

## Social Participation and Mental Health among Older Adults in Iran<sup>1</sup>

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**Objectives:** Social participation is linked to healthy aging and the maintenance of functional independence in older individuals. This study aimed to investigate the relationship between social participation and elderly's mental health .

**Method:** Totally 380 people, aged over 60 residing in city of Hamadan were participated in the study. The participants completed a researcher-tailored inventory assessing their social participation and a GHQ-28 questionnaire assessing their mental health. Required social and demographic data was also gathered.

**Results:** Findings showed that the elderly, relatively, enjoyed good level of mental health. In general, mental health was significantly associated with social participation. However, when looking at subscales, only somatic and social performance had a significant positive relationship with social participation .

**Discussion:** Social participation can be of effective factors on which policy makers and therapists can plan to improve the mental health of aged people .

**Keywords:** Older adults, Social participation, mental health

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### Introduction

Within a society in which being young and happy are so appreciated that elders hardly can appear at the scene, however, aged people are being treated, obviously, different from the past (1). Many studies have indicated that costs of care would shoot up when aging begins. These costs can be of more frequent and longer social service needs, high expense of therapeutic processes comparing to other age groups, and many other things. We tend to spend such huge money while disregarding our humanly daily experiences that are of good help to organize a fulfilling personal and social life (2). In fact, there are some easy ways to protect ourselves from health-related problems with no need to pay for those agonizing costs. Recently, social science researchers have been interested in exploring the effect of social activities on aged people survival. They have reported that participating in group activities, either formal or informal, can help individuals to keep, or

even extend, the size of social network which normally shrinks when they enter to aging. Social network helps older adults to stay physically and mentally healthier (3-6). Also, being involved in various activities which require mental abilities may help elderly stay safe (7).

There is a slew of research examining the relation of social participation and various aspects of health in elders. The present study aimed to examine the relation between social participation and mental health among an Iranian population. Neither theoretically nor operationally there is an agreement on definition of social participation, but great number of definitions have emphasized on several key features that are thought to be included in its definition. Huddling those features together it can be said that social participation is "a set of practices including voluntary sector activities and a range of other forms of interactions within the public and private spheres, like neighbors watch, informal group membership and etc." (8).

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Aging is a natural trend in normal life and nobody can prevent it, but it might be possible to postpone people's physical, spiritual, emotional, and cognitive decline (9-11). Increasing number of aging people is a common issue for many societies. As WHO estimated, people of 60 and over ears old will make over 14 percent (1,200,000,000 individuals) of whole world's population in 2025 (12). Although, depending on extent of development each country faces with aging in a different and distinct way, however, all societies have to seriously think about it. Generally, improving elderly's health will result in public health improvement throughout the society. Indeed, it can lead to active and healthy old people so that despite their possible impairment, they can be still productive. According to general population trends, Iran is going to have a huge number of aged men and women in near future, many of whom will face several serious health-related tangles. According to Malek Afzali et al, many elders, especially women, report at least one sort of disease or feel pain in some part of their body (13).

As previously mentioned, a large body of research has tried to find out whether social participation affects health outcomes or not. Surprisingly, different and sometimes quite contrary results were found. Some studies report positive correlations (14-18); some other suggest negative relations (19-21); and interestingly enough, some indicate no significant linkage (7, 22-24). This variance in results might have several reasons: researchers might use different instruments to measure either participation (almost in studies, a researcher-design or a checklist indicating some categories of getting involved in social or group activities were used) or health; they might distinguish between subjective and objective involvement, as some criticized subjective and non-physical engagement being included in the definition of social participation (25), while others paid attention to very details of engagement in any activity to measure this variable (26); they might take different ethnicity, sex or age limit into consideration. Also, time and place of studies have to be taken into account. However, more evidence is needed to elucidate the relationship between social participation and health, namely mental health, among elderly.

In Iran, due to the post-revolutionary baby boom during 1980s, a considerable change has occurred in the age structure of the population. The children of baby-boomers now have come to the age of marriage and it is quite expected that the number of

elderly people will highly increase in near future. In the present study, we sought to determine whether social engagement of elderly people has any relation to their mental health status.

## Methods

*Participants* - 380 older adults aged from 60 to 74 years old who lived in city of Hamadan were participated in this study. They were selected randomly from public places, usually parks, by simple random sampling method. We had to use this kind of sampling method because there is no formal or informal organization or sport and hobby club for elder people in Hamadan. Since health was a main variable in this study, those elders who had mental or physical illness were crossed out. As official statistics show the total number of residents in Hamadan city was about 800000 people of whom 5.6% were 60 years old and over (27).

*Tools* – Socio demographic questionnaire; General Health Questionnaire 28 (GHQ-28), and Social participation questionnaire were used in this study. Socio demographic questionnaire contained information about gender, age, marital status, number of children, schooling, occupation, income, residency history, and housing status of the elderly. GHQ-28 as a self-administered instrument was originally designed to detect psychiatric disorders in community and non-psychiatric clinical settings (26). The existence of four subscales permits analyses within the subscales and this is an additional advantage of the GHQ-28 scale over the other versions (28). Its scores range from 0 to 28. Higher scores indicate a greater probability of a psychiatric distress. Although the GHQ was developed in the United Kingdom during the 1960s and 1970s, it has been shown to be a valid and reliable instrument across many other cultures as well. Reliability coefficients have been ranging from 0.78 to 0.95 in various studies. Its reliability is also proved in an Iranian representative study (29). Elsewhere, working on 751 University students, Cronbach's alpha was reported for GHQ as 0.82, as well as for each subscale 0.85 for somatic, 0.87 for anxiety, 0.79 for social dysfunction, and 0.91 for depression (30). To estimate concurrent validity tests, correlation with SCL-90 was measured; correlation coefficient was 0.82. There is also other validity assessment on Iranian older adults (31). They standardized GHQ-28 and developed a 14-item scale by factor analysis. However, as is suggested in that report, it still needs more reinforcement to become quite useful in research.

To assess social participation we used a researcher-tailored questionnaire (Social participation questionnaire). Concepts related to social participation were extracted from previous studies on social participation and were developed into a questionnaire based on Chapin's Social Participation Scale. The questionnaire we used in the present study was somehow inspired by "Ellaway" and "Macintyre" (22), in which four sorts of group and social activities are measured including being engaged in political activities (being a member of political parties, guilds or local cooperation, attending elections) civic groups (contribution to a newspaper for public interests, cultural associations), religious groups and charitable organizations (going to mosque, attending religious events, contribution to provide dowry for poor families), and recreational, art, and sport groups (going to cinema, theatre, museums, sport groups). To determine interest to participation, respondents were asked to rate the extent to which they were concerned about their community problems on a 5-point likert question. Generally speaking, the questionnaire was an 18-item tool, consisting of 4 dimensions that were rated on a 5-point Likert-type scale; total score of social participation ranged from "0" through "76". Using a test-retest method on 30 elders, reliability of the questionnaire was proved; its correlation coefficient was about 0.86. Validity of the questionnaire was assessed by content validity method. The primary version of the questionnaire was reviewed by 8 experts in the field of social participation, social capital and health to see if these are consistent with local and cultural context. Then the researchers modified the questionnaire based on the mark each item reached.

Procedures followed the ethical standards of research ethics committee of Hamadan University of medical sciences and health services. The study was conducted during summertime. Subjects who were eligible and agreed to participate were visited in the parks and public places.

*Data analysis* - Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 16. Data obtained by the questionnaires were initially analyzed by descriptive statistics. Correlation analysis was conducted to assess the relationship between variables.

## Results

Among the participants the mean of age was 68.3 (SD: 6.62). The descriptive features of the sample are presented in table (1).

**Table 1.** Descriptive information of the sample (N = 380)

Variables	Value
Age, M ± SD (Range 60-79)	68.3 ± 6.62
Number of children, M ± SD (Range 1-7)	4.4 ± 1.7
Income *, M ± SD (Range 138.88-283.33)	208.33 ± 69.44
Residency history **, M ± SD (Range 5-32)	19 ± 9.5

\* \$; \*\* Years

The sample consisted of 380 elders residing in Hamadan city including 212 (55.78%) men and 168 (44.22%) women. Other characteristics of the sample are presented in table (2). Considering demographic characteristics, level of education could be in a positive association with mental health status. As it is shown in table (2), approximately, half of the sample had diploma (12-grade school education) (51.84%) and a relatively high portion of the sample had experienced university education (28.43%). It is somewhat interesting because when they were young academic education was not very common. The study also asked about housing status. Unsurprisingly, most of them (57.37%) were living in their own house. Although it was not significantly correlated with mental health, it was unsatisfactory that around 38% of elders were not living in their own private house. According to Erikson's theory of life cycle (1959), elders review their life to see how successful they were and they feel desperate when they realized that they missed opportunities to provide a valuable property like housing.

**Table 2.** Characteristics of the sample (N = 380)

Variables	N
<i>Gender</i>	
Male	55.78%
Female	44.22%
<i>Marital status</i>	
Married	77.36%
Single	22.64%
<i>Schooling</i>	
Under Diploma	19.73%
Diploma	51.84%
Technician	20.00%
Higher	8.43%
<i>Occupation</i>	
State	7.10%
Private	13.43%
Self-employed	5.00%
Retired	37.10%
Housekeeper	37.37%
<i>Housing status</i>	
Private	57.37%
Rent	23.42%
Mortgage	14.48%
Housing State	4.73%

As findings revealed there was not actually high interest to get engaged in tackling a neighborhood problem (quite a lot = 3.94, very = 21.57) and most of them (43.68%) reported to be moderately interested in participating in their community. Mean of social participation scores was  $26.70 \pm 14.25$ . Mean of social participation score for subscales were as follows: political activities ( $4.56 \pm 1.42$ ), civic groups ( $6.80 \pm 8.22$ ), religious groups and charitable organizations ( $8.10 \pm 3.93$ ), recreational groups, art, and sport ( $7.34 \pm 5.56$ ).

Mean of GHQ-28 score in the sample was  $33.55 \pm 11.98$ , which indicates a fairly good level of mental health. The scores for the subscales confirm this finding: subjects had the best status in somatic aspect ( $7.13 \pm 4.41$ ) and the worst in social functioning ( $9.53 \pm 3.39$ ). Mean of other mental health subscales were as follows: anxiety ( $8.11 \pm 5.16$ ) and depression ( $8.76 \pm 7.22$ ).

Analytic findings showed that two main variables of this study, i.e. mental health and social participation, were positively and significantly correlated ( $P = 0.01$ ,  $r = 0.54$ ). Table (3) shows the correlation results between social participation and GHQ subscales.

**Table 3.** Correlation between social participation and GHQ subscales

	Somatic symptoms	Anxiety and insomnia	Social dysfunction	Severe depression
Social participation	0.56**	0.26	0.71*	0.31

\*  $P < 0.05$  ; \*\*  $P < 0.01$

## Discussion

Reviewing research literature makes it clear that there is no consistent pattern for the association between getting involved in social activities and health outcomes in different groups. The present study was conducted to examine the relationship between social participation and mental health among elderly in Hamadan city. Our findings approve several previous studies (3, 14-16, 32), which suggested a positive relationship of social participation with mental health in total. This also disagrees with Osborne et al (33) that found a negative effect of involvement in group activities on mental health, especially for female participants. However, Nilsson et al pointed out that social participation may have a little relation to changes in functional ability or onset of disability, but as they reported, the relation is insignificant (34). We also found a similar linkage between engaging in social activities and subscales of mental health. However,

we found that social participation can significantly and positively predict physical health, so we can conclude that participating in social and group activities can reduce somatic symptoms of aged people. This result agrees in a way with Rose (24) and Sirven et al (7) that suggested that those who are socially excluded should have worse physical and emotional health. However, physical health is much positively related to age than emotional health is (22, 24), so decreasing somatic symptoms as a result of social engagement could be very noticeable. An obvious linkage between social participation and improvement of social functioning was also found in the present study. We, meanwhile, failed to find any significant association between social participation and anxiety lessening among aged people. The same result was found for depression as well. This supports Nyqvist's work (23), although the direction is positive and, therefore, consistent with dominant hypothesis.

In general, the study reveals that social participation should be taken into account as an important contributor of mental health among aged people. These findings can provide a reliable and referable evidence for health policy makers. It provides some interesting paths for further research as well. Certainly, there were some limitations that make us be cautious to talk firmly over the result. First of all, we need to take into consideration that this analysis is based on a cross-sectional study and it is possible that people in different situations rate their health differently. Also, due to cultural nuances, some people are more likely to take part in groups and associations than people in other places and consequently the extent of the relationship between health and social participation is likely to vary across time, place and population characteristics (22). So, it is important that the extent of the relationship is reexamined in different contexts. Various instruments also can be used to measure any of the variables. Some of differences of our findings with previous studies can be easily attributed to the methodological factors.

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