

Original Article

# Assessing Life Satisfaction Among the Elderly in Iran: A Cross-sectional Analysis of Psychological, Social, Economic, and Health Dimensions

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Abstract

**Introduction:** With the increasing life expectancy, the quality of life has become a crucial concern. It is important not just to extend life but also to ensure its quality. This study aimed to assess life satisfaction among elderly residents of Iran.

**Methods:** This cross-sectional, descriptive-analytic study included 360 individuals aged 65 and older residing in households served by health centers who were selected using two-stage cluster sampling. The data were collected through face-to-face interviews with a structured questionnaire and analyzed using SPSS, version 18.

**Results:** Among participants, 19.4% reported high life satisfaction in all nine dimensions. Health satisfaction ( $P=0.04$ ) and usefulness ( $P=0.002$ ) were significantly affected by residence. However, health ( $P=0.04$ ), family life ( $P<0.0001$ ), friendships ( $P=0.005$ ), leisure activities ( $P=0.02$ ), and job satisfaction ( $P=0.01$ ) were influenced by marital status.

**Conclusion:** Improving elderly life satisfaction requires support from family, friends, and the community, alongside careful planning by policymakers.

**Keywords:** Life satisfaction, Life satisfaction Inventory, Quality of life, Elderly



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## Introduction

Aging is an unavoidable biological phenomenon, and from a chronological standpoint, old age typically commences at 65 (1). According to the World Health Organization (WHO), by 2050, the elderly population will have tripled compared to 2000, representing a higher growth rate than any other demographic group (2). Based on estimates from the Statistical Center of Iran, the population over 65 years old was 3 656 591 in 2006, and it is projected that by 2050, this will constitute 26% of the total population (3). Today, with the rising indicators of life expectancy, the more pressing issue of how life is lived, specifically the quality of life, has become a focal point (4). According to the WHO, quality of life is defined as an individual's perception of their position in life within the context of the culture and value systems in which they exist, as well as their goals, expectations, and standards. Therefore, it is

a highly personal concept and is based on the individual's perception of various aspects of their life (5). Numerous studies have explored the impact of factors such as health, family, personal relationships, role performance, and recreational activities on the quality of life (6). Consequently, in addition to efforts to extend lifespan, attention must also be directed toward the quality, meaning, and well-being of life. Thus, the concept of life satisfaction has emerged as a significant issue that must be addressed (7). Satisfaction encompasses the collection of expectations, needs, demands, and desires (8), and it relates to individuals' subjective perceptions of how well they have fulfilled their goals and desires (9). Research has demonstrated a strong connection between physical health, mental health, and life satisfaction (10).

On the other hand, health status, along with various economic, social, cultural, and personal factors, is among



the influences on an individual's level of life satisfaction, which can be shaped by their values, character, and lifestyle (11). A systematic review aimed at identifying factors influencing life satisfaction among older adults (60 years and above) in Asia highlighted 19 key factors, including activities of daily living, aging, childlessness, cognitive ability, decision-making in daily life, depression, discordant living arrangements, education level, economic status, health status, and housing satisfaction. The remaining key factors were insurance, marital status, perceived discrimination, preferred living arrangements, quality and duration of sleep, religiosity, social functioning, and social support. The review found that social support emerged as the most significant factor for enhancing life satisfaction. Raising awareness of this issue could help educate society on the critical role social support plays in improving life satisfaction for older adults (12). What is essential in old age is to avoid feelings of worthlessness and uselessness, as these pose significant barriers to achieving life satisfaction (8). Therefore, the elderly must receive the necessary attention and support to address their physical, mental, social, and spiritual needs since they are regarded as a vulnerable group in society due to aging and diminished abilities (13). One form of support is social support, which manifests in emotional and instrumental types. Emotional support involves fostering a warm and loving relationship with the elderly, while instrumental support encompasses providing services, assistance with activities, financial aid, and other forms of help offered to the elderly (14,15). In the study by Sadeghi Moghaddam et al, a direct correlation was found between social support and the life satisfaction of the elderly (16). Thus, identifying factors that influence the life satisfaction of the elderly is crucial for understanding behaviors that promote health and happiness in this demographic (8,16). All relevant authorities must recognize the physical, mental, and social needs of the elderly to enhance their health and, consequently, their quality of life (17). As the elderly population in the country increases and lifestyles and family structures evolve, older adults are increasingly faced with psychological, physical, and social challenges, resulting in diminished life satisfaction (18). Therefore, this study seeks to examine the level of life satisfaction among the elderly residing in the urban and rural areas of Qaemshahr County and its associated factors to aid authorities in developing intervention programs that enhance the life satisfaction of the elderly.

## Materials and Methods

### Samples

This descriptive-analytic study was conducted on 360 individuals aged 65 and above residing in households served by the health centers in Qaemshahr. The study utilized a two-stage cluster sampling method. Initially, the study population was categorized into urban and rural groups, followed by cluster sampling conducted within each group. To identify the first sample (the cluster head),

the selected centers were visited, and the cluster heads were determined based on the household number and the address of the last child vaccinated that day. Prior to conducting the interviews, a consent form was presented to the elderly individual, and the interview was performed only if they agreed. The questionnaire was conducted through face-to-face interviews over two months. The inclusion criteria included being at least 65 years old, being able to communicate, and showing consent to participate in the study. On the other hand, the exclusion criterion involved a lack of willingness to continue participating in the study. The data collection tool was a questionnaire focused on life satisfaction among the elderly.

### Measures

The Life Satisfaction Inventory (the Chicago Attitude Inventory) was first developed by Cavan in 1994. It evaluates the elderly's satisfaction across nine dimensions of life, including health, family, friends, leisure, work, security, religion, usefulness, and happiness. Each dimension comprises ten items, totaling 90 items, with responses coded as "yes" or "no", corresponding to values of 0 and 1. In each of the nine dimensions, four to five items carry negative weight, while the remaining dimensions have positive weight. For positively weighted questions, an agreement response and a disagreement response receive scores of 1 and 0, respectively. Conversely, negatively weighted questions employ the opposite scoring method. The scores are then aggregated. According to the study's scoring system, a score of 0–4 (or less than 50% of the total score) signified dissatisfaction. Scores of 5–8 (or 50%–80% of the total score) and 9–10 (more than 90% of the total score) indicated relative and high satisfaction, respectively. Overall, scores of 0–44, 45–65, and above 65 represented dissatisfaction, relative satisfaction, and high satisfaction, respectively. The test-retest method was employed to evaluate the reliability of the questionnaire. Initially, the questionnaire was administered through face-to-face interviews with 15 elderly individuals. Two weeks later, the same individuals were interviewed again. The data from both interviews were entered into Excel by participant number and subsequently analyzed using SPSS software, version 18. The correlation coefficient for the Elderly Life Satisfaction Inventory (the Chicago Attitude Inventory) was determined to be 0.82. After establishing the reliability and validity of the questionnaire, it was distributed to health center coordinators at each of the selected centers. The collected data were analyzed using SPSS (version 18), along with descriptive statistics, the Friedman test, and Hotelling's T-squared test, to explore relationships among multiple variables simultaneously.

### Results

The results revealed that 52.2% of the participants were women, 60.7% resided in rural areas, and 64.1% were married. The average age of the participants was  $74.32 \pm 7.57$  years. The mean score across the nine

dimensions of elderly life satisfaction was  $54.10 \pm 12.38$ . The average scores of health satisfaction, family satisfaction, friend satisfaction, leisure time satisfaction, job satisfaction, security satisfaction, religious satisfaction, usefulness satisfaction, and happiness satisfaction were  $4.40 \pm 2.71$ ,  $8.78 \pm 1.71$ ,  $6.90 \pm 1.48$ ,  $4.11 \pm 2.59$ ,  $4.05 \pm 2.26$ ,  $5.30 \pm 2.69$ ,  $8.75 \pm 1.23$ ,  $7.02 \pm 7.02$ , and  $4.40 \pm 2.28$ . In the categorization of life satisfaction across each dimension, 10.8%, 71.1%, 15.8%, 72.8%, 31.9%, 14.2%, 6.7%, 3.1%, and 6.4% of the elderly were highly satisfied with their health, family, security, religion, usefulness, friends, leisure time, work, and happiness, respectively. Overall, 19.4% of the participants were highly satisfied, while 56.6% were relatively satisfied with the nine dimensions (Table 1).

The results of the Hotelling T2 test, which assessed multiple variables (the nine dimensions of life satisfaction) simultaneously, revealed significant differences concerning the place of residence ( $P=0.001$ ), gender ( $P=0.03$ ), and marital status ( $P=0.03$ ). The results indicated that mean satisfaction with health ( $P=0.04$ ) and usefulness ( $P=0.002$ ) was significantly associated with place of residence (Table 2).

Mean satisfaction with religion ( $P=0.02$ ) and leisure time ( $P=0.01$ ) was significantly associated with gender (Table 3). In addition, mean satisfaction with health ( $P=0.04$ ), family ( $P<0.001$ ), friends ( $P=0.005$ ), leisure

time ( $P=0.02$ ), and work ( $P=0.01$ ) was significantly related to marital status (Table 3).

Using the Friedman test, a significant difference was found in the importance of the nine dimensions of life satisfaction ( $P=0.001$ , Table 4).

## Discussion

Our findings confirmed that most participants experienced a moderate level of satisfaction, aligning with the findings of research by Sadeghi Moghaddam et al on the elderly in Gonabad (16). However, these results contradict those of Aslani et al, indicating that 63.6% of hospitalized elderly individuals were highly satisfied (19). In Korea, higher health status among the elderly was linked to greater life satisfaction, while neuroticism showed a negative association with life satisfaction. Notably, structural and cognitive social capital were positively correlated with life satisfaction. In contrast, factors such as income, financial issues, and extraversion did not significantly impact life satisfaction. These findings highlight the importance of considering a combination of personality traits and social capital when researchers and clinicians work to enhance life satisfaction in the elderly population (20). The results of this study demonstrated that satisfaction with health and usefulness varied between urban and rural elderly populations. The urban elderly reported

**Table 1.** Distribution of Relative and Absolute Frequency of Elderly Satisfaction in Nine Dimensions of Life Satisfaction for the Elderly Aged 65 and Over in Qaemshahr

| Nine Dimensions of Life Satisfaction  | Very Satisfied (%) | Somewhat Satisfied (%) | Not Satisfied (%) | Total (%) |
|---------------------------------------|--------------------|------------------------|-------------------|-----------|
| Religion                              | 262 (77.7)         | 94 (26.1)              | 4 (1.1)           | 360 (100) |
| Family                                | 256 (71.1)         | 82 (22.8)              | 22 (6.1)          | 360 (100) |
| Usefulness                            | 115 (31.9)         | 176 (48.8)             | 69 (19.2)         | 360 (100) |
| Security                              | 57 (15.8)          | 172 (47.7)             | 131 (36.3)        | 360 (100) |
| Friends                               | 51 (14.2)          | 286 (79.4)             | 23 (6.3)          | 360 (100) |
| Health                                | 39 (10.8)          | 150 (41.6)             | 171 (47.5)        | 360 (100) |
| Leisure time                          | 24 (6.7)           | 129 (35.8)             | 207 (57.5)        | 360 (100) |
| Happiness                             | 23 (6.4)           | 167 (46.4)             | 170 (47.2)        | 360 (100) |
| Job satisfaction                      | 11 (3.1)           | 143 (39.7)             | 206 (57.2)        | 360 (100) |
| Total satisfaction in nine dimensions | 70 (19.4)          | 204 (56.6)             | 86 (23.9)         | 360 (100) |

**Table 2.** Comparison of Nine Dimensions of Life Satisfaction for Elders (65 and Above) Based on Residence (Urban vs. Rural)

| Life Satisfaction Dimensions | Residence Type                |                 |                              |                |               |         |       |
|------------------------------|-------------------------------|-----------------|------------------------------|----------------|---------------|---------|-------|
|                              | Mean $\pm$ Standard Deviation |                 | Difference (Urban vs. Rural) | Standard Error | Impact Factor | T-value | Sig.  |
|                              | Urban                         | Rural           |                              |                |               |         |       |
| Satisfaction with religion   | $8.65 \pm 0.89$               | $8.90 \pm 1.63$ | -0.25                        | 0.15           | 0.010         | -1.65   | 0.09  |
| Satisfaction with health     | $4.70 \pm 2.68$               | $4.03 \pm 2.74$ | 0.66                         | 0.33           | 0.014         | 1.97    | 0.04  |
| Satisfaction with family     | $8.88 \pm 1.64$               | $8.66 \pm 1.80$ | 0.22                         | 0.21           | 0.004         | 1.07    | 0.28  |
| Satisfaction with friends    | $7.04 \pm 1.36$               | $6.92 \pm 1.66$ | 0.11                         | 0.18           | 0.002         | 0.63    | 0.52  |
| Satisfaction with leisure    | $4.23 \pm 2.51$               | $3.93 \pm 2.72$ | 0.29                         | 0.32           | 0.003         | 0.92    | 0.35  |
| Satisfaction with security   | $5.53 \pm 2.69$               | $4.96 \pm 2.70$ | 0.57                         | 0.33           | 0.011         | 1.70    | 0.09  |
| Satisfaction with usefulness | $7.38 \pm 2.50$               | $6.49 \pm 2.27$ | 0.89                         | 0.28           | 0.037         | 3.18    | 0.002 |
| Satisfaction with happiness  | $4.71 \pm 2.27$               | $4.45 \pm 2.29$ | 0.25                         | 0.28           | 0.003         | 0.90    | 0.36  |

Note. Sig. Level of significance.

**Table 3.** Comparison of Nine Dimensions of Life Satisfaction for Elders (65 and Above) Based on Gender (Male vs. Female) and Marital Status (Married vs. Single)

| Life Satisfaction Dimensions | Mean $\pm$ Standard Deviation |                 | Difference (Male vs. Female) | Standard Error | Impact Factor | T-value | Sig. |
|------------------------------|-------------------------------|-----------------|------------------------------|----------------|---------------|---------|------|
|                              | Male                          | Female          |                              |                |               |         |      |
| Satisfaction with religion   | 8.54 $\pm$ 1.42               | 8.88 $\pm$ 1.07 | -3.42                        | 0.15           | 0.018         | -2.23   | 0.02 |
| Satisfaction with health     | 4.74 $\pm$ 2.90               | 4.24 $\pm$ 2.58 | 0.49                         | 0.33           | 0.008         | 1.47    | 0.14 |
| Satisfaction with family     | 8.95 $\pm$ 1.50               | 8.69 $\pm$ 1.83 | 0.25                         | 0.21           | 0.005         | 1.21    | 0.22 |
| Satisfaction with friends    | 6.97 $\pm$ 1.50               | 7.01 $\pm$ 1.47 | 0.04                         | 0.18           | 0.000         | -0.21   | 0.82 |
| Satisfaction with leisure    | 4.57 $\pm$ 2.61               | 3.80 $\pm$ 2.54 | 0.76                         | 0.32           | 0.021         | 2.39    | 0.01 |
| Satisfaction with job        | 4.20 $\pm$ 2.44               | 5.08 $\pm$ 2.56 | 0.56                         | 0.33           | 0.011         | 1.69    | 0.09 |
| Satisfaction with security   | 5.64 $\pm$ 2.88               | 5.08 $\pm$ 2.56 | 0.56                         | 0.33           | 0.011         | 1.69    | 0.09 |
| Satisfaction with usefulness | 7.23 $\pm$ 2.42               | 6.90 $\pm$ 2.20 | 0.33                         | 0.28           | 0.005         | 1.16    | 0.24 |
| Satisfaction with happiness  | 4.85 $\pm$ 2.34               | 4.44 $\pm$ 2.23 | 0.40                         | 0.28           | 0.008         | 1.42    | 0.15 |

The significant result of Hotelling's t-test ( $P=0.03$ )

| Life Satisfaction Dimensions | Mean $\pm$ Standard Deviation |                                       | Difference (Married vs. Single) | Standard Error | Impact Factor | T-value | Sig.  |
|------------------------------|-------------------------------|---------------------------------------|---------------------------------|----------------|---------------|---------|-------|
|                              | Married                       | Unmarried (Widow, Divorced, or Other) |                                 |                |               |         |       |
| Satisfaction with religion   | 8.67 $\pm$ 1.28               | 8.88 $\pm$ 1.14                       | -0.29                           | 0.15           | 0.007         | -1.32   | 0.18  |
| Satisfaction with health     | 4.68 $\pm$ 2.78               | 2.55 $\pm$ 4.00                       | 0.68                            | 0.34           | 0.015         | 1.99    | 0.04  |
| Satisfaction with family     | 9.13 $\pm$ 1.34               | 8.19 $\pm$ 2.10                       | 0.93                            | 0.21           | 0.069         | 4.44    | 0.000 |
| Satisfaction with friends    | 7.18 $\pm$ 1.42               | 6.65 $\pm$ 1.54                       | 0.52                            | 0.18           | 0.029         | 2.82    | 0.005 |
| Satisfaction with leisure    | 4.37 $\pm$ 2.58               | 3.64 $\pm$ 2.56                       | 0.73                            | 0.32           | 0.018         | 2.22    | 0.02  |
| Satisfaction with job        | 4.31 $\pm$ 2.39               | 3.57 $\pm$ 1.93                       | 0.74                            | 0.28           | 0.025         | 2.60    | 0.01  |
| Satisfaction with security   | 5.48 $\pm$ 2.74               | 4.91 $\pm$ 2.60                       | 0.49                            | 0.34           | 0.008         | 1.44    | 0.15  |
| Satisfaction with usefulness | 7.18 $\pm$ 2.22               | 6.76 $\pm$ 2.39                       | 0.42                            | 0.29           | 0.008         | 1.45    | 0.14  |
| Satisfaction with happiness  | 4.72 $\pm$ 2.30               | 4.40 $\pm$ 2.24                       | 0.31                            | 0.29           | 0.004         | 1.08    | 0.27  |

Note. Sig. Level of significance.

**Table 4.** Ranking of Nine Dimensions of Life Satisfaction for Elders (65 and Above) Based on Importance Using the Friedman Test

| Ranking | Life Satisfaction Dimensions | Mean Rank |
|---------|------------------------------|-----------|
| 1       | Satisfaction with religion   | 7.93      |
| 2       | Satisfaction with health     | 7.64      |
| 3       | Satisfaction with family     | 6.22      |
| 4       | Satisfaction with friends    | 5.79      |
| 5       | Satisfaction with leisure    | 4.29      |
| 6       | Satisfaction with job        | 3.50      |
| 7       | Satisfaction with security   | 3.42      |
| 8       | Satisfaction with usefulness | 3.19      |
| 9       | Satisfaction with happiness  | 3.01      |

Note. The significance level of Friedman's test ( $P=0.001$ ).

0.66 units higher health satisfaction and 0.89 units higher usefulness satisfaction, respectively, compared to their rural counterparts. This discrepancy can be attributed to better access to amenities and healthcare services in urban areas. One factor influencing the usefulness of the elderly is their health, as it enables them to assist those around them. Additionally, it was revealed that satisfaction with religion and leisure time differed between elderly men and women. Elderly men reported 3.42 units lower satisfaction with religion than elderly women, yet they had 0.76 units higher satisfaction with leisure time. Women tend to be

more emotionally connected, suggesting that religion and spirituality may significantly impact their satisfaction. Conversely, men's higher satisfaction with leisure time could stem from social and cultural factors that afford them greater freedom in how they spend their free time, while women may encounter more restrictions. In this study, married elderly individuals demonstrated 0.68 units higher satisfaction with health, 0.93 units higher satisfaction with family, 0.73 units higher satisfaction with leisure time, and 0.74 units higher satisfaction with work compared to elderly individuals without a spouse (never married, widowed, divorced, and the like). Marriage appears to be a positive factor for elderly satisfaction, likely due to the emotional support provided by spouses. In the study performed by Papi and Cheraghi, married older adults reported higher life satisfaction compared to those who were divorced or had lost a spouse. Similarly, the findings of other studies (21) confirmed that married individuals experienced greater life satisfaction than those who were single. A possible explanation for this is that marriage provides opportunities for joint activities and emotional support, which can enhance self-esteem and psychological well-being, ultimately leading to increased life satisfaction (22,23). Our results revealed that family satisfaction was the most crucial of the nine life satisfaction dimensions. As elderly individuals may

depend more on their families for physical, emotional, and even financial needs during this phase of life, family satisfaction holds great significance for them. Religious satisfaction ranked second, likely due to the elderly's strong beliefs and experiences. Having faced numerous challenges throughout life and relying on their faith for support, religion can play a vital role in their satisfaction. Özdemir et al observed a significant positive relationship among spiritual well-being, life satisfaction, and hope (24). The lower importance of job satisfaction may stem from economic, cultural, and social differences between the present and the past. Many elderly people entered old age at a time when society was advancing rapidly and working conditions were improving; thus, it is natural that they do not feel as satisfied with their past work experiences due to the physical limitations they now encounter. In this study, most elderly participants exhibited an expected level of satisfaction.

### Limitations and Future Research

Accessing elderly individuals, establishing effective communication, and clearly explaining the research objectives were challenges encountered in this study. Given the growing elderly population in recent years and the ongoing aging trend, identifying factors that enhance life satisfaction is essential for improving the quality of life among elderly individuals.

### Conclusion

Given that life satisfaction is a crucial aspect of the quality of life for the elderly, it is essential to identify factors that enhance life satisfaction and improve their overall well-being. This necessitates support from the community, family, and friends. Evidence indicates that social support from family and friends can significantly predict happiness among the elderly. Therefore, efforts should be made to collaborate with all supportive groups in society to ensure that elderly individuals can enjoy their later years and derive maximum satisfaction from this stage of life. In this study, the elderly's inability to fully cooperate in answering all the questionnaire questions due to fatigue or illness presented a limitation. Furthermore, since the questionnaires were collected through interviews at elderly homes, there was some fear or reluctance to disclose their true circumstances.

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### Authors' Contribution

**Conceptualization:** Fereshteh Khatti Dizabadi.

**Data curation:** Fereshteh Khatti Dizabadi.

**Formal analysis:** Fereshteh Khatti Dizabadi.

**Funding acquisition:** Fereshteh Khatti Dizabadi.

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**Writing—review & editing:** Shadi Fathizadeh and Majid Amirsardari.

### Competing Interests

The author(s) declared no potential conflict of interests with respect to the research, authorship, and/or publication of this article.

### Data Availability Statement

The data are available upon reasonable request.

### Ethical Approval

This research project was approved by Mazandaran University of Medical Sciences (Ethical code IR.MAZUMS.REC.94-515). The authors also extend their thanks to the authorities of Mazandaran University of Medical Sciences and all participants for their contributions to this study.

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