

# **A Study on the Korean Senior Employment Promotion Project that Influence on the Quality of Participants**

— Focused on gender difference —

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## **[Abstract]**

This study analyzes the Korean senior employment promotion projects influence on the quality of elderly peoples lives. This study is focused on the gender differences, and based on their identification it provides policy implications to use for senior job creation initiatives as a way to promote improved quality of their lives.

For this study, university students who were trained about interview techniques from October, 2007 to January, 2008 visited 33 organizations in each of Seoul's administrative districts including social welfare centers, senior centers, senior employment support centers and community senior clubs. Ten to thirty older people of each organization had face-to-face interviews with the interviewers, resulting in 595 questionnaires collected. After data cleaning, a total of 574 questionnaires were used for this study.

SPSS 14.0 was used to conduct data analysis, and many analysis techniques were employed for the analysis: frequency analysis, independent samples t-test, one-way ANOVA, correlation analysis, hierarchical multiple regression analysis.

The study uses regression analysis to find out the influence of variables on quality of life, and found that older men felt happier when they were early on in their retirement years, healthier and they participated in the project for an extended time. On the other hand, older women said they were happier when they were healthier and their job gave them more satisfaction when their job was not for public service or human resource dispatch.

## **[Key words]**

Quality of life, Korean senior employment promotion project, job types, project participation period, gender comparison of the quality of life

## **I . Introduction**

With the average span of human life extended due to the development of medical science and the improvement of social and economic conditions, our society has been experiencing the rapid growth of an aging society. The senior population over age 65, all across the country, accounts for 9.9% of the total population as of the year 2007, and it is predicted that the percentage will rise to 11.0% by 2010,

and 24.3% by 2030 according to the increase in expected life span (Korea National Statistical Office, 2006: KNSC, 2006).

With Korea's low birth rate and aging society, the problems of population decrease and an aging work force has occurred as in other advanced countries. The insecurity over an elderly person's jobs is deepening and the unemployment rate of the aged is becoming more serious as our society faces a labor market in which the rate of elderly is relatively high according to the structural change in the aging society, while the size of the labor market is decreasing<sup>1</sup>.

The retirement causes elderly people to get stress as they lose their labor power and the loss of economic and social resources. Furthermore it may be a major factor to a decrease in life satisfaction. The loss of job causes the loss of a role as well as a decrease in income; lowering of self-respect and increasing loneliness and alienation as they face a change in their social ties. As a result, the quality of life is likely to deteriorate more at this time than at any other stage of human life.

The quality or satisfaction of life may be defined as a subjective sense of well-being, happiness or life satisfaction; however, in general it may be referred to as the overall evaluation of a life an individual person feels subjectively. When an elderly person spends a happy and comfortable life in which a regular income is secured it may be called a successfully aging or a successfully retired life, which can be viewed as a high quality of life (satisfaction of life).

There are many factors having effects on quality of life, among them are the level of economy, whether to have a job or not and employment for the aged. Though it is recognized that the economic conditions of the aged, including whether to have a job or not, have effects on life satisfaction, job activity has positive effects on life satisfaction (Yu-ja No, 1988; Sin-suk Lee, 1955), there are study results that argue elderly employment does not have meaningful effects on their life satisfaction as well. It was reported that participating in elderly employment had effects on life satisfaction (Yang-yeol Seo, 2004; Gu-yeong Gweon · Jeong-min Choi, 2007).

The rapid increase of elderly population and the extension of the average life span, due to the development of medical science, improvements in diet and level of living, have resulted in a longer old age life and the greater population of healthy elderly people. Accordingly, elderly people's desire to have economic self-reliance is increasing so that a stable retired life may be secured. According to the results of the 'National survey of elderly life conditions and welfare demands (Gyeong-hee Jeong and others, 2005) carried out by Korea Institute for Health and Social Affairs, the aged people who were willing to prepare the living expenses for themselves occupied 49.4% of total survey participants, taking the highest place, and according to the research data of Korea National Statistical Office, it appeared that more than half (57.9%) of elderly people wanted to be employed later on, in life and the fact that the main reason they wanted to get a job was to make up the deficit of 'living expense'.

In terms of social aspects in advanced countries, which are already experiencing an aging society,

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<sup>1</sup> It is identified that the number of the aged laborers was reduced in 2001, compared to that of 1996. This is because the burden of industrial restructuring after the foreign exchange crisis at the late 1997 was centered mainly on mid-aged and aged laborers, so they were forced to take early and voluntary retirement, regardless of private or public enterprises (Cheol-su Lee, 2003: 99) The continuation of a high unemployment rate makes it difficult for the old-aged jobless to return to work.

the reduction of productive age population and the extension of the average life span of aged people, due to the low birth rate and aging, have caused an increase in social security expenditures such as pensions and medical insurance as the elderly population has sharply increased, which society supports economically. Making the best use of an elderly labor force, which is one of the available labor forces, has become an important matter of policy, so that the financial pressure due to the increase of social security expenditure may be relieved, as well as the national productivity may be sustained allowing continued economic growth.

As long as the aged laborers with high desire for a job have an ability to work, there is a growing need to reorganize the labor environment<sup>2</sup> in order to allow the aged to continue to work using their knowledge and experience regardless of their age, as a countermeasure against the aging labor force, caused by lowering birth rate and becoming an aging society, may be taken and the aging labor force may be used (Ok-hee Kim, 2007: 202).

Despite the extension of life span and the increase of healthy elderly people, our society is not making use of the elderly manpower in an orderly fashion, so most of them depend on their children for living expenses. Accordingly, the necessity of productive elderly welfare policies through employment promotion policies are needed in order to reduce the family and social support expense and to allow the aged to lead a successful old age as they prepare a living expense for themselves.

In the advanced western European countries, which have already experienced the aging population, economic welfare became the one of major targets of national policies, and the countries developed income security systems and diverse elderly employment programs for economic stability of the aged population, so that they might promote the self-sustenance and improve the quality of life of elderly people.

Since 2004 our government has carried out job creation programs for the elderly to enhance the quality of life for them by providing healthy elderly people with suitable jobs, and the opportunity for social activity and income preservation. However, despite the quantitative expansion, providing 110,000 jobs in 2007, the project contains various problems to be resolved in terms of quality, such as the continuation of project, the sharp difference between the ratio of jobs provided by government and private sector, and the weakness in the strategic job series of which the possibility of continuance is verified.

The preceding studies as to life satisfaction of elderly, who participate in economic activities, show so much diversity that it may be a little difficult to generalize them. It seems that the life satisfaction of elderly who participate in elderly employment programs, in which the jobs are different from other occupations in terms of activity content and working conditions, has not been discussed enough yet and needs to be studied.

Though the existing studies on the elderly focused on the difference between elderly male and elderly female, incomplete results were received, in which the peculiar problems of each gender were misunderstood as they were defined on the basis of the average characteristics of elderly males and females (Gi-nam Park, 2004:16).

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<sup>2</sup> For example, there are Age Discrimination in Employment Act in the U.S.A and the Elderly Employment Security Measures (2004, employment security till age 65)

As the gender was limited to the subordinate variable of socio-demographic variables like age and education, the cause identification or comparative studies about the origination process and related factors, such as employment project participation of elderly males and females, poverty, joblessness and reentry, were passed over, so that it may be concluded the social implication about the study results were not sufficiently considered.

Because it was impossible to find consistent study results between the variables of gender and the quality of life, it was decided to research the relationship, considering the importance of the variable of gender and making it become an independent variable. So, it was designed to carry out the comparative analysis on the factors having effects on quality of life on the basis of distinction of gender when the analysis of characteristics of the employment project, which has effects on the quality of life of elderly people who participate in the programs, was carried out.

The concrete problems to study were as follows;

First, how was the quality of life according to the type of elderly jobs, participation period and project satisfaction? Is there any difference in quality of life between elderly males and females according to the type of elderly jobs, participation period and project satisfaction?

Second, do the type of jobs, participation period and project satisfactions have effects on quality of life? Is there any difference between the effects on quality of life of elderly males and that of females caused by the type of jobs, participation period and project satisfaction?

## II . Theoretical backgrounds and preceding studies

### 1. Korean Elderly employment project for improvement of quality of life

The Korean Elderly Employment Project is a project aiming at the effects of elderly health, expansion of social participation, supplementary support income for the elderly over age 65, in order to prepare for the rapid aging society (Chun-sik Lim and others, 2007:92). As of the year 2007, there were 5 types of project, such as Public benefit type, Educational type, Welfare type, Market type and Manpower dispatch type<sup>3</sup>.

The legal ground of Elderly Employment Project are Article 23, Clause 2 of Article 23 and Article 11 of Low Birth Rate and Aging Society Act<sup>4</sup>. Elderly Employment Project are carried out by the Ministry for Health, Welfare and Family Affairs, Korea Labor Force Development Institute for the Aged, local governments and project execution agencies.

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<sup>3</sup> The type of Korean Elderly Employment Project and the concept definition is changing continuously. As of the year 2007, there were 5 types of projects, such as Public benefit type, Educational type, Welfare type, Market type and Manpower dispatch type. There are 5 types of employment supported by the government, and the employment activity in the private sector includes introduction through Elderly Employment Fair, Employment Support Center in Korea Elderly Association and Senior clubs.

<sup>4</sup> Article 23 of Elderly Welfare Act in Korea reads, "The development of jobs suitable for elderly and supply measures shall be explored, and the elderly with labor capability shall be provided with job opportunity on a preferential basis." Clause 2, Article 23 of Elderly Welfare Act reads, "it is allowed to establish · operate institutions which will take complete charge of development, supply, and educational training of employment suitable for the elderly, or entrust corporations · groups with the work." Article 11 of Low Birth Rate and Aging Society Act reads, "The necessary measures shall be explored so that the stable old age life may be secured by the measures like the creation of suitable employment for elderly."

The necessity of Elderly Employment Project can be looked into as it is divided into the necessity of elderly employment, elderly poverty problems, deficiency of personal · social preparation for old age, and low employment rate compared to the high desire of elderly employment.

Quality of life can be examined as it is divided into an objective one and subjective one; however, there is a tendency to understand the quality of life focusing on the subjective aspects of individuals (Tae-hyeon Kim and others, 1997:4 Tae-hyeon Kim, 1999: 62).

Quality of life also can be divided into health and objective parts of material and emotional and subjective parts of satisfaction or happiness, but the subjective aspect of quality of life is regarded as more important, and it is explained as the concept similar to the life satisfaction, well-being and happiness, and measured as the life satisfaction degree (Byeong-eun Gwak, 2006: 55).

Padilla (1985) argues that the quality of life is the process of evaluating the response to mental health, physical health, interests in physical body, interests in society, diagnosis and treatment, so the quality of life is the subjective well-being perceived by individuals in the physical, mental and social-economic fields. Like this, the concept of quality of life or subjective sense of happiness is composed of multi-dimensional fields, so it is defined differently according to different scholars. Quality of life is dealt with in many academic fields and the term is used universally in our society, but the characteristics may be easily defined, and it is very difficult to derive the agreed principles for the formation of scales (Jae-gi Lee. Eun-woo Lee. Jae-hong Kim, 1998).

Quality of life is the emotional content as to the attitude of a personal life, and it can be also a subjective feeling about the present and future, so it refers to life satisfaction and happiness.

In this study, the quality of life was defined as “the personal subjective evaluation and sense of happiness as to the objective conditions, such as physical, mental and social-economic conditions, possessed by individual elderly person, based on the diverse concept definitions of quality of life.

## **2. Preceding studies about elderly employment project and quality of life**

Maeda Daisaku, Nokuchi Yuji, Tamano Kajuyoshi, Nakaya Yoaki, Sakata Shyuichi. Jersey Liang (1989) have drawn the conclusion that the satisfaction of economic condition, whether to have a disease or not, physical function, satisfaction from social supports, present depression or self-respect have significant effects on the subjective sense of happiness, through the research survey using the modified PGCMS.

Kaminari Hideo (2004) found out that social participation activities have certain effects on the subjective sense of happiness of elderly in research survey using the modified PGCMS, and the subjective sense of happiness appeared to have positive effects on social participation activities conversely.

The economic condition, including whether elderly have a job or not, seems to have a positive mutual relations with quality of life (Larsom, 1977; Klemmack & Roff, 1984; Yu-ja No, 1988; Sin-suk Lee, 1995).

According to the study result of Seung-whan Oh, and Dong-seong Yun (2006), unlike the results of preceding studies, in which it was argued that the higher economic income, the higher life satisfaction is obtained, it was disclosed that even the elderly supported by the government, due to economic

poverty, had a high life satisfaction.

Job activities of elderly have effects on the quality of life or psychological sense of welfare (Aquino, Russel, & Altmaier, 1996; Riddick, 1985; Thompson, 1973; Wha-hee Son, Ok-bun Jeong, 1999; Jung-don Gwon, Ju-yeon Jo, 2000; Ik-gi Kim and others, 1999; Ji-hyeon Lee and others, 2008; Nan-suk Go, 2005; Hye-ja Lee, Myeong-ok Seong, Yun-a Shin, 2003; Havighurst, 1972; Mutchler, Burr, Masagli & Pienta, 1999; Mutran, Retzes, Bratton, & Fernandez, 1997). On the other hand, the positive effects of wage labor of elderly were not found in the study of McIntosh and Danigelis (1995).

One studies results argues that economic activities would deteriorate the quality of life in the case of the elderly, and it does not have any effect on the psychological sense of welfare (Sun-deok Yun, 2004).

Accordingly, it may be considered that the effect of the state of employment on elderly quality of life has no consistency. It was reported that participating in the elderly employment project had positive effects on quality of life of elderly (Yang-yeol Seo, 2004; Su-o Seo, 2007; Gu-yeong Gwon, Jeong-min Choi, 2007; Gyeong-whoil Kim, 2007).

Some preceding studies argued that the type of employment project had meaningful effects on the life satisfaction of the elderly participants, and the others argued that there was no relation between them. Yang-yeol Seo argued that the elderly participating in the Public benefit type showed the higher satisfaction. In the case of the study result of Hee-jin Park (2005), the elderly participating in the Welfare type showed the highest satisfaction of the project, but the elderly participating in the Educational type showed the lowest satisfaction with the elderly employment project than the other elderly. According to the study result of Hyeon-suk Kim (2005) the satisfaction degree of project participation was highest in the Market type, and the Manpower dispatch type and Welfare type were higher than the Public benefit type, but the Educational type showed the overall lower level of participation satisfaction compared to other type of employments. In the studies of Gu-yeong Gwon, Jeong-min Choi (2007), Gu-yeong Gwon, Gong-sik Park (2007), the will of participation in the Educational type and Welfare type were higher than the Public benefit type, and the sense of well-being of participants appeared to be higher than the other types.

On the other hand, according to the study of Gyeong-whoil Kim, the type of employment did not appear to have meaningful relations with life satisfaction. Looking into the study results related to the participation period and quality of life, it was identified that the group which had participated more than a year showed lower satisfaction than the group which had participate less than a year (Su-o Seo, 2007), or in the other study, the elderly participating within 5 months showed higher satisfaction with the employment project than the elderly who had participated for different periods (Hee-jin Park, 2005). In another study by Gu-yeong Gwon and Gong-sik Park (2007), the group participating between 4 months and 6 months showed the higher satisfaction than the group participating less than 3 months and between 10 months and 12 months, and the group participating less than 3 month and between 7 months and 9 months showed higher satisfaction than the group participating between 10 months and 12 months.

Looking into the general factors having effects on the quality of life of elderly, it was reported that



the factors included the age, sex, educational level, income, occupation, marital status, religion, social activity, health status and social support (Fitch and Slivinske, 1988; Su-won Chai · Gyeong-ok Oh, 1992; Seung-deok Go · Suk-haeng Jo, 1997).

Woo-bok Lee (1993) reported that the variables, which had effects on elderly life satisfaction, included the sex distinction, age, educational background, occupation, economic status, health, religion, marital status, social relations, support from family and environment. In-jeong Lee (1999), Diener & Suh (1998) reported that the age of elderly did not have effects on life satisfaction.

Quality of life showed the directly-opposed results according to the sex distinction. According to one study, elderly females had lower life satisfaction than elderly males (Liang, 1982; Chung-seon Park, 1998; Gi-wol Seong, 1999; Hyeon-suk Oh, 2003). However, there was a study that argued elderly males had lower life satisfaction than elderly females instead, due to undergoing lots of changes in social roles (Sang-hee Jang, 1983; Jun-su Heo, 2004; Jin-hee Bae, 2004; Seon-me Lee and Gyeong-sin Kim, 2002), on the other hand, there was a study that argued the sex distinction had no effects on life satisfaction of elderly (Yeong-gil Lee, 1994, Palmore & Kivett, 1977; Lason, 1978; Warr et al., 2004; Berg, Hassing, Mcclern and Johansson, 2006; Gwang-hee Park. Hye-gyeong Han, 2002; Su-o Seo, 2007; Hyeon-gu Shin, 2007).

In the study of Gi-nam Park (2004), life satisfaction of elderly males appeared to be meaningfully higher than that of elderly females in the simple mutual relations between sex variables and life satisfaction, but in the case of consideration of all other variables, the directly-opposed result came out in which the life satisfaction of elderly male was rather lower than that of elderly females.

In the study of Jeong-seok Kim (2003), it was found that elderly females were more dependent on the spouse or children than elderly males as the relationship between the elderly males or females and the economic resources appeared to be different according to whether they had a spouse or not, and whether they were living with their children or not.

Even in the case of the western European countries which had experienced an aging society for some time, the study on the difference between sex distinctions of elderly were actively performed recently.

According to the study about what effects employment after retirement has on the life satisfaction of elderly females (Choi, 2001), it argued that though the employment itself did not contribute to the life satisfaction of elderly females, the financial resources became the potential factor of life satisfaction, so the study proposed that the economic condition and the satisfaction should be considered as the important factors in the study of quality of life at old age (Gi-nam Park, 2004).

Though it was not easy to find the consistent relations between sex variables and quality of life on the basis of preceding studies, in consideration of the limits of the existing studies, in this study it was designed to survey and research the relations with the characteristic variables of elderly employment projects, changing the sex variables into independent variables.

### III . Study Method

#### 1. Study object and method of data analysis

The research survey of this study was carried out over 4 months, from October 2007 to January 2008, with the elderly who were participating in the elderly employment projects in the Seoul area. The summary of sampling process for this study is as follows; first, copies of official notice for cooperation were sent out to the officers in charge of elderly employment project at social welfare centers, senior welfare centers, elderly employment support centers and senior clubs of communities in each administrative district in Seoul area, then the surveyor visited the institutions, which agreed to the plan, to carry out the survey of 10 to 30 people in each institution.

University students who received the survey training visited 17 multipurpose welfare centers, 6 senior welfare centers, 7 elderly employment support centers, and 3 community senior clubs in person, and carried out face to face survey in consideration of the educational level of the participating elderly. Among the collected 595 questionnaires, 21 cases that were prepared faithlessly were excluded through data cleaning, then total 574 cases were used as the final study objects.

The data analysis method was as follows.

The Hangeul SPSS 14.0 was used to analyze the data, and as for the analysis techniques, the frequency analysis, independent sample t-test, one-way ANOVA, correlation analysis and hierarchical multi-regression analysis were carried out.

#### 2. Study tools

##### 1) Socio demographical variables

According to the multiple preceding studies, the socio-demographical variables having effects on the quality of life of the participating elderly were composed of age, educational background, existence or nonexistence of spouse, economic status and health status. The scale of variable were as follows; age, educational background (1~6: dummy variables), existence or nonexistence of spouse (existence: 1, nonexistence: 0), economic status (1~5: dummy variables) and health status (5 dummy variables).

##### 2) Sex distinction

Elderly males and females.

##### 3) Characteristic variables of elderly employment project

The employment project characteristics having effects on the quality of life of participating elderly were measured by the participation period (1~5: continuous variable) and the satisfaction with projects (1: satisfied, 0: unsatisfied)

##### 4) Types of employment project

Types of employment project were divided into Public benefit type, Educational type, Welfare type, Market type and Manpower dispatch type.



## 5) Quality of Life

The revised Philadelphia Geriatric Center Morale Scale (PGCMS) of Lawton, which is a scale of subjective quality of life was used, in order to survey and analyze the quality of life of the elderly participating in the elderly employment projects. PGCMS<sup>5</sup> (Lawton,1972) was initially developed as a scale of 22 items and 6 dimensions, but later it was modified to be the scale of 17 items and 3 dimensions (Lawton,1975).

The reliability of quality of life in this study appeared to be proper with the value,  $\alpha = .832$ . If necessary, the reverse encoding of question points were carried out to adjust the higher point to indicate the higher life satisfaction.

## IV. Results of analysis

### 1. The socio-demographical characteristics of survey participants and the difference in quality of life based on the socio-demographical characteristics

Frequency analysis was carried out to examine the demographical characteristics, and the results of independent sample t-test and one-way ANOVA, which were carried out to verify the difference of quality of life according to the demographical characteristics, are presented in <Table 1>.

According to the analysis, the variables related to the difference of quality of life were age, educational background, existence or nonexistence of spouse, whether to live with children or not, residential type, motive to participate in employment project, average monthly income, monthly living expense of family and health status.

It appeared that the elderly under 70 ( $M=.42$ ) had the higher quality of life than that of the elderly over age 75 ( $M=.47$ ). ( $F=6.061, p=.002$ )

As for educational background, the quality of life of elderly who graduated from a university or educational institutions beyond universities ( $M=.65$ ) was higher than that of elderly who graduated from a 2-year college ( $M=.56$ ), a high school ( $M=.51$ ), a middle school ( $M=.52$ ), an elementary school ( $M=.51$ ) or the elderly without schooling ( $M=.42$ ). ( $F=6.618, p=.000$ )

As for existence or nonexistence of spouse, the quality of life of elderly with spouse ( $M=.56$ ) was higher than that of elderly without spouse ( $M=.48$ ). ( $t=-3.619, p=.000$ )

As for whether to live with children or not, the quality of life of elderly who said "Yes" ( $M=.56$ ) was higher than that of elderly who said "No" ( $M=.51$ ). ( $t=-2.128, p=.034$ )

The residential type showed no difference ( $F=3.330, p=.006$ ).

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<sup>5</sup> Maeda Daisaku (1989: 3-18) explains the reason to use the PGCMS at first, in the survey research of elderly life quality, and Maeda Daisaku argues that the life satisfaction index (LSI) of Neugarten, et al. (1961) may not be proper in terms of a pure subjective sense of happiness because it includes the indirect and background questions, and the morale scale of Kutner, Bernard (1956) may be improper because it reviews the content of subjective sense of happiness as the factors are formed under the precondition of single dimension. Seong-jae Choi (1986) introduced the LSI and Lawton's PGCMS (Philadelphia Geriatric Center Morale Scale) as the measuring scale for life satisfaction degree of elderly. Using the revised PGCMS, Gyeong-jin Min · Jin-su Whang (2007) surveyed and studied the life quality of elderly and Gi-nam Park (2004) surveyed and studied the life satisfaction of elderly respectively.

**Table 1 Verification of difference in quality of life according to the demographical characteristics of survey participants (totality)**

(N=574 people, %)

|  |  | N (%)                                     | M                | SD                | t/F      | p        |       |
|--|--|---|------------------|-------------------|----------|----------|-------|
| Demographical characteristics                | Sex  | male                                      | 215(37.46)       | .53               | 0.25     | 0.643    | 0.520 |
|  |  | female                                    | 359(62.54)       | .52               | 0.25     |          |       |
|  | Range of age                               | under 70                                  | 262(46.21)       | .56 <sup>a</sup>  | 0.24     | 6.061**  | 0.002 |
|  |  | 70~75                                     | 180(31.75)       | .52 <sup>ab</sup> | 0.26     |          |       |
|  |  | over age 75                               | 125(22.05)       | .47 <sup>b</sup>  | 0.25     |          |       |
|  | Educational background                     | lack of schooling                         | 55( 9.60)        | .42 <sup>cb</sup> | 0.22     | 6.618**  | 0.000 |
|  |  | elementary graduate                       | 186(32.46)       | .51 <sup>ba</sup> | 0.26     |          |       |
|  |  | middle school graduate                    | 124(21.64)       | .52 <sup>b</sup>  | 0.24     |          |       |
|  |  | high school graduate                      | 104(18.15)       | .51 <sup>b</sup>  | 0.25     |          |       |
|  |  | 2-year college graduate                   | 27( 4.71)        | .56 <sup>b</sup>  | 0.28     |          |       |
|  |  | university graduate or higher institution | 77(13.44)        | .65 <sup>a</sup>  | 0.21     |          |       |
|  | Existence or nonexistence of Spouse        | No  | 223(39.54)       | .48               | 0.25     | -3.619** | 0.000 |
|  |  | Yes                                       | 341(60.46)       | .56               | 0.24     |          |       |
|  | Whether to live with children or not       | No  | 423(73.57)       | .51               | 0.25     | -2.128*  | 0.034 |
|  |  | Yes                                       | 152(26.43)       | .56               | 0.25     |          |       |
|  | Residential type                           | own house                                 | 322(56.20)       | .56 <sup>a</sup>  | 0.24     | 3.330**  | 0.006 |
| lease  |  | 141(24.61)                                | .50 <sup>a</sup> | 0.25              |          |          |       |
| monthly rent                                 |  | 43( 7.50)                                 | .47 <sup>a</sup> | 0.24              |          |          |       |
| permanent lease                              |  | 57( 9.95)                                 | .41 <sup>a</sup> | 0.26              |          |          |       |
| others                                       |  | 10( 1.75)                                 | .50 <sup>a</sup> | 0.24              |          |          |       |
| Motive to participate in employment projects | for income                                 | 286(50.80)                                | .46 <sup>b</sup> | 0.25              | 10.751** | 0.000    |       |
|  | for health                                 | 53( 9.41)                                 | .56 <sup>a</sup> | 0.23              |          |          |       |
|  | to make use of own experience or knowledge | 48( 8.53)                                 | .61 <sup>a</sup> | 0.21              |          |          |       |
|  | to seek for fruitful life                  | 118(20.96)                                | .57 <sup>a</sup> | 0.24              |          |          |       |
|  | to participate in society                  | 58(10.30)                                 | .64 <sup>a</sup> | 0.23              |          |          |       |

As for the motive for participation in the employment project, ‘for health’ (M=.56), ‘to make use of one’s own experience and knowledge’ (M=.61), ‘to seek a fruitful life’ (M=.57) and ‘to participate in society’ (M=.64) were more closely related to quality of life than ‘for income’ (M=.46). (F=10.751, p=.000)

As shown in <Table 2>, the quality of life with monthly income ‘over 800000won’ (M=.62) and ‘from 300000 to 400000won (M=.58) was higher than that with’ from 600000 to 800000won (M=.49) and ‘from 100000 to 300000won (M=.49). (F=5.761, p=.000)

**Table 2 Verification of difference in quality of life according to the economic status and health status (totality)**

(N=574 people, %)

|  |                        | N (%)                     | M          | SD                | t/F   | p        |       |
|--|------------------------|---------------------------|------------|-------------------|-------|----------|-------|
| Economic status and health status                                  | Monthly income         | from 100000 to 300000 won | 344(59.93) | .49               | 0.25  | 5.761**  | 0.000 |
|  |                        | from 300000 to 400000 won | 61(10.63)  | .58 <sup>a</sup>  | 0.24  |          |       |
|  |                        | from 400000 to 600000 won | 72(12.54)  | .58 <sup>ab</sup> | 0.21  |          |       |
|  |                        | from 600000 to 800000 won | 32( 5.57)  | .49 <sup>b</sup>  | 0.26  |          |       |
|  |                        | over 800000 won           | 65(11.32)  | .62 <sup>a</sup>  | 0.24  |          |       |
|  | Monthly living expense | less than 200000 won      | 169(29.55) | .46 <sup>b</sup>  | 0.26  | 5.323**  | 0.000 |
|  |                        | from 200000 to 400000 won | 176(30.77) | .52 <sup>ab</sup> | 0.25  |          |       |
|  |                        | from 400000 to 600000 won | 114(19.93) | .58 <sup>a</sup>  | 0.24  |          |       |
|  |                        | from 600000 to 800000 won | 43( 7.52)  | .53 <sup>ab</sup> | 0.19  |          |       |
|  |                        | over 800000 won           | 70(12.24)  | .59 <sup>a</sup>  | 0.23  |          |       |
|  | Health status          | very unhealthy            | -          | -                 | -     | 11.413** | 0.000 |
|  |                        | unhealthy                 | 34( 5.92)  | .38 <sup>c</sup>  | 0.22  |          |       |
|  |                        | common                    | 228(39.72) | .48 <sup>b</sup>  | 0.24  |          |       |
|  |                        | healthy                   | 212(36.93) | .56 <sup>a</sup>  | 0.24  |          |       |
|  |                        | very healthy              | 100(17.42) | .60 <sup>a</sup>  | 0.24  |          |       |
| Health status compared to the previous status before participation | got worse              | 16( 2.80)                 | .39        | 0.24              | 2.322 | 0.074    |       |
|  | no change              | 253(44.31)                | .55        | 0.24              |       |          |       |
|  | got better             | 243(42.56)                | .52        | 0.26              |       |          |       |
|  | got much better        | 59(10.33)                 | .51        | 0.25              |       |          |       |
| Whether the participation is helpful or not, in terms of economy   | not helpful            | 37( 6.46)                 | .57        | 0.25              | 0.683 | 0.506    |       |
|  | a little helpful       | 301(52.53)                | .52        | 0.25              |       |          |       |
|  | much helpful           | 235(41.01)                | .52        | 0.25              |       |          |       |

The quality of life with monthly income' over 800000won (M=.59) and 'from 400000 to 600000won (M=.58) was higher than that with' less than 200000won (M=.46). (F=5.323, p=.000)

As for the health status, 'very healthy' (M=.60) and 'healthy' (M=.56) showed the higher points than 'common' (M=.48) and 'unhealthy' (M=.38), and the quality of life with 'common' appeared to be higher than the quality of life with 'unhealthy'. (F=11.413, p=.000)

According to the verification of difference in quality of life based on the characteristics and types of employment project, the quality of life varied in accordance with the period of participation, satisfaction with employment project and the type of employment.

As for the period of employment project participation, the elderly quality of life for those participating more than 3 years (M=.65) appeared to be higher than 'from 1 to 2 years' (M=.54), 'from 6 months to 1 year' (M=.54), 'less than 6 months' (M=.46), and the elderly quality of life for those participating 'from 2 to 3 years' (M=.60) was higher than 'less than 6 months' (M=.46). (F=7.473, p=.000)

**Table 3 Verification of difference in quality of life according to the characteristics of employment project and the type of employment**

(N=574 people, %)

|                                       |  | N (%)                   | M                 | SD                | t/F | p        |       |
|---------------------------------------|--|-------------------------|-------------------|-------------------|-----|----------|-------|
| Characteristics of employment project | Period of employment project participation | less than 6 months      | 215(37.52)        | .46 <sup>c</sup>  | .24 | 7.473**  | .000  |
|                                       |  | from 6 months to 1 year | 169(29.49)        | .54 <sup>bc</sup> | .25 |          |       |
|                                       |  | from 1 to 2 years       | 101(17.63)        | .54 <sup>bc</sup> | .26 |          |       |
|                                       |  | from 2 to 3 years       | 44(7.68)          | .60 <sup>ab</sup> | .22 |          |       |
|                                       |  | over 3 years            | 44(7.68)          | .65 <sup>a</sup>  | .23 |          |       |
|                                       | Employment project satisfaction            | unsatisfied             | 85(14.83)         | .44               | .27 | -3.453** | 0.001 |
|                                       |  | satisfied               | 488(85.17)        | .54               | .24 |          |       |
|                                       | Employment type                            | Public benefit type     | 171(29.95)        | .43 <sup>c</sup>  | .23 | 13.077** | .000  |
|                                       |  | Educational type        | 56(9.81)          | .63 <sup>a</sup>  | .20 |          |       |
|                                       |  | Welfare type            | 196(34.33)        | .55 <sup>b</sup>  | .26 |          |       |
| Manpower dispatch type                |  | 32(5.60)                | .45 <sup>c</sup>  | .29               |     |          |       |
| Market type                           |  | 116(20.32)              | .60 <sup>ab</sup> | .21               |     |          |       |

## 2. Quality of life difference between elderly females and males according to the socio-demographical characteristics

The verification results of quality of life difference between elderly females and males according to the socio-demographical characteristics are presented in <Table 4>.

As for the verification of quality of life difference according to age, in the case of elderly males, the quality of life of elderly under males 70 (M=.62) appeared to be higher than that of elderly males between 70 and 75 (M=.49) and over age 75 (M=.48). (F=8.110, p=.000)

As for the verification of quality of life difference according to educational background, in the case of elderly males, the quality of life of '2-year college graduate' (M=.50) and 'university or higher institution graduate' (M=.66) appeared to be higher than that of elderly males without schooling (M=.33) (F=3.766, p=.003), and in the case of elderly females, the quality of life of 'university or higher institution' graduate' (M=.63) appeared to be higher than that of the 'elementary graduate' and the elderly females without schooling (M=.43). (F=3.684, p=.003)

As for the verification of quality of life difference according to existence or nonexistence of spouse, the quality of life of both elderly males and females with spouse ('Yes') appeared to be higher than who marked 'No'. (t=-2.959, p=.003)

As for the verification of quality of life difference according to average monthly income, in the case of elderly males, the elderly quality of life of 'over 800000won' (M=.65) appeared to be higher than that of 'from 600000 to 800000won (M=.49) (F=2.504, p=.043), in the case of elderly females, no definite difference was shown among the groups. (F=3.858, p=.004)

**Table 4 Verification of quality of life difference according to the socio-demographical characteristics**

(N=574 people, %)

|                                     |   | Males      |                   |     | Females           |            |                    |     |                    |
|-------------------------------------|---|------------|-------------------|-----|-------------------|------------|--------------------|-----|--------------------|
|                                     |   | N          | M                 | SD  | t/F (p)           | N          | M                  | SD  | t/F (p)            |
| Renge of age                        | under 70                                  | 77(35.98)  | .62 <sup>a</sup>  | .22 | 8.110**<br>(.000) | 185(52.41) | .53                | .24 | 2.654<br>(.072)    |
|                                     | 70 ~ 75                                   | 65(30.37)  | .49 <sup>b</sup>  | .26 |                   | 115(32.58) | .53                | .26 |                    |
|                                     | over age 75                               | 72(33.64)  | .48 <sup>b</sup>  | .25 |                   | 53(15.01)  | .45                | .24 |                    |
| Educational background              | lack of schooling                         | 5( 2.33)   | .33 <sup>b</sup>  | .26 | 3.766**<br>(.003) | 50(14.01)  | .43 <sup>c</sup>   | .22 | 3.684**<br>(.003)  |
|                                     | elementary graduate                       | 48(22.33)  | .53 <sup>ab</sup> | .24 |                   | 137(38.38) | .50 <sup>bc</sup>  | .27 |                    |
|                                     | middle school graduate                    | 53(24.65)  | .50 <sup>ab</sup> | .24 |                   | 71(19.89)  | .54 <sup>abc</sup> | .23 |                    |
|                                     | high school graduate                      | 50(23.26)  | .49 <sup>ab</sup> | .23 |                   | 54(15.13)  | .53 <sup>abc</sup> | .26 |                    |
|                                     | 2-year college graduate                   | 15( 6.98)  | .50 <sup>a</sup>  | .32 |                   | 12( 3.36)  | .63 <sup>ab</sup>  | .22 |                    |
|                                     | university or higher institution graduate | 44(20.47)  | .66 <sup>a</sup>  | .23 |                   | 33( 9.24)  | .64 <sup>a</sup>   | .17 |                    |
| Existence or nonexistence of Spouse | No  | 37(17.54)  | .45               | .23 | -2.259*<br>(.025) | 185(52.56) | .48                | .25 | -2.959**<br>(.003) |
|                                     | Yes                                       | 174(82.46) | .55               | .25 |                   | 167(47.44) | .56                | .24 |                    |
| Average monthly income              | from 100000 to 300000 won                 | 126(58.60) | .50 <sup>ab</sup> | .25 | 2.504*<br>(.043)  | 217(60.61) | .48 <sup>a</sup>   | .25 | 3.858**<br>(.004)  |
|                                     | from 300000 to 400000 won                 | 18( 8.37)  | .57 <sup>ab</sup> | .26 |                   | 43(12.01)  | .59 <sup>a</sup>   | .24 |                    |
|                                     | from 400000 to 600000 won                 | 26(12.09)  | .54 <sup>ab</sup> | .24 |                   | 46(12.85)  | .60 <sup>a</sup>   | .20 |                    |
|                                     | from 600000 to 800000 won                 | 13( 6.05)  | .49 <sup>b</sup>  | .25 |                   | 19( 5.31)  | .49 <sup>a</sup>   | .28 |                    |
|                                     | over 800000 won                           | 32(17.88)  | .65 <sup>a</sup>  | .23 |                   | 33( 9.22)  | .58 <sup>a</sup>   | .25 |                    |
| Health status                       | very unhealthy                            | -          | -                 | -   | 7.616**<br>(.000) | -          | -                  | -   | 4.996**<br>(.002)  |
|                                     | unhealthy                                 | 10( 4.67)  | .30 <sup>c</sup>  | .26 |                   | 23( 6.41)  | .39 <sup>b</sup>   | .20 |                    |
|                                     | common                                    | 83(38.79)  | .48 <sup>b</sup>  | .23 |                   | 145(40.39) | .48 <sup>ab</sup>  | .25 |                    |
|                                     | healthy                                   | 70(32.71)  | .56 <sup>ab</sup> | .24 |                   | 142(39.55) | .56 <sup>a</sup>   | .25 |                    |
|                                     | very healthy                              | 51(23.83)  | .63 <sup>a</sup>  | .25 |                   | 49(13.65)  | .58 <sup>a</sup>   | .23 |                    |

As for the verification of quality of life difference according to health status, in the case of elderly males, the elderly quality of life of ‘very healthy’ (M=.63) appeared to be higher than that of ‘common’ (M=.48) and ‘unhealthy’ (M=.30), and the elderly quality of life of ‘healthy’ (M=.56) and ‘common’ appeared to be higher than that of ‘unhealthy’. (F=7.616, p=.000) In the case of elderly females, the elderly quality of life of ‘very healthy’ (M=.58) and ‘healthy’ (M=.56) appeared to be higher than that of ‘unhealthy’ (M=.39). (F=4.996, p=.002)

### 3. Quality of life difference between elderly females and males according to characteristics and types of employment project

The verification results of quality of life difference between elderly females and males according to characteristics and types of employment project are presented in <Table5>. In the verification of difference according to the period of employment project participation, in the case of elderly males, the elderly quality of life of ‘over 3 years’ (M=.66), ‘from 2 to 3 years’ (M=.58), ‘from 1 to 2 years’ (M=.59) appeared to be higher than that of ‘less than 6 months’ (M=.43). (F=5.817, p=.000) In the case of elderly females, the elderly quality of life of ‘over 3 years’ (M=.64) appeared to be higher than that of ‘from 1 to 2 years’ (M=.51) and ‘less than 6 months’ (M=.48), the elderly quality of

life of ‘from 2 to 3 years’ (M=.62) was higher than that of ‘less than 6 months’ (M=.48). (F=3.081, p=.016)

In the verification of difference according to satisfaction with employment project, in the case of elderly females, the elderly quality of life of ‘satisfied’ (M=.54) appeared to be higher than that of ‘unsatisfied’ (M=.42). (t=-3.218, p=.001).

In the verification result of difference according to employment type, in the case of elderly males, the elderly quality of life of educational type (M=.61), manpower dispatch type (M=.63), market type (M=.61) were higher than that of public benefit type (M=.45) (F=4.736, p=.007), and in the case of elderly females, the elderly quality of life of educational type (M=.64), welfare type (M=.54), market type (M=.58) appeared to be higher than that of public benefit type (M=.41), manpower dispatch type (M=.34). (F=11.784, p=.000)

**Table 5 Verification of quality of life difference according to period of employment project participation, employment type and project satisfaction**

|  |                         | Males      |                   |     | Females           |            |                    |     |                    |
|--|-------------------------|------------|-------------------|-----|-------------------|------------|--------------------|-----|--------------------|
|  |                         | N          | M                 | SD  | t/F (p)           | N          | M                  | SD  | t/F (p)            |
| Period of employment project participacion             | less than 6 months      | 73(34.11)  | .43 <sup>b</sup>  | .24 | 5.817**<br>(.000) | 142(39.66) | .48 <sup>c</sup>   | .24 | 3.081*<br>(.016)   |
|  | from 6 monthes to 1year | 54(24.23)  | .55 <sup>ab</sup> | .25 |                   | 115(32.12) | .53 <sup>abc</sup> | .24 |                    |
|  | from 1 year to 2 years  | 42(19.63)  | .59 <sup>ab</sup> | .25 |                   | 58(16.20)  | .51 <sup>bc</sup>  | .26 |                    |
|  | from 2 year to 3 years  | 22(10.28)  | .58 <sup>ab</sup> | .21 |                   | 22( 6.15)  | .62 <sup>ab</sup>  | .23 |                    |
|  | over 3 years            | 23(10.75)  | .66 <sup>ab</sup> | .20 |                   | 21( 5.87)  | .64 <sup>ab</sup>  | .26 |                    |
| Satisfaction with the participating employment project | unsatisfied             | 31(14.42)  | .47 <sup>bb</sup> | .28 | -1.441            | 54(15.13)  | .42 <sup>b</sup>   | .26 | -3.281**           |
|  | satisfied               | 184(85.58) | .54 <sup>ab</sup> | .24 | (.151)            | 303(84.87) | .54 <sup>b</sup>   | .24 | (.001)             |
| Type of employment                                     | public benefit type     | 87(40.65)  | .45 <sup>b</sup>  | .25 | 4.736**<br>(.007) | 84(23.60)  | .41 <sup>b</sup>   | .21 | 11.784**<br>(.000) |
|  | educational type        | 16( 7.48)  | .61 <sup>ab</sup> | .22 |                   | 40(11.24)  | .64 <sup>ab</sup>  | .19 |                    |
|  | welfare type            | 48(22.43)  | .55 <sup>ab</sup> | .25 |                   | 148(41.57) | .54 <sup>ab</sup>  | .26 |                    |
|  | manpower dispaich type  | 13( 6.07)  | .63 <sup>ab</sup> | .28 |                   | 19( 5.34)  | .34 <sup>b</sup>   | .24 |                    |
|  | market type             | 50(23.36)  | .61 <sup>ab</sup> | .21 |                   | 65(18.26)  | .58 <sup>ab</sup>  | .22 |                    |

#### 4. Effect analysis of variables that have influences on quality of life

As shown in <Table 6>, before carrying out the regression analysis, the Biserial Correlation Coefficient and the Pearson’s Correlation Coefficient were derived in order to analyze the variables that had influence on quality of life, through correlation analysis.

The Hierarchical Multi Regression Analysis was carried out in order to analyze the variables that had influence on quality of life, and the results are presented in <Table 7> and <Table 8>.

Model 1 shows the result when the general characteristics were put in and Model 2 shows the result when the employment characteristics were put into Model 1. And Model 3 shows the result when the employment type was put into Model 2.



**Table 6 Correlation analysis among the socio-demographical variables, characteristics and types of employment project and quality of life variables**

|  | 01      | 02      | 03      | 05      | 07      | 08      | 09-1    | 09-2    | 09-3    | 09-4    | 09-5   | 12     | 13     |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 01. sex(1: female)   | 1       |         |         |         |         |         |         |         |         |         |        |        |        |
| 02. age  | -.224** | 1       |         |         |         |         |         |         |         |         |        |        |        |
| 03. average monthly income (1:less than 300,000won, 5:over 800,000won )                        | -0.55   | -.273** | 1       |         |         |         |         |         |         |         |        |        |        |
| 05. educational background (1:lack of schooling, 6: university or higher institution graduate) | -.327** | -.275** | .362**  | 1       |         |         |         |         |         |         |        |        |        |
| 07. existence or nonexistence of spouse (1: Yes)   | -.344** | -.142** | .219**  | .348**  | 1       |         |         |         |         |         |        |        |        |
| 08. health status (1: very unhealthy, 5: very healthy)   | -0.98** | .022    | .136**  | .179**  | .099**  | 1       |         |         |         |         |        |        |        |
| 09-1public benefit type  | -.154** | .336**  | -.221** | -.268** | -.113** | -.096** | 1       |         |         |         |        |        |        |
| 09-2educational type   | -.051   | -.203** | .236**  | .518**  | .173**  | .103**  | -.266** | 1       |         |         |        |        |        |
| 09-3welfare type   | .184**  | -.012   | -.015   | -.219** | -.073*  | -.030   | -.458** | -.278** | 1       |         |        |        |        |
| 09-4manpower dispatch type   | .046    | -.026   | -.006   | -.013   | -.041   | .075*   | -.161** | -.098** | -.168** | 1       |        |        |        |
| 09-5market type  | -.019   | -.195** | .067*   | .121**  | .084*   | .012    | -.300** | -.182** | -.314** | -.110** | 1      |        |        |
| 12.period of project participation (1:less than 6 months, 5: Over 3 Year)                      | -.054   | -.098** | .176**  | .210**  | .119**  | .106**  | -.289** | .195**  | .014    | .037    | .130** | 1      |        |
| 13.employment project satisfaction   | .008    | .143**  | -.009   | -.144** | -.052   | .024    | .113**  | -.135** | .039    | .3021   | -.082* | -.046  | 1      |
| Quality of life  | -.029   | -.086** | .137**  | .151**  | .132**  | .262**  | -.162** | .165**  | .031    | -.075*  | .052   | .187** | .167** |

\*p<.05 \*\*p<.01 \*\*\*p<.001

According to the result of multiple regression analysis, in the case of elderly males, it was identified that the age ( $\beta = -.234$ ) and health status ( $\beta = .271$ ) had effects on quality of life, and the power of explanation by Model 1 was 15.1%. In Model 2, it appeared that the period of employment project participation ( $\beta = .189$ ) had effects on quality of life, and the increased power of explanation by the period of employment project participation and employment project satisfaction, which were the characteristics of employment project, was 4.1%. The overall power of explanation of Model 2 was 19.2%. However, in the case of elderly males, it was identified that there was no employment type that had effects on quality of life. So to speak, in the case of elderly males, it was identified that the younger and healthier, the longer period of employment project participation, the better quality of life the elderly had.

In the case of elderly females, it was identified that the educational background ( $\beta = .156$ ) and health status ( $\beta = .159$ ) had effects on quality of life, and the power of explanation by Model 1 was 8.6%. In Model 2, it appeared that the employment project satisfaction ( $\beta = .200$ ) had effects on quality of life, and the increased power of explanation by the period of employment project participation and employment project satisfaction, which were the characteristics of employment project, was 4.3%. The overall power of explanation of Model 2 was 12.9%. In Model 3, among the employment types, public benefit

**Table 7 Analysis of variables that has influence on quality of life (elderly males)**

|                       |  | Model 1 |         | Model 2 |         | Model 3 |   |
|-----------------------|--|---------|---------|---------|---------|---------|---|
|                       |  | B       |         | B       |         | B       |   |
| Controlling variables | age  | -.011   | -.234** | -.009   | -.206** | -       | - |
|                       | educational background (1:lack of schooling, 6: university or higher institution graduate) | .005    | .030    | .003    | .018    | -       | - |
|                       | existence or nonexistence of spouse (1:Yes)  | .046    | .070    | .037    | .056    | -       | - |
|                       | average monthly income   | -.006   | -.039   | -.011   | -.067   | -       | - |
|                       | health status (1:less than 300,000won, 5:over 800,000won)                                  | .078    | .271**  | .071    | .246**  | -       | - |
| Independent variables | period of employment project participation (1: less than 6 months, 5: Over 3 Year)         |         |         | .035    | .189**  | -       | - |
|                       | employment project satisfaction  |         |         | .078    | .111    | -       | - |
|                       | employment type-public benefit type  |         |         |         |         | -       | - |
|                       | employment type-manpower dispatch type   |         |         |         |         | -       | - |
| F                     |  | 7.195** |         | 6.785** |         |         |   |
| R2                    |  | .151    |         | .192    |         |         |   |
| modified R2           |  | .130    |         | .164    |         |         |   |
| R2 variation          |  | -       |         | .041    |         |         |   |

\*p<.05 \*\*p<.01 \*\*\*p<.001

**Table 8 Analysis of variables that has influence on quality of life (elderly females)**

|                       |  | Model 1 |        | Model 2 |        | Model 3 |         |
|-----------------------|--|---------|--------|---------|--------|---------|---------|
|                       |  | B       |        | B       |        | B       |         |
| Controlling variables | age  | .002    | .040   | .000    | .000   | .004    | .079    |
|                       | educational background (1:lack of schooling, 6: university or higher institution graduate) | .027    | .156*  | .026    | .149   | .018    | .105    |
|                       | existence or nonexistence of spouse (1:Yes)  | .048    | .097   | .040    | .080   | .025    | .050    |
|                       | average monthly income   | .018    | .097   | .015    | .079   | .009    | .046    |
|                       | health status (1:less than 300,000won, 5:over 800,000won)                                  | .049    | .159** | .050    | .164** | .050    | .161**  |
| Independent variables | period of employment project participation (1: less than 6 months, 5: Over 3 Year)         |         |        | .019    | .087   | .008    | .036    |
|                       | employment project satisfaction  |         |        | .142    | .200** | .135    | .190**  |
|                       | employment type-public benefit type  |         |        |         |        | -.146   | -.250** |
|                       | employment type-manpower dispatch type   |         |        |         |        | -.238   | -.214** |
| F                     |  | 6.383** |        | 7.124** |        | 9.201** |         |
| R2                    |  | .086    |        | .129    |        | .199    |         |
| modified R2           |  | .073    |        | .111    |        | .177    |         |
| R2 variation          |  | -       |        | .043    |        | .070    |         |

\*p<.05 \*\*p<.01 \*\*\*p<.001

type (= -.250) and manpower dispatch type (= -.214) appeared to have effects on quality of life, and the increased power of explanation by the employment type was 7.0%, and the overall power of explanation by Model 2 was 19.9%. So to speak, in the case of elderly females, it was identified that the healthier, the higher employment project participation, and the less public benefit type and manpower dispatch type, the better quality of life the elderly females had.

## V. Conclusion and policy proposals

### 1. Analysis result

In this study, at first, the characteristics and types of elderly employment project and the quality of life were examined, and then the influence of the characteristics and types of elderly employment project on quality of life was reviewed. The significance of this study is that the differences among the characteristics and types of elderly employment project and quality of life were analyzed in terms of sex distinction.

First, among the employment project types, the welfare type had the highest percentage of employment, followed by public benefit type, market type, educational type and manpower dispatch in that order. In the case of sex distinction, the highest percentage of employment in public benefit type was seen in elderly males, but in the case of elderly females, the largest part of employment was welfare type.

In the case of under age 65, the percentage of market type was high, but over age 75 took the high percentage in public benefit type. The public benefit type took the high ratio of elderly with an average monthly income between 100,000 and 300,000 won, but the educational and market type employment took the high ratio of elderly with average monthly income over 800,000 won, so it was found out that the average monthly income of the educational and market type employment was relatively higher than other types. As for the educational background, it appeared that the elderly without schooling were most in public benefit type, high school graduate in market type, 2-year college graduate in market and university or higher educational institution were most in educational type.

Second, in the verification results of quality of life difference according to the socio-demographical characteristics, the variables showing differences were age, educational background, existence or non-existence of spouse, whether to live with children or not, residential type, motive to participate in employment project, average monthly income, monthly living expense and health status.

Third, the verification results of quality of life difference between elderly females and males according to the socio-demographical characteristics are as follows. As for the age, in the case of elderly males, the quality of life of elderly under 70 appeared to be higher than that of elderly between 70 and 75, and over age 75, and in the case of educational background, the elderly male quality of life of '2-year college graduate' and 'university or higher institution graduate' appeared to be higher than that of elderly without schooling, in the case of elderly females, the quality of life of 'university or higher institution graduate' (M=.63) appeared to be higher than that of the 'elementary graduate' and the elderly females without schooling.

As for the existence or nonexistence of a spouse, the quality of life of both elderly males and females with spouse ('Yes') appeared to be higher than who marked 'No'. As for the average monthly income, in the case of elderly males, the elderly quality of life of 'over 800000 won' (M=.65) appeared to be higher than that of 'from 600000 to 800000 won', in the case of elderly females, no definite difference was shown among the groups. Namely, it may be said that there is no meaningful relations between the quality of life of elderly females and economic level.

As for the health status, in the case of elderly males, the elderly quality of life of 'very healthy' appeared to be higher than that of 'common' and 'unhealthy', and the elderly quality of life of 'healthy' ( $M=.56$ ) and 'common' appeared to be higher than that of 'unhealthy'. In the case of elderly females, the elderly quality of life of 'very healthy' and 'healthy' appeared to be higher than that of 'unhealthy'.

Fourth, the verification results of quality of life difference between elderly females and males according to characteristics and types of employment project are as follows.

In the verification of difference according to the period of employment project participation, in the case of elderly males, the elderly quality of life of 'over 3 years', 'from 2 to 3 years', 'from 1 to 2 years' appeared to be higher than that of 'less than 6 months'. In the case of elderly females, the elderly quality of life of 'over 3 years' appeared to be higher than that of 'from 1 to 2 years' and 'less than 6 months', and the elderly quality of life of 'from 2 to 3 years' was higher than that of 'less than 6 months'.

In the verification of difference according to satisfaction with employment project, in the case of elderly females, the quality of life of satisfied elderly females appeared to be higher than that of the unsatisfied.

In the verification result of difference according to employment type, in the case of elderly males, the quality of life of educational type, manpower dispatch type, and market type were higher than that of public benefit type. While in the case of elderly females, the quality of life of educational type, welfare type, and market type appeared to be higher than that of public benefit type, and manpower dispatch type.

Fifth, according to the results of regression analysis to analyze the variables that had influence on quality of life, in the case of elderly males, it was identified that the younger and healthier the person was along with the longer period of employment project participation, the better quality of life the elderly had. In the case of elderly females, it was identified that the healthier, higher employment project participation, less public benefit type, and manpower dispatch type, the better quality of life the elderly females had.

In the studies of Gu-yeong Gwon. Jeong-min Choi (2007), Gu-yeong Gwon. Gong-sik Park (2007), the willingness to participate in the educational and welfare type was higher than the public benefit type, and the sense of well-being of participants appeared to be higher than that of participants in other employment types. On the other hand, according to the study of Gyeong-who Kim (2007), the relations between the type of employment and life satisfaction did not seem to be meaningful.

However, unlike the preceding studies, it was identified in this study that though the elderly males were not affected, the quality of life of elderly females was affected meaningfully by the type of employment. Namely, it was disclosed that the public benefit and manpower dispatch type of employment had negatively meaningful effects on the quality of life of elderly females.

The results of this study show that as the period of project participation grows longer, the quality of life of elderly males will be affected more positively, but that elderly females are not affected is different from the results of preceding studies.

The result of this study is different from that of Su-o Seo's study (2007), which showed the elderly

employment project satisfaction of a group that participated in the project for more than a year was lower than that of another group which participated in the project less than a year, and that of Hee-jin Park's study (2005), which argued the employment project satisfaction of the elderly who participated in the project within 5 months was higher than that of other elderly who participated in the project for different periods, and that of Gu-yeong Gwon and Gong-sik Park's (2007), which showed the employment project satisfaction of the group which participated in the project between 4 and 6 months appeared to be more satisfied than the group which participated in the project less than 3 months and the group which participated in the project between 10 and 12 months, and the employment project satisfaction of those who participated in the project less than 3 months and the group which participated in the project between 7 and 9 months appeared to be more satisfied than the group which participated in the project between 10 and 12 months .

## 2. Policy proposal

In order to achieve the original purpose of the employment project and raise its effectiveness, and in order to prepare for the development of a productive aging society, it is required to make efforts to raise the satisfaction with employment projects, and furthermore to activate the public benefit type, manpower dispatch type and educational type employment, so that the quality of life of participating elderly may be enhanced.

The concrete policy proposals for this are as follows.

### 1) Revision of the laws related to elderly employment or establishment of related ordinances.

In order to secure elderly employment, revision of the laws related to elderly employment or establishment of relevant ordinances may be required, so that the 11 elderly-oriented jobs in public sectors, such as public building custodian, office building janitor, welfare facility security, park caretaker, parking and stop regulator, school violation regulator, forest ranger, plant cultivator, hometown caretaker, elderly experiential hall operation and item systematizer, may be provided in local communities.

### 2) Local governments shall break from the limited role of merely operating employment projects, to create or expand the projects based on the community to provide more elderly employment.

In the case of Japan, local governments support for establishment of elderly talent centers without state intervention. The local governments help the centers create and expand diverse employment projects based on the local community, so that they may be profitable.

On the contrary, the Korea local government merely remains a central operating body. Therefore, the local governments should break from the role of a central operating body, and participate in the creation of elderly employment projects aggressively, developing employment projects in private sectors or playing the role of support institutions. However, to begin with, the local governments shall derive the participation of private sector and reinforce private capability in order to create and expand diverse employment projects based on the local community because the community organization by private sector has not been activated yet.

The elderly employment execution agencies, private non-profit institution, private businesses and local residents shall make efforts to create and expand elderly employment all together. Plans for the development of local employment shall be established and implemented at the local governmental level, and institutional devices that can derive positive private sector participation shall be prepared (Ok-hee Kim, 2007: 225-226).

- 3) Conversion from the current operating method depending on governmental intervention to autonomous and independent organization operation and social employment project that make a profit. The elderly employment projects in our country are organized and operated with a focus centering on the central government. On the contrary, in Japan, the elderly employment projects based on the elderly talent center are generalized, so the projects are organized and operated by the center and elderly members autonomously and independently. As the centers have the roots of business activities in individuals, families, local community, private enterprises and local government, they take small jobs and deal with the jobs with care and sincerity, gaining public favor. On the basis of positive evaluation from communities, the elderly members of elderly talent centers reinvigorate the locally close-related organization (local team) and develop employment projects independently, getting more orders from the private sector (Ok-hee Kim, 2007: 220-230).

It is necessary for the elderly of this country to break from the stiff operating method centered on the central government, and organize and operate the elderly employment projects autonomously, having the roots of projects in individuals, families, local community, private enterprises and local governments, so that demand of elderly employment projects (especially the market type and manpower dispatch type) may be created in many ways.

- 4) It is assumed that the access to the public benefit type from a gender-sensitive view point is needed, which has a negative effect on the quality of life of elderly females. As the participation rate of over 75, solitary, low-income, low-education elderly and, late elderly<sup>6</sup>, the public benefit type, which provides for the elderly living in poverty with income supplement is low, they shall have preferential access to employment programs.

A public benefit type employment with low intensity shall be considered for the elderly who have vulnerable points in their educational background, age, health and others, and also are weak in labor force. The employment of the public benefit type shall be expanded as a limited labor chance and as a means of income supplement.

- 5) It is necessary to explore a fundamental improvement scheme for the employment project of manpower dispatch type, which has negative effects on quality of life of elderly females. It seems that various improvement schemes are needed, which include guarantee of average monthly compensation similar to other types, guarantee of continuous employment, extension of work-hours and total period, job site monitoring and post management.

It is needed to develop the human resources with identity and creativity by developing custom

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<sup>6</sup> In terms of demographic characteristics, the ratio of elderly males is greater than that of females in the population composed of solitude, low-income, low-education elderly and, late elderly.



vocational training course or in-depth training courses which meets the demands of elderly labor in the local private businesses and reflects the employment desire of the elderly as well as the diverse connections between the project and businesses in the community. Recently, as businesses are forced to take on social responsibilities, they can offer motives for the systematization of elderly employment projects.

- 6) The operation scheme of employment project needs to be differentiated according to sex distinction because the factors having effects on quality of life vary according to the sex distinction of the participating elderly person. The employment policy needs to be established and implemented from a gender-sensitive view point, developing the types of employment appropriate for elderly females (educational>welfare>market type) analyzing work and assigning roles in consideration of preference of each gender, physical strength and ability. It seems that elderly males need the guarantee that they will participate in continuous employment projects.
- 7) As the health status of both gender appeared to be meaning for variables for quality of life, it seems that it is important to develop and operate employment for which the gender, age, health and physical strength of elderly are considered scientifically.

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