores indicate better social relations. The validity of the questionnaire was confirmed by experts after applying the required modifications in the primary draft. The reliability of the questionnaire was analyzed by Cronbach's alpha (0.90, 0.83, and 0.81 for the domains of family relations, workplace relations, and community relations, respectively).

The participants' level of happiness was evaluated by the questionnaire, which consisted of 2 sections. The first section started with a general question: Generally, which of the following is closer to your feeling? 1) extremely happy; 2) very happy; 3) slightly happy; and 4) unhappy. The second section included Oxford happiness inventory (OHI).

3.2.3. Oxford happiness inventory (OHI)

It is a standard 29-item questionnaire introduced by Argyle and Lu in 1989. Overall, 21 items are the reversed items of Beck's depression inventory, and 8 items are related to the other dimensions of this construct. Numerous studies have been carried out following the publication of this questionnaire, reporting alpha coefficients above 0.85 (14). Alipour and Nourbala (1999) estimated the validity and reliability indices of this questionnaire at 0.93 and 0.92, respectively (19). The reliability of this questionnaire in the

present study was evaluated among 50 respondents in a pilot study and was reported to be 0.94.

In this study, OHI was classified into 4 factorial propositions through varimax rotation method. The propositions were denoted as “sense of vitality” (10 items; items 4, 10, 12, 13, 15, 16, 18-21), “life satisfaction” (7 items; items 1-7), “positive interest and purposefulness” (5 items; items 9, 14, 22, 24, and 25), and “self-satisfaction” (4 items; items 23, 27-29). Items 11, 17, and 26 were not included in any of the abovementioned propositions. The questionnaire was scored based on a 4-point scale, ranging from 0 to 3. In addition, Amos software was used for confirmatory factor analysis. The findings indicated acceptable fit of the model (GFI, 0.90; IFI, 0.90; TLI, 0.90; CFI, 0.90; RMSEA, 0.59).

3.3. Statistical Analysis

To analyze the association of binary (gender and night shift) and categorical (job title, marital status, job appeal, and health satisfaction) variables with the main variables of the study, independent t test and ANOVA were applied, respectively. To examine the association between the main variables of the study, Pearson's correlation coefficient test was used. In addition, to determine the explanatory factors of variance in happiness, multiple regression analysis using backward elimination method was applied. In addition, canonical correlation test was used to analyze the effects of social relations and happiness components simultaneously. All analyses were performed using SPSS version 18. Confirmatory factor analysis was carried out using AMOS 18.

4. Results

The study sample comprised of 480 participants. The response rate was 89%. The mean age of the participants was 35.79 ± 8.60 years, and 69.8% of the respondents were female. The mean work experience was 11.93 ± 7.9 years, and the mean duration of work was more than 8 hours. Overall, 67.8% of the respondents were married, and 47.5% stated that they worked night shifts. Moreover, 27.1% of the participants reported that they were not interested in their job, and 13.9% were dissatisfied and very dissatisfied with their health status.

At all levels of social relations, males obtained higher scores than females; however, the difference was only significant in the domain of community relations ($P < 0.01$). Among the dimensions of happiness, the score of “sense of vitality” was significantly higher in men than that of women ($P < 0.05$), while no significant gender difference was observed with regard to other dimensions. Moreover, the mean scores of social relations among physicians,

workplace relations among midwives, and community relations among nurses were higher than other careers. The mean score of happiness dimensions showed that physicians obtained higher scores in all dimensions (Table 1).

The results regarding overall happiness indicated that 3.9% of the respondents were extremely happy, 14.8% were very happy, 63% were slightly happy, and 18.3% were completely unhappy. The participants working night shifts had higher levels of community and voluntary relations. Those who were interested in their job obtained significantly higher scores both in social relations and happiness ($P < 0.01$). This finding applied to all dimensions of the main variables among respondents who were highly satisfied with their health status (Table 1).

The results of regression analysis regarding the role of gender in the correlation between family relations and overall happiness showed that gender (r , 0.337 for men; r , 0.331 for women) played no mediating role in this relationship ($P = 0.077$). In addition, gender had no mediating effect on the relationship between community relations and overall happiness (r , 0.3000 for men; r , 0.237 for women; $P = 0.260$). However, gender displayed a mediating role between workplace relations and overall happiness (r , 0.389 for men; r , 0.212 for women; $P = 0.004$).

According to the results of Pearson's correlation coefficient test, family relations showed the greatest positive correlation with life satisfaction. Workplace relations also had a greater correlation with life satisfaction. Moreover, community activities showed the greatest positive correlation with the sense of vitality (Table 2).

The results of regression analysis using backward elimination showed that family relations had the greatest direct impact on 2 dimensions of happiness, ie, life satisfaction (β , 0.298; $P < 0.01$) and positive interest and purposefulness (β , 0.257; $P < 0.01$). Furthermore, community relations had the greatest direct impact on sense of vitality (β , 0.185; $P < 0.01$) and self-satisfaction (β , 0.170; $P < 0.01$). In addition, family and community relations had significant effects on self-satisfaction, whereas workplace relations did not show a significant impact (Table 3).

The findings of canonical correlation analysis revealed that 23.5% of variance in happiness could be predicted by the components of social relations, based on the Wilks' lambda value (0.765). Accordingly, family relations (β , 0.68) had the highest power to explain happiness components, followed by workplace relations (β , 0.41) and community relations (β , 0.33).

5. Discussion

The current study aimed to investigate the correlation of happiness with components of social relations among

Table 1. The Scores of Happiness and Social Relations Subscales in Terms of Background Variables

	Overall (n = 480) (%)	Social Relations				Happiness		
		Family Relations	Workplace Relations	Associative Relations	Sense of Vitality	Life Satisfaction	Positive Interests and Purposefulness	Self-Satisfaction
Sex								
Male	30.2	40.25 ± 6.95	35.91 ± 8.73	10.34 ± 6.63	11.92 ± 7.17	9.89 ± 4.61	8.79 ± 3.09	5.05 ± 2.83
Female	69.8	39.61 ± 7.79	34.71 ± 8.37	7.87 ± 5.62	10.40 ± 5.34	9.60 ± 3.66	8.43 ± 2.80	4.86 ± 2.30
P value		0.373	0.163	< 0.01	< 0.05	0.499	0.233	0.498
Job position								
Health staff	29.6	39.15 ± 7.43	36.03 ± 8.69	7.47 ± 5.41	10.18 ± 5.35	9.38 ± 3.82	8.62 ± 2.85	4.85 ± 2.42
Physician	9.2	41.07 ± 7.00	36.51 ± 8.31	9.91 ± 5.45	14.08 ± 8.43	11.78 ± 5.08	10.09 ± 3.58	5.72 ± 3.35
Dentist and pharmacist	4.8	39.56 ± 4.93	36.93 ± 6.36	8.73 ± 8.05	11.11 ± 6.54	10.25 ± 4.62	8.63 ± 2.95	4.54 ± 2.49
Nurse	47	39.82 ± 7.85	33.63 ± 8.17	9.46 ± 6.27	10.92 ± 5.68	9.58 ± 3.75	8.13 ± 2.71	5.04 ± 2.32
Mid-wife	9.4	40.68 ± 7.74	37.27 ± 9.43	6.83 ± 5.22	9.25 ± 5.11	8.60 ± 3.42	8.76 ± 2.73	4.75 ± 2.19
P value		0.563	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.072
Marital status								
Single	30.7	37.66 ± 7.49	32.82 ± 8.09	8.76 ± 5.57	10.37 ± 5.44	9.25 ± 3.77	7.97 ± 2.80	5.20 ± 2.44
Married	67.8	40.87 ± 7.33	36.06 ± 8.56	8.63 ± 6.25	10.97 ± 6.11	9.84 ± 4.05	8.80 ± 2.87	4.78 ± 2.49
Widowed or separated	1.5	38.05 ± 6.53	39.57 ± 3.15	5.00 ± 6.11	15.42 ± 9.36	10.42 ± 5.38	9.57 ± 3.37	5.42 ± 2.07
P value		< 0.01	< 0.01	0.274	0.077	0.302	< 0.01	0.202
Night shift								
Yes	47.5	39.46 ± 7.85	33.78 ± 8.59	9.84 ± 7.49	11.03 ± 6.29	9.58 ± 4.00	8.29 ± 2.98	5.05 ± 2.54
No	52.5	40.15 ± 7.22	36.30 ± 8.17	7.49 ± 5.58	10.65 ± 5.61	9.72 ± 3.95	8.74 ± 2.79	4.79 ± 2.39
P value		0.319	< 0.01	< 0.01	0.480	0.695	0.085	0.245
Job appeal								
Very much	13.5	42.22 ± 7.69	38.21 ± 8.50	10.92 ± 6.27	15.16 ± 7.72	12.60 ± 4.89	11.08 ± 2.93	6.35 ± 2.62
Much	27.1	40.14 ± 6.84	36.31 ± 9.54	10.03 ± 6.36	12.12 ± 5.98	10.79 ± 3.66	8.93 ± 2.65	5.17 ± 2.50
Somewhat	43.3	39.02 ± 7.55	34.14 ± 7.62	7.78 ± 5.65	9.52 ± 4.46	8.77 ± 3.09	7.83 ± 2.45	4.41 ± 2.18
Low	9.6	40.02 ± 7.66	32.70 ± 7.51	6.61 ± 5.28	8.46 ± 5.57	7.36 ± 3.54	7.41 ± 2.63	4.30 ± 2.59
Very low	6.5	38.32 ± 8.61	33.63 ± 8.41	6.69 ± 5.11	8.86 ± 5.69	8.23 ± 4.42	7.96 ± 3.60	4.92 ± 2.39
P value		0.032	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Satisfaction with health								
Very dissatisfied	2.5	39.35 ± 11.18	32.41 ± 7.34	6.30 ± 4.54	7.48 ± 4.43	5.89 ± 3.78	7.58 ± 3.91	3.83 ± 1.99
Dissatisfied	11.4	38.68 ± 7.41	33.38 ± 7.60	7.71 ± 5.92	8.06 ± 4.64	7.75 ± 3.56	7.84 ± 3.05	2.54 ± 2.13
Not bad, not good	24.2	38.71 ± 7.36	34.22 ± 8.46	7.52 ± 5.81	9.70 ± 5.38	8.91 ± 3.46	8.24 ± 2.87	4.60 ± 2.39
Satisfied	54.1	39.98 ± 7.13	35.16 ± 8.36	8.98 ± 5.82	11.10 ± 5.38	9.81 ± 3.55	8.45 ± 2.65	4.94 ± 2.40
Very satisfied	7.8	43.29 ± 8.76	40.54 ± 8.77	11.38 ± 7.01	17.62 ± 8.27	14.65 ± 4.32	11.27 ± 2.68	6.72 ± 3.02
P value		< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Table 2. The Correlation Between Happiness and Social Relations Subscales

Variables	Mean \pm SD	1	2	3	4	5	6	7	8	9	10
Happiness											
Sense of vitality	10.84 \pm 5.97	1									
Life satisfaction	9.66 \pm 3.97	0.743 ^a	1								
Positive interests and purposefulness	8.53 \pm 2.89	0.617 ^a	0.633 ^a	1							
Self-satisfaction	4.91 \pm 2.97	0.620 ^a	0.548 ^a	0.555 ^a	1						
Social relations											
Family relations	39.81 \pm 7.52	0.235 ^a	0.359 ^a	0.307 ^a	0.143 ^a	1					
Workplace relations	35.11 \pm 8.74	0.236 ^a	0.283 ^a	0.244 ^a	0.126 ^a	0.221 ^a	1				
Associative relations	8.63 \pm 6.03	0.243 ^a	0.244 ^a	0.218 ^a	0.183 ^a	0.139 ^a	0.251 ^a	1			
Age (years)	35.79 \pm 8.60	0.007	-0.013	0.145 ^a	-0.084	0.045	0.275 ^a	-0.013	1		
Employment years	11.93 \pm 7.91	-0.040	-0.080	0.092	-0.125 ^a	0.039	0.253 ^a	-0.033	0.904 ^a	1	
Work hours	8.39 \pm 3.42	-0.008	-0.045	-0.110	0.029	-0.006	-0.082	0.088	-0.168 ^a	-0.202 ^a	1

^a \leq 0.01.**Table 3.** The Results of Regression Analysis Using Backward Elimination Method for Determining the Predictive Variables of Happiness Subscales

Dependent variables	Regression Results	Predictive Variables	B	Beta	P Value
Sense of vitality	F = 22.80 ^a , R = 0.354, R ² = 0.126	Family relations	0.142	0.178	< 0.001
		Workplace relations	0.109	0.155	0.001
		Associative relations	0.186	0.185	< 0.001
Life satisfaction	F = 38.63 ^a , R = 0.443, R ² = 0.196	Family relations	0.158	0.298	< 0.001
		Workplace relations	0.084	0.178	< 0.001
		Associative relations	0.105	0.158	< 0.001
Positive interests and purposefulness	F = 29.87 ^a , R = 0.398, R ² = 0.158	Family relations	0.098	0.257	< 0.001
		Workplace relations	0.054	0.159	< 0.001
		Associative relations	0.076	0.158	< 0.001
Self-satisfaction	F = 12.20 ^a , R = 0.221, R ² = 0.049	Family relations	0.039	0.119	0.009
		Associative relations	0.070	0.170	< 0.001

^a \leq 0.001.

the health personnel in Kermanshah, Iran. Based on the literature on happiness, increased happiness among people in a society results in better mental and physical health, greater longevity, and occupational or social achievements (20). Various studies have analyzed the effect of happiness as an independent variable, while factors associated with happiness are also of great importance; accordingly, these aspects were taken into account in the present study.

The findings of this study showed the significant role of all components of social relations in explaining happiness in the target group. Social relations in this study in-

cluded 3 components of family relations, community activities, and workplace relations. The first 2 components remained in the regression model, including all 4 subscales of happiness, and played the most important explanatory role. The components of workplace relations remained in the regression model for the rest of subscales (except for the subscale of self-satisfaction) and could partly explain the variance in happiness. In line with the results of the present study, numerous studies have shown that intimate relationship with others, including parents and friends, is the basic source of life satisfaction and happiness (21-23).

Chalabi and Mousavi in 2009 reported a significant negative correlation between social isolation and happiness (14). According to Giddens, trust with caution towards abstract systems, reliance on professional systems for life affairs, transformation of intimacy, and formation of pure relationships are some of the factors crucial to happiness (8). In fact, the effect of social interactions on happiness is influenced by trust, and more interactions result in a greater chance of developing trust and happiness (2).

Hume states that achieving happiness, as a fundamental objective in human life, is only possible through interaction with others (24). The results of the current research showed that the component of family relations had the greatest positive correlation with happiness. Similarly, Chalabi and Mousavi in 2009 reported a similar relationship and reported the key role of primary relationships in increasing happiness among people, especially in the family (14).

Furthermore, the component of community relations was a significant factor, correlated with all components of happiness. Chalabi in 1996 reported the microeffects of community relations (eg, providing people with social opportunities to join social groups), expanding social relations and personal networks, formulating problems in the public arena, expressing opinions, contributing to general decisions, and increasing social tolerance. He believes that these factors can help an individual develop personality and facilitate functionality (25). Therefore, development of these factors may enhance happiness among people.

Moreover, the score of men in all components of happiness was slightly higher than that of women, while a statistically significant difference was only observed in the domain of sense of vitality. In contrast, Rodriguez-Pose in 2014 reported a significant correlation between gender and happiness. Women were reported to be happier than men, which is in contrast with the results of the present study (2). On the other hand, in line with the findings of the current research, Chalabi in 2009 showed no significant correlation between gender and happiness, although men's score was slightly higher than women (14). The difference between domestic and foreign studies is indicative of cultural differences in this area. Iranian women, owing to some governing cultural and social restrictions and common cultural cliches in the society, cannot freely attend social activities, which can in turn disrupt their happiness.

Furthermore, the respondents who showed interest in their job obtained higher scores in both social relations and happiness components, compared with others. This indicates that job appeal, favorable social relations, and happiness are interconnected, reinforcing each other and increasing life satisfaction. The relationships among these

3 components are probably not unilateral, and they possibly influence each other.

Overall, desirable social relations at workplace can promote job appeal. On the other hand, interest in job can help develop positive relations at workplace, which in turn strengthens happiness. Using a multidimensional conceptual framework, including human, personality, and society, Chalabi in 2009 revealed an association among happiness and satisfaction with economic, political, social, and cultural domains at both individual and societal levels. He also showed that job satisfaction and interest are the basic components of the economic domain and are directly related to happiness (14).

In addition, the mean scores of family relations among physicians, workplace relations among midwives, and community relations among nurses were higher than other careers. It seems that higher levels of social relations among different jobs are related to the nature of the jobs. For instance, workplace relations of midwives are limited to their colleagues. They have less work-related interactions with others, as they only work in the domains of obstetrics and gynecology and all the staff are women.

The mean scores of happiness dimensions showed that physicians obtained higher scores in all dimensions. In addition to medical practice in public clinics, physicians also work in their private offices, which can consequently lead to higher income and satisfaction. This probably has a significant impact on their living conditions and consequently their happiness. Another issue, however, is the high social status of physicians in Iran, which can promote personal and social satisfaction and significantly influence happiness. The results of the present study also showed that 23.5% of the variance in the components of happiness could be predicted by the components of social relations, among which family relation was reported to have the highest significance. This finding again confirms the important role of family and family relations in the happiness of individuals.

5.1. Conclusion

In general, the findings of this study indicated a significant correlation between social relations and happiness among the health personnel. However, the role of family relations in happiness was reported to be more significant. In addition, an important variable associated with happiness and social relations (main variables) was job appeal; in fact, interest in job was followed by high levels of happiness and favorable social relations. Furthermore, physicians enjoyed a higher level of happiness among the health personnel.

One of the limitations of this study was that the target group was limited to the health personnel, while other

occupational groups were not taken into account. Another limitation was the questionnaire-based design of the study, which could undermine the accuracy of the findings. On the other hand, the strengths of the present study include attention to the most important jobs in the health domain and use of a multidimensional approach towards social relations, happiness, and their components.

Acknowledgments

We would like to thank our respectful colleagues at Kermanshah University of Medical Sciences for their sincere cooperation and assistance.

Footnotes

Authors' Contribution: Seyed Ramin Ghasemi and Nader Rajabi-Gilan designed and conducted the study and drafted the manuscript. Ali Zakiei participated in the acquisition, analysis, and interpretation of the data. Sohyla Reshadat participated in critical revision of the manuscript. All authors read and approved the final manuscript.

Declaration of Interest: The authors declare no conflicts of interest.

Funding/Support: This study was funded by Kermanshah University of Medical Sciences.

References

- Lin JD, Lin PY, Wu CL. Wellbeing perception of institutional caregivers working for people with disabilities: use of Subjective Happiness Scale and Satisfaction with Life Scale analyses. *Res Dev Disabil*. 2010;**31**(5):1083-90. doi: [10.1016/j.ridd.2010.03.009](https://doi.org/10.1016/j.ridd.2010.03.009). [PubMed: [20400262](https://pubmed.ncbi.nlm.nih.gov/20400262/)].
- Rodriguez-Pose, A, Von Berlepsch V. Social capital and individual happiness in Europe. *J Happiness Stud*. 2014;**15**:357-86. doi: [10.1007/s10902-013-9426-y](https://doi.org/10.1007/s10902-013-9426-y).
- Haybron DM. What do we want from a theory of happiness?. *Metaphilosophy*. 2003;**34**:305-29. doi: [10.1111/1467-9973.00275](https://doi.org/10.1111/1467-9973.00275).
- Diener E. Subjective well-being. The science of happiness and a proposal for a national index. *Am Psychol*. 2000;**55**(1):34-43. [PubMed: [11392863](https://pubmed.ncbi.nlm.nih.gov/11392863/)].
- Sirgy MJ, Rahtz D, Cicic M, Underwood R. A method for assessing residents' satisfaction with community-based services: a quality-of-life perspective. *Social Indicators Res*. 2000;**49**(3):279-316. doi: [10.1023/A:1006990718673](https://doi.org/10.1023/A:1006990718673).
- Chalabi M. *Social analysis of the action*. 2ed ed. Tehran: Ney publication; 2007.
- Harpham T, Grant E, Rodriguez C. Mental health and social capital in Cali, Colombia. *Soc Sci Med*. 2004;**58**(11):2267-77. doi: [10.1016/j.socscimed.2003.08.013](https://doi.org/10.1016/j.socscimed.2003.08.013). [PubMed: [15047083](https://pubmed.ncbi.nlm.nih.gov/15047083/)].
- Giddens A. *Modernity and selfidentity: self and society in the late modern age*. Tehran: Ney Publication; 1999.
- DiTella R, MacCulloch R, Oswald A. Preferences over inflation and unemployment. Evidence from surveys of happiness. *American Eco Rev*. 2001;**91**(1):335-41.
- Alesina A, DiTella R, MacCulloch R. Inequality and happiness: Are Europeans and Americans different?. *J Public Eco*. 2004;**88**:2042-209. doi: [10.1016/j.jpubeco.2003.07.006](https://doi.org/10.1016/j.jpubeco.2003.07.006).
- Gerdtham UG, Johannesson M. The relationship between happiness, health and socio-economic factors: results based on Swedish micro data. *J Socio-Eco*. 2001;**30**(6):553-7. doi: [10.1016/S1053-5357\(01\)00118-4](https://doi.org/10.1016/S1053-5357(01)00118-4).
- Pichler F. Subjective quality of life of young europeans. Feeling happy but who knows why?. *Social Indicators Res*. 2006;**75**:419-44. doi: [10.1007/s11205-004-4337-2](https://doi.org/10.1007/s11205-004-4337-2).
- Leung A, Kier C, Fung T, Fung L, Sproule R. Searching for happiness: The importance of social capital. In: Fave AD, editor. *The Exploration of Happiness*. Netherlands: Springer; 2013. p. 247-67.
- Chalabi M, Mousavi SM. A sociological analysis of happiness, at micro and macro-level. *Iran J Sociol*. 2009;**9**(1-2):34-57. (Persian).
- Jowkar B, Rahimi M. Study of the effect of family communication patterns on happiness in a group of high school students in Shiraz. *Iran J Psychiatry Clinical Psychol*. 2007;**13**(4):374-86. (Persian).
- Tadic M, Bakker AB, Oerlemans WG. Work happiness among teachers: a day reconstruction study on the role of self-concordance. *J Sch Psychol*. 2013;**51**(6):735-50. doi: [10.1016/j.jsp.2013.07.002](https://doi.org/10.1016/j.jsp.2013.07.002). [PubMed: [24295146](https://pubmed.ncbi.nlm.nih.gov/24295146/)].
- Reshadat S, Ghasemi SR, Ahmadian M, Rajabi-Gilan N. The relationship between playing computer or video games with mental health and social relationships among students in guidance schools, Kermanshah. *East Mediterr Health J*. 2014;**19** Suppl 3:S115-22. [PubMed: [24995733](https://pubmed.ncbi.nlm.nih.gov/24995733/)].
- Chalabi M, Amirkaifi M. Analysis of multilevel social isolation. *J Iran Sociological Association*. 2004;**5**:3-31. (Persian).
- Alipoor A, Noorbala A. A preliminary evaluation of the validity and reliability of the Oxford Happiness Questionnaire in students in the Universities of Tehran. *Iran J Psychiatry Clin Psychol*. 1999;**5**(1-2):55-65. (Persian).
- Frisch MB, Hoboken NJ. *Quality of life therapy: applying a life satisfaction approach to positive psychology and cognitive therapy*. John Wiley and Sons; 2005.
- Land KC. Child and youth well-being in the United States, 1975-1998: Some findings from a new index. *Social Indicators Res*. 2001;**56**:241-320.
- Eckersley R. The state and fate of nations: Implications of subjective measures of personal and social quality of life. *Social Indicators Res*. 2000;**52**:3-27. doi: [10.1023/A:1007071621613](https://doi.org/10.1023/A:1007071621613).
- Michalos AC, Hubley AM, Zumbo BD, Hemingway D. Health and other aspects of the quality of life of older people. *Social Indicators Res*. 2001;**54**:239-74.
- Haller M. How social relations and structures can produce happiness: an international comparative analysis. *Social Indicators Res*. 2006;**75**:169-216. doi: [10.1007/s11205-004-6297-y](https://doi.org/10.1007/s11205-004-6297-y).
- Chalabi M. *Order Sociology*. Tehran: Ney Publication; 1996. (Persian).