

Determinants of the Socio-economic and Emotional Status of the Elderly in Korea

Kong-Kyun Ro*

So-Young Cho** Dong-Sook Shin*** Tae-Hoon Lee*

《Contents》

- | | |
|--------------------------------------|--|
| I. Introduction | IV. The Cause-Effect Types of Analysis |
| II. Conceptual Framework of Analysis | V. Summary and Concluding Remarks |
| III. Methodology | |

I. Introduction

It is widely recognized that the primum mobile of economic development has been technological progress and subsequent industrial revolution. The industrial revolution has created high-tech societies which not only radically changed the mode of production but also the value system and life style of the industrialized societies. At the same time, the industrialization and subsequent rising living standard brought

about the demographic transition. It, in turn, leads to aging of the population by prolonging life span and reducing fertility rate.

The crux of problem is created by the above two phenomena accompanied or caused by industrialization, that is, the changing of value system/life style and the aging of population. Whereas the industrialization brought about abundance of material wealth, it has had dehumanizing effects on societal community and family relationship.

By placing a high value on efficiency, it has

* Professor and Graduate student at Korea Advanced Institute of Science and Technology (KAIST)

** Doctoral Candidate, School of Public Health, Seoul National University

*** Researcher, KAIST

**** This study has been supported by a grant from Toyota Foundation. We wish to thank the Foundation for the financial support. Dr.A.Gunji of Tokyo university is a co-investigator of this study. He should have been included as co-author. However, However, this article deals mostly with Korean data. We wish to thank him for his contribution to writing all aspects of this paper. Finally, we like to express our gratitude to Mr. Nam-Hoon Cho of Korea Institute for Health and Social Affairs for his advice and comments in writing this article.

the result of relatively devaluing the importance of compassionate spiritual human relationship. The other by-product of industrialization, namely, the aging of population has, however, created multi-dimensional problems, which require compassionate approaches more than material responses. These problems manifest themselves in social isolation, poverty, unemployment, physical frailty, the loss of self-esteem, etc, of the elderly. These are well-known phenomena in all aging societies. Although all countries have attempted to cope with these problems of the elderly, no country found "the solution".

The objective of this study is not to seek another "unique" solution for the multi-dimensional problems of the aged, but to analyze what factors influence or determine various indices which have been used as representing some aspects of the well-being of the elderly. These indices include correlation of the elderly with their children, social contacts, economic conditions, physical conditions, emotional and mental satisfaction, authority at home, self-esteem, etc.

It is hoped that the result of the study will provide some new insights into what factors influence or determine in what ways some specific aspects of the well-being of the elderly. Such insights would be helpful in formulating policies which would improve these aspects of the well-being of the elderly in Korea's socio-economic and cultural context.

II . Conceptual Framework of Analysis

First, a framework of analysis has been

constructed to clarify the direction which this study will take. The framework is based on the following series of inter-twining hypotheses. The principal cause of the demographic transition is hypothesized to be technological progress, which has led to industrial revolution by causing a radical change in the mode of production (See Figure II -1).

Industrial revolution is hypothesized to have caused the demographic transition by raising the living standard and the concept of efficient household, which is identified as a nuclear small family.

The rising living standard and the new emphasis on the value of efficiency is also hypothesized to have brought about a change in value system/life style and socio-cultural tradition.

The consequences of the demographic transition is multi-dimensional. In this study, the consequences are grouped into three broad categories, namely, economic, social and health. These are investigated as they relate to and impact on the quality of life of the elderly (See attachment on the definition of the quality of life).

Studying the causes and consequences of the aging of population will reveal how they all relate to the quality of life of the elderly. Our framework looks at the quality of life from two broad outlooks — non-material and material.

Next, although this part of hypotheses is not tested in this study, the framework postulates that intervention on the quality of life to improve it, should be made by selecting the focal points and methods of intervention, if it were to be effective

The effectiveness of intervention is hypothesized as depending on how well the invention is tailored to the existing economic, Socio-cultural and political system and tradition.

Finally, the framework emphasizes the importance of multiple approaches in the intervention such as at family, community and government level in a close harmony and cooperation with each other.

III. Methodology

1. Data Collection

The data have been collected from the following three sources; (1) the published data and conference papers, (2) the questionnaire survey conducted in cooperation with the Korean Institute for Population and Health, and (3) the interviews conducted by our own research team for information not obtainable from the above questionnaire survey.

The sample households for the questionnaire survey have been chosen using a stratified sampling method. Although the stratification is not carried out to each cell, it is based on the framework shown in Figure III-1. As shown in the figure, the key variables used for stratification are family structure, age bracket, the characteristics of children or other co-residents, childhood and current residence, income, educational level and current and past employment of the elderly.

The framework of analysis presented in Figure II-1 has been used as the basis for deciding what types of data to collect. First,

data have been collected from the various sources mentioned above about the current and past trends and profile of the demographic transition in Korea. Next, the data to represent the variables hypothesized to be the causes and consequences of the demographic transition have been collected.

The cause and consequence variables are grouped into three categories, namely, economic, socio-cultural and health factors. The economic variables are various industrialization indicators. The socio-cultural factors are those which represent family structure, value system and life style, directly or indirectly. Health variables are represented by environmental conditions, health resources available and their utilization (rate) (See Figure III-2).

The consequence variables are similar to the causal variables except that they are chosen because it is hypothesized that they would enable us to estimate and evaluate the impacts of the demographic transition on economic, socio-cultural and health areas (also shown in Figure II-1).

In collecting data from all the available sources and those generated by ourselves, some of the key variables are found to be not possible to obtain for this pre-liminary study. They are, however, shown in Figure II-1 to indicate that they will be collected in the future for a more comprehensive study.

Furthermore, it has been found that some of the factors shown in Figure II-1 are illusive concept which can be represented by various variables, but none exactly. In the data analyses, only those variables which represent those factors adequately are used.

2. Data Analysis

The analyses of the data collected from various sources have been conducted in the following way. First, trend analyses of the demographic transition, and hypothesized cause and consequence variables have been conducted. Second, the cause-effect types of analyses are conducted to estimate what factors influence or determine some of the indices representing the well-being of the elderly.

The cause-effect types of analyses have been conducted using probit, logit and path analyses. The result of trend analyses have been not presented in this article because they are similar to those published by various government agencies in Korea.

IV. The Cause-Effect Types of Analyses

1. The Probit Analysis

There are many variables widely used as representing some aspects of the well-being of the elderly.

Among these variables, living arrangement, social integration, economic status, health status, and emotional (and psychological) status are chosen for our analyses.

1). Living Arrangement

Whether the elderly live alone or not is widely recognized as one of the most important indicators of the well-being of the elderly. This variable is analyzed by the probit analysis. The result are shown in Table IV-1.

The data analysis shows that the economic

factors are most important in deciding whether the elderly live alone or not. Those who have no employment and no income are most likely to live with their off-springs or relatives. In addition, the elderly who live in rural area are more likely to live with their eldest son.

2). Social Integration

It has been recognized that, for the elderly, the leisure activities, the frequency of contacts with friends and their authority at home reveal some important aspects of the well-being of the elderly (Table IV-2).

(1) Leisure Activity

A probit analysis of the data indicates that, as expected, the elderly who live with their eldest son and/or have more frequent contacts with their friends and/or have more pocket money to spend, have more leisure activities as shown in Table IV-2.

(2) The Frequency of Contacts with Friends

As for the frequency of contacts with friends, those who are male and/or have a greater amount of pocket money tend to have more contacts than others. This confirms the findings of the analysis in Table IV-2.

Note that co-residence, contacts with friends and pocket money are all found to have positive effects on the emotional conditions of the elderly.

(3) Authority of the Elderly at Home.

Family dynamics is known to have a significant impacts on the well-being of the elderly. As expected, the elderly who are male

and under age 70 tend to have more authority than others (Table IV-2).

Having a religion and their own income are significant causes for maintaining the authority of the elderly at home.

In Korea, income status of the elderly is a major factor for maintaining his/her authority and for feeling less isolation because many grown-up children continue to rely on the financial support of their elderly parents.

The elderly who live with their eldest son are found to have less authority at home than others. Whereas younger grown-up children continue to live with their parents and continue to receive financial support from them, the elder offspring usually leave their parents' household to live independently, when their parents are relatively well-off financially.

Therefore, those elderly who live with their eldest son are more likely to depend on their son's income for their livelihood and, therefore, less likely to have authority at home than others.

3). Economic Status

Those who live in urban area and have a higher level of education tend to have more income of their own than others. The female elderly are less likely to have a sufficient amount of pocket money than the male elderly.

Those elderly who have a religion have a higher economic status than the non-religious. In addition, those who have frequent contacts with friends are more likely to have more pocket money than others. It may be perhaps due to the demand factor, i.e., those with frequent contacts with friends need more pocket money

than others (Table IV-3).

As for employment status, the elderly who are male and/or under age 70, and/or live in rural area are more likely to continue to work on farms than in industry.

4). Health Status

As expected, the results of probit analysis indicate that the elderly with an employment and/or those who retire later than the compulsory age for the employees of the low-level position are less likely to suffer from a chronic disease, i.e., more likely to be healthy than others.

As for the health behavior about the utilization of preventive care, the elderly who have a higher level of education and/or those who are living alone are more likely to have more frequent physical examinations than others. So do those with a chronic disease (Table IV-4)

These seem to indicate that the educated are knowledgeable about the desirability of having frequent physical check-ups in the old age to stay healthy. On the other hand, those who live alone seem to have a greater physical examinations in the fear, that when they get ill, they have no coresidents who would take care of them.

5). Emotional Status

A probit analysis of what determine the emotional/psychological condition of the Korean elderly shows that those who live alone and/or being male are more likely to feel unhappy than others (Table IV-5).

Having a religion appears to help to improve

the elderly's feeling and so is having a sufficient amount of pocket money. However, the elderly who have their own income seem to feel unhappy compared with those who have no income of their own. This may be due to the fact that those with their own income tend to live alone (Table IV-5).

As for feeling of isolation and being lonely, those who have a chronic disease and/or those who live alone are more likely to feel lonely than others. As expected, the elderly who live with their eldest son and/or have frequent contacts are likely to feel not lonely. Having an independent spirit also helps not to feel isolated.

2. Path Analysis

From the preceding analyses, what can we say about the determinants of the quality of life of the elderly?

All of the dependent variables of the preceding analyses reveal one or more aspects of the quality of life.

As shown before, the quality of life includes the subjective feelings of the elderly as well as the objective indices of various aspects of their life.

The preceding analyses have been conducted to find out what variables influence the impacts (consequence) variables of the aging of population. In this section, path analyses are conducted to gain some insights into how the same variables influence the same indicators of the quality of life through other variables. For example, a path analysis (Figure IV-1) shows that employment status is found to influence

directly the frequency of contacts with friends of the elderly and also influence it through the living arrangement as well as through the extent of leisure activities.

Note that, of the seven variables found out to be significantly influencing the frequency of contacts variable, only three variables, namely, employment, preventive care and pocket (allowance) money are found to influence the dependent variable directly. Even out of these three variables, two of them influence the contacts variable indirectly also through the living arrangement and leisure activities variables.

If we consider the frequency of contacts with friends, living arrangement and leisure activities as indicators of the quality of life, this path analysis has shown that there exists the inter-correlations among these indicators. In addition, it reveals that the independent variables, all of which represent characteristics of the elderly, influence a quality of life indicator (the dependent variable) through other indicators more often than do directly.

When additional path analyses are conducted to find out what variables influence the living arrangement and the extent of leisure activities variables directly and/or indirectly, a similar information is obtained. Except the preventive care variable, all other independent variables are found to influence significantly the two quality of life indicators, chosen as the dependent variables, directly or indirectly through other quality of life indicators (Figure IV-2 and IV-3). However, a greater number of independent variables are found to influence the living arrangement variable directly than the

two other dependent variables.

Next, three additional quality of life indicators, which represent the subjective feelings of the elderly, are chosen and analyzed through path analyses. The subjective indices of the quality of life examined are the feeling of happiness (satisfaction with life), the authority at home and the feeling of isolation of the elderly. Note that the previously analyzed three indicators are all objective indices. The path analyses of these three subjective indices show that, with two exceptions, the objective indicators of quality of life influence the subjective indices to a greater extent than any of the variables representing various characteristics of the elderly. This makes a contrast with the results of path analyses of the three objective indices. These analyses of the objective indices reveal that mostly the independent variables (characteristics variables) influence the dependent variables to a greater extent than other objective indicators (See Figure IV-4 through IV-6).

These two sets of path analyses support the hypotheses that the living arrangement, the frequency of contacts with friends and the leisure activities of the elderly influence significantly how they feel about the life they lead. To repeat, the path analyses support the finding of the previous studies and our own hypotheses that the human relationship and how one spend his or her time significantly influence the quality of life of the elderly.

3. Conclusion

Ultimately, the quality of life depends, to a

large extent, on the extent of felt satisfaction with the life one leads. Therefore, to analyze statistically what factors determine the quality of life of the elderly, which has many aspects, a single index representing it has to be constructed. And to analyze the quality of life as a single index, one has to have a scaling method for it by giving pre-determined points to each aspect of the quality of life.

A more fundamental question for us before analyzing the determinants of the quality of life is how to define it. There are numerous literature on this subject, each giving its own definition. A most widely accepted definition is that proposed by George and Bearon (1980), namely ① life satisfaction; ② self-esteem; ③ general health and functional status; and ④ socio-economic status. All of the dependent variables of the above cause-effect analyses have something to do with one or more of the above four items. The future study, using our own scaling of the quality of life, could acquire better insights into the determinants of the quality of life for Korean elderly under the current conditions. More importantly, the future study should emphasize qualitative analyses over quantitative analyses in dealing with the quality of life of the elderly.

V. Summary and Concluding Remarks

High-tech society has resulted in emphasizing efficiency at the expense of humanism. As small firms in high-tech industries are disappearing, large households with emphasis on familism are being replaced by nuclear small households. Two generation fa-

milies are becoming fewer in number. The high-tech society with free market system rewards the efficient firm with profit and punishes the inefficient firm with financial loss.

A small family is efficient in operating the household when the head is in the productive age group. Therefore, when the head of household becomes old and unproductive in the marketplace, his or her off-springs become productive and, in most cases, wish to leave the household. The so-called "empty nest" household usually faces a relative social isolation and economic deprivation.

The crux of the problem created by the aging high-tech society is how to reconcile the requirement of high-tech society for efficiency and material abundance with the humanistic needs of the elderly who had contributed to the production in their young age.

Advanced communities have mainly sought material solution by allocating more resources for health and hysical confort of the elderly by financing with the taxes collected from the income of young generation. Unfortunately, apart from the inter-generational equity issue involved here, physical comfort alone does greatly not improve the quality of life of the elderly, however one may define it.

What we need is a spritual revolution to match the industrial revolution of the past. Such revolution could create the environment which is conductive for the renaissance of humanism with a meaningful change in the human relationship at family, community and society levels. This will lead to a revival of familism, filial piety as well as a greater love for children, and the reverence for the elderly as the

depository of wisdom.

The reconciliation of the irresistable pressure for efficiency for individual survival and the need for humanistic revival to improve the well-being of the elderly may be extremely difficult, if not impossible. One of the places to look for policy strategies to overcome such difficulty is in societies where the ancient humanistic tradition is still relatively strong and where the family has begun to face the pressure of high-tech society and, at the same time, the multi-dimensional problems of the demographic transition.

Korea may be such a society. It is becoming a hig-tech society and, at present, she is in the early stage of aging of the population. However, Korea has not yet adopted Western values to the same extent as Japan in adjusting to the aging of the population. There still prevails the Confucian tradition of family cohesiveness and respect for the elderly. This may, however, be likely to change as its demographic transition goes into the later stage and the industrialization also accelerates.

The result of the study revealed that Korea has been following the path Japan and other industrialized countries travelled in the past in the industrialization and demographic transition with some variations. Korea has a great deal to learn from their experience in coping with the problems of aging of the population in a high-tech society.

This study focussed on analyzing the determinants of the hypothesized consequences of aging. Using probit, logit and path analyses, what factors account for the inter-personal differences in the impacts variables of the aging

population have been studied.

In order to gain some insights into the optimum strategies for policy intervention, several objective and subjective indices of the well-being are selected as the dependent variables for the above cause-effect types of the study. The results of the study revealed that the personal characteristics of the elderly exert significant influences on how aging affect individual person's quality of life.

Since this is a preliminary study, we have not gone further in analyzing what conditions should be fostered to improve the well-being of the elderly. Nevertheless, in the course of conducting this study, we learned that the concept of the quality of life is illusive and multi-dimensional one, which is largely determined by the socio-cultural tradition of each society. Due to the data constraint, this pre-liminary study mainly relied on quantative analyses. Having conducted mainly statistical analyses, we now believe that qualitative analyses would be better studied in seeking knowledge and wisdom which could be valuable in formulating policy strategies to improve the quality of life of the elderly of Korea.

In summary, the present research merely assessed the nature and magnitude of the problems of the demographic transition in Korean society where the requirements for the technological progress collide with those for improving the quality of life of the elderly. The future study, if undertaken, should attempt to discover the causes why Korea have succumbed to the pressure of high-tech societies and adopted Western policies for coping with the aging of population, which tend to neglect

humanistic and compassionate approach. Specifically, it should conduct an in-depth analysis of the socio-economic, family and community dynamism which have resulted in for Korea to adopt most of Western values.

What determines the above dynamism in high-tech society is an illusive concept to grasp. The traditional statistical survey research has been proved to be inadequate. The future study, therefore, should combine a qualitative survey study with an in-depth analysis using the anthropological approach of participant observation. Once how such dynamism operates is discovered, one may gain some new insights into how to adopt alternative more humanistic approach in reconciling the requirements of high-tech societies and the problems created by the aging of population.

In conclusion, the future study should focus on the followings;

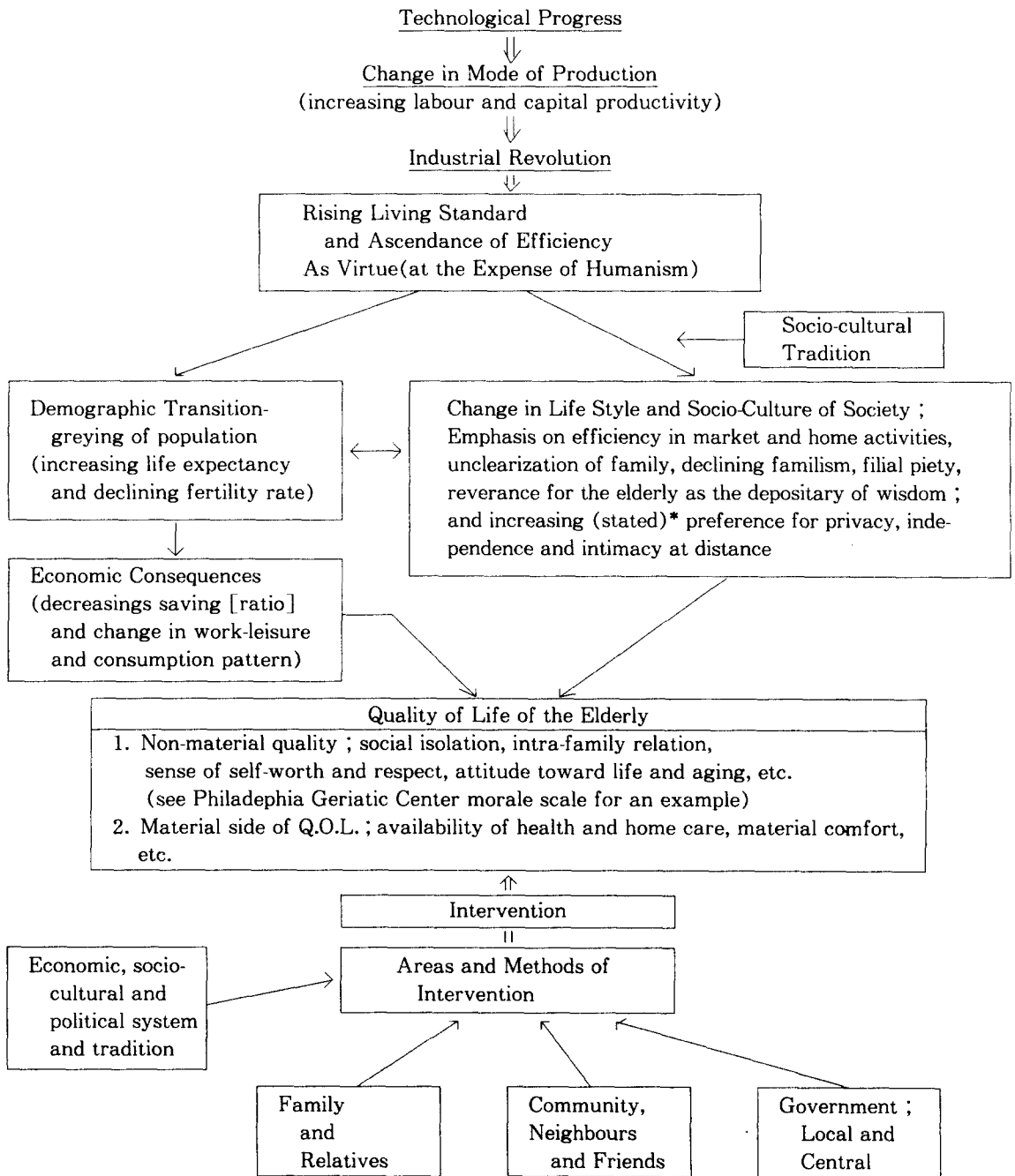
1. As nuclearization of familism is being accelerated by urbanization and industrialization, how to maintain traditional values of familism and filial piety, or some variations thereof, in coping with the aging of population?
2. What should be the role of family, community and government in achieving the commonly recognized objectives of avoiding institutionalization of the elderly, providing an opportunity for the elderly to be an independent and productive member of the community and helping the frail ones in most humane and dignified way?
3. Among those feasible to acquire by a sound and properly focussed research, what kinds of information and knowledge could be used

in what manner to formulate the optimum strategy to improve the proven important indices of the quality of life of the elderly, with the minimum possible burden on the society in the way uniquely suited for Korea.

< Reference >

- Ahn, Kye-Choon(1988), et al., "Final Survey for Characteristic of Korean Elderly Population and Trends", Korea Institute of Population and Health. (in Korean)
- Anders, R. L. and Masako Kanai-Pak(1988), "Growing Old in Japan", Institute of Population Problems, Tokyo, Japan, pp. 1-41
- Hirosima, Kiyosi(1987), "Recent Change in Prevalence of Parent-Child Co-residence in Japan", *Journal of Population Studies*, Published by The Population Association of Japan, (May, 1987):pp. 33-39
- Koyano, Watlau, et al., (1988), "Prevalence of Disability in Instrumental Activities of Daily Living Among Elderly Japanes", *Journal of Gerontology* (43,2); S41-45
- Ku, Jasoon(1986), "Suggestions for Solving Health Problems for the Elderly's Health Care in Korea", *Journal of Korean Gerontology Society* (6): pp. 13-25 (in Korean)
- Martin, L. G (1988), "The Aging of Asia", *Journal of Gerontology*, (43,4), S99-133
- Martin, L. G.(1989), "The Greying of Japan", *Population Bulletin*, (44,2)
- Martin, L. G. and Naohiro Orgawas(1988), "The Effect of Cohort Size on Relative Wages in Japan" in *Economic of Changing Age Distribution in Developed Countries*, edited by Ronald D. Lee, et al.

Figure II - 1.



* The stated may be different from the reality.

Figure III - 1. Demographic and Socio-economic Structure of One Generation Elderly Family

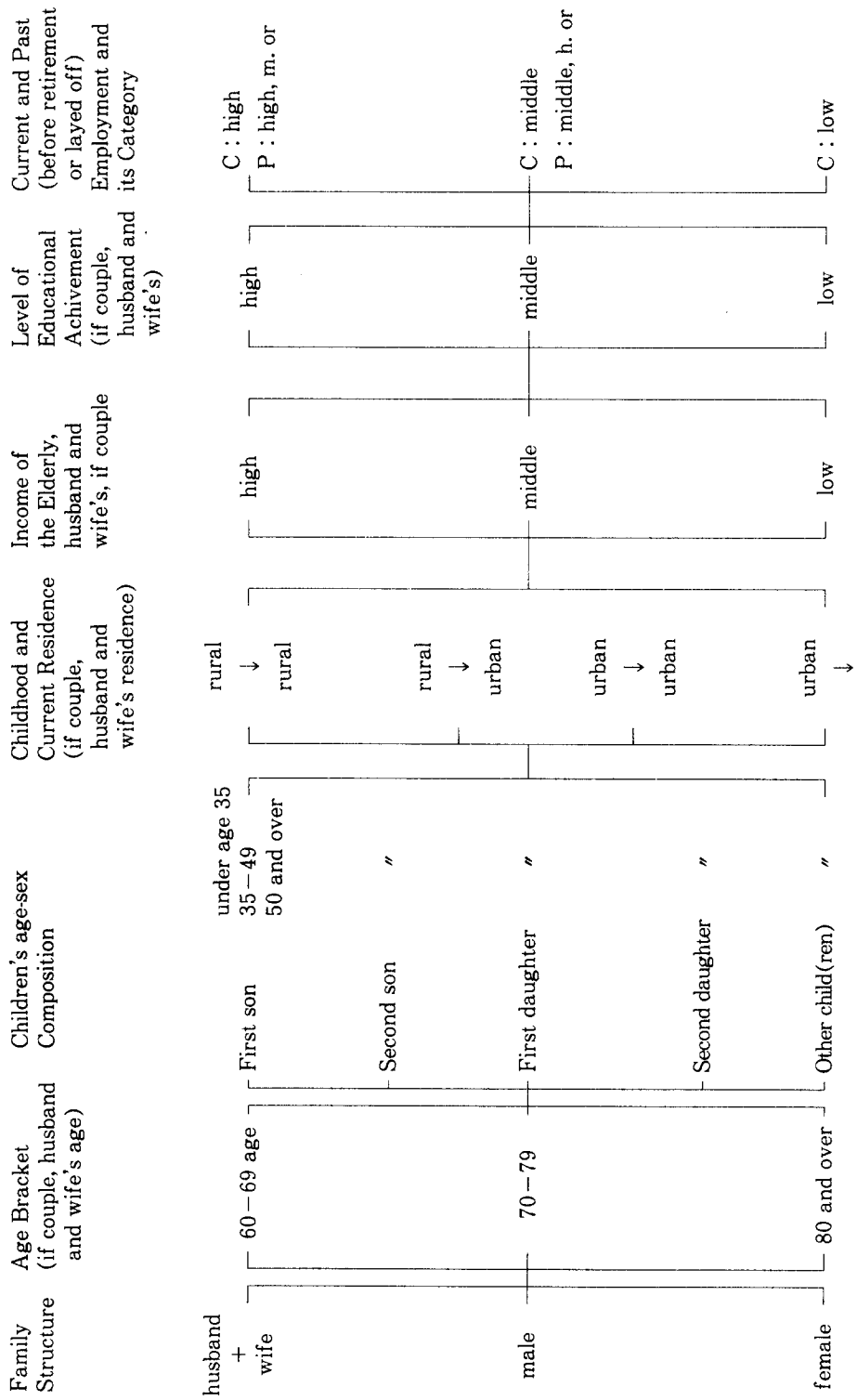
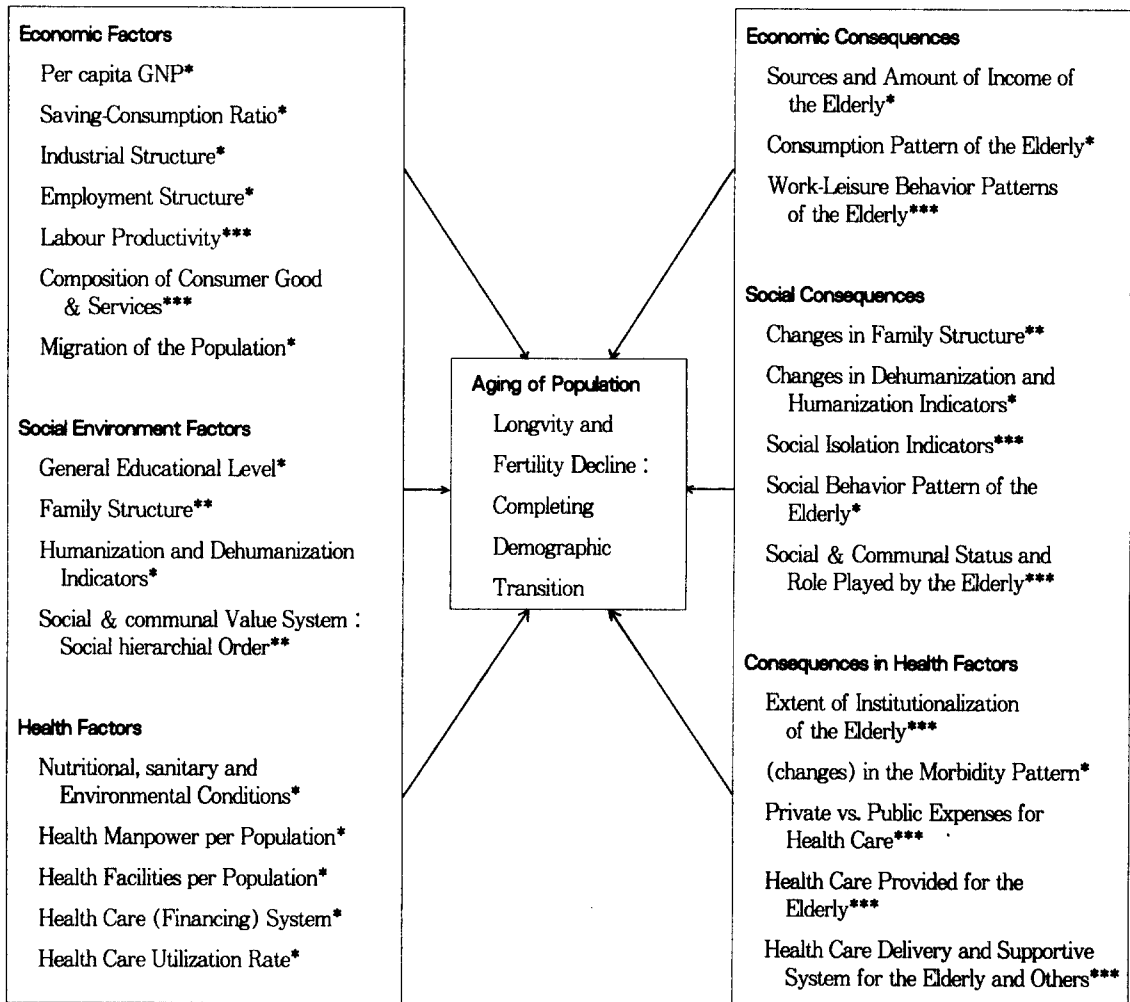


Figure III—2. Schematic Overview of the Variables Chosen to Represent the Causes and Consequences of Aging of the Population



* Published (Secondary) Data

** (First-hand) Data collected by our own surveys

*** The data are not available now. Since these factors are the key variables in this framework, if the third phase of this study can be conducted, we plan to collect them.

Table IV - 1. Probit Analysis of Determinants of Living Arrangements of the Elderly in Korea

(represented by co-efficients and T-values)

(** indicates significantly different from zero at the 5-percent level using a two-tail test.)

	Living alone	Living with the eldest son
Constant	-1.23 (-5.50)	-0.69** (-3.66)
Sex female	0.11 (1.85)	0.51** (4.68)
Age 70-	-0.13 (-1.13)	0.35** (3.86)
Education junior high or less	-0.14 (-1.26)	0.02 (0.19)
Employment	-0.48** (-2.70)	0.24 (1.32)
The elderly has a religion	0.14 (1.25)	0.02 (0.20)
Residence in urban area	-0.02 (-0.15)	-0.40** (-4.43)
Living alone	-	-
Living with the eldest son	--	--
Contacts with friends high or less	0.06 (0.53)	0.10 (1.08)
Level of pocket money high or less	-0.45** (-4.05)	0.38** (4.12)
The elderly has a chronic disease	0.13 (1.14)	0.08 (0.87)
The elderly has independent spirit	-0.10 (-0.99)	0.06 (0.67)
Retirement after 55 years	-0.16 (-1.10)	0.06 (0.55)
The elderly has income	1.23** (7.56)	-0.87** (-5.26)
Good of fitness test(5% significance level)	significant	significant
Theoretic chi-squared	21.0	21.0
LOGIT chi-squared	98.9	132.03

Table IV - 2. Probit Analysis of Determinants of Leisure Activities, Social Contacts and Authority at Home of the Elderly in Korea

(represented by co-efficients and T-values)

(** indicates significantly different from zero at the 5-percent level using a two-tail test)

	Leisure activities ¹⁾	Frequency of contacts with friends	Authority at home ²⁾
Constant	-0.43 (-2.17)	-0.36 (-1.85)	1.17 (4.65)
Sex female	0.24 (2.12)	-0.31** (-2.85)	-1.01** (-7.04)
Age 70-	0.02 (0.21)	-0.16 (-1.66)	-0.89** (-7.68)
Education junior high or less	-0.19 (-2.12)	0.08 (0.87)	0.09 (0.79)
Employment	-0.36 (-2.10)	-0.23 (-1.30)	-0.56 (-2.11)
The elderly has a religion	-0.03 (-0.32)	0.09 (0.95)	0.47** (4.16)
Residence in urban area	-0.06 (-0.61)	-0.11 (-1.11)	-0.15 (-1.27)
Living alone	-0.14 (-1.14)	0.10 (0.76)	-8.30 (-0.01)
Living with the eldest son	0.40** (4.18)	0.18 (1.82)	-0.66** (-6.08)
Contacts with friends high or less	0.72** (7.91)	-	-0.16 (-1.41)
Level of pocket money high or less	0.22** (2.31)	0.39** (4.05)	-0.00 (-0.03)
The elderly has a chronic disease	-0.11 (-1.09)	-0.05 (-0.56)	-0.08 (-0.63)
The elderly has independent spirit	-0.13 (-1.43)	-0.05 (-0.62)	0.06 (0.52)
Retirement after 55 years	0.06 (0.53)	-0.08 (-0.75)	-0.16 (-1.17)
The elderly has income	0.11 (0.69)	0.45 (0.28)	1.04** (4.32)
(n)	975	978	975
Log-likelihood	-607.2	-602.2	-377.7
Chi-squared	122.1	48.5	244.4
(degrees of freedom)	(14)	(13)	(14)
Good of fitness test(5% significance level)	significant	significant	significant
Theoretic chi-squared	23.7	22.4	23.7
LOGIT chi-squared	112.5	47.2	199.9

1) spends leisure time with friends=1, spends leisure time alone=0

2) the elderly has authority=1, the elderly does not have authority=0

Table IV-3. Probit Analysis of Determinants of Economic Conditions of the Elderly in Korea

(represented by co-efficients and T-values)

(** indicates significantly different from zero at the 5-percent level using a two-tail test)

	Level of pocket money	Employment
Constant	-0.60 (-3.07)	-1.45** (-4.61)
Sex female	-0.51** (-4.62)	-0.62** (-3.58)
Age 70-	-0.35** (-3.61)	-0.50** (-3.03)
Education junior high or less	0.33** (3.56)	0.18 (1.16)
Employment	0.11 (0.59)	-
The elderly has a religion	0.21** (2.21)	-0.03 (-0.19)
Residence in urban area	0.55** (5.79)	-0.69** (-4.25)
Living alone	-0.22 (-1.69)	-0.36 (-1.98)
Living with the eldest son	-0.02 (-0.18)	0.08 (0.44)
Contacts with friends high or less	0.48** (5.21)	-0.16 (-1.04)
Level of pocket money high or less	-	-
The elderly has a chronic disease	0.05 (0.50)	-0.36 (-2.07)
The elderly has independent spirit	0.02 (0.25)	0.20 (1.37)
Retirement after 55 years	-0.01 (-0.10)	-
The elderly has income	0.08 (0.49)	3.53** (15.03)
Good of fitness test(5% significance level)	significant	significant
Theoretic chi-squared	22.4	20.0
LOGIT chi-squared	142.2	175.1

1) the elderly has more than or equal to 10 thousand won=1
the elderly has less then 10 thousand won=0

Table IV—4. Probit Analysis of Determinants of Health Care and Status of the Elderly in Korea

(represented by co-efficients and T-values)

(** indicates significantly different from zero at the 5-percent level using a two-tail test)

	Physical examination	Chronic disease
Constant	-0.92 (-4.77)	0.71 (3.91)
Sex female	-0.06 (-0.53)	0.15 (1.40)
Age 70-	-0.12 (-1.32)	0.09 (0.87)
Education junior high or less	0.25** (2.85)	-0.01 (-0.07)
Employment	-0.17 (-1.00)	-0.67** (-3.45)
The elderly has a religion	-0.05 (-0.51)	-0.06 (-0.61)
Residence in urban area	0.11 (1.20)	-0.07 (-0.77)
Living alone	0.38** (3.13)	0.18 (1.38)
Living with the eldest son	0.01 (0.07)	0.11 (1.12)
Contacts with friends high or less	0.03 (0.38)	-0.00 (-0.05)
Level of pocket money high or less	0.06 (0.69)	-0.02 (-0.18)
The elderly has a chronic disease	0.48** (4.73)	-
The elderly has independent spirit	-0.16 (-1.82)	-0.04 (-0.42)
Retirement after 55 years	-0.16 (-1.46)	-0.29** (-2.56)
The elderly has income	0.25 (1.62)	0.34 (1.87)
Good of fitness test(5% significance level)	significant	significant
Theoretic chi-squared	23.7	22.4
LOGIT chi-squared	62.3	35.45

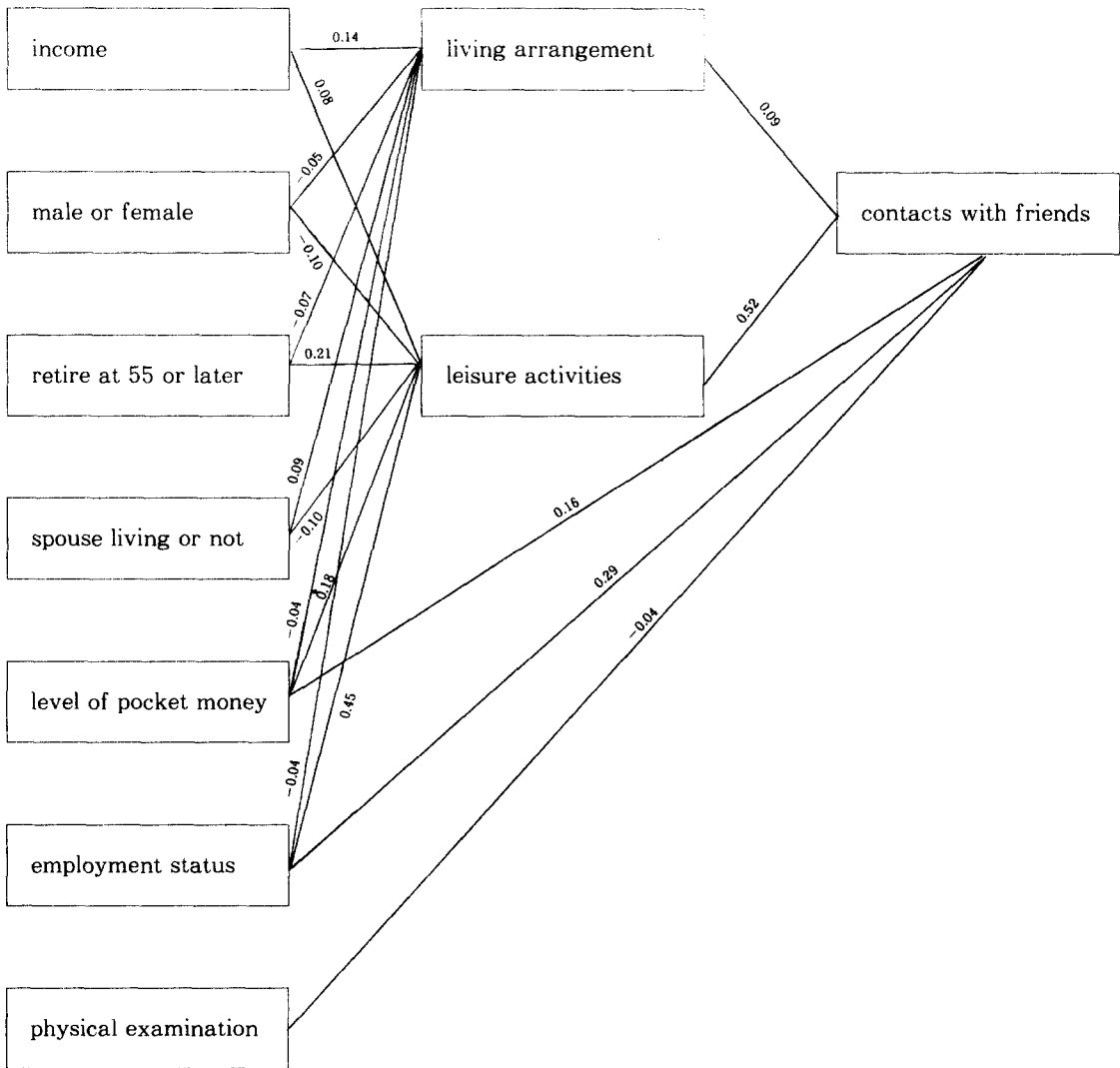
Table IV-5. Probit Analysis of Determinants of Emotional and Psychological Conditions of the Elderly in Korea

(represented by co-efficients and T-values)

(** indicates significantly different from zero at the 5-percent level using a two-tail test)

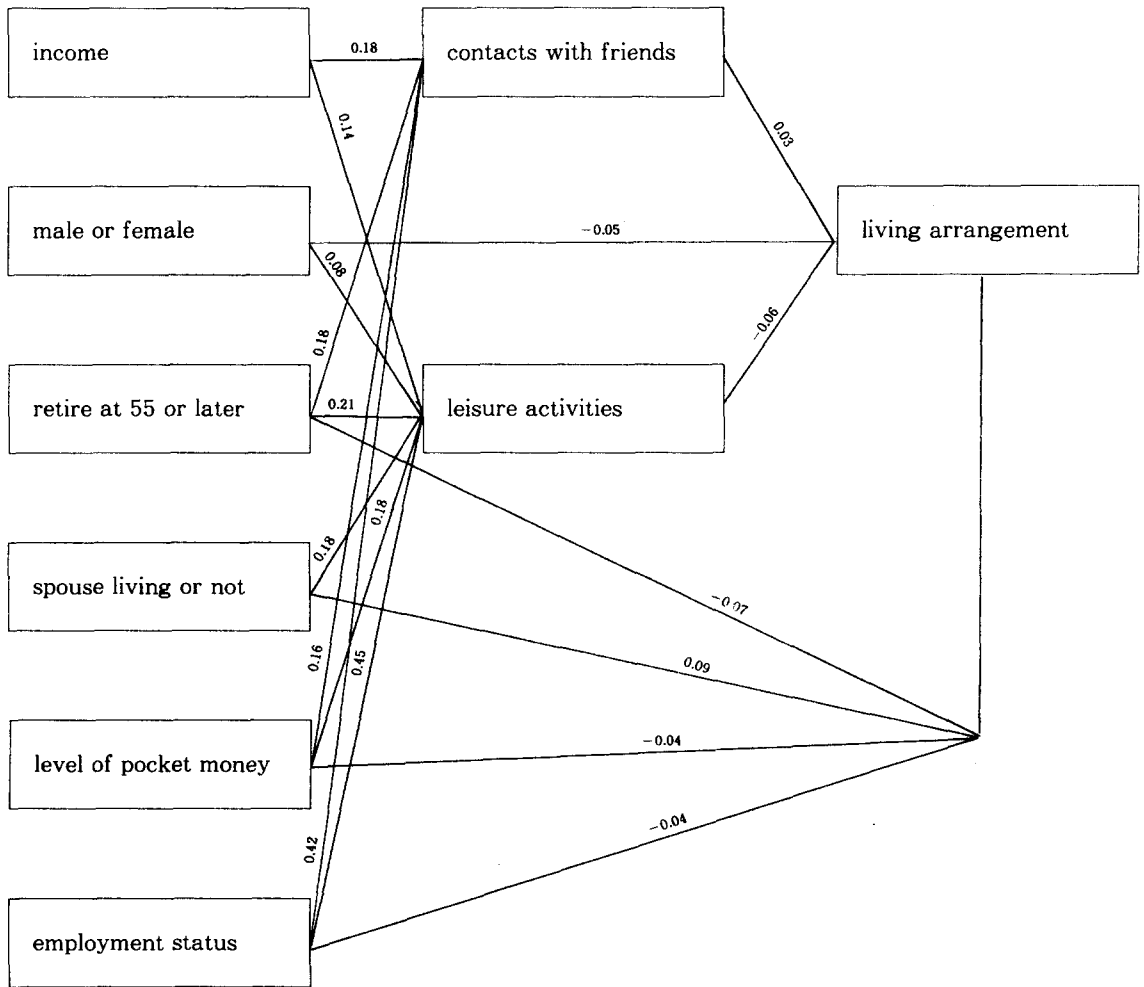
	Feeling of satisfaction	Feeling of isolation
Constant	-0.83 (-4.00)	-0.35 (-1.73)
Sex female	0.67** (5.75)	0.19 (1.71)
Age 70-	0.16 (1.61)	-0.07 (-0.75)
Education junior high or less	-0.02 (-0.20)	-0.10 (-1.06)
Employment	0.22 (1.23)	-0.32 (-1.83)
The elderly has a religion	0.22** (2.25)	0.05 (0.56)
Residence in urban area	-0.17 (-1.78)	0.21 (2.13)
Living alone	-0.36** (-2.80)	0.39** (3.07)
Living with the eldest son	0.29** (2.86)	-0.22** (-2.20)
Contacts with friends high or less	0.15 (1.57)	-0.28** (-3.03)
Level of pocket money high or less	0.40** (4.16)	-0.12 (-1.29)
The elderly has a chronic disease	-0.15 (-1.47)	0.48** (4.60)
The elderly has independent spirit	-0.01 (-0.07)	-0.22** (-2.43)
Retirement after 55 years	0.21 (1.79)	-0.08 (-0.70)
The elderly has income	-0.32** (-1.94)	0.26 (1.39)
Good of fitness test(5% significance level)	significant	significant
Theoretic chi-squared	23.7	23.7
LOGIT chi-squared	98.8	85.1

Figure IV – 1. Path Analysis Indicating How Various Factors Influence the Contacts with Friends of the Elderly in Korea



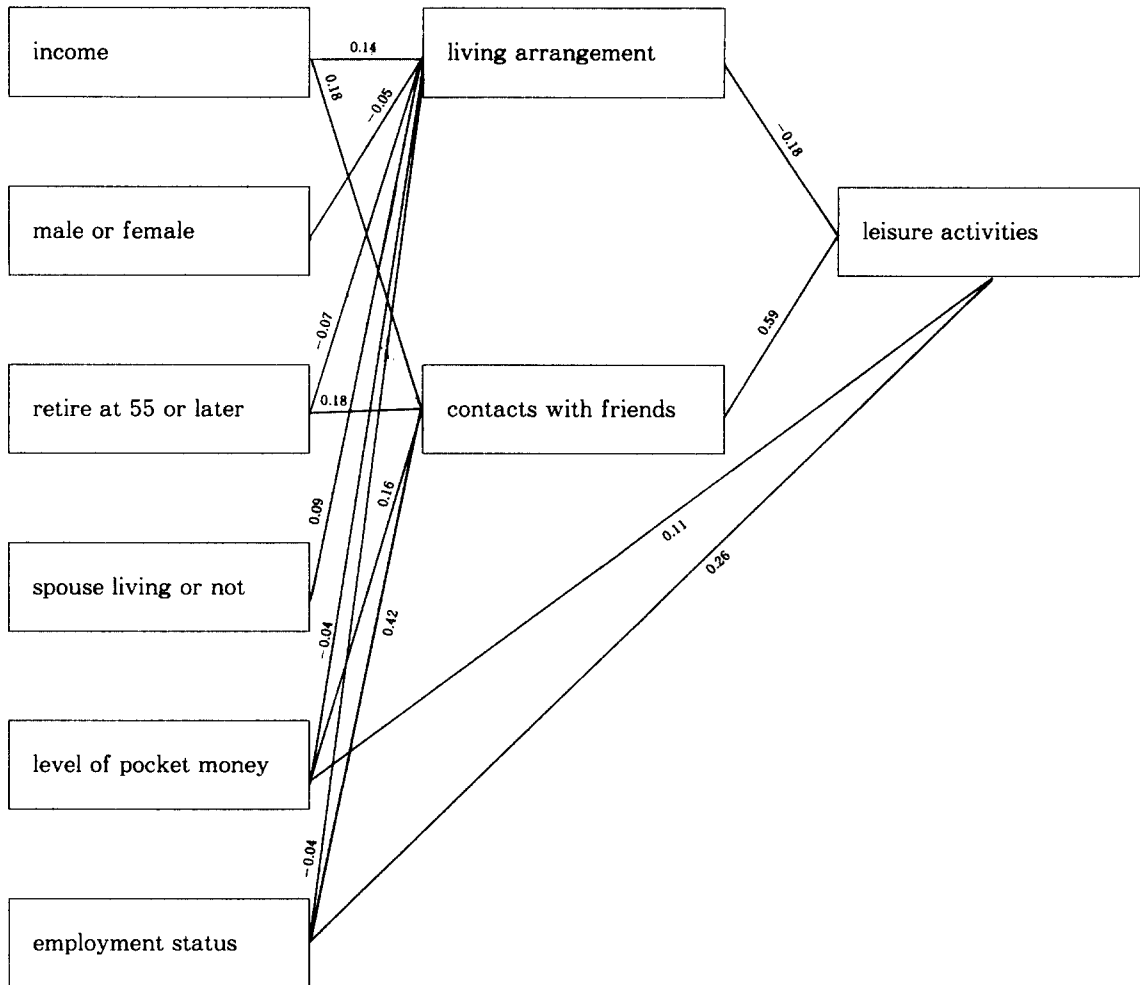
- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high=1, low=0
- * all variables are dummy variables ie. : yes/high=1, no/low=0
- * all b - coefficient shows is significant at 0.05 level

Figure IV –2. Path Analysis Indicating How Various Factors Influence the Living Arrangement of the Elderly in Korea



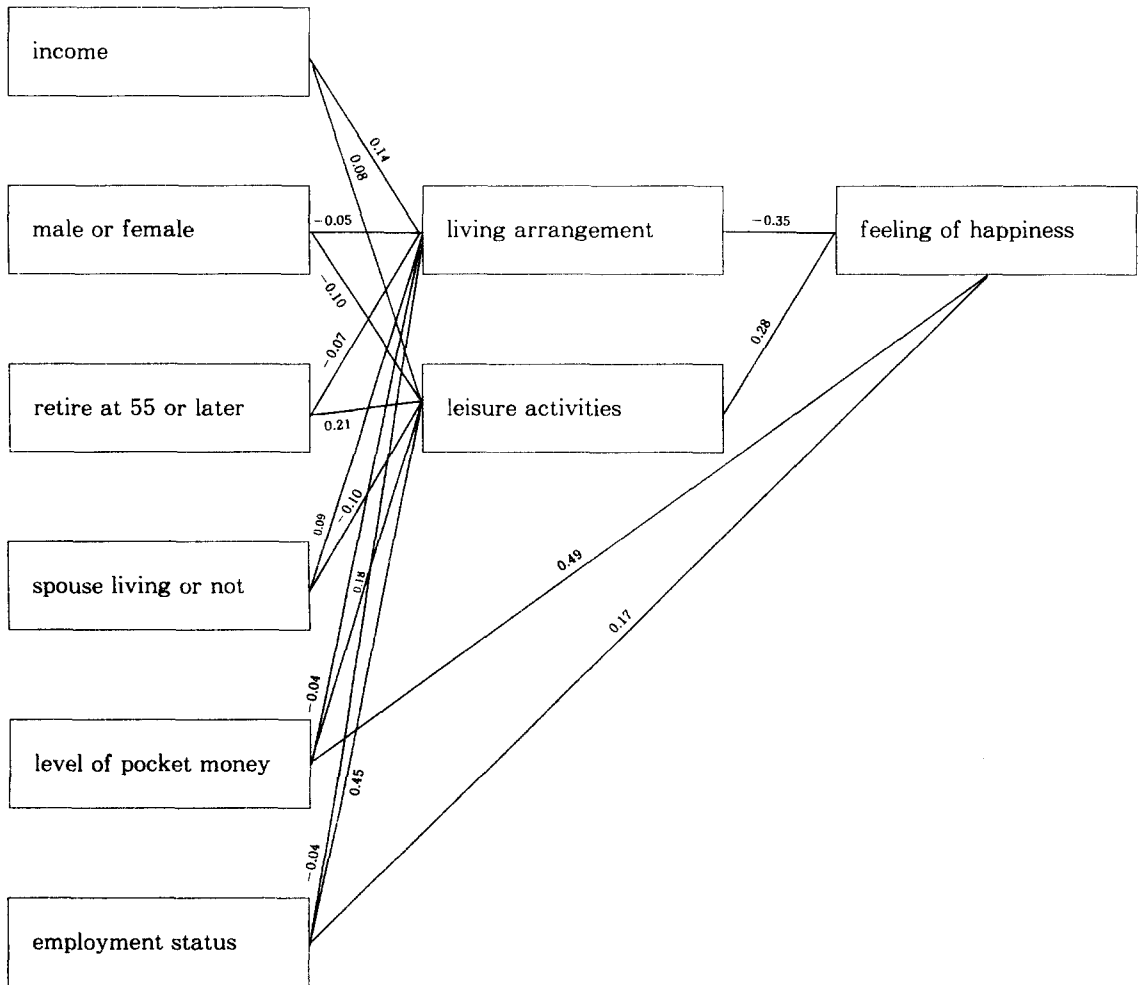
- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high=1, low=0
- * all variables are dummy variables ie. : yes/high=1, no/low=0
- * all b - coefficient shows is significant at 0.05 level

Figure IV—3. Path Analysis Indicating How Various Factors Influence the Leisure Activities of the Elderly in Korea



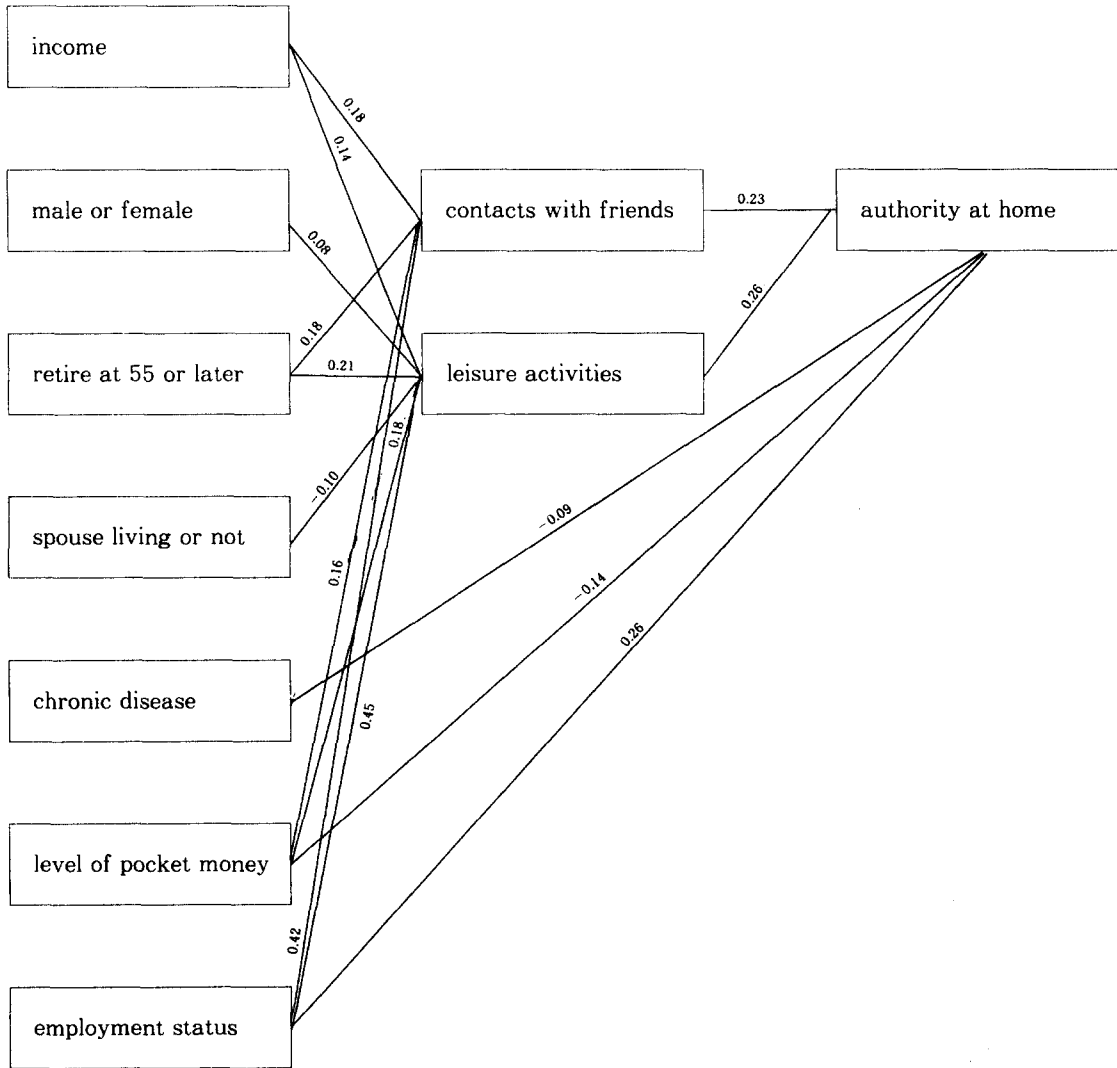
- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high=1, low=0
- * all variables are dummy variables ie. : yes/high=1, no/low=0
- * all b - coefficient shows is significant at 0.05 level

Figure IV –4. Path Analysis Indicating How Various Factors Influence the Feelings of Happiness of the Elderly in Korea



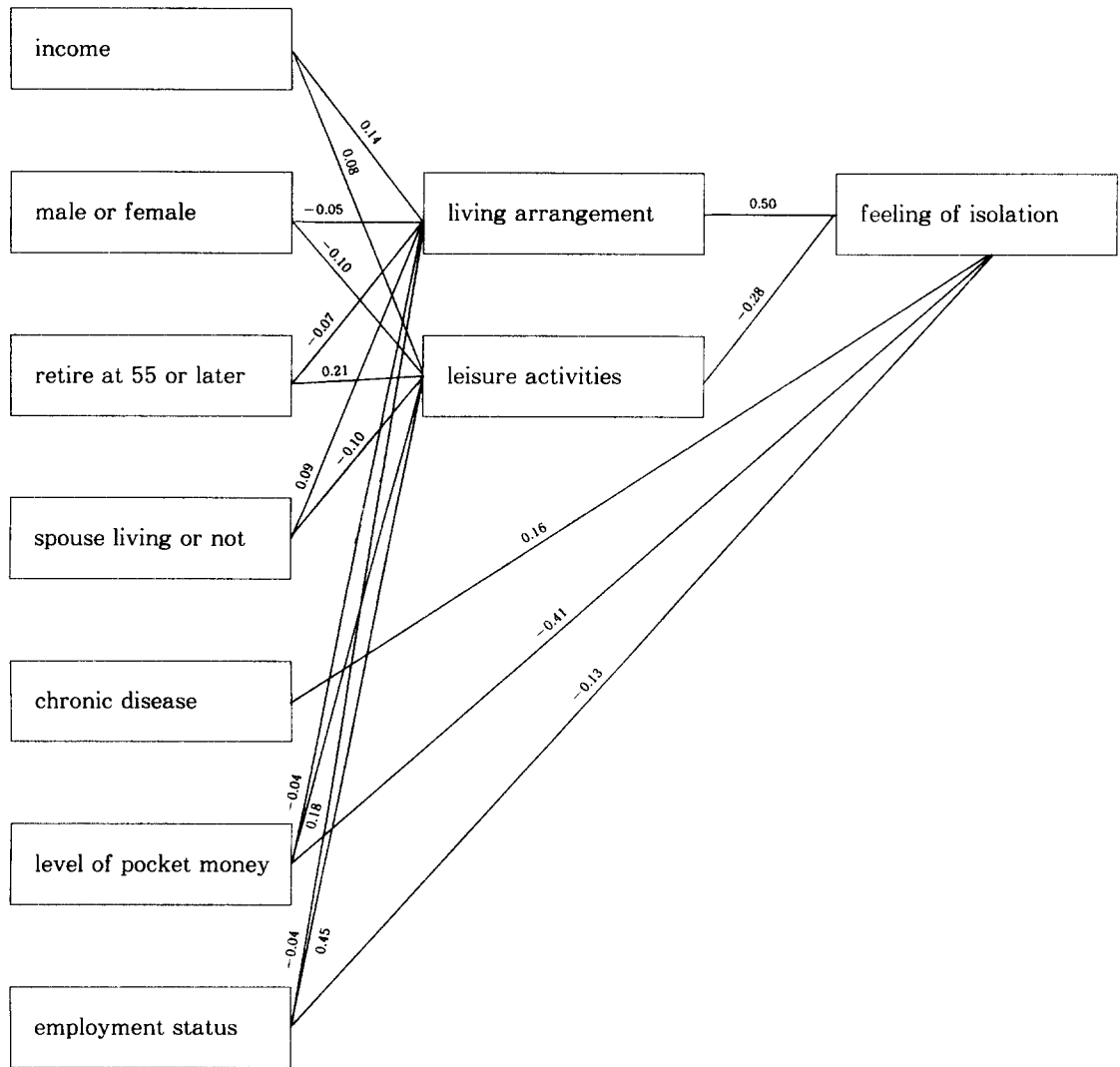
- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high=1, low=0
- * all variables are dummy variables ie. : yes/high=1, no/low=0
- * all b - coefficient shows is significant at 0.05 level

Figure IV –5. Path Analysis Indicating How Various Factors Influence the Authority at Home of the Elderly in Korea



- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high=1, low=0
- * all variables are dummy variables ie. : yes/high=1, no/low=0
- * all b - coefficient shows is significant at 0.05 level

Figure IV –6. Path Analysis Indicating How Various Factors Influence the Feelings of Isolation of the Elderly in Korea



- * income : from his own income source
- * living arrangement : living alone or with children and relatives
- * leisure activities : with others or alone
- * employment status : high = 1, low = 0
- * all variables are dummy variables ie. : yes/high = 1, no/low = 0
- * all b - coefficient shows is significant at 0.05 level

(國文抄錄)

韓國 老齡人口의 社會·經濟的 狀況의 決定要因

노공균 · 조소영 · 신동숙 · 이태훈

1. 問題點(Setting of Problems)

産業의 急進的인 進歩는 高度의 技術社會(high-tech societies)를 創出해 내었고, 이로 인해 生産樣式뿐만 아니라, 價値體系 및 生活樣式이 急進的으로 變化하였다. 동시에, 産業化 및 生活水準의 向上은 人口統計學的 變遷(demographic transition)을 가져와, 人口의 老齡化가 이루어졌다. 産業化에 의해 發生된 이러한 現狀들 즉, 價値體系의 變化와 人口의 老齡化가 바로 問題의 核心인 것이다.

産業化는 效率(efficiency)에 높은 價値를 賦與함으로써, 精神的인 人間關係側面의 重要性을 無視하고, 老齡化란 多次元的(multi-dimensional) 問題를 일으켰다.

이러한 問題들의 解決策으로서 西歐的인 價値概念은 老人들의 生活의 質(quality of life)을 向上시키지 못한 것으로 생각된다. 따라서, 物質的인 面 이외에 精神的인 面의 接近法을 必要로 하게 되는 것이다.

2. 研究의 目的(Objective of the Study)

이 研究의 目的은 韓國에 있어서의 人口의 老齡化의 原因과 結果에 대한 研究를 하는데 있다. 이러한 研究에 의해 老齡化라는 多次元的 問題에 대한 知識을 얻으므로써, 社會, 共同體 및 家族 水準에서의 老齡化 問題를 다루는데 있어 非西歐的 接近法 및 政策的 戰略에 관한 方案을 提示하게 되기를 希望한다.

3. 方法論(Methodology)

1) 資料 蒐集(Data Collection)

資料는 다음 세가지 源泉으로 부터 얻어졌다.

첫째, 出版된 資料 및 會議書類

둘째, 韓國保健社會研究院과의 協助로 行해진 設問紙 調査

셋째, 自體 研究팀에 의해 行해진 面談

2) 資料分析(Data Analysis)

因果分析(cause-effect types of analyses)은 probit, logit, path analyses에 의해 行해졌다. 이 研究論文에는 trend analysis의 結果는 提示되지 않았는데, 이는 多樣的 政府機關에 의해 出刊된 分析들과 類似하기 때문이다.

4. 研究分析의 結果

첫째, 經濟的 要因은 老人들의 生活狀態를 決定하는데 가장 중요한 要因이라는 것을 알 수 있다.

둘째, 老人의 社會的인 統合이 強할수록 보다 幸福한 生活을 營爲하는 것으로 나타났다.

셋째, 性(sex), 教育程度, 住居地域 등이 老人의 雇傭狀態 및 所得水準과 큰 關係가 있다.

넷째, 教育程度, 社會的 統合(social integration) 등이 健康狀態와 密接한 關係가 있다.

다섯째, 社會的 統合, 健康狀態, 獨立心 등이 老人의 情緒的 狀態에 큰 影響을 미친다.