

The Relationship between Social Participation and the Elders' Life Expectancy in Amol City

Fazli M.,^{*1} Mohammadpour Lima H.²

Abstract

Introduction: Elders population increase can be considered a crisis. Retirement and limitations in social activities are problems encountered by the elderly. The present study aims to investigate the relationship between social participation and life expectancy among the elderly in Amol city.

Method: This study follows a descriptive-analytic design in a cross-sectional framework. The population of the study contains the elderly over 60 years of age under the coverage of Amol city (Mazandaran-Iran) health and treatment centers. A sample of 450 members was selected via multi-phases cluster random method. Snider's social support and life expectancy questionnaires were used to measure the variables of the study. The data were analyzed via running descriptive statistics, Pearson correlation-coefficient, Regression and T-test.

Findings: In the present study, the regression coefficient of social participation was significant with life hopefulness at the level of 0.01 ($\beta=0.332$, $P=0.001$). Further, the results of the regression analysis demonstrated that social participation could have the capacity to anticipate life expectancy among the elderly. The results also indicated that there was a significant difference between male and female participants in terms of social participants as well as life expectancy i.e. social participation and life expectancy were higher in male participants than in female counterparts.

Conclusion: The results of the present showed that an increase in social participation could enhance life expectancy among the elderly; and as a result, provide them with a high-quality living. Regarding the importance of the elders' health, it is suggested that more opportunities be dedicated to the facilitation of social participation among the elderly.

Key word: elderly; hope to live; social participation;

Received: 23/January/ 2023

Accepted: 18/February/ 2023

Citation: Fazli M., Mohammadpour Lima H. The Relationship between Social Participation and the Elders' Life Expectancy in Amol City, Family and health, 2023; 13(2): 49-60

¹ - (Corresponding Author) Assistant Professor, Department of Education, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran. mfazli81@yahoo.com, ORCID: 0000-0003-0420-8066

² - Lecturer, Department of Management and Accounting, Astara Branch, Islamic Azad University, Astara, Iran. Hormoz.mohammadpoor@yahoo.com, ORCID: 0000-0003-0370-3804

Introduction:

In the contemporary, technologically sophisticated world, socioeconomic progress has reduced population growth and raised global life expectancy. In this way, the demographic transition process changed the age structure of the population, or, to put it another way, the population underwent an age transition. As a result, it is anticipated that gradually, the population's weight will shift from the young age groups to the old age groups, leading to an increase in the proportion of elderly people in society. Many nations are now experiencing an aging population, and it is anticipated that more nations will also experience this phenomenon in the future. The old population is growing faster in emerging nations than in industrialized ones, according to the data that is currently available. Therefore, emerging nations host more than half of the world's senior population (1). According to estimates, the aged will comprise roughly 0.20 of the global population in the next 30 years, reaching two billion people by the year 2050 (2). Iran's age structure is now in transition, and in the coming decades, the country's population is likely to begin to age. In Iran, more than 9% of the population was over 60 in 2015; by 2019, that number will rise to 25%. (3). Iran is one of the nations with the world's fastest aging population growth rates, and by 2050 it will rank among the oldest (4). One of the most difficult problems in the field of health right now is the rise in the senior population, which includes Iran. It is crucial for nations to pay attention to aging concerns because without understanding the fundamental requirements and characteristics of older people, it is impossible to make plans for their psychological and social well-being.

Along with lowering their functional capacities, ignoring the elderly in society's varied activities lowers expectations from the community and groups for their participation and active presence. Due to these circumstances, older people are less likely to actively participate in social activities, which contributes to their social isolation (5). While taking into consideration the rights of the old, social involvement is one of the crucial and effective aspects of the physical and mental health of the elderly. It may also help preserve social order and enhance their quality of life. One theory that addresses the significance of the elderly's role in the activity and social involvement at this time is the theory of activity. According to the notion of activity, maintaining an active lifestyle and actively participating in societal concerns as an older person helps them feel positive pleasure. From this perspective, effective aging is defined as active aging (6). Social participation, which is applicable in two forms formal participation (institutional) and informal participation (non-institutional), is the process of conscious, voluntary, (7) and group intervention of people according to their interests in social activities such as religious, political, entertainment, recreational activities, social and neighborhood associations, charity, and family affairs outside the home (8). Gerontology studies have shown that social participation among the elderly is linked to benefits like bettering their functional status, physical and mental health, quality of life, happiness, emotional support, life satisfaction, and self-confidence. It is also thought to reduce diseases and suicide and is regarded as a determining factor of health and a significant and correctable aspect of successful aging (9).

According to Snyder, hope is a type of thought process that consists of active and strategic thinking. Both aspects are essential for adaptability, physical and mental health, and are

determined by intentional actions, the construction of hope, and the degree of hope. The cognitive component of hope is strategies, which demonstrate a person's capacity to devise practical means of achieving objectives. Agency thinking, which depicts a person's sense of their capacity to accomplish past, present, and future goals, is the motivating element of hope. In combination with hope, having a purpose in life can boost happiness, life satisfaction, good feelings, and lessen sadness. One of the most significant sources of meaning and purpose in life is relationships with others. Human interaction with others is essential to his ability to survive, and his will to live on depends greatly on his social environment. According to studies, those who are hopeful have more stable attachments, better nourishment and care, and sufficient social support to deal with challenges than those who lack hope (10).

This study aims to analyze the relationship between social participation and life expectancy of the elderly in light of the role of social participation in the life expectancy of the elderly to take action to enhance the health and life expectancy of the elderly.

Method:

The current descriptive-analytical study has cross-sectionally examined the relationship between senior citizens' social participation and optimism for their futures in Amol City in 2016. The 42,599 senior men and women over 60 who were enrolled in health centers in Amol city made up the statistical population of this study (24,618 urban and 17,981 rural inhabitants). Cochran's calculation yielded a sample size of 380, which was expanded to 450 to improve the study's power. After determining the sample size, sampling was carried out using a random multi-stage cluster classification due to the vastness of the statistical population and the high number of healthcare facilities. Thus, out of the total of 18 health-treatment facilities located in urban areas, the clusters comprise the following 10 facilities: One stage involved the random selection of two centers from Amol city's central area, two centers from the northwest area, two centers from the northeast, two centers from the southeast, and two centers from the southwest. The second stage involved the random selection of 25 seniors from the area served by these centers. However, the sample in Amol City's rural districts, which, under the city's national divisions, contains five divisions (Central, Dasht Sar, Dabo Dasht, Imamzade Abdullah, and Larijan divisions), and 28 rural health clinics, twenty senior men and women over 60 who were covered by the health center were randomly chosen from each of the two rural health and treatment centers and one rural health center that was randomly chosen from each district and center in the first stage. The entire sample size was chosen by taking into account the population's age, gender, and urban/rural split. The eligibility requirements for the samples to participate in the study include being 60 years of age or older, willingness to participate, being able to understand and respond to the questionnaire questions, being aware of time, place, and people, and not having any problems like speech disorders, severe hearing loss, loss of consciousness, dementia, or Alzheimer's disease. People were entirely free to respond to the questionnaires' questions and take part in the interview; the only requirements for exclusion were a refusal to fill out the questionnaire and a refusal to cooperate with the interviewer. In cases of withdrawal, a lack of eligibility requirements to participate in the study, or access issues, the chosen participant was replaced based on random sampling by the next

person on the list. Schneider's life expectancy questionnaire and the social participation questionnaire were both utilized to collect data.

1. Snyder's Life Expectancy Questionnaire: Snyder developed this questionnaire in 1991 to assess hope, and it is used as a self-evaluation. Individuals aged 15 and older should complete Snyder's questionnaire. The questionnaire has 12 statements, of which 4 are used to evaluate operational thinking, 4 to measure strategic thinking, and 4 to assess deviant thinking. Therefore, this questionnaire consists of two subscales: 1. Agency thinking 2. Strategic thinking (11). The answers in this survey range from fully agree to disagree on a 5-point Likert scale. Deviant expressions receive no score, while those that relate to the subscales of agency thinking and strategic thinking reveal the individual's total hope score. As a result, this questionnaire's possible revisions vary from 8 to 40. Additionally, the test's overall internal consistency ranges from 0.74 to 0.84, and its test-retest reliability is equivalent to 0.80 but greater in intervals longer than 8 to 10 weeks. Internal consistency for the factor subscale ranges from 0.71 to 0.76, whereas it ranges from 0.63 to 0.80 for the strategic subscale (12). It is important to note that the validity of this scale has been determined by Cronbach's alpha, which gave the total scale a score of 0.82, the agency thinking subscale a score of 0.82, the agency thinking subscale a score of 0.79, and the strategic thinking score of 0.88. (13). Cronbach's alpha was used to determine the validity of this scale, which had overall scores of 0.86 for the life expectancy scale, 0.77 for the subscale of agency thinking, and 0.79 for the subscale of strategic thinking (10). Furthermore, internal consistency by Cronbach's alpha was achieved for the agency thinking subscale to be equal to 0.74 and the strategic thinking subscale to be equal to 0.62 (14). This section's validity was determined based on the questionnaire's content and expert input (10 experts familiar with the research topic and psychometric process of the instrument). The reliability of this questionnaire was examined and validated utilizing the reliability coefficient and 35 senior participants from the city of Amol (with a reliability coefficient of 0.79).

2. Social participation questionnaire: The 17 items in the social participation questionnaire created by the researcher evaluate two institutional and non-institutional aspects of social participation. The Likert scale is used to score this questionnaire, and the possible results are (0-1-2-3-4), with a maximum score of 68. In the aforementioned questionnaire, a lower score denotes a person's level of social participation, and a higher score implies a person's level of social participation. Yazdani (15), and Entesari (16) have already utilized this questionnaire. The validity of this scale was determined by Cronbach's alpha as 0.87 in another study (17).

Following permission from the experts, the researcher used the questionnaire in the current study among 35 older members of the statistical community, with a Cronbach's alpha value that was estimated to be 0.87. The research was presented to the health centers of the chosen urban and rural areas in the sample to carry it out, after obtaining a written letter of introduction from the Research Vice-Chancellor of Mazandaran University of Medical Sciences and with the coordination of the Amol City Health Center. Then, the research environment was used up until the samples were finished after receiving authorization from the respected authorities to access the needed samples. The interviewers, who were residents of health-treatment centers and health homes, received the necessary instruction on how to complete the questionnaires

during a briefing session where they were also introduced to the topic, purpose, and significance of the research as well as the conditions of the participants in the study. The senior individuals chosen for the sample were invited to complete the questionnaire in person at the health-treatment facilities and nursing homes at the research site. The senior respondents' responses were accurately and thoroughly typed down for each question after the examiner read the questions aloud. To analyze the data from this study, descriptive statistics techniques like mean and standard deviation were used, as well as independent t-tests to compare the research variables between two groups, Pearson's correlation coefficient, and simple regression at a significance level of less than 0.05, along with SPSS software version 24.

Findings:

The aspects of life expectancy and social participation for old men and women are shown in Table 1 together with the mean, standard deviation, minimum and maximum scores.

Table 1. Descriptive findings related to research variables

Variable	Minimum score	Maximum score	Mean	SD
Life expectancy (total)	13	40	28.23	4.92
Agency thinking	5	20	14.78	2.68
Strategic thinking	4	20	13.55	2.68
Social participation (total)	2	68	22.28	11.46
Non-institutional participation	0	40	17.73	7.89
Institutional partnership	0	28	4.54	4.69

Table 2. Correlation among research variables

	Life expectancy	Agency thinking	Strategic thinking
Social participation (total)	**0.232	**0.309	**0.300

Non-institutional participation	**0.321	**0.303	**0.286
Institutional partnership	**0.271	**0.244	**0.253

As the data in Table 2 indicated, Life expectancy and its subscales have a positive and significant relationship with social participation and its subscales (P<0.01). In this approach, the life expectancy of the elderly increases with an increase in social participation or one of its variables, and falls with a decline in social participation and its subscales.

Table 3. The regression coefficient of the predictor variable of social participation in the life expectancy of the elderly

Variable	B	Beta	T	Significance level
Fixed	25.16		52.48	0.000
Social participation	0.142	0.232	7.444	0.000

The regression coefficient of the social participation predictor variable for the complete sample is shown in Table 3, demonstrating the significance of the social participation variable in predicting life expectancy. The direction of the beta coefficient demonstrates that the social participation variable contributes positively to the explanation and prediction of senior life expectancy. This implies that as social participation rises, so does the life expectancy of the elderly.

Table 4. Describing and comparing the life expectancy of the elderly and social participation of the participating elderly related to gender

Variable	Gender	Number	Mean	SD	T	Degree of freedom	Significance level
Life expectancy	Male	242	29.14	5.13	3.83	448	0.000
	Female	208	27.39	4.50			
Social participation	Male	242	24.47	11.97	4.47	448	0.000
	Female	208	19.73	10.29			

According to the statistics in Table 4, there are significant differences between the genders who participated in the current study in terms of social participation and life expectancy ($P < 0.01$). Men generally participate in society more and live longer than women.

Discussion and conclusion:

This study aims to determine how elderly residents of Amol city's quality of life and social participation related to one another. The findings of this study demonstrated a significant correlation between elderly people's life expectancy and their level of social participation. In addition, a strong and positive relationship exists between the subscales of life expectancy and the subscales of social participation. In other words, older adults who were highly socially engaged had longer life expectancies. In other words, the more senior citizens participate in community organizations like local and family cooperatives, environmental, charitable, cultural, and support associations, local elections, religious gatherings and celebrations, sports activities, helping the underprivileged, and visiting with old friends, the greater the degree of confidence in one's capacity to overcome obstacles and find solutions, the more energy one has to accomplish their goals, the applicability of prior experiences, feelings of achievement in life, lack of anxiety, and confidence in achieving higher goals.

The findings show that elderly people's levels of social participation are lower than the national average. The most significant issues reducing Iranian seniors' social participation in society are their economic difficulties and inadequate social security (18, 19). Their social participation is diminished by chronic illness and the rising costs of aging. Elderly people participate in fewer social activities due to loneliness and living with non-peers than to the costs and ailments of old age (20, 21). The combination of these characteristics appears to be intimately linked to one another and has a decreasingly significant negative impact on older social participation.

Furthermore, there is a notable disparity in life expectancy and social participation between old men and women. Men generally participate in society more and live longer than women. According to Mansouri, Darwishpour, Jafarina, and Burhaninejad's study, older women participated less than older males (22, 23, 24, and 25). In the years before old age, when women often participate in social activities at a lower rate than males, there is a correlation between older age and a lower level of social participation among elderly women. It appears that women have historically participated less in society and outdoor activities as a result of cultural and religious issues as well as patriarchal culture. Being housewives who often earn less money and have less education than old men, elderly women may find it harder to participate in social activities.

Limitations:

- The most significant disadvantage of this research is the absence of similar research domestically or even internationally, which prevents the comparison of its findings with those of comparable studies.

- One of the limitations of this research is the unwillingness of some older individuals to complete the questionnaire and the potential for incorrect comprehension of the questions due to the majority of participants' illiteracy.

Recommendations:

The senior population needs better access to social activities. Thus, it is recommended to provide older people, particularly older women, additional opportunities to participate in social activities. Also, it is critical to motivate senior citizens to participate in social activities. The elderly now have more optimism in their lives thanks to social activities, which can help to raise the standard of their everyday lives.

Research applications:

Given that the aged mature more quickly than other age groups and that social interactions have a significant part in enhancing the elderly's sense of optimism for the future and enhancing their quality of life overall, sociologists, psychologists, planners in the field of the mental and physical health of the aged, institutions and organizations that work with the elderly and aging concerns may be interested in the findings of this article.

Acknowledgements:

This work was taken from a doctoral thesis with a specific focus. We would like to express our gratitude to the Mazandaran University of Medical Sciences research assistant, the health center in Amol city, the staff at the chosen health centers and health homes, and all the elderly study participants for their assistance in carrying out this research. The Ethics Committee of Mazandaran University of Medical Sciences has authorized this study under The MAZUMS code of ethics, REC.96.d 101.

Conflict of interest:

The authors of this article declare that they have no conflict of interest.

References:

1. Webber M, Fendt-Newlin M. A review of social participation interventions for people with mental health problems. *Social Psychiatry and Psychiatric Epidemiology*, 2017; 52:369-80, D.O.I: [10.1007/s00127-017-1372-2](https://doi.org/10.1007/s00127-017-1372-2)
2. Kannus P, Niemi S, Sievänen H, Parkkari J. Declining incidence in fall-induced deaths of older adults: Finnish statistics during 1971–2015. *Aging Clinical and Experimental Research*, 2018; 30: 1111-5, DOI: [10.1007/s40520-018-0898-9](https://doi.org/10.1007/s40520-018-0898-9)
3. Mehri N, Messkoub M, Kunkel S. Trends, determinants and the implications of population aging in Iran. *Ageing International* 2020; 45: 327-43, doi:[10.1007/s12126-020-09364-z](https://doi.org/10.1007/s12126-020-09364-z)
4. Rezvani Khaledi F, Abdorrahim P. Alternative Futures of population ageing in Iran with Causal Layered Analysis. *Strategic management studies of national defense studies* [Internet]. 2020; 3(12):373-404. Available from: <https://sid.ir/paper/383732/en>

5. Gomes GC, Moreira RD, Maia TO, Santos MA, Silva VD. Factors associated with personal autonomy among the elderly: a systematic review of the literature. *Ciência & Saúde Coletiva* 2021; 26: 1035-46, PMID: 33729357, DOI: [10.1590/1413-81232021263.08222019](https://doi.org/10.1590/1413-81232021263.08222019)
6. Woll A, Bratteteig T. Activity theory as a framework to analyze technology-mediated elderly care. *Mind, Culture, and Activity* 2018; 25: 6-21, <https://doi.org/10.1080/10749039.2017.1375528>
7. Srivastava SK, Panigrahi PK. Social participation among the elderly: Moderated mediation model of information and communication technology (ICT). *Communications of the Association for Information Systems* 2019; 44: 33, DOI:[10.17705/1CAIS.04433](https://doi.org/10.17705/1CAIS.04433)
8. Ichida Y, Hirai H, Kondo K, Kawachi I, Takeda T, Endo H. Does social participation improve self-rated health in the older population? A quasi-experimental intervention study. *Soc Sci Med.* 2013; 94:83-90. doi: [10.1016/j.socscimed.2013.05.006](https://doi.org/10.1016/j.socscimed.2013.05.006). Epub 2013 May 18. PMID: 23931949.
9. Mansouri T, Farhadi A, Borhaninejad VR, Kujaei Bidgoli A, Nawabi SD, Hossein Abadi R. Factors and obstacles affecting the social participation of the elderly. *North Khorasan Journal of Medical Sciences* 2017; 9(4) 65-7. (Persian). D.o.i: [10.29252/nkjmd-090410](https://doi.org/10.29252/nkjmd-090410)
- 10- Kermani Z, Khedapanahi MK, Heydari M. Psychometric characteristics of Snyder's hope scale. *Journal of Applied Psychology* 2011; 5, 3(19): 7-23. url={<https://api.semanticscholar.org/CorpusID:146151913>} (Persian).
- 11- Estakhri Z, Tajikzadeh F, Kazemi SA. Comparison of the Role of Religious Beliefs in Hopefulness and Quality of Life among Cancer and Non-cancer Patients in Shiraz, Iran. *Religion and Health*, 2016; 4(2): 1-11 URL: <http://jrh.mazums.ac.ir/article-1-333-en.html> (Persian).
- 12- Snyder CR, Berg C, Woodware JT, Gum A, Rand KL, Wroblewski KK, et al. Hope against cold: individual differences in trait hope and acute pain tolerance on the cold pressor task. *Journal of Personality.* 2005; 73(2):287-312. PMID: 15745432 DOI: [10.1111/j.1467-6494.2005.00318.x](https://doi.org/10.1111/j.1467-6494.2005.00318.x)
- 13- Bonab BG, Lavasani M, Rahimi H. Hope, purpos in life, and mental health in college students. *International Journal of the Humanities.* 2007; 5(5):127-32 DOI:[10.18848/1447-9508/CGP/v05i05/42113](https://doi.org/10.18848/1447-9508/CGP/v05i05/42113) (Persian).
- 14- Nasiri HA, Joukar B. The relationship between life's meaningfulness, hope, happiness, life satisfaction and depression in a group of employed women. *Women Development and Politics.* 2008; 6(2):157-76, https://jwdp.ut.ac.ir/article_27413_en.html (Persian).
- 15- Mahdavi SG. Sociological analysis of aging with emphasis on social welfare services for elderly of Iran , Tehran: Group of charitable women. 2000. (Persian).
16. Yazdani A, Fekrazad H, Sajadi H, Salehi M. Relationship between social participation and general health among the elderly. *J Kermanshah Univ Med Sci.* 2015; 18(10):e74009. <https://doi.org/10.22110/jkums.v18i10.2298>. (Persian).
17. Moradi S, Fekrazad H, Mousavi M T, Arshi M. The Study of Relationship Between Social Participation and Quality of Life of Old People Who Member of Senior Association Are of

Tehran City in 2011. *Salmand: Iranian Journal of Ageing*. 2013; 7 (4):41-46,
 URL: <http://salmadj.uswr.ac.ir/article-1-655-en.html>

18. Darvishpoor Kakhki A, Abed Saeedi Z, Delavar A, Saeed-O-Zakerin M. Autonomy in the elderly: A phenomenological study. *Hakim Research Journal*. 2010; 12(4): 10, <https://jhpm.ir/article-1-346-en.pdf> (Persian).
19. Yazdanpanah L. Barriers of social participation in people of Tehran. *Social Welfare Quarterly*. 2007; 7(26):105-130(Persian).
20. Gasemi H, Harirchiey M, Masnavi AA, Rahgozar M, Akbarian M. Quality of life of elderly people in community and aged care centers. *Social Welfare Quarterly*. 2010; 10(39):177-200 (Persian).
21. Darvishpoor Kakhki A. Understanding of health concept and developing a model and instrument for measuring of health status of the elderly. Dissertation for Doctor of Philosophy in Nursing. Shahid Beheshti University of Medical Sciences. 2010(Persian).
22. Mansouri T, Farhadi A, Borhaninejad V, Kajaei Bidgoli A, Nawabi SD, Hossein Abadi R. Factors and obstacles affecting the social participation of the elderly. *North Khorasan Journal of Medical Sciences*. 2017; 9(3): 65-73(Persian).
23. Darvishpoor Kakhki A, Abed Saeedi Z, Abbaszadeh A. Social participation, barriers, and related factors in older people in Tehran. *J Health Promot Manage*. 2014; 3(4):65-73. URL: <http://jhpm.ir/article-1-346-en.html> (Persian).
24. Borhaninejad V, Nabvi S, Lotfalinezhad E, Amini F, Mansouri T. Relationship between Social participation and life satisfaction among older people. *J North Khorasan Univ Med Sci*. 2016; 8(4):701-11. (Persian).
25. Jafarinia G. Study of socio - economic factors affecting the political participation of citizens Khormoj. *J Polit Sci*. 2012; 7(2):87 - 122. (Persian).