

✧ RESEARCH PAPER ✧

# *Relationships among the perceived health status, family support and life satisfaction of older Korean adults*

**Sook-Young Kim RN PhD**

*Associate Professor, College of Nursing, CHA University, Pocheon, Kyonggi-Do, Republic of Korea*

**Sohyune R Sok RN PhD**

*Associate Professor, College of Nursing Science, Kyung Hee University, Seoul, Republic of Korea*

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## **Relationships among the perceived health status, family support and life satisfaction of older Korean adults**

The objective of this study was to examine the perceived health status, family support and life satisfaction of older Korean adults and the relationships among them. This study was designed to be a descriptive correlation study using questionnaire. Subjects were 246 older people who were over 65 years of age in Seoul and Daegu metropolitan city, Korea. Measures were the Cornell Medical Index-Simple Korean Form to measure the perceived health status, the Family Support Instrument to measure the family support and the Standard Life Satisfaction Instrument for Korean people to measure the life satisfaction. Perceived health state was worse as average 3.3, family support was good as average 3.4 and life satisfaction was low as average 3.1. There were statistically significant positive correlations among perceived health state, family support and life satisfaction and between family support and life satisfaction. The predictors of life satisfaction in elderly were family support, age, monthly allowance and perceived health state. These factors explained 37.5% of the total variance. The major influencing factor was family support. This cross-sectional study provides preliminary evidence that to develop nursing strategy to increase family support of older Korean adults is needed.

**Key words:** family support, health, Korea, life satisfaction, older.

## **INTRODUCTION**

Korean population is rapidly ageing and the increase in the average life expectancy has resulted in an increase in the number of older people who were 65 years and older.<sup>1</sup> The older population's most serious problems, to which first priority should be given, are bodily dysfunctions and

health problems caused by ageing, such as chronic degenerative diseases.<sup>2,3</sup> However, their declining physiological functions cause not only a decrease in their health status but also an increase in their susceptibility to sickness and death, as well as a decrease in their ability to adapt to changed family roles (e.g. due to their children's marriage), reduced income associated with retirement and loss of social ties.

Furthermore, older people have difficulties adapting to rapid changes in society, leaving them more socially disadvantaged and limiting their ability to participate in

*Correspondence:* Sohyune R. Sok, College of Nursing Science, Kyung Hee University, Kyunghee-Daero 26, Hoegi-dong, Dongdaemun-gu, Seoul, 130-701, Republic of Korea. Email: 5977sok@khu.ac.kr

society when compared with younger generations.<sup>4</sup> Therefore, many older people view their lives as meaningless and experience a decrease in self-esteem as well as an increase in loneliness and alienation, leading to a subjectively low quality of life.<sup>5</sup> As a result, an older person's positive evaluation of their life can be considered important. The most favourable and optimal state during older age can be defined as maximizing an older person's potential through physical, mental and social satisfaction in order to achieve successful ageing.<sup>6</sup>

Life satisfaction is based on an older person's subjective perception of their present life and is directly associated with that person's happiness and the extent of their life achievements; therefore, the degree of life satisfaction during older age can be considered an important concept in assessing their life.<sup>7,8</sup> The negative events experienced during older age can decrease an older person's physical and mental health, ability to adapt and life satisfaction, exerting a negative impact on their quality of life.<sup>9,10</sup>

As such, the role of the family in assisting an older person's ability to cope with such negative experiences is very important.<sup>11</sup> Because the family is considered one of the most direct and fundamental social environments for older people, many researchers claim that the family is one of the most important factors affecting the perceived health status of older people.<sup>3,7,11</sup> As family is the first point of contact that interacts with older people, they understand their personality and habits; thus, it is believed that family is the primary support system that can promptly and accurately detect changes in an older person's ability to independently perform daily tasks, notice changes in their health, identify potential physical or mental difficulties (e.g. loneliness) and as a result help manage or cope with these potential health issues.<sup>12</sup> In other words, it is presumed that family support has a significant impact on life satisfaction and perceived health status, which are strongly correlated to one another. Therefore, a study that will determine the correlations among these factors is required. Additionally, no study was found on the correlations among perceived health status, family support and life satisfaction of older people.

Thus, this study was conducted to collect data that might serve as basis for nursing interventions pursuing to provide a higher quality of life among older people through the identification of perceived health status, family support, life satisfaction and the correlations among them. The aims of this study were the following: (i) to identify the general characteristics; (ii) to determine

the levels of perceived health status, family support and life satisfaction; (iii) to determine the correlation among the perceived health status, family support and life satisfaction; and (iv) to determine the factors that influence life satisfaction.

## METHODS

### Participants

The participants in this study included a total of 280 older Korean adults in Seoul and Daegu City, South Korea. They were recruited through convenient sampling. The eligibility criteria included participants aged 65 years and older, understood the purpose of this study, consented to participate in this study, have no cognitive impairments and have complete verbal ability to communicate in Korean. Among them, 261 out of 280 (93.21%) questionnaires were received back. Due to incomplete data, a total of only 246 questionnaires were included in the final dataset. Sample size adequacy ( $N = 207$ ) using G power 3 analysis software (IBM Corp., Albany, NY, USA) was estimated based on an alpha level = 0.05, conventional medium effect size = 0.25 and power = 0.90.<sup>13</sup> Therefore, the sample size in this study was adequate.

### Materials and procedure

Data were collected by the authors from March to July 2008 at community centres, welfare centres and personal residences located in Seoul and Daegu City, South Korea. The researchers contacted the prospective participants and explained this study's purpose as well as the participation details and the instruments that were to be used. The survey consisted of a self-reporting questionnaire to be administered by the researchers. Each of the participants took ~ 25–30 min to complete the questionnaire.

The study questionnaire was designed to measure the participant's demographic characteristics with the Cornell Medical Index (CMI)-Simple Korean Form, the Family Support Instrument and the Standard Life Satisfaction Instrument. General characteristics included gender, age, marital status, the presence or absence of a spouse, religion, level of education, previous and current occupation, living expenses, monthly allowance, housing, number of children and whether participants were living alone or together with other family members.

The CMI developed by Brodman *et al.*<sup>14</sup> was modified to the CMI-Simple Korean Form by Nam<sup>15</sup> and was used in this study to measure the perceived health status of the participants. This was designed for self-reporting using a

four-point scale and consisted of 31 total questions. The possible score range was from 31 to 124, and the higher the score was, the lower the respondent's perception of their health status was. The reliability of this instrument in this study was Cronbach's  $\alpha = 0.90$ .

The Family Support Instrument developed by Cobb<sup>16</sup> and modified by Kang<sup>17</sup> was used in this study to measure the family support of the participants. It consisted of a total of 11 questions using a five-point scale. The possible score range was from 11 to 55, and the higher the respondent's score was, the higher their social support was. The reliability of this instrument in this study was Cronbach's  $\alpha = 0.93$ .

The Standard Life Satisfaction Instrument for Korean people developed by Choi<sup>18</sup> was used in this study to measure the life satisfaction of the participants. It consists of 20 total questions (six about the past, eight about the present and six about the future) using a five-point scale. The possible score range was from 20 to 100, and the higher the respondent's score was, the higher their life satisfaction was. The reliability of this instrument in this study was Cronbach's  $\alpha = 0.91$ .

### Data analysis

The collected data were analyzed using the SAS 8.2 statistical software program (SAS Institute Inc., Cary, NC, USA). The demographic characteristics of the participants were analyzed using descriptive statistics and the correlations among perceived health status, family support and life satisfaction were analyzed using Pearson's correlation coefficient. In order to examine the factors influencing their life satisfaction, multiple regression analysis was used.

### Ethical considerations

This study was approved by the Institutional Review Board of a Korean University in Seoul, South Korea. The participants were informed about the aim and method of the study; they were told that their participation was voluntary and that they had the right to withdraw at any point. Participants were informed regarding anonymity and confidentiality of the data. The researchers received completed written consent forms from those who agreed to participate in this study.

## RESULTS

Demographic characteristics of participants are shown in Table 1. There were more female subjects (60.2%) than

**Table 1** Demographic characteristics (N = 246)

Characteristics	Categories	n	%
Gender	Male	98	39.8
	Female	148	60.2
Age (year)	65–69	108	43.9
	70–74	75	30.5
	≥ 75	63	25.6
Marital state	Single	4	1.6
	Married	155	63.3
	Bereavement	83	33.9
Spouse	Divorce	3	1.2
	Yes	142	59.2
Religion	No	98	40.8
	Protestant	61	24.9
	Catholic	54	22.0
	Buddhist	83	33.9
Education	None	47	19.2
	≤ Middle school	146	60.6
	High school	53	22.0
Past occupation	≥ College	42	17.4
	Public service	28	11.7
	Office worker	27	11.3
	Small business/customer Service	78	32.5
Current occupation	Service	—	—
	Agriculture	33	13.8
	Professional	19	7.9
	No	55	22.9
Living expense	Yes	206	84.8
	No	37	15.2
Monthly allowance (10 000 won)	Self	130	53.9
	Child	73	30.3
	Government support	38	15.8
Housing	≤ 10	88	35.8
	11–20	71	28.9
	≥ 21	87	35.4
Child (person)	Owner	175	71.1
	1–2	71	28.9
	Lease/rent	82	33.5
Living together	3–5	150	61.2
	≥ 6	13	5.3
	Married son	39	16.7
	Married daughter	6	2.6
Living together	Single child	41	17.6
	Couples	84	36.1
	Relations	2	0.9
	Alone	61	26.2

**Table 2** Mean of perceived health status, family support and life satisfaction of older Korean adults (N = 246)

Variable	M	SD	Range
Perceived health state	3.3	0.4	2–4
Family support	3.4	1.0	1–5
Life satisfaction	3.1	0.6	2–5

M, mean; SD, standard deviation.

male subjects (39.8%). The 65–69 year old age group was the most (43.9%). For marital status, participants who were married were the most (63.3%). Among all the participants, most of them had a spouse (59.2%). For religion, Buddhism was the most (33.9%). As for level of educational, more than half of the participants graduated from middle school (60.6%). For living expenses, self-sustenance was the most (53.9%). For children, most participants had three to five children (61.2%). Participants living with only their spouse were the most (36.1%), followed by those living alone (26.2%).

The levels of perceived health status, family support and life satisfaction of participants are shown in Table 2. The mean score of participants in terms of their perceived health status was 3.3 with scores ranging from 2 to 4, which indicates a low perception of their health status. The mean score of participants in terms of family support was 3.4 with scores ranging from 1 to 5, which indicates a high level of family support. The mean score of participants in terms of life satisfaction was 3.1 with scores ranging from 2 to 5, which indicates a low level of life satisfaction.

The correlations among the perceived health status, family support and life satisfaction of participants are shown in Table 3. The correlation analysis between family support and life satisfaction ( $r = 0.548$ ,  $P < 0.001$ ) showed a positive correlation. The correlation analysis between family support ( $r = 0.398$ ,  $P < 0.001$ ) and life satisfaction ( $r = 0.350$ ,  $P < 0.001$ ) in relation to perceived health status also showed a positive correlation.

The factors that influence life satisfaction among participants are shown in Table 4. Multiple-regression analysis of perceived health status, family support and certain general characteristics, specifically age and monthly allowance, was performed to identify the major factors influencing the life satisfaction of older Korean people. The analysis showed that the prediction model of life

satisfaction among older Korean people was significant ( $F = 37.708$ ,  $P < 0.001$ ). The value of the adjusted  $R^2$  was 0.375, which corresponds to the explanatory power of 37.5%. The most influential factor on life satisfaction among older Korean people was found to be family support ( $\beta = 0.406$ ), followed by age ( $\beta = -0.204$ ), monthly allowance ( $\beta = 0.138$ ) and perceived health status ( $\beta = 0.112$ ) (see Table 4).

## DISCUSSION

Although perceived health status was higher than the median, it was not that much higher, indicating that older people perceive their health status in a relatively negative light. This finding is similar to studies conducted by Song<sup>10</sup> and Hays.<sup>19</sup> Based on the results of previous studies, it is clear that perceived health status is an important factor in determining life satisfaction among older people because those with a positive perceived health status exhibited a higher degree of life satisfaction than those with a negative perceived health status.

The degree of family support for older people was higher than the median. This finding is consistent with a previous study conducted by Choi.<sup>5</sup> Family support has great significance because love or the help extended from family gives older people the strength to adapt faster and more effectively to crises that occur during their lives, leading to a higher quality of life.<sup>20</sup> Thus, it is highly probable that family support is required to maintain a healthy life for successful ageing among older people.

The degree of the life satisfaction among older people was slightly lower than the median, which is consistent with the findings of Song<sup>7</sup> and Lee.<sup>21</sup> This probably attributed to the fact that the older people had lack of sufficient care and social interactions, which were in accord with the report by a study<sup>7</sup> that most older people were likely to view their own lives negatively, regretting how they had lived and despairing over the quality of their present lives.<sup>22</sup> This study emphasizes the necessity of exploring solid nursing interventions for the improvement of life satisfaction among older people.

A positive correlation between perceived health status and family support was shown among older people in this study. This result was also consistent with Jang<sup>2</sup> and Okkonen and Vanhanen's study,<sup>20</sup> which showed that the higher the level of family support is, the higher perceived health status will be among older people. There was a positive correlation between perceived health status and life satisfaction among older people. The results of

**Table 3** Correlation among perceived health status, family support and life satisfaction of older Korean adults (N = 246)

	Perceived health status	Family support	Life satisfaction
Perceived health status	1	—	—
Family support	0.398**	1	—
Life satisfaction	0.350**	0.548**	1

\*\*  $P < 0.001$ .

**Table 4** Multiple-regression analysis in perceived health status, family support and life satisfaction of older Korean adults (N = 246)

Variance	$B$	SE	$\beta$	$t$	Adj. $R^2$	$F$
Constant	3.012	0.570	—	5.281**	0.375	37.708**
Family support	0.266	0.038	0.406	7.046**		
Age	0.180	0.006	-0.204	-3.799**		
Monthly allowance	0.102	0.040	0.138	2.528*		
Perceived health state	-0.023	0.089	0.112	2.009*		

\*  $P = 0.05$ , \*\*  $P < 0.001$ . SE, standard error.

previous studies by Jang,<sup>2</sup> Edwards and Lopez,<sup>8</sup> and Lin *et al.*,<sup>23</sup> in which participants who subjectively perceived themselves as having a higher health status exhibited a higher level of life satisfaction, were also consistent with the results of this study. Additionally, this study showed a positive correlation between family support and life satisfaction among older people. This result is consistent with Edwards and Lopez<sup>8</sup> and Kim's study<sup>24</sup> in that the higher the family support perceived by older people is, the higher their life satisfaction will be. During older age, family support is the important factor contributing to the life satisfaction of older people because they require more external support and assistance due to declining physical functions associated with natural ageing, less frequent participation in social activities, reduction in family members caused by the death of a spouse, sibling(s) or relative(s), as well as children moving out due to marriage, and reduced income after retirement.<sup>21,25</sup> Therefore, it is likely that life satisfaction among older people can be improved through increased family support.

Moreover, this study revealed that family support ( $\beta = 0.406$ ), age ( $\beta = -0.204$ ), monthly allowance ( $\beta = 0.138$ ) and perceived health status ( $\beta = 0.112$ ), in order of importance, are the factors that affect life satisfaction among older people with an explanatory power of 37.5%. Among these factors, family support was found to

be the most important form of primary support for older people. These results are consistent with Varley and Blasco<sup>25</sup> and Sok and Yun's study,<sup>26</sup> which demonstrated that family support, determined by the relationship between older people and their children, greatly affects the life satisfaction of older people. Another study showed that family support played an important social and psychological role with regard to adaptation to daily life by mediating and resolving long-term chronic health problems or personal conflicts.<sup>20</sup> Although the perceived health status among older people directly affects their life satisfaction, its effects are mediated to a large extent by family-related satisfaction. Moreover, even though life satisfaction among older people is affected by complex factors such as social and environmental factors as well as past life history, their life satisfaction can be sufficiently improved if their environment, particularly their family environment, can be improved despite the difficulty of doing so. Age and monthly allowance were also confirmed to be influential factors in this study, which is consistent with the result of a previous study by Chung.<sup>27</sup> Therefore, this study showed that strong family support, younger age, higher monthly allowance and higher perceived health status are contributing factors to the life satisfaction of older people.

The generalizability of the study result is limited as the data were collected through a convenience sampling

approach. The participants were older people in two communities in South Korea; therefore, these populations might differ from those in the other parts or regions throughout the nation. Despite the limitation, this study contributes the literature on perceived health status, family support and life satisfaction of older adults. This research alerts researchers and health-care providers alike to the varying manifestations of perceived health status, family support and life satisfaction in older adults.

These study's findings showed that the levels of the perceived health status and life satisfaction among older Korean adults were low, but their level of family support was high. Family support was reported to be the most influential factor to life satisfaction among older Korean adults.

These findings might help health-care providers to provide basic data that shall serve as basis to explore the nursing intervention to improve the perceived health status, family support and life satisfaction of older Korean adults. Considering these findings, clinical practice should be focused on family support for older Korean adults. Future research studies should consider various characteristics including status of the support based on types of living arrangement of older Korean adults.

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