

Investigating the Status of Leisure Time among the Elderly in Isfahan City, Iran: A Qualitative Study

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Original Article

Abstract

Introduction: An important aspect of caring for the elderly is enhancing their quality of life (QoL); consequently, improving their living conditions has become a common global concern. Given the multidimensional impact of leisure time on the QoL of older adults, the present study aimed to investigate the patterns of leisure engagement among the aging population in Isfahan City, Iran.

Materials and Methods: This qualitative study was carried out through content analysis approach. A total of 25 participants residing in Isfahan City were selected through purposive sampling with maximum variation. A theoretical approach was utilized, employing a sequential selection process until data saturation was achieved. Data were collected through in-depth, semi-structured interviews and subsequently analyzed.

Results: The findings of this study culminated in five core themes that delineate the leisure experiences of older adults: 1) general patterns of leisure engagement, 2) barriers to leisure participation, 3) the impact of leisure on the lives of older adults, 4) the role of family support in facilitating leisure, and 5) strategies for enhancing leisure opportunities among the aging population.

Conclusion: According to the findings, leisure engagement significantly enhances the QoL among older adults by improving mood, vitality, self-confidence, and life satisfaction, ultimately contributing to better general health. Therefore, it is imperative for policymakers and health administrators to implement targeted strategies aimed at fostering improved leisure patterns and removing barriers to the useful and effective participation of the elderly in leisure activities.

Keywords: Aging; Leisure time; Qualitative study; Iran

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Introduction

Aging is one of the most critical topics for research. In all regions of the world, the elderly population is increasing (1). Each year, the global population grows by 7.1 percent, but this increase is 2.5 percent for the population aged 60 and above (2). According to the World Health Organization's projections, by 2050 one in five people will be over 60 (3). Additionally, based on the 2013 General Population and Housing Census, approximately 2.8 percent of the country's population

is aged 60 and above. Consequently, Iran is also undergoing a rapid demographic transition toward aging (4). The rising number of elderly individuals has shifted global attention toward improving quality of life, particularly by ensuring the health and well-being of older adults (4). Efforts to enhance the living conditions of older people have become a shared global concern, and among the key aspects of geriatric care, improving the quality of life remains paramount (5). Many occupational therapists believe that a purely

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biomedical model is insufficient to address the health needs of older adults; rather, the physical and mental health of older people is deeply intertwined with their physical, social, and personal contexts. Therefore, the overarching goal is to improve the health and well-being of older adults by fostering their active participation in meaningful activities (6). Research demonstrates that maintaining the health and independence of older adults depends on factors such as diet, lifestyle, daily routines, social support, daily exercise, and leisure activities.

Furthermore, staying active and remaining productive are two critical factors in successful aging (7). Active aging refers to the active engagement in daily social, economic, cultural, and recreational activities, as well as the ability to sustain interpersonal relationships and consistently participate in productive endeavors (8). Additionally, the Activity Theory emphasizes the strong association between activity levels and well-being and life satisfaction, suggesting that greater daily activity correlates with higher levels of life satisfaction (9).

In the occupational therapy framework, leisure is defined as an intrinsically motivated activity performed voluntarily and not allocated to essential activities such as work, self-care, and sleep (10). Leisure has emerged as a key topic in contemporary societies. The significance of leisure in modern life has led to the characterization of contemporary societies as "leisure societies." Iran is not exempt from this trend; influenced by socio-economic transformations and global values, leisure time has become one of the most pressing concerns for individuals in Iranian society. Leisure patterns can positively affect living conditions and individuals' life satisfaction (7). Patterns of older adults' participation in leisure activities depend on multiple factors, including age, gender, background factors, health status, depression, cognitive impairments, and dementia; identifying these factors facilitates an active lifestyle among the elderly (11).

Research indicates that individuals with higher levels of social participation exhibit significantly reduced need for health services and pharmaceutical care. Additionally, participation in social, productive, and physical activities has been associated with increased objective and mental health, reduced mortality risk factors, and decreased loneliness and depression among older adults (12).

Findings reveal that participation in social and recreational activities among older adults contributes to the preservation and enhancement of cognitive functions (13) and helps prevent Alzheimer's disease (14). Studies also show that older adults who engage more in

intellectual activities exhibit higher levels of cognitive functioning than other elderly individuals (15).

Studies have demonstrated that aerobic exercise programs for older adults can improve cognitive functions in this population. Moreover, physical activity plays a crucial role in disease prevention, maintaining independence, and enhancing quality of life among older adults (16, 17). Additionally, participation in creative activities such as reminiscence therapy, problem-solving tasks, group activities, artistic production, writing, and reading poetry and magazines can improve problem-solving skills, self-esteem, adaptive skills, life satisfaction, and reduce symptoms of depression and anxiety (1).

The significance of examining leisure time among older adults lies in the fact that, due to retirement, these individuals have more free time, and the appropriate or inappropriate use of this time can have specific consequences. Particularly, upon the conclusion of their working lives, individuals often experience feelings of loneliness and rejection. Furthermore, the pressures of industrialization have led to emotional and psychological disengagement, exposing older adults to significant risks. Although participation in meaningful leisure activities appears vital for a healthy and balanced life (18), most research conducted in Iran regarding the leisure patterns of older adults indicates unsatisfactory patterns. The most common leisure activities reported by participants are watching television and spending time at home (19). A study conducted in 2009 compared social activities and leisure patterns among older adults in Iran and Sweden, revealing relatively low satisfaction with social relationships among Iranian older adults compared to their Swedish counterparts (20). Existing studies emphasize the necessity of comprehensive, precise planning, as well as greater expertise and attention from authorities and planners, to further engage older adults and move toward healthy aging.

It appears that obtaining a relatively comprehensive, goal-oriented set of leisure patterns for older adults, along with precise planning for their implementation and national-level development, will yield desirable outcomes (21). However, implementing a uniform plan for all urban areas—whether in developing specific programs or establishing new facilities—would be futile, given differences in needs and preferences, as well as varying demographic and socio-cultural contexts (22).

Given the multifaceted impact of leisure on older adults' quality of life, this study examines their leisure patterns in Isfahan City. By identifying the limiting factors in older adults' leisure time, we aim to prevent

the exacerbation of problems and take a step toward enhancing their quality of life through comprehensive planning and effective strategies.

Materials and Methods

This study employed a qualitative-descriptive design. Following approval of the research protocol and receipt of ethical approval from the Ethics Committee of Isfahan University of Medical Sciences, older adults were assessed to confirm inclusion criteria and the absence of exclusion criteria. Subsequently, participants meeting the inclusion criteria were informed about the study procedure and assured that all personal and medical information would remain confidential. Those older adults who expressed willingness to participate were requested to complete an informed consent form.

The research setting included parks, recreational and sports facilities, and gathering places for older adults in Isfahan City. Using purposive sampling and the inclusion criteria, 25 older adults (14 men and 11 women, aged 60–90 years) were selected. In purposive sampling with a theoretical approach, research units were selected according to the research objectives, and the researcher could, based on professional judgment, choose the most appropriate sources of information—such as observation, interviews, or written sources—and subsequently continue sample selection and data collection until saturation of all categories and themes was achieved (23). Inclusion criteria for older adults in this study were as follows: age over 60 years, living with family, absence of mental disorders and ability to correctly understand and report experiences, not obtaining a score below 21 on the Mini-Mental State Examination (MMSE) (20), absence of physical limitations affecting mobility, and full willingness to participate in the study.

Data were collected through semi-structured in-depth interviews using open-ended questions. Interviews began with a general question about daily living experiences, followed by questions aimed at obtaining deeper information, such as: "Please describe your typical day from morning to night in full detail." Interview themes included: a complete day, older adults' leisure activities, problems encountered by older adults regarding leisure, and individual perspectives and solutions proposed by participants to improve older adults' leisure status.

Qualitative content analysis was used to analyze the data in this study. The data analysis process followed the stages proposed by Graneheim and Lundman, which included: transcribing interviews and reviewing them multiple times to gain a correct

understanding of the entire text; identifying meaning units and categorizing them as condensed units; determining appropriate titles for the categories; arranging subcategories; and selecting an appropriate title capable of encompassing the categories (24). In this way, content analysis goes beyond the objective content in textual data, revealing themes derived from hidden concepts in participants' descriptions, which are then coded, summarized, and classified. Codes, extracted from concepts based on participants' descriptions, were classified by differences and similarities (25).

Interviews were recorded with participants' permission and immediately transcribed in writing after each interview. Subsequently, concepts derived from participants' descriptions were summarized, coded, and categorized by differences and similarities. To ensure the accuracy and robustness of the data, the four criteria proposed by Lincoln and Guba (24) were considered, and each interview was analyzed upon completion.

Tables were drawn for each category, and interviews continued until saturation of all categories and themes, with no further data leading to development, modification, expansion, or addition to the existing theory, or to proposals for creating a new category. To confirm data saturation, additional interviews were conducted. The validity of findings was assessed through credibility, transferability, confirmability, and applicability. A multi-perspective review of the research data was conducted, and corrective comments from experts were utilized.

Results

A total of 25 interviews were conducted with 25 participants. The sample consisted of 14 men and 11 women, aged 60–91 years. Regarding educational attainment, four participants held university degrees, ten held high school diplomas, two had completed intermediate school, seven had attended primary school, and two were illiterate. Following completion of the 25 interviews, data reached saturation.

Nineteen participants were married, one was divorced, and five were widowed. Of these, four lived with their children, and one lived alone (Table 1).

Based on an analysis of participant statements, the main themes and sub-themes in the field of leisure were identified (Table 2). The findings of the present study regarding the leisure pattern of older adults included five main themes: overall leisure pattern in older adults, problems of older adults regarding leisure time, the impact of leisure on aging, the role of the family in older adult leisure, and strategies for improving older adult leisure status, along with 29 sub-themes.

Table 1. Demographic Characteristics of Participants

No.	Gender	Age (year)	Married status	Education status	Job status	Status
1	Male	71	Married	High school diploma	Retired	With spouse
2	Male	62	Married	Bachelor's degree	Retired	With spouse
3	Male	72	Married	Primary school	Retired	With spouse
4	Male	75	Married	Primary school	Retired	With spouse
5	Male	91	Married	Primary school	Retired	With spouse
6	Male	66	Married	Illiterate	Freelance retired	With spouse and children
7	Male	61	Married	High school diploma	Retired	With spouse and children
8	Male	82	Married	High school diploma	Retired	With spouse
9	Male	80	Married	Illiterate	Retired	With spouse
10	Male	78	Married	Primary school	Retired	With spouse
11	Male	77	Married	Primary school	Retired	With spouse
12	Male	85	Married	Primary school	Retired	With spouse
13	Female	70	Married	High school diploma	Retired	With spouse and children
14	Female	65	Married	High school diploma	Retired	With spouse
15	Female	73	Widowed	High school diploma	Retired	With children
16	Female	73	Widowed	High school diploma	Retired	Alone
17	Female	72	Widowed	Intermediate school	Housewife	With children
18	Female	66	Widowed	High school diploma	Retired	With children
19	Female	65	Widowed	Bachelor's degree	Retired	With children
20	Female	76	Divorced	High school diploma	Retired	Alone
21	Female	67	Married	High school diploma	Retired	With spouse and children
22	Female	62	Married	Bachelor's degree	Retired	With spouse and children
23	Female	60	Married	Intermediate school	Housewife	With spouse and children
24	Female	74	Married	Bachelor's degree	Retired	With spouse
25	Female	68	Married	High school diploma	Retired	With spouse and children

Theme 1: Overall Leisure Patterns of Older Adults

One of the main themes extracted from participants' statements was the identification of leisure activities among older adults. Analysis revealed that 76% of participants engaged in activities such as shopping and household tasks to pass the time. Eighty percent reported watching television and resting at home during their leisure time. Fifty-two percent visited parks or went for walks outside the home. Sixty-eight percent conversed with peers in places such as parks. Only 32% engaged in sports or artistic activities, including sports, mountain climbing, listening to music, gardening, sewing, crocheting, calligraphy and handwriting, painting, and writing books and poetry. Some excerpts from participants regarding this topic include:

Participant 9: "I help my wife a little at home; I clean the tables and these items, wash the dishes, and clean the tablecloth. After the morning prayer, I eat breakfast, then I go to the park or buy something for the house. I sit in the park and enjoy the flowers and plants. The fountain that works here brings joy; the flowers and plants help the spirit. We are getting old; if we don't come out, we go crazy. We sit with our friends, chat, and laugh. Sometimes my son comes and takes me out."

Participant 19: "In the morning, I perform my prayers; I am not used to sleeping in the morning. After breakfast, I wash the dishes. I have the habit of reading

the morning prayers every day, then I go about my work. My daughters cook lunch. Some days I go to the cultural center, and some days I go shopping so I can walk and buy magazines; sometimes I cook food that I personally like. If I don't go out and exercise one day, I feel upset. Some days I go to religious gatherings. At night, I listen to various prayers on television, and sometimes on the mobile radio. I also have a great interest in flowers; we have many, including many geraniums. Of course, my brother is just like me. We plant lotus flowers. I am very interested in gardening; I even grow vegetables in plastic containers. When we were young, we had a garden and were surrounded by flowers, and later my field of study was horticulture and craftsmanship."

Theme 2: Problems of Older Adults Regarding Leisure Time

Another main theme identified in this research was the examination of the problems older adults face during leisure time. Most problems mentioned by older adults included financial problems (52%), physical limitations (36%), insufficient facilities (44%), lack of proper planning in society (12%), limited leisure spaces (16%), psychological problems due to loneliness or emotional and mental distress caused by loss of relatives (40%), homemakers' responsibilities at home (28%), lack of friends and companions (32%), and the burden on children (16%). Some excerpts from participants regarding this topic include:

Table 2. Themes Derived from Interview Analysis

Main themes	Sub-themes
Overall Leisure Pattern in Older Adults	Performing activities at home such as shopping Watching television and resting at home Walking in the park or outside the home Talking with peers in places such as parks Engaging in sports or artistic activities such as sports, mountain climbing, listening to music, gardening, sewing, crocheting, calligraphy and handwriting, painting, writing books and poetry
Problems of Older Adults Regarding Leisure Time	Financial problems Physical limitations Insufficient facilities Lack of proper planning in society Limited leisure spaces Psychological problems due to loneliness or emotional and mental distress caused by loss of relatives Housewives' responsibilities at home Lack of friends and companions Burden on children
Impact of Leisure on Aging	Providing mental and physical health Preventing depression, isolation, and guarding against pointless grief and mistaken thoughts Increasing tolerance in confronting problems and stresses Vitality and well-being Relieving fatigue
Role of the Family in Older Adult Leisure	Spouses' and children's inattention to older adults' leisure Children's concerns as a barrier to leisure Older adults' demand for independence in leisure time
Strategies for Improving Leisure Time	Increasing pensioners' benefits by the government Providing non-cash facilities for older adults' leisure such as tourism programs Creating employment for older adults' children Holding sessions by relevant specialists Utilizing older adults' experiences in executive work and maintaining communication with them Proper nutrition Having a suitable friend for leisure time

Participant 18: "Most of the time I stay at home; I don't like going out because I don't have good legs, and there's no one like me who can help me get up to go out with friends."

Participant 21: "My mother passed away, which has affected me. Now I am alone. Loneliness is the worst pain; I also have physical problems and can't host parties, not financially, but because of my back disc."

Participant 22: "Most of our retirees don't have sufficient income and are in a tight spot economically, and usually their children are a burden to them, which adds a lot of pressure."

Participant 4: "There are many issues. First, our cultural infrastructure isn't good. This needs to be fixed first before such things can take shape."

Theme 3: Impact of Leisure on Older Adults' Lives

One of the main themes derived from participants' experiences with leisure was its impact on older adults' lives. According to the issues mentioned by older adults, the following were identified as the benefits of leisure activities: providing mental and physical health

(36%), preventing depression, isolation, and guarding against pointless grief and mistaken thoughts (28%), increasing tolerance in confronting problems and stresses (16%), vitality and well-being (52%), and relieving fatigue (16%). Some excerpts from participants regarding this topic include:

Participant 2: "These activities are very effective. If someone does not engage in such programs, they will certainly suffer from depression, and the problems created for them at home cannot be tolerated, leading to increased stress. However, if their mind and soul are healthy and vibrant, they can cope better with challenges."

Participant 5: "If I did not have these leisure activities, I could not have reached this age; I would just sit and grieve."

Theme 4: Role of Family in Older Adults' Leisure

Another theme derived from participants' statements regarding individual experiences in the context of leisure was the role of the family. Three sub-themes were identified under this main theme:

inattention by spouses and children to older adults' leisure (72%), children's concerns as a barrier to leisure (40%), and older adults' demand for independence in leisure time (24%). Some excerpts from participants regarding this topic include:

Participant 21: *"My husband gets up and goes out himself; he has no work for me. My son, when he comes, is also tired. I have a car. I want to say, 'Mom, let's go out,' but I see he comes and goes to sleep; from eight in the morning until five in the afternoon, I care for him, and when he wakes up, he goes to the gym."*

Participant 2: *"The family is very influential in leisure time. The first factor is family. If an individual has a family whose children have no problems, follow their own paths, finish their studies on time, are not unemployed, and marry at the appropriate time, the person's mind is much calmer. The problems older adults face are their children's problems. The biggest problem among older adults, in my opinion, is their family."*

Theme 5: Strategies for Improving Leisure Time

Another main theme derived from older adults' experiences with leisure time was strategies for improving it. Sub-themes included increasing pensioners' benefits by the government (68%), providing non-cash facilities for older adults' leisure such as tourism programs (40%), creating employment for older adults' children (20%), holding consultation sessions by relevant specialists (8%), utilizing older adults' experiences in executive work and maintaining communication with them (28%), proper nutrition (28%), and having a suitable friend for leisure (44%). Some excerpts from participants regarding this topic include:

Participant 4: *"Unfortunately, our government does not support retirees. We do not see any facilities from the government that help retirees."*

Participant 1: *"The cultural system of our country has not thought about this issue. Many retirees have a lot of experience, but no one benefits from them."*

Participant 18: *"If the government can provide for us—for example, by getting our children employed—people will not fall ill; worry, grief, and sorrow themselves cause illness. If a person's children are happy, and our lives are prosperous both financially and emotionally, that would be better."*

Discussion

Aging is a sensitive phase in human life, and attention to its issues and needs is a social necessity. Older adults constitute one of the vulnerable groups in every society, requiring special care due to their specific sensitivity in terms of physical and mental health (26).

The goal of supporting older adults should not be merely increasing their life expectancy (length of life). Still, today, the concept of active aging has been introduced, meaning that as the elderly population grows, their quality of life should also be a focus. Active aging is defined by cognitive, psychosocial, social, and physical dimensions. The term "active" (dynamic) encompasses participation in social, economic, cultural, sports, and daily activities, as well as the ability to maintain interpersonal relationships and to remain continuously engaged in productive activities (8).

Participation in meaningful leisure activities is vital for a healthy and balanced life, especially for older adults who, upon moving from the working phase to retirement, gain more leisure time. According to the present study, the overall leisure pattern of older adults includes activities such as watching television, performing household tasks, participating in religious gatherings and social events, talking with peers, and reading newspapers and books. This finding is consistent with a cross-sectional study involving 400 older adults, which indicated that older adults were interested in activities such as watching television (77%), reading books (40%), walking (31%), and traveling (36%) (27). Financial problems, physical limitations, loneliness, and psychological problems, as well as insufficient facilities and proper planning in society, were among the major problems reported by participants in this study regarding leisure time. According to a study by Farsi and colleagues, internal, social, and structural barriers reduce older adults' participation in leisure and physical activities (28). The findings of the present study indicate that leisure is essential for maintaining the vitality and well-being of older adults. Movement, exercise, and entertainment create a satisfying life for them, strengthen their self-confidence, and save them from stagnation, fruitlessness, and a sense of insignificance (26). This finding is in line with the results of a study by Anna Hakman and her colleagues, who concluded that engaging in and developing leisure activity planning and management improves the physical capacity and abilities of individuals, as well as their psychosocial status, reduces pain, and increases cognitive functions and physical health in older adults (29). In a study on the impact of a person-centered leisure program, it was shown that participating in 30-minute activity groups three times a week for two months leads to a significant increase in self-confidence and a significant reduction in depression among older adults (30). Therefore, awareness of the status and manner of older adults' leisure-time spending helps planners design programs that align with their desires and needs. In the first

prospective study examining the relationship between leisure activities and the level of cognitive impairment in older adults, it was found that engaging in activities involving attention, memory, problem-solving, and social interaction reduces the risk of cognitive impairment (31).

Another theme derived from participants' experiences in this study was the family's role in older adults' leisure. A study by Andrea and colleagues showed that older adults with family and friends to accompany and encourage them in leisure activities engaged in leisure and physical activities three times as often as those without family support (32). Additionally, a study by Farsi and colleagues showed that motivation can play an important role in increasing older adults' participation (28). Participants in this study proposed strategies such as increasing pensioners' benefits, providing non-cash facilities for older adults' leisure (e.g., tourism programs), offering leisure activity counseling from occupational therapists, and establishing daily recreational centers for older adults to improve their leisure conditions.

The findings of the present study indicate that older adults do not have an ideal leisure pattern; rather, they engage in repetitive, routine activities during their leisure time. On the other hand, they highlighted many barriers to the appropriate use of leisure time, with the greatest distress being financial inability and lack of social support. With an aging population, one of the duties of state institutions is to plan to promote older adults' healthy lifestyles by providing facilities that modify their leisure patterns, to enhance their physical and mental health and prevent certain problems. Efforts to institutionalize a culture of leisure, providing appropriate recreational facilities and leisure activities, creating centers for older adults' gatherings, and encouraging participation in self-help sessions, competitive programs, poetry reading, religious activities, etc., as well as providing opportunities for occupational therapists to be present in health houses to provide specialized activity counseling, are effective interventions in this field.

Limitations

The present study was conducted with certain limitations. First, it was a qualitative-descriptive study with a relatively small sample size (25 participants). Purposive sampling was employed, which may limit the generalizability of the findings to all older adults. Second, the study was conducted only in Isfahan City, which limits the generalizability of the results to other regions with different cultural, economic, and social contexts. Third, interviews were conducted using

semi-structured in-depth questions, which may have led to the omission of some aspects of participants' experiences. Finally, the study was conducted over a limited period, which may not capture long-term patterns of leisure behavior.

Recommendations

Based on the findings of this study, several suggestions for future research can be proposed. First, it is recommended that quantitative studies with larger sample sizes be conducted to validate the results of this study. Performing quantitative studies with larger sample sizes and random sampling provides the opportunity for stronger statistical analyses and better generalizability of the findings. The second suggestion is comparative studies across cities; that is, examining leisure patterns of older adults in different cities in Iran helps to identify cultural, economic, and social differences and design appropriate interventions. Another suggestion is to conduct longitudinal studies, as monitoring changes in leisure patterns and quality of life over time provides deeper insights into the dynamics of leisure behavior among older adults. On the other hand, intervention studies on the design and evaluation of occupational therapy-based programs (such as activity counseling and group activities) are essential for assessing their effectiveness in improving leisure patterns and quality of life among older adults. Furthermore, exploring the relationships between leisure, physical health, mental health, cognitive function, and social support among older adults using comprehensive assessment tools provides a more holistic understanding of the factors influencing leisure participation.

Conclusion

This qualitative-descriptive study aimed to examine the leisure patterns, problems, and strategies for improving the leisure status of older adults in Isfahan City. The findings revealed that the overall leisure pattern of older adults primarily consisted of household activities, watching television, walking in parks, conversing with peers, and participating in religious and social gatherings. Yet most participants relied on repetitive, routine activities. Major barriers included financial limitations, physical disabilities, loneliness, lack of adequate facilities, and insufficient family support. Participants also proposed practical strategies such as increasing pension benefits, providing leisure facilities and non-cash allowances, receiving activity counseling from occupational therapists, and strengthening social and family support networks. The results highlight the urgent

need for comprehensive planning, institutionalization of a leisure culture, provision of appropriate facilities, and enhanced family and social engagement to promote active aging and improve the quality of life of older adults.

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Authors' Contribution

Project design and ideation: Elham Nasiri, Farzane Saberi

Providing financial resources for the project: Elham Nasiri

Scientific and executive support of the project: Elham Nasiri, Farzane Saberi, Elahe Karimi, Ali Ebrahimifar

Providing equipments and statistical sample: Elham Nasiri, Farzane Saberi, Elahe Karimi, Ali Ebrahimifar

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Analysis and interpretation of the results: Elham

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Maintaining the integrity of the study process from the beginning to the publication, and responding to the reviewers comment: Elham Nasiri, Farzane Saberi, Elahe Karimi, Ali Ebrahimifar

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Conflict of Interest

The authors did not have a conflict of interest.

References

1. Flood M, Phillips KD. Creativity in older adults: A plethora of possibilities. *Issues in mental health nursing*. 2007; 28(4): 389-411.
2. Hasani F, Kamali M, Akbar Fahimi M, Davatgaran K. Factors affecting quality of life of the elderly in the residential homes of tehran (2009). *Journal of Birjand University of Medical Sciences*[Internet]. 2012; 18 (4(49)): 320-8. Available from: <https://sid.ir/paper/95660/en>
3. Schorderet C, Ludwig C, Wüest F, Bastiaenen CH, de Bie RA, Allet L. Needs, benefits, and issues related to home adaptation: a user-centered case series applying a mixed-methods design. *BMC geriatrics*. 2022; 22(1): 526.
4. Rastgarimehr B, Afkari ME, Solhi M, Taghdisi MH, Mansourian M, Shafieyan Z, Qorbani M, Asayesh H. Relationship between the educational stage of PRECEDE model and quality of life improvement in the elderly affiliated with Tehran culture house for the aged. *Iranian Journal of Diabetes and Metabolism*. 2014; 13(6): 469-78.
5. Heravi-Karimooi M, Rejeh N, Garshasbi E, Nikkhar M, Montazeri A. A validation study of the Persian version of Older People's Quality of Life Questionnaire (CASP-19). *Payesh (Health Monitor)*. 2016; 15(4): 432-42.
6. Cara E, MacRae A. *Psychosocial occupational therapy: A clinical practice*. Clifton Park, NY: Thomson Delmar Learning; 2005.
7. Clark F, Azen SP, Zemke R, Jackson J, Carlson M, Mandel D, Hay J, Josephson K, Cherry B, Hessel C, Palmer J. Occupational therapy for independent-living older adults: A randomized controlled trial. *Jama*. 1997; 278(16): 1321-6.
8. Rowe JW, Kahn RL. Successful aging. *The gerontologist*. 1997; 37(4): 433-40.
9. Menec VH. The relation between everyday activities and successful aging: A 6-year longitudinal study. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2003; 58(2): S74-82.
10. Roley SS, DED JV, Barrows CJ, Susan Brownrigg OTR L, Sava DI, Vibeke Talley OTR L, Kristi Voelkerding BS, COTA L, MOT ES, Pamela Toto MS, Sarah King MOT OT. *Occupational therapy practice framework: Domain & process 2nd edition*. The American journal of occupational therapy. 2008; 62(6): 625.
11. Paillard-Borg S, Wang HX, Winblad B, Fratiglioni L. Pattern of participation in leisure activities among older people in relation to their health conditions and contextual factors: a survey in a Swedish urban area. *Ageing & Society*. 2009; 29(5): 803-21.
12. Carr K, Weir PL, Azar D, Azar NR. Universal design: A step toward successful aging. *Journal of aging research*. 2013; 2013(1): 324624.
13. Park DC, Gutchess AH, Meade ML, Stine-Morrow EA. Improving cognitive function in older adults: Nontraditional approaches. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2007; 62(Special_Issue_1): 45-52.
14. Scarmeas N, Levy G, Tang MX, Manly J, Stern Y. Influence of leisure activity on the incidence of Alzheimer's disease. *Neurology*. 2001; 57(12): 2236-42.

15. Hultsch DF, Hertzog C, Small BJ, Dixon RA. Use it or lose it: engaged lifestyle as a buffer of cognitive decline in aging?. *Psychology and aging*. 1999; 14(2): 245.
16. Pendleton HM, Schultz-Krohn W. *Pedretti's Occupational therapy-e-book: Practice skills for physical dysfunction*. Elsevier Health Sciences; 2017.
17. Kramer AF, Colcombe S. Fitness effects on the cognitive function of older adults: a meta-analytic study—revisited. *Perspectives on Psychological Science*. 2018; 13(2): 213-7.
18. Firozjaian, A. and F. Gholamrezazadeh, Sociological analysis on leisure times in Iranian society (Meta-analysis on present researches)(Meta-analysis on present researches). *Journal of Tourism Planning and Development*, 2013. 1(3): p. 189-209.
19. Rahimi A, Anoosheh M, Ahmadi F, Foroughan M. Tehranian elderly people's experiences about leisure time activities and recreations. *Iranian Journal of Ageing*. 2010; 5(1)
20. Sadat Madah SB, Emami A, Rahgozar M, Foroughan M, Norouzi K, Mohammadi F, Mazaheri M. The Status of Social and Leisure Time Activities in the Elderly Residing in Iran And Sweden. *Iranian Journal Of Ageing [Internet]*. 2008; 3(8): 597-606. Available From: <https://Sid.Ir/Paper/393702/En>
21. Zareei A, Ghorbani Sh. Elderly's Leisure Times. *Iranian Journal Of Ageing [Internet]*. 2007; 2(3): 190-195. Available from: <https://sid.ir/paper/94982/en>
22. Varesi H, Beikmohammadi H, Ghanbarian S. Investigating the Leisure of The Elderly (A Comparative Study of Isfahan's 2nd And 5th Districts). *Geography And Environmental Studies [Internet]*. 2010;1(4):5-14. Available from: <https://sid.ir/paper/186421/en>
23. Jalali R. qqualitative research sampling. *Journal of qualitative research in health sciences*. 2013; 2(4): 310-20.
24. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse education today*. 2004; 24(2): 105-12.
25. Tabrizi M. Qualitative content analysis from the perspective of deductive and inductive approaches. *Social sciences*. 2014; 21(64): 105-38.
26. Khalili M, Mahjal Shoja MA, Esmaili Parapari S, Bateni GR. The role of exercise in old age from the viewpoint of hakim meisari, avicenna, and jorjani. *Medical History[Internet]*. 2011; 4(7): 57-76. Available from: <https://sid.ir/paper/195484/en>
27. Ghanbari A, Mohammadi Shahbolaghi F, Mohammadi M, Vahidi A. Leisure activities and mental health among aging people in tehran, iran. *Elderly Health JournaL[Internet]*. 2015; 1(2): 62-67. Available from: <https://sid.ir/paper/347455/en>
28. Farsi AR, Fathirezaie Z, Zamani H, Abbaspour K. The Examination of Leisure Time Physical Activity Participation Four Model among Iranian Elderly. *Sport Psychology Studies [Internet]*. 2020; 9(33): 37-64. Available from: <https://sid.ir/paper/960321/en>
29. Hakman A, Andrieieva O, Kashuba V, Omelchenko T, Karp I, Danylchenko V, Levinskaya X. Technology of planning and management of leisure activities for working elderly people with a low level of physical activity. *Journal of Physical Education and Sport*. 2019; 19(1): 2159-66.
30. Jung JY, Park SY, Kim JK. The effects of a client-centered leisure activity program on satisfaction, self-esteem, and depression in elderly residents of a long-term care facility. *Journal of physical therapy science*. 2018; 30(1): 73-6.
31. Wang JY, Zhou DH, Li J, Zhang M, Deng J, Tang M, Gao C, Li J, Lian Y, Chen M. Leisure activity and risk of cognitive impairment: the Chongqing aging study. *Neurology*. 2006; 66(6): 911-3.
32. Böhm AW, Mielke GI, da Cruz MF, Ramires VV, Wehrmeister FC. Social support and leisure-time physical activity among the elderly: a population-based study. *Journal of Physical Activity and Health*. 2016; 13(6): 599-605.