

Elderly Sports, Challenges and Solutions

Case Study: Western Provinces of Iran

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Received: June 11, 2016

Accepted: June 26, 2016

Online Published: September 5, 2016

doi:10.5539/res.v8n4p37

URL: <http://dx.doi.org/10.5539/res.v8n4p37>

Abstract

The purpose of this research was to discuss the challenges and solutions regarding elderly sports in western provinces of Iran. The research is survey-descriptive and has conducted as field method. The data population were men and women aged over 60 years in the western provinces of Iran at 2015 that their number is 750,000 people according to statistics taken from official authorities. Among the population the 2,540 people were selected using Morgan table. Sampling method was accessible method. Researcher made questionnaire was used for data collection which contained 30 item in the 5 item Likert scale. The validity of questionnaire confirmed by 11 people of sport management professors. The reliability of the questionnaire was obtained 0.74 using Cronbach's alpha. Descriptive statistics indexes (Mean, standard deviation, and percent) and Chi-squared test were used for analyzing data. Results indicated that lack of sufficient recreational and sports facilities, low levels of education, low levels of income, physical weakness, cultural factors, psychological characteristics, family and proper education play a significant role in enjoyment of sports and leisure. With respect to results, it is recommended to establish sports and recreational sites for development of elderly sports.

Keywords: sports, leisure, elders, challenges, solutions

1. Introduction

According to calculations of global organization of health, during the next fifty years, the elder population of developing countries will be increased up to 9 times. In addition, the elder population will also have a great increase in developed countries as well (Madah, 2010). Sports is a social right for every human. In 2003, the United Nations announced sports as a social right and stated that having an opportunity for participation in sports and physical exercises is a human right and that governments are obliged to provide everyone with the opportunity for sports participation (Tondnevis, 2000).

The purpose of health promotion programs is not merely to improve the quantity of life, but also they are aimed at promotion of qualities of life as well (Min Hat et al., 2014). Nowadays, as a result of increased life expectancy in many countries, the quality of life among elders has become a major challenge in human societies. As people age, they become more susceptible to development of specific diseases. The greatest threat for elders is lack of movement which makes them prone to diseases more than other factors. Elders are considered as one of the most important target societies in the world of sports, however increasing elders' sports participation have been more or less neglected (Li et al., 2011). Physical activities and sports leave several positive effects on our life qualities, health, life expectancy, mental stability and self-confidence (Siberian, 2004).

As the machine life grows and movement poverty prevails and leaves its numerous negative effects, as an element that can compensate this movement poverty, sports has become the center of many attentions (Hekmati et al., 2014). The new welfare movement emphasizes on efficient use of leisure times and its role in physical and mental health as well as prevention of several diseases. According to scholars, this movement requires proper sports activities for obtaining a healthy life and prevention of different diseases and illnesses (Chang et al., 2014). Mc Olly et al. (2005) and Diner et al. (2005) have stressed out that a short period of physical activity improves the life quality of elders and in long periods, it improves the feeling of well-being. Recognition of the way elders pass their significant amounts of leisure time and detecting their recreational and sports activities is the first step

towards a proper recreational and sports planning for them. In addition, it is necessary to carry out a suitable planning in order to fulfill their needs. Some demographic variables including gender, marriage status, housing status and education are considered as factors which might be related to elders' health. Findings resulted from studying elders revealed that there are differences between females and males in every aspect of health (Alipoor, 2008).

Asefzadeh et al. (2010) have concluded that municipalities, governmental organizations and the media should prepare programs for benefiting from abilities and capabilities of elders of the society. Nonetheless, factors such as gender, social and economic status as well as total life status are effective on the amount of an individual's activities (Ahmadi, 2011). Findings have revealed that older families require less expenses for passing their leisure times compared to younger families. In addition, the amount of time spent on active leisure and sports activities reduce as the individual's age exceeds 44 (Dahashti, 2006). Noorbakhsh et al. (2011) have carried out a research and in their research they have stressed out significant differences in factors of participation motivation according to gender, age groups, education levels and career groups. Although that during the past few years, significant steps have been taken towards improvement of sports facilities for women, but still women are challenged in this context and are not supplied with adequate facilities equal to men. This fact leads them to spend their leisure times on watching television, doing hand works, talking, sitting in the allies, listening to music and studying. This is while men mostly spend their leisure times outside the house. Researchers have indicated that more than 90 percent of elders have significant amounts of leisure time and most of them (97%) watch television in their leisure time. In addition 67 percent of these elders take part in sports activities (Afzali, 2006).

Chaman Pira et al. (2015) have stated that performance of physical activities plays a significant role in satisfaction from leisure times among elders. In 20th century, the main challenge was to keep alive, but in 21st century, is to have life with better qualities (Sanaei et al., 2014). Discussing the relation between lifestyle and mental health among elder men and women indicates that having a healthy lifestyle promotes mental health among elders (Anderson et al., 2011). Previous studies in Iran indicate that elders have a relatively low awareness regarding having a healthy lifestyle and its effects on promoting a healthy mind and body. In addition, these people's lack of awareness about methods of having a healthy lifestyle causes them to manifest unhealthy performance towards promotion of a healthy lifestyle (Samadi, 2007). Moschini et al. (2011) have stated that elders' barriers towards participation in sports activities include weak health, lack of a company, lack of interest, lack of sport opportunities and lack of transportation facilities.

Hatton et al. (2009) and Garber et al. (2011) have concluded that activities that can be performed for optimization of elders' sports participation include giving instructions on requirements of exercising and the obtained advantages, improvement of incentives and self-efficacy through supporting health and improvement of supplying activities and reformation of qualities and publicizing the training programs including development of class environments by using experienced coaches in order to assure the security of these elders. Karimi et al. (2011) have concluded that having regular walks in addition to an effective amount of exercise can provide the contexts for improvement of quality of life of elders. On this basis, it is recommended to design systematic physical activities under the surveillance of experienced and aware coaches according to the findings of these researches. Cardenas (2009) and Valenzuela et al. (2009) have counted the limiting factors of participation in sports activities as lack of proper health, fear of injury and lack of facilities. In the current era, the need for sports and physical activities is felt more than ever and also, in developed societies, sports is both considered as an element with effects on health, well-being and mental health and studied as a social phenomenon. In the view of experts, in current societies, sports is considered as a human-training count and is rapidly growing among all classes of the society (Minhatt et al., 2014).

Moran et al. (2014) have carried out a research regarding perception of the relations between physical environment and physical activity among elders and concluded that environmental factors including infrastructures of sidewalks, access to welfare facilities and environmental conditions can be effective in elders' physical activates. Ramezanejad et al. (2010) have stated that among elders (over 60 years), the motivation of enjoyment, health and physical preparedness and social interactions are considered as the highest motivations for sports participation. Richard et al. (2008) have also signified illnesses and physical weaknesses as restraining factors for physical activities. Other researchers have also divided these restraining factors in two personal and environmental groups. The most important environmental restraining factors included high expenses of sports programs, lack of awareness about the existing sports facilities, lack of sports knowledge, lack of energy, lack of motivation, laziness, and lack of interest, lack of time and difficulties of performance. Having regular physical activities is caused by mental-social and environmental factors (Santos et al., 2012).

In addition, efforts towards institutionalization of the culture of sports can lead to improvement of elders' health and their lifestyle through promotion of leisure times (Anooshe et al., 2011). The researcher in this study is after recognition of challenges faced by planning for elders' sports activities, discussing their current problems for participation in sports activities and investigation of the current situation and ultimately, providing suitable solutions for development of recreational sports among elders. Nevertheless, organizations including municipalities, organizations of sports and youth, the organization of welfare and other organizations which are somehow related to elders, their welfare and health can consider the results of this research as a basis for their future plans. One of the main questions of this research is that what the challenges for development of elders' sports are and what the solutions are for overcoming these challenges and barriers?

2. Materials and Methods

The research is survey-descriptive and has conducted as field method. The data population were men and women aged over 60 years in the western provinces of Iran at 2015 that their number is 750,000 people according to statistics taken from official authorities. Among the population the 2540 people were selected using Morgan table. Sampling method was accessible method. Researcher made questionnaire was used for data collection which contained 30 item in the 5 item Likert scale. The validity of questionnaire confirmed by 11 people of sport management professors. The reliability of the questionnaire was obtained 0.74 using Cronbach's alpha. Descriptive statistics indexes (Mean, standard deviation, and percent) and Chi-squared test were used for analyzing data.

3. Results

Table 1 indicates the elders' leisure activities.

Table 1. Description of elders' recreational and leisure activities

Questions	Standard Deviation	Average	Rank
Watching television and listening to radio	1.51	3.61	1
Performance of religious practices	0.59	3.45	2
Talking with friends	1.22	3.26	3
Walking and sitting	1.77	2.81	4
Playing and exercising	0.03	1.2	12

Results of Table 1 indicate that with respective average and standard deviation if 3.61+-1.15, listening to radio and watching television is in the first rank. In addition, with an average and standard deviation of 3.45+-0.59, performance of religious practices is in the second rank. Talking with friends with average and standard deviation of 1.22+-3.26 is in the third rank and walking and sitting with a standard deviation and average of 2.81+-1.77 is in the fourth rank and finally, playing and exercising is in fifth rank.

Table 2 indicates the variables if sports activities.

Table 2. Variables of sports activities

Variables of Sports Activities	Abundance
Performance of sports activities	32.3
Training in presence of a coach	14.5
Wearing sports outfits	17.2
Existence of sports facilities in the immediate neighborhood	11.0
Type of exercising (singularly)	15.9
Time of exercising (early morning)	9.1

Table 2 indicates that among the respondents, 32.3% exercise 14.5% do their exercises with presence of a coach, 17.2% of respondents use sports shoes and outfits while exercising, 11% of the respondents think it is necessary

to have sports equipment specific to elders, 15.9 percent exercise singularly and 9.1 percent of them also practice in the early morning.

Table 3 indicates the relation between elders' sports activities and other variables.

Table 3. Results of the Chi-squared test

Independent Variable	Dependent Variable	Chi- Square Value	Freedom Degree	Sig
Elders' life quality	exercising	28.43	5	0.00
Access to sports facilities	exercising	25.34	7	0.00
Satisfaction from leisure activities	Type of sport activity	61.12	15	0.00
Satisfaction from life quality	exercising	26.76	7	0.00

The results of Table 3 indicate that there is a significant relation between elders' life quality, access to sports facilities and satisfaction of life quality and exercising. There also exists a significant relation between elders' satisfaction from their leisure time and their type of sports activity.

4. Discussion and Conclusions

Results indicated that there is a significant and meaningful relation between access to sports facilities and exercising among elders. These results are consistent with results obtained by Sallies (1999), Dorgan et al. (2003), Richard et al. (2008), Cardenas et al. (2009), Madah and Imami (2009), Madah (2010) and Chaman Pira (2015).

In addition, Cardenas et al. (2009) and Richard et al. (2008) have also pointed out the significance of existence of sports facilities for attracting elders towards sports participation. In addition, two important economic factors including lack of money and facilities are recognized as major barriers of sports participation (Journal of analysis of elderly issues in Iran, 2008). One of the main public ways for prevention and even treatment of inabilities caused by age is to develop sports facilities for elders and also to persuade elders towards having physical activities suitable for their age. This practice is seriously followed up in developed and advanced countries.

There was a significant relation discovered between elders' life quality satisfaction and exercising. These results are consistent with the results obtained by Necho (2006), Valenzula et al. (2009), Placious et al. (2011), Ziapoor (2013), Asef et al. (2010), Ahmadi et al. (2011) and Sanaei et al. (2014). Currently, human societies are moving towards an era in their life which is termed as leisure civilization. The new organization of welfare has emphasized on using leisure times and their effects on mental and physical health of individuals. People who do not have any control over their life-style will face agonizing diseases and early death (Hamidi & Ahmadi, 2009).

Several researches have shown that an individual's bewilderment in his or her leisure time, especially in environments filled with stressful factors will cause several crises in personal and career lives. It has also been turned out that spending time on healthy recreational activities, especially sports activities has several positive and advantageous effects (Safania, 2002). Feeling satisfied is a main feature of leisure. Seeking an activity for spending our leisure time is highly important that if the person's satisfaction is not realized, it will be senseless (Bahram, 2002).

Leisure times are not restricted to a certain age or gender and every individual requires some time for leisure in their daily lives (Rasooli et al., 2013). Therefore, providing a suitable condition for more activity which on the one hand amuses elders and fills their leisure time and on the other hand, fulfills their need for movement is one of the most important measures which should exist in elders' leisure planning. No only exercising is accompanied with several physiological benefits, but also it has several other beneficial advantages among which it can be referred to improved self-confidence, mental happiness, making contact with others, prevention from shyness and etc.

A significant and meaningful relation was detected between elders' life satisfaction and exercising. These results are consistent with the results obtained by Borzoo et al. (2012), Kargar et al. (2013), Badri et al. (2014), Hojjati et al. (2015), Rijsky et al. (2008), Mayor Jam et al. (2010), Hodakava et al. (2011) and Rion Sung and Ran Sung (2014).

Although that in the view of elders from different countries, cultural differences are considered as main causes of differences in different aspects of life, but by controlling the status of health and age, the role of these cultural factors loses its strength. In other words, although that several researches have pointed out the direct role of health status on life quality, it should be mentioned that health status affects elders' perception of the importance that they give to different aspects of life quality. In this regard, as an elder's health status is improved, he or she will have a better understanding of the issue of life quality and its different aspects (Mulzan et al., 2014). Relative improvement of life quality and improving social welfare will provide the contexts for thinking and finding better solutions for wellbeing (Tondnevis, 2003).

Life quality is considered as a main index and since it embraces several aspects such as physiological dimensions, performance and the being of the person; it is highly important to pay attention to it (Killer et al., 2010). Results of previous studies indicate that as mature people gain more awareness regarding the importance of physical preparedness, they put more efforts towards realizing it. Currently, with respect to a plenty of worthy and beneficial information, mankind has realized that a healthy lifestyle is definitely the key to success and having regular exercises is considered as a necessity for having a healthy life (Richard et al., 2008).

In addition, efforts towards institutionalization of culture of exercising can lead to improvement of health and lifestyle of elders through promotion of elders' leisure times. Findings of this research have shown that recreational and leisure exercises play a significant role in satisfaction of elders from leisure times and their life. Also light and recreational sports should be taken into account. Therefore, authorities should take steps towards development of elderly sports through establishment of sports facilities in order to witness the flourishing of elderly sports in west of Iran.

References

- Afzali, H. (2007). Social mobilization for health promotion Seniors Complex in Tehran neighborhood. *Wise publications*, 9(4), 1-6.
- Ahmed, A. A. M., & Foroughan, P. A. (2011). Tehran nursing experience in the field of leisure and recreation, senior. *Senior Journal*, 5(15), 61-77.
- Ali Pour, F., Sajjad, H. F. A., Biglarian, A., & Galileans, A. S. (2009). Quality of life of elderly Region 2 Tehran. *Journal of Ageing*, 9(10), 75.
- Ampofo, K., Yen, M., & Barnabas, V. (2003). The influence of demographic variables on factors that constrain recreational sport participation in Malaysia. *Annals of leisure research*, 6(4), 362-372. <http://dx.doi.org/10.1080/11745398.2003.10600932>
- Asefzadeh, S. A., Qdvsyan, E., & Najafipour, B. (2010). Qazvin status of the elderly in terms of leisure and interfering with the ability of 2009. *The Journal of Qazvin University of Medical Sciences*, 2, 85-88.
- B. S., Aristotle, P. A., Ghasem Zadeh, R., Zahid Race, N., Habibi, A. S. A., & Tender, S. A. D. (2012). The effect of aerobic exercise on quality of life of the elderly living in nursing homes in Ahvaz city. *Elder (Senior Journal)*, 6(1), 47-57.
- Badriazarin. (2014). Compare the quality of life of the elderly, athletes and non-athletes in Tabriz. *Elder (Senior Journal)*, 30, 74-82.
- Bhramfr, D. (2002). *Study on leisure time female students of Islamic University of Tehran with an emphasis on exercise* (Master's thesis). Islamic Azad University, Central Tehran Branch.
- Breyer, I. S. et al. (2014). Physical problems, psychological and social risk factors in the elderly and its relationship with the city of Zahedan in 2012. *The monthly grace*, 17(3), 313.
- Cardenas, D., Henderson, K. A., & Wilson, B. E. (2009). Physical activity and senior games participation. *Journal of aging and physical activity*, 17, 135-153.
- Chang, P. J., Wray, L., & Lin, Y. (2014). Social Relationships, Leisure Activity, and Health in Older Adults. *Health Psychology*, 33(6), 516-523. <http://dx.doi.org/10.1037/hea0000051>
- Chow, H. (2006). *The relationship between physical active leisure activities and health for adults age fifty and older*. The Pennsylvania State University.
- Davati, A. S. et al. (2005). Retirement benefit from special services leisure in Tehran. *Journal of Social Welfare*, 4(15), 123-138.
- Diener, E. (2005). Physical activity enhances long-term quality of life in older adults: Efficacy, esteem and affective influences. *Ann Behav Med*, OCT, 138-145.

- Gautam, R. (2007). *Leisure and religious activity participation and mental health: Gender analysis of older adults in Nepal*.
- Ghanbarian, N., Heir, C., & Beikmohammadi, H. (2012). Evaluation of site selection leisure seniors with emphasis on the individual (study of regions 3 and 5). *Journal of Geography and Environmental Planning*, 22(42), 170-159.
- Grass Pira, M., Farahani, M., & Jalali Farahani, M. (2015). Check recreation and physical activity for the elderly with an emphasis on fitness devices. *Tehran Municipality in 2011*, 9(3), 179.
- Haji Ibrahim, D. H., Kandahar, A. S., Charkazi, A. S., Mirnejad, M., & Behnampour, N. (2015). Economic variables-social and life satisfaction in Gorgan city in years 83 and 88. *Elder (Senior Journal)*, 9(3), 168.
- Hamidizadeh, S., & Ahmadi, F. (2009). Effect of group exercise program on quality of life in the years of 2007-2008. *University of Medical Sciences and Health Services Yazd*, 16(1), 81-86.
- Hudakova, A., & Hornakova, A. (2011). Mobility and quality of life in elderly and geriatric Patients. *International Journal of Nursing and Midwifer*, 3(7), 81-85.
- Hutton, L. F. et al. (2009). The perceptions of physical activity in an elderly population at risk of falling: A focus group study. *NZ Journal of Physiotherapy*, 37(2).
- Janke, M. C., Nimrod, G., & Kleiber, D. A. (2008). Leisure Patterns and Health Among Recently Widowed Adults. *Activities, Adaptation & Aging*, 32(1). <http://dx.doi.org/10.1080/01924780802039238>
- KARGARFARD, M., Fayaz Clement, D., & Alaei, N. (2013). The impact of an eight-week aquatic exercise program on quality of life in elderly women over 65 years. *Iranian Journal of Obstetrics Gynecology and Infertility*, 15(19), 1.
- Karimi Torghabeh, A. E. M. et al. (2011). Walk on the effectiveness of psychosocial functioning quality of life of elderly. *Aging (aging of Iran)*, 18, 21-30.
- Keeler, M., Jack, M., & Tian, H. (2010). The Impact of Functional Status on Life Expectancy in Older Persons. *J Gerontol A Biol Sci Med Sci*, 65(7), 727-733. <http://dx.doi.org/10.1093/gerona/glq029>
- Kerr, J., Marshall, S., Godbole, S., Neukam, S., Crist, K., Wasilenko, K., ... Buchner, D. (2012). The Relationship between Outdoor Activity and Health in Older Adults Using GPS. *International Journal of Environmental Research and Public Health*, 9, 4615-4625. <http://dx.doi.org/10.3390/ijerph9124615>
- Leopold Busse, L., Gil, G., Santarém, G., & Filho, W. G. (2009). Physical activity and cognition in the elderly. *Journal of Dementia & Neuropsychologia*, 3(3), 204-208.
- Leung, G., Leung, K., & Lam, L. (2011). Classification of Late-life Leisure Activities among Elderly Chinese in Hong Kong. *East Asian Arch Psychiatry*, 21, 123-127.
- Macoly, N. (2005). The contribution of socio-demographic and psychosocial factors to life satisfaction. *Aging and Society*, 21(1), 25-43.
- Marques, A., Martins, J., Sarmiento, H., Ramos, M., Diniz, J., & Carreiro da Costa, F. (2015). Socio-demographic correlates of leisure time physical activity among Portuguese adults. *Cad. Saúde Pública, Rio de Janeiro*, 31(5), 1061-1070.
- Mathiew, I. (2008). *Happiness and humor group promotes life satisfaction for senior center participation*.
- Minhat, H. S., Mohd Amin, R., & Shamsuddin, K. (2014). Determinants of Leisure Participation among the Malay Ethnic Elderly in Malaysia. *Middle-East Journal of Scientific Research*, 21(9), 1442-1447.
- Mirjam, A. G., Sprangers, J. A., & Sloan, A. B. (2010). Scientific imperatives, clinical implications, and theoretical underpinnings for the investigation of the relationship between genetic variables and patient-reported quality-of-life outcomes. *Journal of Qual Life Res*, 12, 134-141.
- Molzahn, A., Kalfoss, M., Makaroff, S., & Skevington, S. M. (2011). Comparing the importance of different aspects of quality of life to older adults across diverse cultures. *Age and Ageing*, 40(2), 192-199. <http://dx.doi.org/10.1093/ageing/afq156>
- Moran, M., Van Cauwenberg, J., Hercky-Linnewiel, R., Cerin, E., Deforche, B., & Plaut, P. (2014). Understanding the relationships between the physical environment and physical activity in older adults: A systematic review of qualitative studies. *International Journal of Behavioral Nutrition and Physical Activity*, 11, 79. <http://dx.doi.org/10.1186/1479-5868-11-79>

- Moschny, A., Platen, P., Klaaßen-Mielke, R., Trampisch, U., & Hinrichs, T. (2011). Barriers to physical activity in older adults in Germany: A cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity*, 8, 121. <http://dx.doi.org/10.1186/1479-5868-8-121>
- Mourning, S. A. B. (2010). STATUS OF SOCIAL AND LEISURE TIME in the Iranian elderly and Sweden. *The elderly (Senior Journal)*, 3(8), 597-606.
- Mourning, S. A. B., & Imam, A. (2009). The social activities and leisure activities in the Iranian elderly and Sweden. *Elder (Senior Journal)*, 3(8), 62-71.
- Noorbakhsh, M., Farokhi, A., Khakpoor, S. A., & Farahani, E. (2011). Comparing men and women in Tehran incentives to participate in physical activity. *Journal of Motor Learning*, 5, 49.
- Palacios-Ceña, D., Alonso-Blanco, C., Jiménez-García, R., Hernández-Barrera, V., Carrasco-Garrido, P., Pileño-Martínez, E., & Fernández-de-las-Peñas, C. (2011). Time trends in leisure time physical activity and physical fitness in elderly people: 20 year follow-up of the Spanish population national health survey (1987-2006). *BMC Public Health*, 11, 799. <http://dx.doi.org/10.1186/1471-2458-11-799>
- PD, A. D. (2006). *Study on leisure activities with an emphasis on exercise Qom University* (Master's thesis). Islamic Azad University, Tehran Branch of Tehran.
- Pour wisdom, N. et al. (2014). The impact of regular exercise on depression in the elderly. *Journal of Health Education and Health Promotion*, 3, 23.
- Proceedings in Iran to investigate the issues of the elderly.* (2008). 978-600-5010-50.
- Proof, H., Pour wisdom, M., Farhad, S., Sharifnia, Q. H. M., Small, F., & Myrabvalhsny, D. (2015). Examine the effects of regular exercise on self-esteem and life satisfaction city of Gorgan and Gonbad in 2010. *Journal of Geriatric Nursing*, 1(1), 75.
- Radial, F. et al. (2014). Explaining the health of the elderly: A model of demographic. *Aging (aging of Iran)*, 8(29), 60-69.
- Rahimi, A., Anoosheh, M., President, F., & Blaze, D. (2011). Tehran's nursing experience leisure and recreation. *Aging (aging of Iran)*, 5(15), 77-61.
- Ramezanejad, G. et al. (2010). Compare the everyday motivation to participate in various sporting activities among different groups of Shiraz. *Sport Science Research*, 5(9), 71-86.
- Rasouli, S. A. M., Morsel, B., Stenographer, F., Sacred, C., & Ismaili, M. (2013). How Tehrani of older people in sport-recreational leisure. In *The first national conference on applied research in public health and sustainable development* (p. 145).
- Rejeski, W. J., King, A. C., Katula, J. A., Kritchevsky, S., Miller, M. E., Walkup, M. P., ... Pahor, M. (2008). Physical activity in pre-frail older adults: Confidence and satisfaction related to physical function. *J Gerontol B Psychol Sci Soc Sci*, 63(1), 19-26. <http://dx.doi.org/10.1093/geronb/63.1.P19>
- Richard, E. (2008, January). *The Relationship of Environmental, Social and Individual Factors and Physical Activity Participation Level in Young Adults*.
- Saberian, D. (2004). *Evaluating the economic, social, health and leisure time residents in urban areas covered by the department in 2002* (Vol. 4, No. 3-4, pp. 129-136).
- SamadI, S., Bayat, A., Taheri, M., Joneid, B., & Rooz-Bahani, N. (2007). Knowledge, Attitude and Practice of Elderly Towards Lifestyle During Aging (Letter to Editor). *The Journal of Qazvin University of medical Sciences*.
- Sanaee, M., Zdshtyan, N., & Seyyed Hossein Norouzi, B. (2014). The effect of physical activity on quality of life and life expectancy in the elderly Mazandaran province. *Journal of Sport Management Studies*, 17, 137-158.
- Santos, R. V. T. et al. (2012). Moderate exercise training modulates cytokine profile and sleep in elderly people. *Cytokine*, 60, 731-735. <http://dx.doi.org/10.1016/j.cyto.2012.07.028>
- Sasidharan, V. (2006). Older adults' physical activity participation and perceptions of wellbeing: Examining the role of social support for leisure. *Managing Leisure*, 11(3), 164-185. <http://dx.doi.org/10.1080/13606710600715242>
- Schoenborn, C. A., & Brnes, P. M. (2002). Leisure time physical activity among adults: United States 1997-1998 (p. 325). Hyattsville, Maryland: national center for health statistics.

- Sfanya, A. S. (2002). Leisure time female students of Islamic Azad University with an emphasis on exercise. *Moving Journal*, 9, 127-140.
- Shorthand, P. (2003). Place of leisure time people in Iran. *Research in Sport Science*, 1(4), 115-133.
- Song, M. R., & Song, L. R. (2014). Analysis of Quality of Life among Middle Aged and Elderly Women Participating in Health Dance Exercise. *International Journal of Bio-Science and Bio-Technology*, 6(3), 163-168. <http://dx.doi.org/10.14257/ijbsbt.2014.6.3.19>
- Tornine, E. (2007). *The relationship between leisure and life satisfaction: Application of activity and need theory*.
- Valenzuela, A. V., & Juan, R. F. (2009). Elder people and their motives to join in leisure time physical activity. *Revista Mexicana De Psicología*, 26(1), 61-69.
- Wan, M., & Wong, R. Y. (2014). Benefits of Exercise in the elderly. *CGS Journal of CME Journal*, 1, 4.
- Warsi, E. G. et al. (2011). Review of leisure seniors (A Comparative Study of Region 3 and 5). *Journal of Geography and Environmental Studies*, 2, 5-10.
- Wikstrom, I., Book, C., & Jacobson, L. T. H. (2006). Difficulties in performing leisure activities among persons with newly diagnosed rheumatoid arthritis: A prospective, controlled study. *Rheumatology (Oxford)*, 45, 1162-1166. <http://dx.doi.org/10.1093/rheumatology/kei080>
- Xo, Q., Anderson, D., & Country, M. (2011). A longitudinal study of the relationship between lifestyle and mental health among midlife and older women in Australia. *Health Care for Women International*, 13(12), 1082-1096.
- Zamanzadeh, E. (2009). Tmrynalt effects of physical exercise on quality of life in hemodialysis patients. *Journal of Tabriz University of Medical Sciences*, 51-55.
- Zarei, A. S. et al. (2008). Qazvin city leisure needs of the elderly. *Aging (aging of Iran)*, 2(3), 190-195.
- Ziapour, A. (2013). Survey of elderly leisure and its social factors. *European Online Journal of Natural and Social Science*, 2(4), 669-676.

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