



Healthy Aging and Happiness in the Korean Elderly Based upon Leisure Activity Type

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Abstract

Background: Leisure activities contribute to a healthy retirement and increase the life satisfaction of the elderly, who may suffer from a stronger sense of emotional isolation, depression, and loneliness.

Methods: A total of 397 elderly Koreans aged 65 and over participated in this study on the differences in healthy aging and happiness depending on type of leisure activity (i.e., active, passive, and social activities). A cross-sectional survey design with a purposive sampling method to collect data were employed. SPSS 23.0 was used to conduct descriptive statistics analysis, reliability analysis, validity analysis, and one-way MANOVA.

Results: In terms of social health, the passive leisure participants had relatively lower mean scores than the other two groups. For the physical health factor, the active leisure participants had higher mean scores. There were no statistically significant differences in the levels of psychological health and happiness with life for the elderly participating in the active, passive, and social leisure activities. This study found that only active leisure activities help the elderly to enjoy their old age by increasing their physical health, indicating that the dissatisfaction and unhappiness incurred with the natural aging process can only be offset by a physical lifestyle. Furthermore, passive leisure activities that are enjoyed alone may impede a socially-healthy aging process.

Conclusion: While all forms of leisure activity can provide emotional stability, active leisure activity was deemed the most important in this study, as it helped resolve the most significant hurdle to maintaining health.

Keywords: Healthy aging; Leisure; Happiness; South Korea

Introduction

The world's elderly population is aging rapidly due to an increased aged population (1) and a higher quality of medical services (2). The average age of the world's population in 2019 is predicted to be 42.1 years and expected to be 46.7 years in 2030, and it will possibly surpass 50 years in 2040 (3). While the global population is swiftly aging, the current radically-changing labor market structure has decreased jobs and roles for the elderly (4). As such, elderly individuals are more likely to

experience alienation, depression, or lethargy toward life than other groups (5), because they are deprived of life's primary means of social activity. The issue of good physical and mental health due to the deterioration of physical functions as a natural progression of human life is also an important issue for the elderly (6).

The United Nations (UN) defines a society as "aging" if 7% of its population is over 65, "aged" if the percentage of 65-year-olds surpasses 14%,

and “super-aged” when 20% or more of a population is 65 or older (7). Based on these criteria, the portion of the population aged more than 65 years in Korea is already over 14%, meaning the country has attained “aged society” status. Under this circumstance, research efforts to analyze the physical, psychological, and social benefits thereof continue. Shin and You (8) analyzed the types of leisure activities and level of satisfaction and classified them as active, passive, and social.

The current study therefore represents a meaningful research effort and contribution to the healthy lives of the elderly. Accordingly, the current study addresses the following research question: What are the differences in healthy aging and happiness depending on type of leisure activity (i.e., active, passive, and social activities) in Korea’s elderly population?

Aging better

Rowe and Kahn (9) first proposed the concept of *successful aging* in 1987, and interest in the topic has since grown. Successful aging refers to spending effective and meaningful time through individual efforts and environmental controls while aging (10). Another concept for better aging is healthy aging (11). This term refers to physical and psychological health during old age (12) and engaging in active social interaction with a close group of acquaintances (13). Similar to the successful aging, physical health is also an important aspect of healthy aging (12) as it permits active participation in leisure activities with good mental health, indicating that diseases in the elderly are possible significant hurdles to healthy aging (14). Although successful aging and healthy aging are distinct, there is a common argument that aging should be recognized through many interpretive lenses.

Nevertheless, there is a difference between healthy and successful aging. First, the elderly’s participation in active and productive activities without disease or disability is considered as successful aging (15). This typically means an elderly person engages in as much physical activity as they did during their middle-age period in order to maintain their biological health; thus, necessi-

tating a more medical or biological approach to understanding aging. On the other hand, healthy aging focuses on the overall well-being of the elderly by considering the physical, mental, social, and economic aspects of their lives. Post-retirement economic activity and financial considerations in particular have been found to be important factors in an aging society (16). Healthy aging therefore addresses the overall problems people will experience in old age and focuses on how an individual will choose to spend their time as they age. From these two competing perspectives it is clear that opinions vary as to how to best spend one’s old age, and efforts to analyze the aforementioned issues continue.

Leisure activities for the elderly

Leisure refers to all forms of activities that occur in one’s free time that are not labor-related or mandatory (17). Passmore (18) categorized leisure activities into three groups based on the benefits sought from each: active leisure with clear objectives (e.g., sports), social leisure for social interaction (e.g., meeting friends), and time-out leisure for passing time (e.g., watching TV).

Based on the healthy aging theory (10), the elderly’s consistent participation in social and healthy leisure activities can assist in leading healthy lives and boosting psychological well-being significantly. In this regard, middle-aged and elderly individuals aged more than 50 years who engage in social participation have reported higher subjective health in a study spanning 11 European countries (19). Moreover, elderly individuals engaging in leisure activities have experienced positive psychological states, which increased their satisfaction and happiness in life compared to those who did not (20). A large number of the elderly had high subjective feelings of well-being despite having chronic diseases and functional impairments to their health, representative of the idea that one’s psychological health is important for healthy aging (21).

Healthy aging is thus partially defined by a high amount of cognitive and emotional satisfaction within an elderly person’s life (22). In addition,

social support and interaction influence healthy aging positively (23). For instance, the elderly can increase their life satisfaction by attending social gatherings like cultural, religious, and sporting events; engaging in leisure activities; and volunteering in ways they deem meaningful (24).

Elderly happiness

Happiness is defined by the subjective evaluation of one's life and is influenced by a complex matrix of factors rather than a single aspect (25). For those aged 51–88 years, the level of happiness on a given day differs based on the time spent on physical, cognitive, and social activities, rather than an individual's characteristics (e.g., gender or character) (26). The elderly experience significant emotional shrinking with the reduction of their social roles, and the leisure activities they enjoy during this period lead them to have healthy lives and influence their psychological well-being significantly (9). As the elderly can be psychologically isolated from social experience, they can improve their quality of life by engaging in regular leisure activities (27). For them, leisure activities are methods to express their abilities and significantly boost their quality of life (27). Ultimately, leisure activities can benefit the elderly (28).

Materials and Methods

Participants

The purpose of this study was to compare and analyze happiness and healthy aging in the elderly based on the type of leisure activities participated in. A cross-sectional survey design to examine this rapidly changing social phenomenon (29) and a purposive sampling method to collect data from the elderly were employed. Given that WHO (30) and Korea's Ministry of Health and Welfare (31) consider the elderly to be those aged 65 years or more, this study limited the survey participants to those aged at least 65 years or more.

Data were collected at two local sport and leisure centers in Seoul, Korea for two months from October 3 to December 10 in 2018 (69 days). A

total of 397 survey questionnaires were utilized in this study, 235 (59.2%) males and 162 (40.8%) female. All respondents selected a leisure activity and were categorized into three groups based on their responses: active leisure, passive leisure, and social leisure (8) (Table 1).

Measurement tools

To measure the happiness of the elderly based on leisure activities, an instrument (32) that investigated psychological happiness was modified and employed for this study. The instrument (four items) had acceptable psychometric properties ($\alpha = .823$) in the previous study. In addition, to measure the healthy aging, a measurement tool (33) that examined the relationship between physical fitness and healthy aging of the elderly was utilized. It had acceptable psychometric properties in the previous study as follows: [physical (three items): $\alpha = .612$; psychological (four items): $\alpha = .860$; and social (four items): $\alpha = .881$]. All questionnaires applied five-point Likert-type scales ranging from "strongly disagree" (1 point) to "strongly agree" (5 points).

Data analysis

The SPSS version 23.0 (Chicago, IL, USA) was utilized for data analysis. This study examined the descriptive statistics of the socio-demographic characteristics of the survey participants. To verify the validity and reliability of the collected data, an exploratory factor analysis (EFA) and Cronbach's alpha coefficients were performed on the dependent variables. After this, a multivariate analysis of variance (MANOVA) was implemented to compare and analyze the differences in happiness, social health, psychological health, and physical health depending on the three groups (i.e., active, passive, and social).

Results

Scale validity and reliability

The EFA, using a principle component analysis (PCA), was conducted on the following variables: happiness (four items), social health (four items),

psychological health (four items), and physical health (three items). The Kaiser Meyer-Olkin (KMO) measure reported the sample adequacy for this analysis (0.70), which exceeded the criterion (0.70) (34). Bartlett's test of sphericity was statistically significant ($\chi^2 = 1306.661$, $df = 105$, $P < 0.001$). The retained four factors had eigenvalues greater than 1, a factor structure coefficient

greater than 0.40, and accounted for 57.568% of the total variance. Cronbach's alpha coefficients were greater than 0.700 as follows: happiness ($\alpha = 0.718$), social health ($\alpha = 0.727$), psychological health ($\alpha = 0.726$), and physical health ($\alpha = 0.730$), which indicated acceptable internal consistency for reliability (35) (Table 2).

Table 1: Leisure participation by gender among groups

Variable	Group 1		Group 2		Group 3	
	Male	Female	Male	Female	Male	Female
Active leisure activity						
Dancing	10	7	-	-	-	-
Table Tennis	9	6	-	-	-	-
Walking	9	6	-	-	-	-
Tennis	11	3	-	-	-	-
Cycling	5	2	-	-	-	-
Swimming	13	3	-	-	-	-
Gym workout	7	0	-	-	-	-
Golf	9	5	-	-	-	-
Badminton	11	2	-	-	-	-
Gate Ball	2	2	-	-	-	-
Yoga	2	2	-	-	-	-
Bowling	4	1	-	-	-	-
Hiking	13	2	-	-	-	-
Passive leisure activity						
TV watching	-	-	25	17	-	-
Radio listening	-	-	13	11	-	-
Newspaper reading	-	-	7	5	-	-
DVD watching	-	-	3	2	-	-
Listening to music	-	-	4	6	-	-
Reading books	-	-	7	9	-	-
Drawing	-	-	3	4	-	-
Cooking	-	-	2	1	-	-
Social leisure activity						
Chatting	-	-	-	-	11	9
Club activity	-	-	-	-	24	12
Meeting friends	-	-	-	-	31	44
Totals	105	42	64	55	66	65
	(71.4%)	(28.6%)	(53.8%)	(46.2%)	(50.1%)	(49.9%)

Source: Own study

Multivariate analysis of variance

As shown in Table 3, the MANOVA revealed statistically significant differences in the dependent variables based on the types of leisure activities participated in (Wilks' lambda = 0.798, $F(8, 782) = 11.642$, $P = 0.00$, partial $\eta^2 = 0.106$).

Based on the adjusted alpha level using a Bonferroni correction ($P = 0.05/4 = 0.013$), the univariate tests were statistically significant for the social and physical health variables. No significant differences were evident for the happiness and psychological health variables.

Table 2: Factor structure matrix for happiness and healthy aging

<i>Variable</i>	<i>Happiness</i>	<i>Social health</i>	<i>Psychological health</i>	<i>Physical health</i>
Social health items				
I like to meet people around me.	.864			
I have a good relationship with the people around me.	.763			
I have many friends to talk to.	.711			
I enjoy meeting new people.	.611			
Psychological health items				
I am not stressed.		.830		
I maintain my mental abilities.		.755		
I enjoy and live my life happily.		.726		
I have a comfortable state of mind.		.644		
Happiness items				
I feel that I am happiest right now.			.757	
I live a life full of vitality.			.740	
I always feel pleasant in all manner of things.			.727	
I always feel excitement in my daily life.			.715	
Physical health items				
I engage in regular exercise.				.832
I control what I eat.				.826
I have no issues in moving my body.				.756
Eigenvalues	2.45	2.17	2.12	1.90
Variance (%)	16.30	14.47	14.10	12.69
Cronbach's alpha	0.727	0.726	0.718	0.730

Source: Own study

Table 3: Results of the MANOVA of the elderly

<i>Dependent Variables</i>	<i>df</i>	<i>F</i>	<i>p</i>	<i>η²</i>
Happiness	2	80.645	0.051	0.290
Social health	2	14.761	0.001*	0.070
Psychological health	2	33.311	0.459	0.145
Physical health	2	26.655	0.001*	0.119

Follow-up Tukey post-hoc analyses were conducted to determine where the statistically significant differences existed for the social and physical health factors among the three groups. In terms of social health, the passive leisure participants (Group 2) had relatively lower mean scores

than the other two groups (Groups 1 and 3). For the physical health factor, the active leisure participants (Group 1) had higher mean scores than the other two groups (Groups 2 and 3). Table 4 shows the groups' detailed mean scores for the dependent variables.

Table 4: Mean scores for dependent variables among groups of elderly people

<i>Variable</i>	<i>Happiness</i>	<i>Physical health</i>	<i>Psychological health</i>	<i>Social health</i>
Group 1	3.560	3.363	3.418	3.393
Group 2	3.481	2.919	3.517	2.691
Group 3	3.349	2.835	3.504	3.218

Note. Group 1 = Active leisure participants, Group 2 = Passive leisure participants, Group 3 = Social leisure participants. Statistically significant higher mean scores among groups are indicated in bold

Discussion

This study compared and analyzed empirically the differences in healthy living and life satisfaction based on the elderly's types of leisure participation. While there were no statistically significant differences in the levels of psychological health and happiness with life for the elderly participating in the active, passive, and social leisure activities employed in this study, the average values of the three groups were generally high. In general, elderly people are more likely to experience negative feelings like psychological isolation, depression, and lethargy toward life (5) as their statuses and roles gradually diminish in society (4). Existing studies have highlighted regular leisure activity as an important method to improve the quality of life in such cases (27). Leisure activities help maintain psychological well-being as well as refreshment by providing relaxation (36), which coincides with the results of the current study. It is notable that, similar to active and social leisure activities, passive leisure activities helped the elderly seek out emotional stability in their elderly years. As such, elderly people engaging in the aforementioned passive leisure activities resolved their stress and increased their vitality and positive energy toward life. Ultimately, this study is significant, as it confirmed that, for the elderly, participating in activities contributes to psychologically healthy aging more than the type of activities, and they were able to raise their life satisfaction throughout the process.

As predicted, active leisure activities scored higher than other types in terms of effectiveness in cultivating a healthy elderly lifestyle. Physiologically, aging progresses rapidly for the elderly (14), and based on this trend, physical health is prioritized in old age (12). This study concluded that active leisure activities (see above) were mandatory for a healthy old age. That is, active leisure activities help people live a physically healthy life in old age, because it delays the decline in muscle strength, endurance, and balance (37). From a different perspective, a sedentary lifestyle can be a significant factor in impeding people's healthy lifestyles (38). An excessive sedentary lifestyle

might be a predictable result that increases the dangers of physical illnesses (39).

Recently, the OECD (Organization for Economic Co-operation and Development) classified elderly individuals who are restricted from participating in physical activities due to deterioration of physical function and regardless of disability or disease as "frail old people" (40). Given that the elders in Korea had had a very low participation rate in the government's health promotion programs (12.6 %), they may require further attention (41). Encouraging the elderly to increase their participation in physical leisure activities is an urgent issue, as these activities can reduce serious health threats (39). Increased attention on leisure participation may parallel concerns regarding a sedentary lifestyle, which might threaten people's health. These problems are also applicable for the elderly. To resolve them, the elderly must participate in active physical activities.

Finally, this study found that active and social leisure activities were important, ensuring the elderly may spend a socially healthy life. As mentioned, the social isolation of the elderly after their retirement is an increasingly important issue, a concern in Korea as its ultra-aged population grows and life after retirement lengthens. In particular, while it is important for the elderly to seek physical health and emotional stability, they must be social, because they become disconnected from social experiences after retirement (12). That is, for retired seniors, social interaction plays a very important role in helping them spend a healthy retirement (42). Further, the quality of life can vary depending on the number and number of times older people meet their acquaintances (43). In this regard, leisure activities not related to the economic activity of supporting one's family help the elderly come in frequent contact with others, strengthen their social network, and maintain solidarity with society (23, 24). Therefore, types of leisure activities that can be enjoyed with others enable them to strengthen their social network through interaction and are thus useful.

In summary, no one can escape aging in life, but it is possible to improve the process by engaging in a physically active lifestyle that could enhance

an elderly person's sense of well-being in retirement and life (44), which has significant implications for the world's growing number of elderly people.

Limitations

Emotions such as happiness change over time, and there is criticism that such emotions cannot be measured using isolated questionnaires (33). Follow-up studies should supplement this issue and explore how happiness may change depending on the time and situation. In addition, some people may have engaged in both active and passive leisure activities simultaneously. However, this study asked participants to choose a single type of leisure activity that they generally participated in. Consequently, future studies should consider the effect of multiple types of leisure activities on the elderly.

Conclusion

While previous studies have advocated the elderly participating in all forms of voluntary leisure activities to benefit their emotional stability and improve overall life satisfaction, this study found active leisure activities to be the most important, as they helped to resolve the most significant hurdles to the elderly: the maintenance of one's mental and physical health. These findings indicate the importance of program development and support from the central and regional governments to help the elderly engage in active leisure activities.

Ethical considerations

All ethical considerations, such as plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy, have been observed diligently by the authors.

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Conflict of interests

The authors declare no conflict of interest.

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