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SOCIOLOGY | RESEARCH ARTICLE

Effects of living arrangements of the urban elderly on their subjective wellbeing: A comparison between Korea and China

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Abstract: This research is to find the effects of living arrangements of urban elderly on their subjective wellbeing, comparing Incheon, South Korea (Korea hereafter) with Shandong, China. Subjective well-being includes degree of loneliness, and satisfaction with concept of filial piety, children's supports, and life in general asked using printed questionnaire for total 1904 elderly population of 65 and over of age in both countries. The traditional Confucian belief that living arrangements is an essential condition for subjective wellbeing of older parents is not supported by the Chinese case, but partially supported by the Korean case. Although the general life-satisfaction is not significantly affected by the forms of living arrangement, the degree of loneliness, satisfaction with children's filial piety toward them, satisfaction with children's supports are significantly affected by the form of living arrangement for Korean, while none of the three areas is affected for Chinese. Nevertheless, the subjective wellbeing of elderly in both countries is commonly affected, sometimes more affected by other factors than living arrangement, particularly "marital status" and "health" of elderly. The elderly living alone as well as who are unhealthy seem to need more attention from family in both countries. With all these similarities and differences, however, the levels of the subjective wellbeing of Chinese elderly are higher in all of the four areas of the wellbeing than that of Korean. The reasons for the differences may have a relation with the wellbeing-friendly conditions of Chinese, such as legalized filial obligation for parents, the higher proportion of living with spouse only, elderly' residence closer to children's, and more frequent meeting and communication with children. It

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PUBLIC INTEREST STATEMENT

This study tries to compare life satisfaction of 1,904 elderlies residing in cities in South Korea and China, namely Incheon, Yantai, Qingdao, Jinan, and Taian. Responses on how satisfied respondents are living were subjectively measured in four areas; how lonely they feel, how satisfied they are with their children, how satisfied with their children's financial support, and overall state of content in life. The result shows that for South Korea's case, the elderlies answered that whether they live with their children affects how they feel happy or lonely, and how much their children are keen to support them. However, the analysis on Chinese elderlies did not show that living with their children does not have effect on their assessment of well-being.

implies that not only financial support but also physical care and emotional supports of family are still possible and necessary, in spite of changing condition of living arrangement, especially with higher proportion of elderly' living apart from children and the higher preference for the separate arrangement.

Subjects: Social Sciences; Education; Adult Education and Lifelong Learning; Educational Research; Higher Education; Classroom Practice; Curriculum Studies

Keywords: well-being; living arrangement; China; Korea

1. Introduction

Conventional wisdom and modernization theorists have long thought that the status and well-being of the elderly are closely related to the form of living arrangement, specifically living with married children. Living arrangement was determined by whom the elderly decides to live with which would normally include spouse and adult children. In addition, important interactions were seen between population aging, changes in the living arrangements of the elderly, and need for the long-term care services (Bengtson & Lowenstein, 2003; Yi & George, 2001). Although familial supports can be given without co-residence, it has been long viewed as a form of condition for happiness, especially in countries with Confucian tradition, where family solidarity and mutual dependency are more important than the privacy and individualism. On the contrary, cultural preference of the privacy, independence, individualism even between generations in the family may have some negative effects on the choice of co-residence with a married child and life satisfaction as in Western societies such as USA (Pampel, 1983).

The impacts of population aging on family structure and living arrangements can be explained first by the microscopic changes in individual families. The longer period of co-residence of family members of different generations, adding one or more generations to the family, thereby implying heavier obligation of family members, especially that of old members for their older parents. Moreover, as population aging accompanied by very low birth rate with one-child in most families like in Korea and China, working younger generations of the family have fewer members, while retired older generations with increasing life expectancies have more, which make the familial supports to old members difficult. That is, the so-called pyramid forms of the family structure has been changing into the beanpole shape which is long and thin with fewer members in each generation and more number of generations in the family (United Nations, 1999).

In fact, the continuing increase of older person households and steady reduction of the three generation household have been experienced in Korea since 1970s and now the proportion of independent older person households reaches near the half of their living arrangements in Korea (Kim & Phillips, 2007; National Statistical Office [NSO], 2011). And it is expected that the increase of the independent living arrangement of older people will further continue in coming future, with the increasing number of beneficiaries of pensions and increasing preference of older people's independent living arrangements (NSO, 2011). That is, demographic availability, economic feasibility, cultural preference may be important factors affecting the living arrangements (Chung, 2000, 2002; Kemyung University/Korea Health & Welfare Research Institute, 2009). The conditions may imply the realistic and practical possibilities in choosing living arrangements together with their preferences. As the interactions between the form of living arrangement and life satisfaction are directly related to family support systems and public policies, studies on the living arrangements of the elderly are important to improve the wellbeing of the elderly.

In the process of changing family structure, factors such as age, gender, marital status, health status, income level, and education were found to be significant as determinant of living arrangement (Kim, 2004). The financial ability like having independent income source, higher educational level, and better health condition were found to be one of the important factors affecting the independent living arrangements (Kemyung University/Korea Health & Welfare Research Institute, 2009; Kim, 2004). As Chen and Silverstein (2000) had also reported that intergenerational exchange in Chinese family is

characterized by resources, needs, and opportunities available to the parents and their children. In addition, the out-migration from rural to cities is one of the major factors affecting the urban-rural differentials in living arrangements both in Korea and China (Jung & Cho, 2005; Kim, 2004).

Furthermore, older people with high literacy and better income were found to have a higher tendency to live apart from their children (De Vos & Holden, 1988). In addition, the primary reason for not willing to live with children is to avoid family conflict (Du, 1990) and the major reasons for living together with their children is not due to their wishes and ideology, but to the reality of actual living conditions and costs (Du, 1990).

Another concern with the living arrangement is that the changing structure of family and household, therefore, may have some impacts not only on the familial relations and mutual support, but also on the subjective sense of happiness. Some researches on the impacts of living arrangements on the wellbeing of elderly in Korea and China have shown some evidence of different effects. A Chinese research (Jung & Cho, 2005) found the causal influence of different living arrangements on health outcomes and life satisfaction among Chinese older population, and provided empirical evidence that married couples living apart from children are the most advantaged group in terms of health and life quality. Another study (Yoo & Park, 2003) revealed that the mental and emotional health status of elderly living alone was found to be much lower than the elderly living with other family members. Moreover, Korean elderly living with children receive and actively provide household chores such as meal preparation and house cleaning (Lee & Weber, 2000), which may indicate positive effect of co-residence on wellbeing of elderly.

A study (Yoo, 2000) on the solidarity and the discord with the adult children by four types of living arrangements has found that the financially independent co-residence group showed the highest in solidarity with adult children, while the children-dependent elderly groups who have no income are not friendly relationships with children. In addition, the impacts of living arrangement are known to affect the psychological wellbeing and feeling of loneliness depending on the marital status (Han & Yoon, 2001; Won, 1995). Therefore, the separate living arrangement between parents and children does not necessarily mean the weakening of family relations and exchange of supports (Kim, 1987). Thus, the so-called revised form of the extended family (Bengtson & Lowenstein, 2003; Han & Yoon, 2001; Won, 1995) may still be working in family relations.

Thus, research findings are varying: findings (Kim, 1999; Lim & Lee, 2008; Yoo, 1997) that living with children has positive effects on feeling of loneliness, depression, life-satisfaction, and wellbeing, in contrast to studies (Kim, 1987; Won, 1995) that living arrangement does not have positive effects on the happiness of elderly, i.e. physical togetherness is not the factor affecting the level of satisfaction. Moreover, a research (Han & Yoon, 2001) argued that happiness level of elderly is less determined by living arrangement than by situational characteristics such as health status, financial condition, marital status, and financial dependency on children.

The aim of this research is to find the effects of living arrangements of urban elderly on their subjective wellbeing in comparison of Korea and China. As both countries are with a long Confucian tradition of *familism*, this comparative study of the two countries could better show the effect of living arrangements on the subjective wellbeing in different contexts. Subjective wellbeing here includes four subjectively assessed areas, including degree of loneliness, satisfaction with filial piety, satisfaction with children's supports, and general life-satisfaction.

2. Research questions, hypotheses, and method

2.1. Research questions

- (1) What kind of living arrangement do older people desire to live, live with children or live apart from children? What is the level of their satisfaction with present living arrangements, in

respect of accordance of the current form of living arrangement with their desired form of arrangement?

- (2) Is there any effect that different living arrangements (living with children/living apart from children) have on the 4 areas of subjective wellbeing, including the feeling of loneliness, satisfaction with children's filial piety toward them, satisfaction with children's supports, and general life-satisfaction?
- (3) What are the effect of other factors such as gender, age, marital status, education, health states, monthly income on elderly' subjective wellbeing, in comparison with the effect of living arrangement?
- (4) How much are the general life-satisfaction different between elderly living alone, living with spouse only, and living with children?

2.2. Hypotheses

Based on the previous researches, following hypotheses are made on the effects of living arrangement on the subjective wellbeing of elderly of Korea and China: First, the proportions of elderly who wish the separate living arrangement as a whole may be much higher than those who wish the co-residence in both countries, "living apart" may be regarded as a condition for of happier life for elderly of both countries, except for those living alone.

Second, level of subjective wellbeing of elderly in four areas would be relatively high for the two countries, but the four areas of subjective wellbeing may be affected by the forms of living arrangement.

Third, the general life satisfaction as a part of subjective wellbeing of the elderly can be more affected by other characteristics of elderly than by living arrangement itself, particularly by marital status and health states.

Finally, the subjective wellbeing of Chinese elderly would be better than Korean, and less affected by living arrangement than that of Korean elderly, considering wellbeing friendly conditions of Chinese, such as legalized filial obligation for parents, the higher proportion of married couple, elderly' residence nearer to children's, and more frequent meeting and communication with children.

2.3. Research method

The reasons for this study to choose the urban elderly of Incheon-Gyeonggi, Korea and Shandong, China are based on their similarities of population aging stage, industrialization, and urbanization as well as cultural and geographical affinity. As the impacts of population aging on elderly people would vary depending on the proportions of aging population, the degrees of urbanization (Bengtson & Lowenstein, 2003; Yi & George, 2001), and culture, these similarities of these conditions are important for comparison of the elderly life, although in different national contexts.

First, both countries have long traditions of filial piety and the familial obligation for old age, and still sustain the so-called "ideology of mixed welfare system" with an emphasis on the role of family in welfare. However, China has even stronger family orientation in their welfare system by legalizing the children's or familial duties for old age supports (Kwon, 2010). Second, characteristics of Shandong Province, facing the stage of population aging higher than the average of China, has economic status as industrialized urban community and as the highest of China (Kwon, 2010), which is very similar to the conditions of Incheon-Gyeonggi, within Korea. Third, Shandong province is where the Confucius was born and its people are similar to Korean people in keeping the similar Confucian tradition, as two provinces are geographically the closest to each other, and have historically closest relationship with each other than with any other provinces in both countries. The impacts of population aging on elderly people would vary depending on the proportions of aging population and the degrees of urbanization (Bengtson & Lowenstein, 2003; Yi & George, 2001) and culture, these three conditions are important for comparison of the elderly life, although in different national contexts. Finally, the reason for selecting the urban elderly of both countries is that there been the urban-rural

Table 1. Basic characteristics of elderly studies in Korea and China

Variables	Category	Incheon-Gyeonggi, Korea (N/%)	Shandong, China (N/%)
Age	65–69	287 (28.3%)	235 (26.4%)
	70–74	251 (24.8%)	232 (26.1%)
	75–79	230 (22.7%)	161 (18.1%)
	80+	245 (24.2%)	110 (12.4%)
Gender	Male	423 (41.7%)	425 (47.8%)
	Female	591 (58.3%)	462 (51.9%)
Marital	Currently married	535 (52.8%)	661 (74.4%)
	Currently unmarried	479 (47.2%)	227 (25.6%)
Education	No schooling	286 (28.2%)	135 (15.2%)
	Elementary school	322 (31.8%)	395 (44.6%)
	Secondary school	334 (32.9%)	311 (35.1%)
	College or higher	72 (7.1%)	45 (5.1%)
House	Owned by elderly	123 (34.9%)	680 (76.4%)
	Else	229 (65.1%)	210 (23.6%)
Health	Good	311 (31.0%)	404 (45.8%)
	Ordinary	264 (26.3%)	295 (33.4%)
	Poor	427 (42.6%)	183 (20.7%)
Total		1,014 (100%)	890 (100%)

differentials of the living arrangements of elderly (Kim, 2004). The massive out-migration of young population from rural areas is the main reason for most of rural elderly to live apart from children. Therefore, the relevant older people in studying various factors affecting their living arrangements are considered to be the elderly living in urban areas.

2.4. Data

Data used for this study on older persons aged 65 and over, 1,014 elderly in Incheon-Gyeonggi region in Korea and 890 elderly in four cities of Shandong province in China including Yantai, Qingdao, Jinan, and Taian, were surveyed respectively in 2009 and 2010, but the same questionnaire were used for both Korean and Chinese surveys. The sample population in both countries were identified using quota sampling method to ensure only elderly who are 65 and over of age responded to the questionnaire. The questions used in the analyses were marital status, general life satisfaction, loneliness, and supports from children. The general characteristics of the respondent are shown in Table 1.

2.5. Analyses and main variables

The χ^2 test and logistic regression analysis were conducted on effect of the living arrangement on the subjective wellbeing: the living arrangement is independent variable and the four areas of subjective wellbeing, including feeling of loneliness, satisfaction with children’s filial piety toward them, satisfaction with children’s supports, and general life-satisfaction are dependent variables.

In the logistic regression analysis of other factors affecting the four areas of subjective wellbeing, seven independent variables are used such as gender, age, marital status, educational attainment, monthly income, self-rated health status, in addition to the forms of living arrangements, and dependent variable are the four areas of subjective wellbeing, including the feeling of loneliness, satisfaction with filial piety of children, satisfaction with children’s supports to parents, and general life-satisfaction. Finally, for the effect of living arrangement on the general life-satisfaction by χ^2 test, living arrangement as independent variable is divided into three variables, including “living alone” and “living with spouse only”, and living with children, and dependent variable is general life-satisfaction.

Table 2. Living arrangement of elderly by gender

	Living arrangement	Male %	Female %	Total		χ^2 -test
				N	%	
Incheon-Gyeonggi, Korea (N, %)	Live alone	15.2	32.1	253	25.1	$\chi^2 = 103.8$ $p = 0.000$
	Live w. spouse only	53.6	24.6	370	36.7	
	Live w. unmarried child	15.0	13.2	141	14.0	
	Live w. Married child	16.2	30.6	245	24.3	
	Total	100.0	100.0	1,014	100.0	
Shandong, China	Live alone	9.1	19.1	110	14.3	$\chi^2 = 35.9$ $p = 0.000$
	Live w. spouse only	69.0	48.3	447	58.1	
	Live w. unmarried child	3.3	3.7	27	3.5	
	Live w. married child	18.7	29.0	186	24.1	
	Total	100.0	100.0	770	100.0	

3. The characteristics of living arrangements of the urban elderly

3.1. Distributions of the living arrangements in comparison

The current status of living arrangements of elderly both in Incheon-Gyeonggi, Korea and Shandong, China (hereafter IK, Korea and Sd, China) are shown in Table 2. The most salient differences of living arrangement of the two countries are as follow.

- (1) The elderly living alone in IK, Korea occupies 25.1%, much larger than 14.3% of Sd, China.
- (2) The elderly living with spouse in China consists of 58.1%, much larger than 36.7 in IK, Korea.
- (3) The elderly living with unmarried child in IK, Korea constitutes 14.0%, much larger than 3.5% of Sd, China.

However, there are two kinds of common trends in the status of living arrangements.

- (1) The living arrangements of the elderly in both countries show significant gender differences, with more women than men living alone and living with married children.
- (2) The proportion of elderly living with married child is almost the same in the two countries, with 24.3% in IK, Korea and 24.2% in Sd, China.
- (3) The proportions of the elderly living separately from children are more than that of those living with children in both countries, although in different degrees, 61.8% of Korean in IK and 72.4% of Chinese.

3.2. Accordance of the current living arrangements with the desired

In order to know what kinds of living arrangements the elderly in the two countries desire to live, and how much of their current living arrangements are in accordance with their ideal forms, their desired forms of living arrangements are cross-tabulated by their current living arrangements, as presented in Table 3, which reveals the rates of accordance and discrepancy between the wishes and the reality for the two countries.

Accordance of the realities with the wishes in living arrangement are higher among those currently living with children than those living apart for Korean, while these are higher among those currently living apart than living with for Chinese. That is, about 51.7% of the Korean elderly and 40.1% of Chinese elderly who are currently living with child indicated the co-residence as their ideal

Table 3. Desired forms of living arrangements of elderly by their current arrangements

Desired	Incheon-Gyeonggi, Korea				Shandong, China			
	Living with (%)	Living apart (%)	Total		Living with (%)	Living apart (%)	Total	
			N	%			N	%
Living separately	16.4	41.0	308	31.6	23.9	46.8	341	39.7
Living with	51.7	11.4	261	26.8	40.1	8.2	155	18.0
Living separately when healthy, living with when not healthy	20.2	25.4	229	23.5	16.3	23.9	185	21.6
Living separately when healthy, but in silver home when not healthy	10.8	20.0	160	16.4	14.8	17.2	141	16.4
Others	0.1	2.3	17	1.7	5.0	3.9	36	4.2
Total (persons)	100.0 (371)	100.0 (603)	975	100.0	100.0 (264)	100.0 (594)	858	100.0

Table 4. Effects of living arrangement on the feeling of loneliness and satisfaction with filial piety of children

Feeling	Degree	Living		Total		χ^2 -test		p-values of logistic regression
		With (%)	Apart (%)	N	%	χ^2	p	
<i>(a) Incheon-Gyeonggi, Korea</i>								
Loneliness	Often	9.8	15.4	129	13.6	20.892	0.007	0.018**
	Occasionally	32.4	22.9	256	26.4			
	Not lonely	57.8	61.7	581	60.9			
	Total	100.0 (367)	100.0 (598)	966	100.0			
Children's filial piety	Good	66.8	54.0	562	59.0	56.112	0.000	0.000***
	Ordinary	25.1	31.8	278	29.2			
	Don't know	4.9	6.7	57	6.0			
	Little	2.4	5.0	39	4.1			
	Never	0.8	2.5	17	1.7			
	Total	100.0 (371)	100.0 (581)	953	100.0			
<i>(b) Shandong, China</i>								
Loneliness	Often	8.0	5.2	29	6.1	1.472	0.479	0.536
	Occasionally	22.1	22.6	106	22.4			
	Not lonely	69.9	72.2	338	71.5			
	Total	100.0 (163)	100.0 (310)	473	100.0			
Children's filial piety	Good	76.3	84.0	374	81.3	7.790	0.168	0.254
	Ordinary	21.9	13.3	75	16.3			
	Don't know	1.3	1.3	6	1.3			
	Little	0.	1.0	3	0.7			
	Never	0.5	0.4	2	0.4			
	Total	100.0 (160)	100.0 (300)	460	100.0			

Notes: Numbers in parentheses are frequencies.

The p-value of the logistic regression analysis above is of variable "living with/apart", among 7 variables included in the analysis: age, gender, marital status, health status, house ownership, monthly income, and educational attainment.

**p < 0.05.

***p < 0.005.

form of living arrangements. On the other hand, only 41.0% of Korean elderly and 46.8% of Chinese elderly who are currently living apart from children regard the separate residence as their ideal form.

However, only 11.4% of Korean elderly and 8.2% of Chinese elderly who are now living apart from children regarded the co-residence as the ideal form of living arrangement. On the other hand, 16.4% of Korean and 23.9% of Chinese who are currently living with child regard the “living apart” as ideal form of arrangement. Although the consistency of the reality with the desired is higher than the discrepancies between the two forms for both countries even in different degrees, it can be concluded that discrepancy between the reality and the desired is much higher among those currently living with children than among those living apart from children in both countries. In addition, the proportions of elderly who wish the separate living arrangement are much higher than those who wish the co-residence in both countries. This finding may imply that the increase of the elderly living apart from children may further continue in future.

4. Effects of the living arrangements on subjective wellbeing of the elderly

Elderly in the two countries were asked about the degree of loneliness, children’s filial piety, and degrees of satisfaction with children’s actual supports, and general life-satisfaction. The responses to the questions were tabulated by living arrangements and are tested by χ^2 and analyzed by Logistic Regression (the variable of “living with and apart” together with other seven variables such as age, gender, marital status, health status, educational attainment and monthly income are included). However, for the sake of limited space here, the full outputs of χ^2 test and Logistic Regression Analysis are not presented here. Only χ^2 and the p -value of χ^2 test, and the p -value of the Logistic Regression analysis are presented in Tables 4 and 5.

4.1. Effects of the living arrangements on feeling of loneliness and satisfaction with filial piety of children

As shown in Table 4, the effects of living arrangements on elderly’ feeling of loneliness and their satisfaction with filial piety of children in Korea are found significant both by Logistic Regression Analysis and χ^2 test, while the effects on the two areas of wellbeing are found not so significant in Chinese case, neither by χ^2 nor the Logistic Regression analysis.

The results seem to be related to the difference of the proportion of elderly living alone, as 25.1% of Korean elderly live alone, compared with 14.3% of Chinese elderly. In fact, significant differences in the degrees of loneliness were found between those living alone and living with spouse only by χ^2 test, for both countries. Nevertheless, the proportion of Chinese elderly responding positively is much higher than that of Korean in the two areas of subjective wellbeing. That is, Chinese are less lonely and more satisfied with filial piety of their children than Korean. For instance, the proportion of Korean elderly rated “good” about satisfaction with children’s filial piety is 59.0%, which is much less than 81.3% of Chinese. The difference may be due to the condition that children’s supports to parents in China have a strongly enforced legal status, live nearer children, meet and communicate with children more frequently.

4.2. Effects of the living arrangements on the degree of satisfaction with children’s supports and general life-satisfaction

Elderly of the two countries were asked about the degrees of satisfaction with two areas of subjective wellbeing: children’s supports to parents and general life-satisfaction. As presented in Table 5, the majority of the elderly in both countries responded higher than the ordinary degree of satisfaction with the two areas of subjective wellbeing.

However, the effects of the living arrangements on the degree of satisfaction with two areas by χ^2 and Logistic Analysis show different results for the two countries. In the case of Korean, no significant difference of effect was shown on general life-satisfaction, but significant effect was shown on the satisfaction with children’s financial support to elderly. In the case of Chinese, however, no significant effect of the living arrangements on the two areas of subjective wellbeing was shown.

Table 5. Effects of living arrangement on the degree of satisfaction with children’s supports to parents and general life-satisfaction

	Degree ^a	Living		Total		χ^2 -test	p-value of the logistic regression ^c
		With	Apart	N	%		
<i>(a) Incheon-Gyeonggi, Korea</i>							
Children’s support	1	11.4	8.3	92	9.5	$\chi^2 = 27.472$ $p = 0.007$	0.001
	2	41.4	35.4	364	37.6		
	3	40.9	44.2	415	42.9		
	4	6.3	19.6	86	8.9		
	5	0.0	1.5	10	1.1		
	Total	100.0 (36.7) ^b	100.0 (599) ^b	967	100.0		
General life satisfaction	1	5.9	5.3	54	5.5	$\chi^2 = 5.334$ $p = 0.868$	0.081
	2	39.7	37.1	371	38.1		
	3	41.6	44.4	42.3	43.4		
	4	12.2	11.8	116	11.9		
	5	0.6	0.4	10	1.1		
	Total	100.0 (370) ^b	100.0 (603) ^b	974	100.0		
<i>(b) Shandong, China</i>							
Children’s support	1	30.2	33.9	144	32.7	$\chi^2 = 1.965$ $p = 0.742$	0.659
	2	36.3	32.9	150	34.0		
	3	26.8	24.0	110	24.9		
	4	4.7	5.8	24	5.5		
	5	2.0	3.4	13	2.9		
	Total	100.0 (149) ^b	100.0 (292) ^b	441	100.0		
General life satisfaction	1	27.6	29.2	132	28.6	$\chi^2 = 5.452$ $p = 0.244$	0.564
	2	41.0	40.3	187	40.6		
	3	19.2	22.6	79	21.5		
	4	10.3	4.9	31	6.7		
	5	1.9	3.0	12	2.6		
	Total	100.0 (156) ^b	100.0 (305) ^b	461	100.0		

^aDegree: categorized in 5: (1) most satisfied; (2) satisfied; (3) normal; (4) unsatisfied; and (5) most unsatisfied.

^bThe numbers in parentheses are frequencies.

^cThe p-values of the logistic regression are the effect of the two different living arrangement variables on the degree of satisfaction with their own children’s support, care, and life in general, in addition to the other 7 variables such as age, gender, marital status, education, health status, monthly income, and ownership of their residential houses.

Comparing the two countries in the degrees of subjective wellbeing, however, Chinese elderly are found to be more satisfied with the two areas, i.e. children’s supports to parents, and life in general. It is rather strange that degree of satisfaction with children’s support for Chinese elderly is higher than for Koreans, while the proportion of children’s actual supports are higher for Korean elderly than for Chinese ones. Conclusively, living arrangements, i.e. living with children or living apart from children, did not affect the degrees of satisfaction with children’s supports and life in general in both countries.

5. Factors affecting the four areas of the subjective wellbeing of elderly

While in previous section, the effects of living arrangements on the subjective wellbeing in four areas were examined, here in this section factors affecting the four areas are examined by logistic regression analysis, and the results are presented in Table 6 and explained below.

Table 6. Factors affecting life-satisfaction in general, by logistic regression analysis

Factors	Life satisfaction in general		Degree of loneliness		Feeling of filial piety		Satisfaction with children's supports	
	β	p-value	β	p-value	β	p-value	β	p-value
<i>(a) Incheon-Gyeonggi, Korea</i>								
Constant		0.000		0.000		0.000		0.000
Gender	0.062	0.093	-0.057	0.114	0.132	0.000	0.097	0.010
Age	-0.023	0.503	0.049	0.135	-0.132	0.000	-0.062	0.072
Marital status	0.075	0.033	-0.288	0.000	0.128	0.000	0.105	0.004
Education	-0.096	0.009	0.043	0.222	-0.066	0.070	-0.008	0.839
Health	0.186	0.000	-0.163	0.000	0.047	0.155	0.085	0.011
Monthly income	-0.053	0.123	0.033	0.325	-0.090	0.009	-0.045	0.195
Living arrangement	0.053	0.100	-0.070	0.025	0.193	0.000	0.109	0.001
<i>(b) Shandong, China</i>								
Constant		0.000		0.000		0.000		0.000
Gender	0.095	0.055	-0.045	0.335	0.134	0.010	0.137	0.009
Age	-0.308	0.000	-0.004	0.940	-0.043	0.435	-0.239	0.000
Marital status	0.158	0.002	-0.342	0.000	0.168	0.002	0.150	0.005
Education	0.006	0.912	-0.057	0.297	-0.22	0.715	-0.026	0.666
Health	0.239	0.000	-0.234	0.000	0.054	0.279	0.129	0.010
Monthly income	-0.173	0.001	0.042	0.406	-0.025	0.659	-0.081	-0.152
Living arrangement	0.024	0.598	-0.029	0.501	-0.045	0.353	0.023	0.632

5.1. Factors affecting the general life-satisfaction of elderly

Effect of living arrangement on general life-satisfaction are found not to be significant for elderly in both countries, while factors such as age, marital status, health status and monthly income are all found to be significantly affecting the general life-satisfaction for Chinese, while marital status, education, and health status are revealed significant for Korean. Remarkable and common to both countries is that two factors, i.e. marital status and health state are significantly affecting the life-satisfaction of elderly in both countries.

5.2. Factors affecting the feeling of loneliness of elderly

Effect of living arrangement on the feeling of loneliness is significant for Korean, while it is not significant for Chinese. However, the two countries showed here again the same reaction that marital status and health states are significantly affecting the feeling of loneliness of elderly, which is in accordance with other previous research (Yoo & Park, 2003).

5.3. Factors affecting the satisfaction with filial piety of children

Here again, the effect of living arrangement on the satisfaction with filial piety of children is found to be significant for Korean elderly, while it is not for Chinese. However, other factors including gender and marital states are shown significantly affecting the satisfaction commonly for the two countries, while age and monthly income are affecting the satisfaction only for Korean elderly. Interesting is the fact that health state is not affecting significantly in either countries.

5.4. Factors affecting the satisfaction with children’s supports to parents

Here again, the effect of living arrangement on the satisfaction with children’s support is found to be significant for Korean, while it is not for Chinese. But other factors including marital status and health states are also significantly affecting the satisfaction with children’s supports to them in both countries, while age and gender are significant for Chinese only.

The above results can be summarized as follow: First, the effect of living arrangement in the four areas of subjective wellbeing showed similar patterns as that of the above section, in that three of the subjective wellbeing except general life satisfaction are affected significantly by it for Korean elderly, while none of four areas is affected significantly for Chinese. Second, among other factors significantly affecting the four areas of wellbeing in both countries, marital status and health are commonly found significantly affecting all of four areas of subjective wellbeing, except the life-satisfaction of Chinese elderly in which only marital status is still affecting. In many cases, other factors such as gender, age, income in addition to marital status and health are affecting the four areas of the wellbeing more strongly than the living arrangement in China. This finding is consistent with the previous research (Han & Yoon, 2001) that happiness level of elderly is less determined by living arrangement than by situational characteristics such as health status, financial condition, marital status, and dependency.

6. General life-satisfaction by living alone, living with spouse only, and living with children/others

Although the general life-satisfaction is only one area of the four of subjective wellbeing, it could be considered the representative area of all. And as we have found in the previous section that marital status affects not only the degree of general life satisfaction more than the forms of living arrangement, but also affects commonly all of four areas for the two countries.

Therefore, it would be meaningful here to know the degree of life-satisfaction by three forms of living arrangements, including “living alone”, “living with spouse only”, and “living with children/others”, as the satisfaction level of elderly could be different even among those “living apart” between those living “alone” or those living “with spouse only”. The degrees of life-satisfaction are cross-tabulated with the 3 living arrangements as presented in Table 7.

According to χ^2 test shown in Table 7, the degrees of life satisfaction in general are significantly different depending on the forms of living arrangement for Korean elderly, while the differences are not quite significant for Chinese ones. However, difference of life-satisfaction between the “living alone” and “living with spouse only” are significant not only for Korean elderly, but also for Chinese elderly. The reason why the p -value by χ^2 on life satisfaction by three living arrangements show rather insignificant for Chinese elderly seems to be that the degree of the satisfaction for the elderly living with children is relatively high than for Korean, and therefore, if looking at the differences

Table 7. Degrees of general life satisfaction by three forms of living arrangements

	Degree living arrangement	Very much	Relatively	Normal	Unsatisfied	Very unsatisfied	Total % (N)	Pearson X	p-value
Incheon-Gyeonggi, Korea	Alone	3.17	27.0	44.0	21.4	3.17	100.0 (252)	84.373	0.000
	With spouse	7.11	39.63	44.30	8.33	0.60	100.0 (492)		
	With children	4.19	40.83	42.36	11.45	0.76	100.0 (262)		
		5.36	36.97	43.83	12.42	1.29	100.0 (1,006)		
Shandong, China	Alone	19.04	40.47	33.33	3.57	3.57	100.0 (84)	25.679	0.059
	With spouse	33.18	41.36	16.81	6.36	2.27	100.0 (220)		
	With children	27.64	42.27	16.26	11.38	2.43	100.0 (123)		
		28.80	41.45	19.90	7.25	2.57	100.0 (427)		

between those living alone and living with spouse only, the former is less satisfied with life in general and the latter is more satisfied with life in both countries. This finding is in accordance with the previous researches (Han & Yoon, 2001; Won, 1995).

7. Discussion and conclusion

With regard to the basic composition of the living arrangements, the proportion of elderly living apart from children is higher among China than Korean, 72.4% of the Chinese and 61.8% among Korean, but the proportion of Korean living alone is larger than the Chinese, and Chinese living with spouse only is much larger than the Korean. These differences of the living arrangement in the characteristic of the two countries may have contributed to the reduction of living arrangement effect on the subjective wellbeing and the relatively higher degrees of subjective wellbeing of Chinese elderly.

However, the arrangement of “living apart” from children seems to be preferred not only as the more convenient life, but also desired life. Although the accordance degree of the current living arrangement with the desired is much larger among those living with their children than those living apart from child in both countries, the proportion of elderly who wish the separate living arrangement by itself, including the preference in changing conditions, is much higher than that of those who wish the “living with” arrangement in both countries. The discrepancy between the reality and the desired is larger among elderly currently living with children than among those “living apart”. These two facts seem to imply a possibility that the preference of the separate living arrangement of older people will further continue in coming future, especially with the future development of population aging (Kim & Cho, 1996; Yoo, 2005).

However, the effects of living arrangement on the four areas of subjective wellbeing by Regression analysis show slightly different results between the two countries. The common is that the general life-satisfaction is not significantly affected by the forms of living arrangement. The rest of 3 areas of subjective wellbeing, i.e. the degree of loneliness, satisfaction with children’s filial piety toward them, satisfaction with children’s supports are significantly affected by the form of living arrangement in case of Korean elderly, while none of the 3 areas is affected in case of Chinese. The degrees of subjective wellbeing of Chinese elderly, however, are revealed higher than these of Korean in all of the four areas. That is, Chinese elderly seem to feel less lonely, be satisfied with children’s supports and their filial piety, and satisfied with life in general more than Korean.

Nevertheless, the subjective wellbeing of elderly is shown to be affected, sometimes more affected by other factors than the living arrangement. Among other factors mentioned, common factors significantly affecting almost all of four areas of subjective wellbeing for both countries are “marital status” and “health” of elderly. That is, married and healthier elderly than single and unhealthy elderly showed higher score on the subjective wellbeing. This finding is further supported by the result by χ^2 test showing that even among the elderly living apart from children, the life-satisfaction of those living alone is much lower than that of those living with spouse only. Remarkable is the finding that gender factor is neither affecting the life-satisfaction of elderly nor degree of loneliness of elderly in both countries.

What are reasons for Chinese elderly to show relatively much higher level of subjective wellbeing and for less impact of living arrangements on their wellbeing than Korean? For one, filial piety in China as a legalized obligation is practiced by everybody regardless of the living arrangements. For another, the proportion of elderly living with spouse only is four times more than that of living alone among those living apart from children. Considering that marital status is significant factor affecting the subjective wellbeing, the condition may have alleviated the impact of living arrangement in China. Furthermore, Chinese elderly living apart from children are found to live nearer children’s residence, meet more frequently with children, and communicate with them more often. All of these

wellbeing-friendly conditions of Chinese elderly may have reduced the effect of living arrangement on their subjective wellbeing. It implies that living apart from children do not affect the subjective wellbeing of elderly, if with close relation and frequent communication with children.

In conclusion, the traditional belief that co-residence with children is an essential condition for subjective wellbeing of older parents is not supported by Chinese case, but partially supported by Korean one. In spite of the larger proportions of elderly living apart from children and the higher preference of living together, the general life-satisfaction of elderly is not significantly affected by living arrangement, with exceptions of the living alone and who are unhealthy in both countries. These findings are in consistent with the previous researches that the arrangement of living apart from children does not necessarily mean the weakening of family relations and supports (Bengtson & Lowenstein, 2003; Han & Yoon, 2001; Kim, 1987; Won, 1995).

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References

- Bengtson, V. L., & Lowenstein, A. (Eds.). (2003). *Global aging and challenges to family*. New York, NY: Aldine De Gruyter.
- Chen, X., & Silverstein, M. (2000). Intergenerational social support and the psychological well-being of older parents in China. *Research on Aging*, 22, 43–65.
<http://dx.doi.org/10.1177/0164027500221003>
- Chung, K. H. (2000). *The forms of living arrangement of elderly and intergenerational relations*. A paper presented at the Spring Conference of Sociology, June, 17, Seoul.
- Chung, K. H. (2002). A study on the factors influencing living arrangements of older parents. *Journal of Health and Society*, 22, 101–127.
- De Vos, S., & Holden, K. (1988). Measures comparing living arrangements of the elderly: An assessment. *Population and Development Review*, 14, 688–704.
<http://dx.doi.org/10.2307/1973629>
- Du, P. (1990). Cohort analysis of the living arrangements of Chinese elderly. *Chinese Demographic*, 1999, 3.
- Han, K. H., & Yoon, S. D. (2001). The effect of living arrangements on the psychological wellbeing of elderly living in agricultural region. *Journal of the Korea Gerontological Society*, 21, 163–178.
- Jung, T. H., & Cho, E. Y. (2005). Variables related with loneliness and life satisfaction. *Journal of the Korea Gerontological Society*, 25, 55–71.
- Kemyung University/Korea Health and Welfare Research Institute. (2009). 2008 Survey on Korean Older Persons.
- Kim, E. J., & Cho, J. S. (1996). Differences in the housing norms and satisfactions among three generations of the extended families. *Journal of Korea Family Study Association*, 34, 303–314.
- Kim, I. (1999). *Life of Korean older people*. Seoul: Tree of Thoughts.
- Kim, I. (2004, July). *Different Patterns of the living arrangements of the elderly in urban and rural Korea*. Paper presented at the 36th World Congress Sociology, Beijing.
- Kim, I., & Phillips, R. (2007). Demographic changes in Korea during the period of 1960–2000. In I. K. Kim & R. Phillips, (Eds.), *Generational change and social policy challenges in Australia and South Korea* (pp. 52–76). Sydney: Sydney University Press.
- Kim, J. S. (1987). *A study on the degree of life satisfaction of Korean Elderly* (Published doctoral thesis). Ewha Women's University, Seoul.
- Kwon, J. H. (2010). Tasks for the Chinese aged welfare in urban area with changing economic systems. *The Korean Association for Philippines Studies*, 13, 93–114.
- Lee, M. A., & Weber, M. J. (2000). Intergenerational reciprocal care and elderly living arrangements in Korea. *Journal of the Korea Gerontological Society*, 20, 129–142.
- Lim, S. H., & Lee, Y. S. (2008, April). *A study on the improving living condition of the Korean elderly as a way of social integration*. Paper Presented at the Spring Conference of Korea Gerontological Society, Seoul.
- National Statistical Office, Korea. (2006–2008/2010/2011). Public Internet Service. Retrieved from <http://www.koisis.kr>
- Pampel, F. C. (1983). Changes in the propensity to live alone: Evidence from consecutive cross-sectional surveys, 1960–1976. *Demography*, 20, 433–447.
<http://dx.doi.org/10.2307/2061112>
- United Nations. (1999). World Population Prospects. The 1998 revision, vol. II Sales No. E.99. XIII.8.
- Won, Y. H. (1995). The effects of living arrangements of elderly on their psychological happiness. *Journal of the Korea Gerontological Society*, 15, 97–116.
- Yi, Z., & George, L. (2001). Extremely rapid ageing and thee living arrangements of the elderly: The case of China. *Bulletin of the United Nations*, 24, 1–24.
- Yoo, H. J. (2000). Solidarity and discord with the adult children by residence pattern of the aged parents. *Korea Journal of Family*, 5, 109–126.
- Yoo, K. S. (2005). Factors affecting the acceptance of diversity of family. *Family and Culture*, 17, 211–233.
- Yoo, K. S., & Park, H. S. (2003). Comparison of health status between senior people living alone and those who live with their families. *Journal of the Korea Gerontological Society*, 23, 163–179.
- Yoo, S. H. (1997). Variables determining the arrangement of elderly living apart from children: Theoretical examination. *Journal of the Korea Gerontological Society*, 16, 51–68.



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