

Factors Influencing on Happiness in relation to the Aging of Elderly

Hyea Kyung Lee¹

Assistant Professor,
Department of Nursing, Jungwon University,
Goesan, 28024, South Korea
lee-hk1214@hanmail.net

Hee Kyung Kim^{2*}

Professor,
Department of Nursing, Kongju National
University, Gongju, 32588, South Korea
hkkim@kongju.ac.kr

*Corresponding Author

Abstract- Purposes: The purpose of this study was to identify the degree of depression, family support, social participation, disability of daily living activities and happiness from aging for elderly. Also, this study aimed to analyze the factors influencing the happiness from aging for elderly. **Methods:** The research participants were 171 elderly people aged 65 years old or older who use the community centers located in Chungcheongbuk-do. The research findings were analyzed through descriptive statistics, t-test, ANOVA, Pearson's correlation coefficient and stepwise multiple regression analysis. **Results:** The most influencing variable on the happiness from aging for elderly people was depression with explanatory power of 15.5 % ($\beta = -.349$, $p < .001$), followed by educational background with 6.8 % ($\beta = -.151$, $p = .043$), gender 2.1 % ($\beta = .267$, $p = .001$), age 3.8 % ($\beta = .241$, $p = .001$) and disability of daily living activities 1.8 % ($\beta = -.145$, $p = .039$). Thus, it was found that the aforementioned five variables explained a total of 30.0 % of the happiness from aging for elderly people. **Conclusion:** It is necessary to have an appropriate nursing intervention through operating a program to improve the happiness from aging for elderly people. In this regard, it would be imperative to prepare and implement a differentiated strategy in the development of a program in accordance with the educational background, gender, age and disability of daily living activities in order to reduce the depression of elderly.

Keywords: Depression, Family support, Social participation, Disability, Happiness

Introduction

In our society, the average life span of the senior is increasing along with the population of elderly people due to a prolonged average life span from improvement of the living conditions and medical science development. In Korea, the population of elderly people aged 65 and above was over 7 percent in 2000 that already entered an aging society determined by UN. In 2014, the elderly population was 12.7 percent of the entire population that is expected to increase to 24.3 percent in 2030 and 32.3 percent in 2040. The expected life expectancy was 71.2 in 1990 that was increased by 10 years to 81.9 in 2013 [1]. Hereupon, as the old age increased in the life cycle, there has been an increasing concern on how happily one can live his/her life over how to merely live longer [2]. Seen in this perspective, studies dealing

with happy lives in old ages have been conducted due to an increase in population of elderly people.

As for variables related to happy lives of the senior, family relationship, physical and mental health, economic level, social activities, self-esteem, self-efficacy, and peace of mind were turned out to directly and indirectly influence on them [3]. In addition, perceived health conditions, stress, depression, and life quality have also influenced on lives of elderly people [2]. Furthermore, leisure activities and family support were turned out to be variables influencing on physical and mental health, and family support was shown to be a variable mediating the relationship with leisure activities and health conditions of the senior [4]. Hereupon, depression, family support, leisure activities, physical and mental health, and life quality were turned out to be variables that influenced on happiness of old ages. However, there have been insufficient amount of studies dealing with comprehensive observation of happiness of the elderly people as they aged by integrating psychological, social, and physical factors including happiness in old ages.

The most striking feature in the aging population is an increase of depression. In fact, depression is one of the most common health issues shown in 20 to 50 percent of the senior population and is also known as an important factor for predicting suicide. In addition, since it lowers the life quality by bringing deteriorated chronic diseases of elderly people and reducing the functions of daily lives [5], depression is of a very serious health issue. As for factors influencing on the depression of elderly people, those with low income level but without education background and religion were turned out to have a higher level of depression [6,7]. In addition, the higher the level of happiness [8] from aging, social support, and family support were, the lower the depression was [6,9]. It was also verified how perceived stress [2,9], activities and participation [10], and whether elderly people participated in economic activities influenced on life satisfaction. Furthermore, it was confirmed that a variable of depression mediated the relationship between the participation of elderly people in economic activities and life satisfaction [11]. In addition, the more seriously they experienced depression, the more they were limited with physical activities due to lack of energy, muscle atrophy, and stiffness [12]. Therefore, social support, social activities and participation, happiness from aging, stress, and physical activities of elderly people were turned out to be important factors that influenced on depression of elderly people.

In addition, social participation [13] that made elderly people stay away from loneliness and role loss in society

while recovering their confidence and participating in local communities and also restore positive attitude and vigor was evaluated as a core element for improving the life quality of elderly people [14] and was regarded as an important factor that influenced on the happiness from aging. Seen in this perspective, this study was conducted on elderly people who were able to use community welfare center with not much of limitation in activities in daily lives.

Hereupon, it is needed to identify factors that are related to and influence on the happiness from aging and also to confirm mediating variables in order to improve the happiness of elderly people from aging. Therefore, this study has integrated depression, family support, social participation, and disability of daily living activities, which were psychological, social, and social factors, with socio-demographic characteristics on elderly people using welfare center in the community identifying factors that influenced on the happiness of elderly people from aging and suggesting preliminary resources to suggest a direction of nursing intervention to improve the happiness of elderly people from aging in the future.

Purpose

The purpose of this study was to identify the degree of depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for elderly. Also, this study aimed to analyze the factors influencing the happiness in relation to the aging for elderly people. The specific purposes of this study are as follows.

- 1) To identify the degree of depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for the participants
- 2) To identify the difference in the happiness in relation to the aging in accordance with the general characteristics of participants
- 3) To identify the relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for the participants
- 4) To identify the factors influencing the happiness in relation to the aging of participants

Methods

Research Design

This study is a descriptive correlation study to identify the factors influencing the happiness in relation to the aging for elderly people.

Subjects

This study selected the 200 elderly people at the 5 local community centers, who understood the purpose of this study and agreed to participate in this study. The criteria of selection are as follows.

- 1) Elderly people aged 65 years old or older who can read and understand texts
- 2) Elderly people who agreed to participate in this study

The number of research participants was calculated by utilizing the G Power 3.1.7 program. The required number of samples for maintaining the number of forecasting factors at 5, the effect size

at .15, the significance level at .05 and the test power at .95 was 138. However, this study had a total of 200 samples by taking the dropout rate into consideration. At the end, this study utilized a total of 171 questionnaires after excluding the 27 incomplete questionnaires that had several missing responses.

Instruments

Depression

To measure depression, this study utilized the tool used by Kim [17], which was the modified and updated version of Geriatric Depression Screening Scale (GDS) of Yesavage et al. [15] and Geriatric Depression Screening Scale-Shorter Version (GDS-S) of Sheikh and Yesavage [16]. The depression scale used in this study consisted of a total of 8 questions, which measured depressive emotion, anxiety, helplessness, emptiness, misery, discomfort and feelings of death. This depression scale had the 3 positive questions and the 5 negative questions. The selection category consisted of 5-point Likert scale with 1 point for "highly unlikely" and 5 points for "highly likely". That is, the higher the response score is, the higher the degree of depression is. Cronbach's α of the tool at the time of development was .85. However, Cronbach's α in this study was .80.

Family support

In regard to the family support scale, this study utilized the tool used by Kim [17], which was the modified and updated version of the tool developed by Cobb [18]. This scale consisted of a total of 10 questions: 5 questions of family relation and 5 questions of economic, emotional and instrumental assistance. It contained the 8 positive questions and the 2 negative questions. The score of negative questions was calculated through inverse conversion. It consisted of 5-point Likert scale with 1 point for "highly unlikely" and 5 points for "highly likely". A score can be distributed from 10 to 50 points. The higher the score is, the higher the degree of family support is. In this study, the reliability of family support scale was Cronbach's α = .89.

Social participation

To measure social participation, this study utilized the tool used by Kim [17], which was the modified and updated version of the tool developed by Weiss [19]. This tool consisted of a total of 10 questions: 6 questions of affection, assistance and encouragement from colleagues in a social meeting and satisfaction level felt by new expectations and sense of unity and 4 questions of hope and extent of social participation. It consisted of 5-point Likert scale with 1 point for "highly unlikely" and 5 points for "highly likely". The higher the score is, the higher the degree of family support is. The reliability in the study of Kim [17] was Cronbach's α = .85; however, the reliability in this study was Cronbach's α = .91.

Disability of daily living activities

In regard to the measurement tool for disability of daily living activities, this study utilized the Korean Version of Oswestry Disability Index (KODI), which Jeon et al. [20]

translated and obtained an approval for use from the developers. It consisted of a total of 10 items in relation to degree of pain, personal hygiene, goods lifting, walking, sitting, standing, sleeping, sex life, social life and travel. The reliability was Cronbach's $\alpha=.92$. However, this study utilized only the 9 items by excluding the sex life item in consideration of the nature of elderly people, many of whom did not have a spouse. The score of each item was evaluated on a scale of 0 to 5. The higher the score is, the more severe the disability of daily living activities is. The reliability in this study was Cronbach's $\alpha=.88$.

Happiness in relation to the aging

In regard to happiness from aging, this study utilized the tool of happiness in relation to the aging for elderly, which was developed by Oh [8]. It consisted of a total of 34 questions with the following 6 sub-domains: 9 questions of tolerance, 8 questions of recognition, 6 questions of sense of freedom, 3 questions of tranquility and 2 questions of acceptance of death. The scale with 1 point for 'highly unlikely', 2 points for 'unlikely', 3 points for 'likely' and 4 points for 'highly likely' means the total score of 34 questions. The higher the score is, the higher the degree of happiness is. Cronbach's α at the development of the tool of Oh [8] for the elderly people at home was .94. However, the reliability in this study was Cronbach's $\alpha=.95$.

Data Collection

The data of this study had been collected from July 1 to 31, 2015. The author of this study visited the 5 community centers located in C-city of Chungcheongbuk-do and acquired an approval from the heads of these community centers. Thus, this study targeted the elderly people aged 65 years old who were using the aforementioned community centers. The author of this study explained the purpose of this study to those qualified people for the selection criteria of research participants. The author of this study obtained a written consent from them. Then, the author of this study distributed the structured questionnaire to the research participants, who were then asked to fill up the questionnaire by themselves. For those research participants who had a difficulty of filling it up, the author of this study read the questions for them while the author of this study and the assistant researchers filled it up. Two social workers served as a research assistant. They discussed with the author of this study on the purpose and intent of this study before collecting the data. That is, they were educated on the contents and methodology of questionnaire. To maintain consistency with the research findings, the research assistants were asked to fully understand the content of questionnaire through discussion. Also, efforts were made to allow the author of this study and the research assistants to collect the data through the preliminary research.

Ethical Consideration

The data was collected after acquiring an consent from the heads of the community centers. The research participants were explained the purpose and objective of this study before collecting the data. The research participants were also clearly explained that they could drop out or stop this survey whenever they wanted. In addition, the research participants gave their written consent based on the facts that the collected data would be used only for the purpose of research and the confidentiality and freedom of research participants would be guaranteed. Only after then, the questionnaires were distributed to them.

Methods of Data Analysis

The collected data was statistically analyzed by SPSS Win 19.0 program.

- 1) The general characteristics were analyzed by utilizing descriptive statistics with real number, percentage, mean and standard deviation. The degree of the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging of research participants was analyzed by utilizing descriptive statistics with mean and standard deviation.
- 2) The difference in the degree of happiness in relation to the aging in accordance with the general characteristics was analyzed through t-test and ANONA. Post-verification was performed with Scheffe test.
- 3) The relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging of research participants was analyzed through Pearson's Correlation Coefficient.
- 4) The explanatory power of the factors influencing the happiness in relation to the aging for the research participants was analyzed by utilizing Stepwise multiple regression analysis.

Results

General characteristics of the subjects

The general characteristics of the research participants of this study are as shown in Table 1. The mean age of the research participants was 75.6 years old. Those aged between 70 and 79 years old accounted for the largest proportion with 69.8 percent. The men accounted for 55.7 percent, whereas the women accounted for 44.3 percent. As for marital status, the married people accounted for 61.7 percent, whereas the bereaved people accounted for 32.9 percent. As for educational background, those with elementary school diploma accounted for 26.8 percent and those with middle school diploma accounted for 26.2 percent. The research participants who had no job accounted for 87.9 percent. The research participants who had a religion accounted for 50.3 percent. In regard to monthly household income, those with less than KRW 1 million accounted for 55.7 percent. As for the monthly allowance of pocket money, KRW 110,000 to 200,000 accounted for the largest proportion with 25.5 percent. The research participants who thought that they needed much more pocket money accounted for the largest proportion with 26.8 percent. The research participants who were doing exercise regularly accounted for the largest proportion with 50.3 percent.

TABLE 1. General characteristics of Subjects
 (N=171)

Characteristics	Range	N (%)	M±SD
Age	60-69 years old	34(19.9)	74.78±6.08
	70-79 years old	104(60.8)	
	80-89 years old	31(18.1)	
	90 years old or older	2(1.2)	
Gender	Man	86(50.3)	
	Woman	85(49.7)	
Marital status	Married	106(62.0)	
	Bereavement	58(33.9)	
	Others	7(4.1)	
Educational level	None	16(9.4)	
	Elementary school diploma	52(30.4)	
	Middle school diploma	43(25.1)	
	High school diploma	40(23.4)	
	University degree	20(11.7)	
Occupation	Yes	27(15.8)	
	No	144(84.2)	
Religion	Yes	83(48.5)	
	No	88(51.5)	
Monthly household income	Less than KRW 1 million	99(57.9)	
	KRW 1.01-1.5 million	25(14.6)	
	KRW 1.51-2 million	20(11.7)	
	KRW 2.01-2.5 million	11(6.4)	
	KRW 2.51-3 million	7(4.1)	
	More than KRW 3 million	9(5.3)	
Perception about monthly allowance of	Need much more	13(7.6)	
	Need little more	45(26.3)	

pocket money	Just enough	82(48.0)	
	More than enough	31(18.1)	
Amount of monthly pocket money	Less than KRW 100,000	19(11.1)	
	KRW 110,000-200,000	41(24.0)	
	KRW 210,000-300,000	29(17.0)	
	KRW 310,000-400,000	29(17.0)	
	KRW 410,000-500,000	24(14.0)	
	More than KRW 500,000	29(17.0)	
Exercise	I do exercise regularly.	87(50.9)	
	I do exercise once in a while.	69(40.4)	
	I never do exercise.	15(8.8)	

Degree of the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging of elderly

The degree of the depression, family support, social participation, disability of daily living activities and happiness from aging for elderly people is as shown in Table 2. The degree of depression of elderly people was around the median value at $2.42 \pm .65$ points (scale of 1 to 5 points), whereas family support was higher than the median value at $3.80 \pm .68$ points (scale of 1 to 5 points). In addition, social participation was higher than the median value at $3.81 \pm .64$ points (scale of 1 to 5 points). The degree of disability of daily living activities was $0.87 \pm .71$ points (scale of 1 to 5 points), whereas happiness from aging was higher than the median value at $3.02 \pm .37$ points (scale of 1 to 4 points).

TABLE2. Degree of the depression, family support, social participation, disability of daily living activities and happiness from aging

(N=171)

Variables	M±SD	Range
Depression	2.42±.653	1~ 5
Family support	3.80±.685	1~ 5
Social participation	3.81±.645	1~ 5
Disability of daily living activities	0.87±.712	0~ 5
Happiness in relation to the aging	3.02±.372	1~ 4

Difference in happiness in relation to the aging of elderly people in accordance with the general characteristics

The difference in the happiness from aging in accordance with the general characteristics is as shown in Table 3. There was no statistically significant difference in the happiness from aging in accordance with age, gender and educational level. In regard to age, those research participants aged 90 years old or older had the highest score of happiness from aging ($F=4.283$, $p=.006$). In regard to gender, the women generally had a higher value ($t=-3.073$, $p=.002$). As for educational level, the uneducated research participants had the highest degree of happiness from aging ($F=5.060$, $p=.001$).

TABLE 3. Difference in happiness as to the aging in accordance with the general characteristics (N=171)

Characteristic	Scope	M±SD	t or F	p	Scheffe
Age	60-69 years old	2.97±.319	4.283	.006	
	70-79 years old	2.99±.376			
	80-89 years old	3.09±.361			
	90 years old or older	3.85±.124			
Gender	Man	2.93±.325	-3.073	.002	
	Woman	3.10±.398			
Educational level	None ^a	3.37±.465	5.060	.001	$a>b>c>d>e$
	Elementary school diploma ^b	3.03±.348			
	Middle school diploma ^c	2.99±.365			
	High school diploma ^d	2.93±.319			
	University degree ^e	2.92±.334			
Occupation	Yes	2.94±.287	1.159	.248	
	No	3.03±.385			
Religion	Yes	3.05±.388	-1.036	.302	
	No	2.99±.357			
Monthly	Less than KRW 1 million	3.05±.389	.746	.590	

house hold income	KRW 1.01-1.5 million	2.96±.342			
	KRW 1.51-2 million	2.92±.446			
	KRW 2.01-2.5 million	2.98±.180			
	KRW 2.51-3 million	2.94±.112			
	More than KRW 3 million	3.11±.382			
Perception about monthly allowance of pocket money	Need much more	3.14±.414	2.621	.052	
	Need little more	2.90±.275			
	Just enough	3.02±.399			
	More than enough	3.12±.372			
Amount of monthly pocket money	Less than KRW 100,000	3.03±.348	.694	.629	
	KRW 110,000-200,000	3.00±.374			
	KRW 210,000-300,000	3.09±.319			
	KRW 310,000-400,000	3.07±.457			
	KRW 410,000-500,000	2.92±.463			
	More than KRW 500,000	2.99±.244			
Exercise	I do exercise regularly.	3.05±.393	1.091	.338	
	I do exercise once in a while.	3.00±.315			
	I never do exercise.	2.90±.481			

Relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging

The relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for elderly people is as shown in Table 4. In regard to the relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for elderly people, happiness in relation to the aging had a statistically significant inverse correlation with depression ($r=-.394$, $p<.001$). Happiness in relation to the aging had a statistically significant positive correlation with social participation ($r=.284$, $p<.001$). In other words, the degree of happiness in relation to the aging for elderly people becomes higher with a lower degree of depression and a higher degree of social participation.

TABLE 4. Relationship between the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging

	Depression r(p)	Family support r(p)	Social participation r(p)	Disability of daily living activities r(p)	Happiness in relation to the aging r(p)
Depression	1				
Family support	-.318 ($<.001$)	1			
Social participation	-.283 ($<.001$)	.422 ($<.001$)	1		
Disability of daily living activities	.246 (.001)	-.212 (.005)	-.166 (.030)	1	
Happiness in relation to the aging	-.394 ($<.001$)	.041 (.594)	.284 ($<.001$)	-.134 (.082)	1

Factors influencing happiness in relation to the aging among elderly people

To identify the factors influencing the happiness in relation to the aging of elderly people, this study performed multiple regression analysis with a total of 7 variables (age, gender, educational level, depression, family support, social participation and disability of daily living activities) as an independent variable. These 7 variables were found to be statistically significant in this study.

To examine the differences depending on age from the multiple regression analysis, this study assigned '0' to those aged 80 years old or older and '1' to those aged 79 years old or less. To examine the differences depending on educational level, this study assigned '0' to those with elementary school diploma or higher and '0' to the uneducated research participants. To examine the difference depending on gender, this study assigned '0' to the women and '1' to the men. Hence, this study analyzed the specific explanatory variables influencing the happiness from aging of elderly people, including such independent variables as depression, family support, social participation and disability of daily living activities.

As a result of verifying the hypotheses of regression analysis as to the independent variables, Durbin-Watson statistic value was near 2 at 2.001 in the autocorrelation verification (independence) of errors. Thus, it was confirmed that there was no autocorrelation. As a result of residual analysis, the scope of residuals was 2.323 to 3.663; thereby, satisfying homoscedasticity and also confirming normality. There was no variable whose tolerance was less than 0.8 as all the variables had a tolerance between .899 and .999. The variation inflation factor (VIF) was between 1.000 and 1.373. That is, it was less than the reference

value of 10. Thus, it was confirmed that there was no problem associated with multi-collinearity.

As a result of the analysis, the most influencing variable for the happiness from aging of elderly people was depression with explanatory power of 15.5 percent ($\beta = -.349$, $p < .001$), followed by educational background with 6.8 percent ($\beta = -.151$, $p = .043$), gender 2.1 percent ($\beta = .267$, $p = .001$), age 3.8 percent ($\beta = .241$, $p = .001$) and disability of daily living activities 1.8 percent ($\beta = -.145$, $p = .039$). Thus, it was found that the aforementioned five variables explained a total of 30.0 percent of the happiness from aging for elderly people (Table 5).

TABLE 5. Factors influencing happiness in relation to the aging

Variables	B	SE	β	t	p
Constant	3.140	.209		15.031	$<.001$
Depression	-.199	.038	-.349	-5.175	$<.001$
Educational level	-.048	.024	-.151	-2.035	.043
Gender	.199	.057	.267	3.503	.001
Age	.137	.042	.241	3.249	.001
Disability of daily living activities	-.076	.036	-.145	-2.084	.039

$R^2 = 0.300$, Adj $R^2 = 0.279$, $F = 14.175$, $P < .001$

Discussion

This study was conducted to identify the degree of the depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for elderly people and analyze the factors influencing the happiness from aging for elderly people. The discussions on the research findings are as follows.

Happiness in relation to the aging in this study was high at 3.02 points (scale of 1 to 4 points). In comparison to the findings of the previous studies (2.90 points of Oh [8] on a scale of 1 to 4 points, 2.74 points on a scale of 1 to 4 points in the study of Yoon [2] for urban elderly people at home and 2.86 points in the study of Kang [21] on chronic hemodialysis elderly patients), the research participants of this study were found to have a higher degree of happiness from aging than the general elderly people and chronic hemodialysis elderly patients. Moreover, The depression of elderly people was around the median value at 2.42 points (on a scale of 1 to 5 points). This was higher than 4.30 points on a scale of 1 to 15 points in the study of Song et al. [22] for the urban elderly people. However, it was similar to 7.8 points on a scale of 1 to 14 points in the study [23] for the elderly people with chronic disease. Depression is the most common mental problem elderly people suffer from. Deteriorated physical functions, diseases, death of spouses, exacerbated economic conditions, isolation from society or family, decrease of control in daily lives, and remorse in all

the years they have lived tend to make elderly people depressed [24]. In addition, depression of elderly people tends to be progressed due to other health issues or in different life settings and is easily overlooked in most of the cases. Therefore, it seems that elderly people overlook symptoms of depression by themselves even when they are depressed. At the same time, the reason why there is a higher degree of happiness from aging seems to how elderly people tend to have much experience of feeling happiness while living in a close relationship with neighbors and with regular leisure activities since they are usually residents in local communities in rural areas and use welfare center.

Family support was turned out to be the score of 3.8 (score from 1 to 5). This was higher than the results in previous studies in terms of family support since it was 2.25 in the result of study by Kim [17] and 3.12 in the research by Kim [25] (score 1 to 5) that were conducted on elderly people using welfare center. Aforementioned result seems to be related how high level of emotional stability is shown in subjects of this study due to seamless interaction from families and family support. In addition, it also seems to be related with high level of happiness from aging.

Social participation was turned out to be the score of 38.42 (score from 10 to 50). This was the similar result from the study conducted by Kim [17], which was the score of 36.1. This represents how elderly people using welfare center actively participate in welfare center program or use the welfare center. As people age, they tend to be physically and environmentally limited experiencing the loss of role. However, it is known that actively participating in the role or other activities from the position in middle-years of life makes people maintain positive concept of ego and successfully adapt to aging [26]. Hereupon, an effort shall be exerted to provide elderly people a practical opportunity to participate in economic activities, social volunteer activities, and leisure activities in order to actively derive social participation from them. However, elderly people are limited to participate in economic activities in real world. In addition, most of the elderly people participate in leisure activities offered in a limited space such as senior welfare center. Therefore, public and private organizations such as senior citizen centers or life-long education institutes where are easily accessible by elderly people are needed to implement a program supporting social participation of elderly people.

Disability of daily living activities was shown to be score of 0.87 (scorer from 0 to 5). Compared to how the score of limitation of physical activities in daily lives was 21.3 (score from 10 to 30) in the study conducted by Kim and Byun [23] on elderly people with chronic diseases, the score of disability of daily living activities in this study was turned to be lower. This represents a result how the less elderly people were limited in their activities without inconvenience in physical movement, the more actively they used the welfare center and participated in leisure activities since elderly people using the welfare center were the subjects in this study.

In the relationship of factors related to the happiness from aging in this study, it was shown that the lower the level of depression was on elderly people and the more they participated in society, the higher the happiness of aging was turned out to be. According to the result of verification in correlation of depression and the happiness from aging in the study conducted by Oh [8],

there was a significant difference of melancholy disposition in the happiness from aging. In addition, the study conducted by Yoon [2] also represented a result how the lower the level of depression was, the higher the level of happiness from aging was turned out to be. Therefore, they were consistent with the result of this study. This shows that social participation of elderly people without spouses influenced on the reduction of depression through social support and self-efficacy [27]. In addition, it was also shown that the higher the level of social participation in old ages was, the higher the life satisfaction was and the lower the level of depression was [28]. Therefore, they were also consistent with the result of this study.

Therefore, it is required to prepare for strategies aiming to support active social participation and reduce depression of elderly people to improve the happiness from aging. In order to do so, it seems that individualized approach is needed considering characteristics of each of elderly people instead of group-oriented approach. Furthermore, it is also suggested to provide financial support and identify personal requirements of each of the elderly people extending an opportunity for them to find a job and financially stable and participate in various hobbies. In the study by Kim [17], it was stated that active social participation of elderly people after retiring not only formed a positive sense of self but also successfully improve the conditions of aging. In the study by Kim et al. [27] conducted on elderly people without spouses, it was shown that social participation represented mediator effect in reducing depression of elderly people. According to aforementioned results, a positive effect of socially participating activities of elderly people was verified. In addition, it seems to be needed to support elderly people to actively participate in local community activities and also enjoy various hobbies by using welfare center in the future.

In order to identify factors that influenced on the happiness of elderly people from aging, multiple-regression analysis was implemented. As a result, depression was turned out to be the factor that influenced on the happiness of elderly people in relation to the aging the most. It had 15.5 percent of the explanation power followed by 6.8 percent in academic background, 2.1 percent in gender, 3.8 percent in age, and 1.8 percent in disability of daily living activities. These five variables were turned out to explain total 30.0 percent of the entire level of happiness of elderly people from aging.

According to the result of study conducted by Lee and Jeon [29], peace of mind was turned out to directly influence on the happy lives of elderly people, while economic status and self-realization indirectly influenced on them. Furthermore, family relationship, health, and social activities were turned out to both directly and indirectly influence on them. In the study conducted by Yoon [2], perceived stress was turned out to be the most influential variable among education level, number of currently suffering diseases, perceived health conditions, stress, and life quality, and these variables were shown to explain 17 percent of the level of happiness of elderly people in relation to the aging. According to the study conducted by Kang [21], life quality and education level were turned out to explain 41 percent of the level of happiness of elderly people from aging. In addition, according to the study conducted by Yoon [2],

depression and the happiness from aging were turned out not to have explanation power. Therefore, it was an inconsistent result from the one in this study. However, a significant correlation between the happiness from aging and depression was derived. However, there were a few studies dealing with development and application of means for the happiness in relation to the aging [2,21], and there is not enough amount of studies to have such results represent the happiness of elderly people in relation to the aging. In addition, aforementioned previous studies researched influential factors that were different from this study. Therefore, it is currently limited to discuss the difference of them with the result of this study, and follow-up studies are needed to deal with this issue in the future. In addition, since the subjects of this study used the welfare center in only one particular area, it is still limited to generalize the results of this study. Therefore, it is needed to confirm influential factors of the happiness of elderly people in relation to the aging through repetitive research with extended number of subjects including other variables in the future.

There has been a significant increase in personal and social concern about healthy life span. However, an opportunity for supporting elderly people to effectively perform healthy life practice or for early detection or intervention to improve the happiness of elderly people as well as deteriorated cognitive functions of them has not yet been promoted. Therefore, intervention is required to help elderly people when they suffer from depression or even prevent them from being depressed. In addition, it is also needed to pursue a specific approach for improving the happiness of elderly people in relation to the aging and maintaining the cognitive functions.

According to aforementioned results, depression, academic background, gender, age, and disability of daily living activities were specified as factors that influenced on the happiness of elderly people from aging. In order to improve the happiness of elderly people in relation to the aging, a differentiated approach in terms of academic backgrounds, gender, and age might be needed while reducing the depression. In addition, it has not been explained as an influential factor, but enhanced family support and social participation were confirmed to be variables improving the happiness of elderly people in relation to the aging. Therefore, it is needed to operate a program to improve the happiness of elderly people from aging and prepare for and include a differentiated strategy in the development of program in terms of academic backgrounds, gender, age, and disability of daily living activities while reducing the depression of elderly people at the same time.

Conclusion and suggestion

This study identified the degree of depression, family support, social participation, disability of daily living activities and happiness in relation to the aging for elderly people. Moreover, this study examined the factors influencing the degree of happiness in relation to the aging for elderly people.

As a result, this study found that the degree of happiness from aging for elderly people would become higher with a lower degree of depression and a higher degree of social participation. This study also analyzed the variables influencing the happiness from aging for elderly people. As a result, the most influencing variable was depression with explanatory power of 15.5, followed

by educational background with 6.8 percent, gender with 2.1 percent, age with 3.8 percent and disability of daily living activities with 1.8 percent. That is, it was found that the aforementioned five variables explained a total of 30.0 percent of the happiness from aging for elderly people. Therefore, this study confirmed that depression was the most influencing variable of the happiness in relation to the aging for elderly people. However, this study only targeted those research participants who were using the community centers in certain regions. On that account, there is a limitation of generalizing the findings of this study. Thus, it is necessary to confirm other influencing factors on the happiness in relation to the aging for elderly people through a repetitive study that increases the number of research participants. Moreover, it is necessary to have an appropriate nursing intervention through operating an adequate program to improve the happiness from aging for elderly people. It would be also imperative to implement a strategy to reduce the degree of depression of elderly people.

Lastly, it would be imperative to make efforts to reduce the depression and promote the happiness for elderly people in local communities through promoting various mental health programs within the health education programs of local communities.

References

- [1] Statistics Korea, "Korea's Social Index for 2014," <http://kostat.go.kr>
- [2] Yoon, M. Y., 2012, "Factors predicting on happiness related to aging among older adults," M.S. thesis, Hanyang University, Seoul.
- [3] Lee, S. J., and Jeon, E. W., 2015, "A Study on the Factors Affecting the Happy Lives of the Elderly and Relevant Variables," Korean Journal of Family Welfare, 20(1), pp. 113-131.
- [4] Kim, M. S., and Ko, J. W., 2013, "The Effect of the Elderly's Leisure Activity on Their Health and the Mediating Role of Family Support," Journal of Welfare for the Aged Institute, 60, pp. 35-54.
- [5] Yang, S. M., Rim, C. S., and Oh, Y. J., 2007, "A relative effects of related-variables on depression of the rural elderly," Journal of Welfare for the Aged Institute, 36, pp. 139-158.
- [6] Cho, O. S., Kim, J. I., and Kim, Y. M., 2013, "A Study on Sleep Quality and Geriatric Depression in the Elderly between Hospital and Senior Welfare Service Center," Journal of the Korea Gerontological Society, 33(2), pp. 493-507.
- [7] Kim, S. J., 2012, "The Study on physical, mental and social health of the senior citizens : focusing on comparison between those living urban area and rural area," M.S. thesis, Hanseo University, Seosan.
- [8] Oh, Y. K., 2011, "The development of an analytic instrument for correlation inquiry of perceived happiness and advancing in years," Ph.D. thesis, Hanyang University, Seoul.
- [9] Jang, S. H., 2015, "A Study on the Influencing Factors of Depressive Symptoms and Suicidal Ideation among Elderly," M.S. thesis, Wonkwang University, Iksan.

- [10] Fairhall, N., Sherrington, C., Kurrle, S. E., Lord, S. R., and Cameron, I. D., 2011, "ICF participation restriction is common in frail, community dwelling older people: An observational cross sectional study," *Physiotherapy*, 97(10), pp. 26-32.
- [11] Lee, S. W., Song, H. J., Nam, H. J., and Yeom, H. Y., 2015, "The mediating effects of Depression on the relationship between Work Participation and Life Satisfaction in the Korean Elderly," *The Journal of the Korean Association of Psychotherapy*, 7(1), pp. 57-68.
- [12] Naughton, F., Ashworth, P., and Skevington, S. M., 2007, "Does sleep quality predict pain-related disability in chronic pain patients? The mediating roles of depression and pain severity," *Pain*, 127 (3), pp. 243-252.
- [13] Lee, K. H., 2001, "Social Participation and Voluntarism of the Elderly," *Journal of Welfare for the Aged Institute*, 12(0), pp. 7-24.
- [14] Oh, S. H., 2007, "A Comparative Study on the Effect of Social Participation and Social Support on Life Satisfaction on the Elderly among Urban, Farm and Island Area," *Journal of community welfare*, 23, pp. 209-223.
- [15] Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., and Leirer, V. O., 1983, "Development and validation of geriatric depression screening scale: A preliminary report," *Journal of Psychiatric Research*, 17(1), pp. 37-49.
- [16] Sheikh, J. I., and Yesavage, J. A., 1986, "Geriatric depression scale: Recent evidence and development of a shorter version," *Clinical Gerontologist*, 5, pp. 165-172.
- [17] Kim, J. J., 2007, "A Study on Influential Factors for Successful Aging," Ph.D. thesis, Baek-seok University, Seoul.
- [18] Cobb, S., 1976, "Social support as a moderation of life stress," *Psychosomatic medicine*, 11(5), pp. 300-314.
- [19] Weiss, R., 1974, "The provisions of social relationships," *Doing unto Others*, pp. 17-26.
- [20] Jeon, C. H., Kim, D. J., Kim, D. J., Lee, H. M., and Park, H. J., 2005, "Cross-cultural Adaptation of the Korean Version of the Oswestry Disability Index (ODI)," *Journal of Korean Society of Spine Surgery*, 12(2), pp. 146-152.
- [21] Kang, Y. E., 2014, "Elderly Hemodialysis Patients Happiness During Aging, Perceived Stress, Quality of Life," M.S. thesis, Hanyang University, Seoul.
- [22] Song, M. S., Kim S. K., and Kim, N. C., 2010, "Factors Influencing Depression among Rural Elders," *Journal of Korean Gerontological Nursing*, 12(1), pp. 21-28.
- [23] Kim, Y. S., and Byun, H. S., 2014, "Effects of Pain on Memory, Physical Function, and Sleep Disturbance in Older Adults with Chronic Disease: The Mediating Role of Depression," *Journal of Korean Gerontological Nursing*, 16(1), pp. 59-67.
- [24] E, Y., Ko, S. H., Kim, M. J., Kim J. S., and Park, M. H., 2007, *Introduction of senile specific nursing*, Seoul, Hyunmoonsa.
- [25] Kim, S. A., 2012, "Impact of Family Support and Social Support on Hopelessness among Rural Elderly People," *Journal of Agricultural Extension &Community Development*, 19(3), pp. 581-616.
- [26] Kwon, J. D., 2012, *Theory of senile welfare (5th edition)* Seoul, Hakjisa.
- [27] Kim, D. B., Kim, S. B., and Shin, S. M., 2012, "The Effects of Social Participation on the Depression of the Spouseless Elderly: The Mediating Effect of Social Support and Self Efficacy," *Journal of the Korean Gerontological Society*, 32(1), pp. 289-303.
- [28] Kang, H. J., 2009, "Social Activity and Satisfaction of life in Female Elders Living Alone in Rural Area," *Korean Journal of Social Welfare Research*, 21, pp. 1-26.
- [29] Lee, S. J., and Jeon, E. H., 2015, "A Study on the Factors Affecting the Happy Lives of the Elderly and Relevant Variables," *Korean Journal of Family Welfare*, 20(1), pp. 113-131.