



Analysis of Life Satisfaction of the Elderly based on Sports Activities

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Abstract

Most elderly people in Indonesia experience physical and psychological health problems, with the percentage of those who are sick around 48.14%. Health problems, low income, and difficulties in daily activities are some of the factors that can influence their life satisfaction. The aim of this research is to analyze the life satisfaction of elderly people based on the sports activities they participate in, namely gateball, golf, gymnastics, fitness activities, and tennis. The research method used by researchers is the explanatory survey or descriptive survey method. An explanatory survey is a type of survey that is useful in comparing variables by testing hypotheses and samples obtained from a population. The subjects and locations that will be studied by researchers are the sports community of elderly people in the city of Bandung. As many as 74 respondents are active members of the sports community of elderly people in Bandung City. The results of the analysis show that there are differences in parents' life satisfaction based on the sport they do. The average score of respondents who played golf showed the highest life satisfaction. then tennis, aerobics, fitness sports, and gateball. Physical activity for older people is good for health and quality of life; therefore, exercise programs for older adults should focus on maintaining functional capacity and quality of life with lower intensity, frequency, and duration.



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INTRODUCTION

Seniors around the world do physical activity every day to stay healthy. Research shows that physically active seniors benefit from maintaining physical health with lower cardiovascular disease, better physical and cognitive function, better mental health, and lower depression (Manini & Pahor, 2009). WHO (2017) recommends at least 150 minutes of moderate or 75 minutes of vigorous aerobic physical activity for individuals aged 65 years and over (or an equivalent combination). Negara (2019) recommends sports activities three times a week to keep the body's physiology developing well.

Sports for the elderly consist of daily living activities, interests or hobbies, and life routines that they must fulfill every day. Living actively involves walking to the supermarket, walking up and down stairs, washing a few small items of clothing instead of using the washing machine, as well as cooking food. For older adults, it can also include dressing and bathing, brushing teeth, combing hair, and eating rather than being fed by someone else (Taylor, 2021). There are several differences in lifestyle among the elderly. This ultimately eliminates activities that require physical activity, thereby leading to a progressive sedentary lifestyle. Therefore, it is necessary to stimulate physical movement to combat laziness by involving individuals in more light physical activity (Lobo, 2010).

Exercises are generally divided into four main groups: flexibility exercises include stretching as much as can be done without assistance to increase the range of motion in muscles and joints, tilting the head, bending at the waist, rotating the ankles or wrists, making circles using the hands, feet, hips, and others (O'connor et al., 2006). Older adults are advised to engage in flexibility and strength training for a minimum of two sessions a week

(Muchiri et al., 2018). Aerobic exercise includes cycling, swimming, walking, rowing, hiking, or playing tennis. It focuses on improving cardiovascular endurance. Regular participation in physical activities that involve rhythmic movements of large muscles has the potential to improve aerobic fitness. In contrast, anaerobic exercise consists of activities that require high energy consumption. Therefore, it is not recommended for older people unless carefully considered (Biller, 2002). Exercises for balance help maintain body balance, thereby increasing independence and self-confidence. Walking activities allow a person to maintain good balance, namely standing without using hands, standing on one leg, lifting the heel, and standing against a wall as close as possible (Navarro-Patón et al., 2016).

Elderly people in Indonesia experience health complaints, both physical and psychological, with the percentage experiencing illness around 48.14% (Lestari, 2020). Various factors influence the life satisfaction of the elderly, Karataş & Duyan (2008) found that health problems, low income, and difficulties in daily activities can have a significant impact on life satisfaction. Riddick (1985) identified recreational activities, income, health problems, and employment status as key determinants, and transportation barriers are particularly relevant for older women. Abu-Bader et al (2003) highlighted the importance of physical health, emotional balance, social support, and locus of control in predicting life satisfaction. further emphasized the role of employment status and social support, and social support mediates the effect of volunteer positions on life satisfaction. These findings underscore the complex interaction between physical, emotional, and social factors in shaping the life satisfaction of older adults. Elderly life satisfaction is also influenced by social

support, cognitive abilities, and health status (Khodabakhsh, 2021). Depression, lack of stimulation from developmental tasks, religious beliefs, and satisfaction with life achievements are also key factors (Marliana et al., 2022). Physical activity has been proven to reduce the risk of depression and improve the quality of life (Nuryadi et al., 2015; Prabandari et al., 2020). Apart from that, positive thinking and self-acceptance play an important role in the life satisfaction of elderly people in nursing homes (Indarwati et al., 2021).

METHODS

The research method used by researchers is the explanatory survey or descriptive survey method. An explanatory survey is a type of survey that is useful in comparing variables by testing hypotheses and samples obtained from a population. Researchers used a research design to obtain answers to whether there were differences in the life satisfaction of elderly people based on the sports activities they participated in.

Participants

The subject and location that will be studied by researchers is the elderly community sports community in the city of Bandung. As many as 74 respondents are active members of the elderly community sports community in Bandung City. All respondents are divided into several sports activities, namely gateball, golf, gymnastics, fitness sports activities, and tennis courts.

Material and Apparatus

The research instrument used in this research is the Basic Needs Satisfaction in Sport Scale questionnaire. There are five indicators to measure the life satisfaction of the elderly, namely (a) competence; (b) choice; (c) internal perceived locus of causality; (d) volition; and (e) relatedness. The five indicators have validity coefficients with values of (a) competence 0.77; (b) choice 0.85; (c) internal perceived locus of causality 0.76; (d) volition 0.61; and (e) relatedness 0.77 (Ng et al., 2011). Then the basic need satisfaction in sport scale questionnaire was retested for language validity through theoretical validity and face validity, with a suitability value of 0.90 indicating that the criteria were very valid and usable.

Data Analysis

The data analysis was processed using SPSS 23 software. The analysis was carried out using the Anova test, where the author intended to see the respondents' life satisfaction based on the sports category they participated in.

RESULT

The data analysis was processed using SPSS 23 software. The analysis was carried out using the Anova test, where the author intended to see the respondents' life satisfaction based on the sports category they participated in.

Table 1. Demographic Data on Life Satisfaction Based on Sports Activities

Life Satisfaction	Research Group	Nilai Mean & St.Dev
	Golf	$\pi = 128.5$ $\sigma = 10.45$
	Gateball	$\pi = 110.9$ $\sigma = 6.70$
	Aerobics	$\pi = 115$ $\sigma = 13.71$
	Fitness sport	$\pi = 114.1$ $\sigma = 9.27$
	Tennis	$\pi = 117.8$ $\sigma = 10.15$

Based on Table 1, it can be seen that the average scores are for the golf group, gateball group, Aerobics, fitness sport, and field tennis group. Life satisfaction (BNSS) in the golf group obtained an average value ($\pi = 128.5$) with a standard deviation ($\sigma = 1.45$), the gateball group obtained an average value ($\pi = 110.9$) with a standard deviation ($\sigma = 6.70$), and the

gymnastics group obtained an average value ($\pi = 115$). with a standard deviation ($\sigma = 13.71$), the fit Muhajirin group obtained an average value ($\pi = 114.1$) with a standard deviation ($\sigma = 9.27$), and the field tennis group obtained an average value ($\pi = 117.8$) with a standard deviation ($\sigma = 10.15$).

Table 2. Life Satisfaction Normality Test

Kolmogorov Smirnov			
No.	Research Group	Value sig.	Category
1.	Golf	0.20	Normal
2.	Gateball	0.16	Normal
3.	Aerobics	0.20	Normal
4.	fitness sport	0.20	Normal
5.	Tennis	0.20	Normal

Table 2 shows the normality test for life satisfaction. Based on the Kolmogorov Smirnov test, it is known that the life satisfaction data for the golf group is normally distributed because the sig value is $0.20 > \alpha = 0.05$; the gateball group is also normally distributed because the sig value is $0.16 > \alpha = 0.05$; the fitness exercise group has a normal distribution because the sig value is 0.20; the aerobics has a normal distribution because the sig value is $0.20 > \alpha = 0.05$; and the tennis group has a

normal distribution because the sig value is $0.20 > \alpha = 0.05$. = $0.20 > \alpha = 0.05$, the gateball group is also normally distributed because the sig value. = $0.16 > \alpha = 0.05$, the fitness exercise group has a normal distribution because of the sig value. = 0.20, the fitness sport has a normal distribution because of the sig value. = $0.20 > \alpha = 0.05$ and the tennis group has a normal distribution because of the sig value. = $0.20 > \alpha = 0.05$.

Table 3. Anova Test Results for Life Satisfaction Based on Sports Activities

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2653.618	4	663.404	6.576	.000
Within Groups	6960.923	69	100.883		
Total	9614.541	73			

Based on table 3, the sig value of life satisfaction (BNSS) is $0.000 < 0.05$, meaning that there are differences in the life satisfaction of the elderly based on the sports activities they do. Looking at the average value of respondents who take part in golf sports activities, they have the highest life satisfaction. then tennis, aerobics, fitness and health sports activities, and gateball.

DISCUSSION

The results of the analysis show that there are differences in the life satisfaction of the elderly based on the sports activities they do, looking at the average score of respondents who take part in golf sports activities as having the highest life satisfaction. then tennis, aerobics, fitness and health sports activities, and gateball.

Being involved in sports, whether as a spectator or participant, has always been associated with higher life satisfaction. Inoue et al (2017) found that live viewing and team identification were positively associated with life satisfaction, while Huang & Humphreys Huang & Humphreys (2010) reported that access to sports facilities was associated with increased participation in physical activity and higher life satisfaction. However, Ivantchev & Stoyanova (2019) did not find significant differences in general life satisfaction between athletes and non-athletes, although athletes were more satisfied with their health, relationships, and performance. Kuśnierz et al (2020) also found that martial arts practitioners and team sport players had higher life satisfaction than the general population, with health behavior and marital status being significant determining factors.

Research shows that the following factors influence the subjective well-being of elderly people: employment status, level of religiosity, health conditions, location of residence, and household assets (Nisa'i, 2017). Religion, whether as an external, internal manifestation, or submission, can also influence the psychological well-being of parents (Madanih, 2020). Additionally, additional research shows that family appreciation and support can influence older adults' quality of life and satisfaction (Rekawati et al., 2020). Regular exercise has many benefits for older adults, including improved cardiovascular function, strength, and muscle mass, as well as a reduced risk of falls and fractures (Butler et al., 1998). It can also lead to improved respiratory function, reduced body fat, and increased lean body mass (Lampman, 1987). Exercise has been shown to improve functional status, longevity, and health care costs for older adults and can be used to prevent, treat, or alleviate chronic conditions such as heart disease, diabetes,

and depression (Benton, 2015). In addition, it can increase mobility, prevent muscle weakness, and improve gait and balance, resulting in greater independence in daily life (Barry et al., 1993). Sports activities also have a significant impact on the development of life skills, which play an important role in daily life, such as social skills, problem solving, and time management (Gumilar, 2024). Research shows that a variety of sports and exercises are suitable for older adults, with an emphasis on improving physical fitness, motor skills, well-being, and mobility (Meusel, 1986). Exercise programs for the elderly should focus on maintaining functional capacity and quality of life, with lower intensity and higher frequency and duration (Pollock et al., 1994). Older athletes may require additional recovery time and cross-training to prevent injury (Foster et al., 2007). The frequency and intensity of exercise training for the elderly can vary, with higher frequencies potentially causing greater increases in endurance (Kh & Shephard, 1978).

Low-intensity physical activity, such as low-limit exercise programs, can significantly improve the quality of life and health of older adults (Burke & Jones, 2023; Kuska et al., 2023). These programs, which can be organized by sports clubs or senior associations, should focus on lowering participation thresholds and increasing sustainability (Ericson & Geidne, 2023). However, exercise frequency may also play a role, with lower-intensity exercise potentially causing more negative emotions and stress (Huan et al., 2021). Therefore, a balance between low-intensity physical activity and regular exercise may be most suitable for older adults.

CONCLUSION

Sports activities for the elderly are very good for health and quality of life.

Exercise programs must focus on maintaining functional capacity and quality of life with lower intensity and higher frequency and duration. The results of the research in this article recommend that sports activities have a positive impact on the life satisfaction of the elderly. Golf is the activity that has the highest impact on the life satisfaction of the elderly among the four other sports activities, namely tennis, gateball, aerobics, and fitness sport activities. This further convinces us that sport has a very important role in maintaining the quality of life of the elderly.

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