

A Preliminary Study on The Definition of Senior Vitality

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ABSTRACT

With the increase in the absolute number of the elderly population and proportion of the elderly in the composition of population, there is a constant need for societal interest in the elderly population. Although many studies have been conducted to overcome various emotional and cognitive difficulties in the elderly, attempts to understand the vitality of the elderly is quite rare at home and abroad and no effort has been made to define the vitality index in terms of psychological science. The purpose of this study is to examine the perception of senior vitality in order to develop the Senior Vitality Quotient (SVQ) that reflects the changing characteristics of the elderly population and integrally define their life. A focus group interview was conducted on a total of 28 men and women aged sixty-five or older residing in Seoul using the convenience sampling method. Two and a half hours long interviews with high-function elderly focus groups and medium-function elderly focus groups were separately carried out. The results of the study manifested different activities, relationships, values, physical health, emotions, cognition, and vitality of life in each group. The factors showing differences in functional vitality in the elderly shall be discussed based on the SVQ development.

1. Introduction

According to the “Survey on the Status of the Elderly in 2017” issued by the Ministry of Health and Welfare in 2017, the elderly people aged sixty-five and over accounted for 13.8% and the number of the elderly population was estimated to exceed 10 million by 2025 and reach 15 million by 2035 (Statistics Korea, 2017). Along with increases in the absolute number of the elderly population and proportion of the elderly in the composition of population, there is a constant need for societal interest in the elderly population. In particular, the Survey on the Status of Elderly conducted every

three years, reported in 2017 that the index of aging has exceeded 100 for the first time due to a larger number of elderly population aged 65 or older than the number of the child population (0~14 years old) (Statistics Korea, 2017).

As such, Korean society is rapidly aging and the need for reflecting the changing characteristics within the elderly population is growing as well. In particular, the survey in 2018 has revealed the changes in expectation of life and life style that will take effects within 10 years when the number of highly educated elderly is increased and suggested the need of various types of supports for vulnerable elderly groups who still are not actively participating in social events (Statistics Korea, 2017). In order to do so, it is necessary to establish a standard to provide appropriate services by integrally defining and understanding the life of the elderly population, reflecting the increases in the number of the elderly and their various characteristics.

According to the literature published in the effort of defining healthy and successful aging of the elderly population, various aspects including physical illnesses, changes in cognitive functions and changes and satisfaction in psychological and social areas are affecting successful aging (An et al., 2011; Cosco et al., 2014; Depp & Jeste, 2006). In the study conducted by Strawbridge, Wallhagen and Cohen (2002), psychological domain was found to have the largest effect compared to individual extrinsic criteria or objective life index.

Depp and Jeste (2006) examined frequently appeared words when defining the concept of successful aging in academic papers published from 1978 to 2005. In their study, the most frequently used words related to the concept of successful aging were extracted in the order of disability-physical function, cognitive function, life satisfaction-well-being, participation in society-production, presence or absence of a disease, longevity, subjective health, personality and environment-finance.

Cosco et al. (2014) systematically reviewed the operational definition of successful aging by analyzing 103 academic journals published from 1979 to 2012. As a result, physiological constructs, engagement constructs, well-being constructs, personal resources and extrinsic factors such as financial status were identified as the elements needed to define successful aging. As such, in order to define successful aging, various factors should be considered, and therefore, a multi-dimensional approach has been suggested. However, neither sufficient studies related to the matter nor agreements on the constructs to integrally refer to the life of elderly, such as successful aging and healthy aging, have made.

Beyond simply extending the life span, the time to prepare for a successful life in old age has come. In order to improve the quality of life of the elderly population, there is a need for further research in related fields to enable them to enjoy old age by actively living in various fields of life with vitality for life. Particularly, a determinant which is the standard of vigorous life of the elderly should be urgently developed. Various terms suggested such as healthy aging and successful aging should be unified and the sub-determinants that constitute these concepts should also be more actively discussed. In order to do so, this study shall examine the perception of vitality in old age among the elderly population and provide the basis for the development of Senior Vitality Quotient (SVQ).

2. Methods

Since the meaning of the vitality index can be varying depending on the stage of the life cycle, the meaning of vitality in the elderly adults in specific was extracted from the data collected through Focus Group Interview (FGI).

2.1 Study Subject

The 28 subjects for this study were selected based on the selection criteria of elderly men and women aged 65 years or older. Subjects who were suspected to have or having cognitive impairment and/or dementia were excluded from the study. For the high-function elderly, official letters informing of research participation were sent to related centers and foundations for or related to the elderly in Seoul and used the convenience extraction method to select participants only from the respondent groups/organizations. For the medium-function elderly, the convenience sampling method was also used to select subjects from the elderly who visit community mental health promotion centers in Seoul. The information on the characteristics of the study subject is as shown in Table 1 below.

Table 1. Characteristics of Participants of the Focus Group Interview

Variables	Subdivision	N(%)	
Gender	Male	13	(46.4)
	Female	15	(53.6)
Age	≤ 70	10	(35.7)
	71-75	11	(40.3)
	≥ 76	7	(25.0)
Years of Education	≤ 12	12	(42.9)
	13-16	10	(35.7)
	≥ 17	6	(21.4)
Marital Status	Single	1	(3.6)
	Married	17	(60.7)
	Separation By Death	10	(35.7)
	Divorced	0	(0)
Total		28	(100.0)

2.2 Focus Group Interview Process Procedure

From November 2017 to November 2018, six focus group interviews were carried out, with four to five people in each group. For the high-function group, interviews were taken place in the K University that the researchers are from, and for the medium-function groups, interviews

were taken place in the community mental health center where the participants are recruited from. The interview length ranged from approximately one and a half hours to two and a half hours. Before the interview began, all participants filled out a questionnaire on demographic information including physical illness and income and a bundle of other questionnaires on social network, negative / positive emotion, personality functioning scale, wisdom scale, emotional schema scale and positive automatic thought scale. The entire interview process was recorded with the consent from the interviewees.

The questions on the questionnaires used in the focus group interviews were appropriately developed for the purpose of the study based on literature review and clinical experience. The interview questions were consisted in the order of current activities (sub-indicator: previous job, retirement year, education / certification, leisure time, regular exercise, volunteer work, religion, reason of starting activity, pleasure of activity, difficulty of activity), relationship (sub-indicator: social gathering, relationship valuable today, relationship that you want to develop further), value (activity value congruency), Physical health (physical illness, physical difficulty, efforts to cope with it), emotion (changed emotions after turning 65 years old, emotional difficulty recently felt, efforts to cope with it) cognition (evaluation of current cognitive function, recent cognitive difficulty, efforts to cope with it) and subjective evaluation of the degree of utilization of smartphone and the present life vitality. For the subjective evaluation of the life vitality, a 10-point scale was used to deduce one's own life vitality score along with a question asking for the reason. Table 2 summarizes the main contents of the questions that were asked in the interview through an unstructured method.

Table 2. Focus Group Interview Questions

Topic	Questions
Activity	<ol style="list-style-type: none">1) What activities do you do these days?2) How and where did you get the information about the activity?3) What do you get emotionally, physically, and/or cognitively through your activities?4) How satisfied are you with your activities? High? Low? What is the reason?
Relationship	<ol style="list-style-type: none">1) In what relationships are you actively engaged?2) What is the most important and meaningful relationship you currently have?3) What is your current relationship that you are most satisfied with /induces the most positive emotions?4) Do you have a relationship you want to keep? Are you making any special effort to do so?5) Do you have a relationship in your mind that you are not engaged in now but want to develop in the future?
Value	<ol style="list-style-type: none">1) What area is most valuable to you now?2) What is the most valuable activity you are currently doing?3) Do you have activities that have great value to you but you cannot do or activities that you don't put much value but spend lots of time doing?
Physical health	<ol style="list-style-type: none">1) What activities do you do in relation to your health? (frequency, difficulty, variety)2) Do you get a subjective assessment on your health status?3) Do you feel uncomfortable in your life because of your physical health?

Topic	Questions
Emotion	1) What are the feelings you often feel daily? 2) After turning 65 years old or at some points, do you have a wide range of emotional changes, emotions you often get or emotions you tend not to get? 3) How do you respond to the changes presented above? Do you have any emotions that you try to get more often? How do you respond when you feel unwanted emotions?
Recognition	1) Do you recently feel decrease in your memory, judgment, and processing speed? 2) Is there any daily situation where you think your cognitive function has been lowered. 3) If you have felt a change in cognition, or regardless of, do you make any special effort to maintain cognitive function?
Life vitality and satisfaction	1) If life satisfaction level can be scaled from 1 to 10, how satisfy are you with your life? 2) If you think it's a specific number, do you have any area you want to improve in order to make the number greater? 3) Do you want to live a life which is close to score 10?
ICT technology utilization skill	1) How familiar are you with smartphones? 2) Do you use your smartphone for reasons other than making/receiving phone calls or texting with your smartphone? 3) If you do, what makes you uncomfortable when you use it?

2.3 Quantitative Indicator

In order to investigate, in terms of quantitative indicators, the variability of high-function and medium-function that were arbitrarily distinguished by the researchers, psychological self-report measures related to personality, emotion, relationship, and insight were used. Quantitative indicator measurements taken from each group are shown in Table 3. However, due to a large difference in the number of cases included for each group, the analysis of the statistical significance between the quantitative indicators was excluded from the results.

Table 3. Measurements of Quantitative Indicator For Each Focus Group

		High-Function			Medium-Function		
		N	Average	Standard Deviation	N	Average	Standard Deviation
Social Network	Blood-tie	15	3.28	0.75	9	1.30	0.98
	Acquaintance	15	3.15	0.84	9	1.78	1.11
Emotion	Positive Emotion	19	2.92	0.82	9	2.26	0.57
	Negative Emotion	19	1.69	0.56	9	3.14	1.07
Functional level of personality	Intimacy	19	0.47	0.30	9	1.04	0.37
	Sympathy	19	0.66	0.37	9	1.23	0.52
	Self-initiative	19	0.59	0.35	9	1.38	0.51
	Identity	19	0.50	0.42	9	1.56	0.59

		High-Function			Medium-Function		
		N	Average	Standard Deviation	N	Average	Standard Deviation
Wisdom	Discernment and insight	19	3.95	0.37	9	3.93	0.72
	Emotional Control	19	3.34	0.47	9	3.47	0.48
	Perspective taking	19	3.48	0.64	9	3.56	0.72
	Integration of experience	19	3.88	0.77	9	3.79	0.60
	Interest and tolerance	19	3.54	0.58	9	3.80	0.54
Emotional schema	Incomprehensibility	19	2.50	1.29	9	4.17	0.43
	Anti-validation	19	2.55	0.78	9	3.06	1.42
	Guiltiness	19	2.42	0.96	9	3.39	1.67
	Simplicity for emotion	19	4.47	1.07	9	5.11	1.11
	Devaluation	19	1.39	0.79	9	2.39	0.89
	Loss of control	19	2.45	0.88	9	4.44	0.81
	Emotional paralysis	19	3.21	1.13	9	4.17	1.03
	Excessive rationality	19	4.45	1.20	9	4.61	1.24
	Emotional retention period	19	2.68	1.10	9	3.00	0.90
	Low emotional consistency	19	2.76	1.06	9	2.89	0.65
	Insoluble to emotions	19	2.29	1.03	9	3.22	1.06
	Rumination	19	3.11	0.88	9	4.78	0.91
	Low level of emotional expression	19	3.05	0.60	9	1.67	1.17
	Criticism	19	3.87	1.22	9	3.94	1.24
	positive automatic thought		19	3.75	0.48	9	2.81
Depression		15	2.53	2.20	9	23.00	5.12
Subjective life vitality		19	7.97	1.14	9	2.06	3.28

2.3.1 Social Network Scale

Social network was broadly divided into structural and functional aspects for the measurement. From the structural aspect, relationships were divided into blood-tied families and relatives and non-blood-tied acquaintances and neighbors. It was constructed such that the qualitative level of help from the relationships with them can be understood from a functional aspect.

2.3.2 Korean Positive and Negative Affect Schedule (K-PANAS)

The Positive and Negative Affect Schedule (PANAS) developed by Watson, Clark, and Tellegen (1998) is the most widely used scale in self-report type research on emotion (Watson, Clark, & Tellegen, 1998). In this study, K-PANAS standardized and justified by Lee, Hyunghee et al. was used. The questionnaire is consisted of 20 questions, rating positive and negative emotions felt during the past one week. Each question is scored according to how the respondent actually thinks/feels using 5-point Likert scale (0= 'Strongly Disagree', 4= 'Strongly Agree'). The internal consistency reliability was relatively good, resulting in .84 for the 10 positive emotion questions and .87 for the negative emotion questions (Lee, Kim, & Lee, 2003).

2.3.3 Functional Level of Personality Scale

This scale is based on the dimensional model of personality composed of 52 personality function questions derived from the clinicians' personality function interview scale and the definition of the function of personality suggested in the Volume III of Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. It assesses how individual's personality traits affect oneself and interpersonal patterns. Each question is scored according to how the respondent actually thinks/feels using 4-point Likert scale. (0= 'Never', 3= 'Always'). Currently, studies on validity of scales are undertaking with general population group and personality disorder group.

2.3.4 Korean Wisdom Scale

This scale is composed of a total of 36 questions, developed and validated by Lee and Cho (2012). And it was found to be consisted of five sub - factors of discernment and insight, emotional control, perspective taking, integration of experience, interest and tolerance. Each question is scored according to how the respondent actually thinks/feels using 5-point Likert scale (0= 'Strongly Disagree', 4= 'Strongly Agree'). It had .82 of internal consistency reliability and showed significant positive correlation with life satisfaction, the meaning of life and self-report measures related to relationship satisfaction and significant negative correlation with so called obsession and neurosis (Lee & Cho, 2012).

2.3.5 Emotional Schema Scale (LESS-II: Leahy Emotional Schema Scale - II)

The Emotional Schema Scale, a self-report type scale developed by Leahy (2012), has 28 questions each of which is scored by 6-point Likert scale (1= 'Strongly Disagree', 6= 'Strongly Agree') and 14 lower measures (Leahy, 2012). Emotional schema is known to determine how individuals experience emotions and respond to them (Leahy, 2002). The lower measures include incomprehensibility, anti-validation, guiltiness, simplicity for emotion, devaluation, loss of control, emotional paralysis, excessive rationality, emotional retention period, low emotional consistency, insoluble to emotion, rumination, low level of emotional expression and criticism. The higher the score of the emotional

schema scales represents the more negative the emotional beliefs. The results from validation study conducted with college students in Korea showed .84 internal consistency reliability (Leahy, 2002).

2.3.6 Korean Automatic Thought Questionnaire – Positive (K-ATQ-P)

It is a tool adapted and standardized by Lee and Kim (2002) that scores self-related evaluation of an individual. ATQ-P is composed of 30 questions each of which is scored by Likert 5-point scale (1= ‘Strongly Disagree’, 5= ‘Strongly Agree’). With the results from a standardized study of Korean adults and college students, showing .96 internal consistency coefficient and .91 self-half reliability as well as .89 of one-week interval test-retest reliability, it has been proved as a reliable evaluation tool (Suh et al., 2018).

2.3.7 Geriatric Depression Scale (GDS)

It is a tool used to score the level of depression of the elderly population adapted and verified by Ki and Lee (1995). Depressive symptoms of elderly patients and the symptoms of dementia show similar findings in cognitive function tests, with the characteristics of noticeable complaints of experience of subjective memory loss and less useful physical symptoms in diagnosing compared to young patients (Ki & Lee, 1995). This biserial scale, which is composed of 30 questions, showed good reliability and inter-item reliability from the validation research, and showed .89 internal consistency coefficient and .78 split-half reliability.

2.4 Analysis Method and Procedure

The purpose of this study is to identify the perception of current activities, relationships, and changes in old age in order to explore the characteristics that define the life vitality of the high-function and medium-function elderly groups. It was sought to understand experience-based factual statements, quantitative indicators of psychometric measures, and the evaluation and meaning of the experience. Max van Manen’s hermeneutic phenomenology method was used to analyze the data obtained from the focus group interviews. Hermeneutic phenomenology analysis starts from examining the essence of an experience, understanding the subject after looking at the experience as it is, and then hermeneutically writing about it (Jung, 2018).

The details of the study procedure are as follow. First, all the voice records were transcribed to analyze the focus group interviews. A first and a second researcher independently carried out coding by reading each statement and underlining words or phrases that were used in a similar concept. Then, a subject was constructed after reconstructing the coded data into general and abstract statements. The first and the second researchers independently categorized them into major and minor categories. Subsequently, a third researcher reviewed the two independently categorized systems and made a final comparison to select common classification subjects. Subjects that did not match were included in the categorization to be agreed upon after discussion.

3. Results

Following the focus group interviews conducted to understand the perception of life with vitality in old age among the elderly population, 7 categories and 14 subcategories were deduced. Category subjects and contents are as shown in Table 4.

Table 4. Subjects and Contents For Each Group

Main Category	Subcategory	
	High-Function Group	Medium-Function Group
Activity Evaluation	Have various activities and actively evaluate oneself. Wide range of activity	Make complaints of physical discomfort. Have difficulties participating in activities or stopped participating Activities centering around religions, senior citizen centers and welfare centers
Aspects of Relationship	Feel rewarded, satisfied, and positive emotions through participating activities Have various types of gatherings such as old social gatherings, common interest meetups and etc. Frequency and number of gatherings are high.	Reserved evaluations of participating activities Most of old social gatherings are disbanded. Limited meetings based on geographical proximity, such as community social gatherings, are maintained.
Value Recognition	Feel a sense of belonging and satisfaction in existing relationships and have interest in new relationships. The present is most important. Reported of various types of values such as helping or teaching others, giving back what have been received and donating to the society.	Does not feel much sense of belonging and satisfaction in existing relationships and have low interest in new relationships. Values of the self or his/her family members are evaluated to be the most important.
Physical Health Recognition	Still make efforts in the areas that one thinks is valuable. Recognize discomfort due to physical changes and added limitations but accept the physical limitations.	Put highest life values on health-related values without sufficiently participating in relevant activities. Discouraged by lowered physical functions Have a high level of discomfort because of limitation in life due to the depressed physical functions.
Emotional Change Recognition	Considerable efforts are made to minimize the effects of degradation of physical abilities and illness. Recognize emotional changes and try to actively cope with the changing emotions	Regular exercise or effort to maintain physical function is made, but the intensity and frequency of exercise are limited. Complain about emotional discomfort and negative emotions. Other areas of life are also affected by feeling depressed and alienated.
Cognition Change Recognition	Do not recognize any cognitive changes or they accept cognitive changes as a natural phenomenon Has an active measures for cognition changes	Vehemently complain about intellectual decline, such as degraded concentration, processing speed and memory. Has no or limited measures for cognition changes
Life Vitality Evaluation	Highly satisfied and confident about current life Has a high desire to have a life that is recognized by other people around, such family members, and expectations for the future.	Feel low satisfaction and self-efficacy with current life Has little hope for the life in future or low expectations for better life

3.1 Activity Evaluation

The subjects of the high-function groups reported that they have done various activities. It was deduced that they actively participate in a wide range of various activities. Especially, it was found that they feel rewarded, satisfied and a lot of positive emotions.

“Because I do a lot of activities I don’t have any distracting thoughts. No distracting thoughts… because I am always busy. I have to do it well. I only think about how I will participate and what I need to do today. I have no so-called negative thoughts. That’s a good thing. If I have to look at it from a negative side…Well, there is no drawbacks. May be I am pressed for time?”

However, subjects of the medium-function group complained about physical discomfort and reported difficulties in taking activities. It was found that they stopped activities for various reasons and only make participation within limited scope.

“I also cannot do any activities because I had a surgery on my back. My legs are numb and tingling. I go out after I get up in the morning to walk for a bit of workout. Taking a walk. And I go out for exercise equipment. That you just walk like this. Doing it makes me feel like I am softening my legs. I do it three to four times a week.”

3.2 Aspects of Relationship

It was found that subjects from the high-function groups have various and numerous types of frequent gatherings, such as old social gatherings and common-interest meetups. Also, they were observed to have a high sense of belonging and satisfaction with the existing relationships and have a great interest and expectation in new relationships.

“I used to work for civil service and I have one or two gathering with my colleagues from the old time. And high school alumni gathering and hometown gathering, I have 4 groups so I meet them once a week or once in two or three months, I have such meetings and I find those that I meet very important and ... [omitted]”

It was found that most of old gatherings of the subjects from the medium-function groups are disbanded and they only maintain limited gatherings/meetings based on geographical proximity, such as community social gatherings. In addition, they tend to have a low sense of belonging and satisfaction with existing relationship and low expectation for new relationships.

“Every week we went to Catholic church together… the closest and friends used to get together they all left far away after building the house… No one is here since the reconstruction… alumni gathering is disbanded… Everything is gone… Everyone became too old… All died and went to somewhere… Do not even know where they are… It is just like that.”

3.3 Value Recognition

It was found that the present is most important factor for the subjects of the high-function groups. They also reported various dimensions of values such as helping or teaching others, giving back what have received and donating to the society. In fact, it was found that they are still making efforts for the areas they find valuable.

“Church is the top priority. What I mean is my religious life is the top priority. I volunteered at the Kangbuk Samsung Hospital Hospice for about five years. Things that I feel when I am doing something like that. I think the conversation I have with them is very important and I love everything that I do now. I think it’s okay to finish my life keeping them in my mind. My plan now is I want to proactively work till I am 75 and be served from 75.”

On the other hand, the subjects from the medium-function groups highly evaluated the health of their own and their family members. They exercise or make efforts regularly to maintain physical functions but the frequency or intensity seemed to be limited.

“Health is most important. Yes. I will pray for my family members and their health”

3.4 Physical Health Recognition

The subjects of the high-function groups recognize occurring discomfort caused by physical changes and added limitations as they age. However, they accept the physical limitations. Also, they seemed to make considerable efforts to minimize the effects of degradation of physical abilities and illnesses.

“I was told not to get a surgery but to work out and that’s why I go to a gym. I paid 60,000 won per hour, not 600,000 won per month, but 60,000 won each time. I worked out for one month, two months and three months and now I am completely recovered. I get old physically because I want to do as I usually did when I was young but I need to be careful now. Like, I don’t run when I cross the crosswalk but wait for the next green light.”

The subjects of the medium-function groups were discouraged by the degraded physical functions as they age and they tend to report high level of discomfort due to corresponding limitation in their life. Also, they seemed to exercise or make efforts regularly to maintain physical function but the frequency or intensity seemed to be limited

“There is nothing special I do for my health. Even though I want to die now but want to live 3 more years. I want to die now but sometimes I want to live 3 more years. Watching my grandson getting married after he is done with.”

3.5 Emotional Change Recognition

The participants of the high-function groups also were aware of emotional changes they have had since the age of 65. However, it was found that they simultaneously try to actively cope with such changes.

“I feel a sense of alienation or something like that. The young people avoid us. I am still the same. Because they feel that way we have to follow. I have no other choice. But I get a lot of positive emotions from gatherings, instead.”

The participants of the medium-function groups complained about emotional discomfort such as sadness, anxiety, nervousness and depression. Other areas of life seemed to be also affected due to experiences with such negative feelings

“I think my mind is little anxious. I want to live like that but it’s not easy to do.. I try to live a positive and happy life. I am more than old enough and there is only one destination for me to go so I want to live positive and try but it’s not easy, not so.”

3.6 Cognition Change Recognition

The participants of the high-function groups do not recognize any cognitive changes and they were willing to accept cognitive changes as a natural phenomenon. They seemed to have active measures to cope with cognition change.

“I get more and more forgetful. But I think my judgment is still okay. I have to read a literary magazine or book every month and I tend to close read at least 2 newspapers every day. Or I basically read articles on newspapers and check.”

The participants of the medium-function groups vehemently complained about the discomfort caused by intellect decline, such as degraded concentration, processing speed and memory. However they seemed to have no or limited measures to cope with such cognition changes.

“So soon I forgot about it. I don’t take medicine to sleep but things just slip through my mind. I often forget what I was about to do. I don’t know why I am like this...”

3.7 Life Vitality Evaluation

It was found that the participants of the high-function groups are confident and satisfied with their current life. Also, they seemed to have a high desire to have a life that is recognized by other people around them, such as close family members, as well as a high expectation for the future.

“I am healthy, I have good cognitive functions such as memory, I don’t really feel my life is sorrowful, regretful or something like that. I still want to move on with things that I still find interesting. I think may be about 7-8 for my vitality index.”

The participants of the medium-function groups seemed to have low satisfaction with their current life and depressed self-efficacy. In addition, they tend to report little hope for the future life and low expectation for a better life in the future.

“There is nothing that I can even evaluate. I almost live in the gutter. It doesn’t matter if I give it a thought.”

4. Discussion

Although many studies have been conducted to overcome various emotional and cognitive difficulties in the elderly, research to understand the vitality of the elderly is quite rare at home and abroad and no effort has made to define the vitality index in terms of psychological science. This study was conducted to establish the concept of senior vitality and build the basis to develop senior vitality quotient (SVQ) in order to examine the perception of senior vitality from a multidimensional aspect. In particular, as suggested by the Survey on the Status of the Elderly in 2017 and because of the problem of treating the elderly population as a group consisted of the same characteristics in the previous studies has been pointed out, the elderly population was divided into two groups of high-function and medium-function for this study and the results were analyzed.

As a result of the analysis, it was found that the high-function group and the medium-function group had different subcategories of the 7 main categories related to life with vitality. For the high-function groups, the activities they were participating are various and they showed high level of self-esteem and satisfaction because of the activities. On the other hand, the seniors from the medium-function groups were participating in limited frequency and types of activities which they were not so much satisfied with. The measures they take against physical, emotional and cognitive changes were found to be also different. It was observed that the overall level and content of vitality for life were different.

Considering the differences in the characteristics of the elderly per the age, gender, stratum, the degree of healthiness showed in the previous studies (An et al., 2011; Hong, 2010; Jang, 2007; Atchley & Barush, 2004), and the proposed suggestion to approach successful aging while taking the differences among the elderly groups into account, this study is deemed to be on the supportive side of the previous studies. Consequently, differentiated standards and services should be provided to the elderly population who showed high expectation of the life in old age and the vulnerable elderly population who are absolutely inactive in participating in social events.

In addition, in order to define the life vitality in old age, key components from various domains such as physiological domain, social domain, and psychological domain should be considered from a multidimensional aspect. However, extensively conducted previous studies have made different

proposals and the studies on the components of successful aging have not yet reached an agreement. The different tools used to measure successful aging have further aggravated confusion in this area of research. Moreover, the number of studies on successful aging, healthy aging and senior vitality is not yet sufficient. Thus, if the discussion on the vitality in old age becomes an issue and relevant variables are deeply contemplated, the time to develop the senior vitality quotient (SVQ) which can integrally define the agreed measurement tools for old age vitality, agreed definitions and the life of the elderly population can be shortened.

Because this study is a qualitative analysis having a large difference in the number of cases between the groups, generalizing the results of this study has a limitation. Thus, conducting a quantitative study which analyzes sufficient number of cases is deemed to be necessary. Nonetheless, this study carries a great significance in that this study divided elderly groups by function and studied and understood the perception of the elements related to the vitality in old age among the elderly.

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