Comparison of Participatory Activities of the Urban Elderly in Gyunggi Province (Korea) and Shandong Province (China)

東アジア老人福祉研究所・所長 金 益基 KIM, Ik Ki

<Abstract>

This paper compared the different patterns of the participatory activities of the Korean and Chinese elderly focusing on the similar but different cultural background. This paper showed the trends of the rapid processes of the population aging in both Korea and China, then compared the participatory activities of the elderly. This paper also analyzed the determinants of the participatory activities of the elderly in both countries using cross-tabulation and regression analyses.

The data for this paper were collected in Gyunggi Province in Korea and Shandong Province in China. Gyunggi Province and Shandong Province are the most closely located provinces in Korea and China. Korean data were collected in Incheon Special city and 10 cities in Gyunggi Province. Chinese data were collected in four cities in Shandong Province. The data are based on the same questionnaire at almost the same time, Chinese data in 2009 and Korean data in 2010.

Korea and China have shown similar socio-demographic background but somewhat different political and welfare systems. This study shows that the Korean elderly and the Chinese elderly have different patterns of doing participatory activities and different degree of life satisfaction. The activity theory seems to be applicable for the Korean elderly in Kyunggi province but not for the Chinese elderly in Shandong province.

<Contents>

- I. Introduction
- II. Factors affecting participatory activities of the elderly
- III. Research methods and the characteristics of samples
- IV. Analysis of participatory activities of the elderly
- V. Summary and conclusion

I. Introduction

Korea and China in the East Asia are geographically very closely related. In addition to the geographical proximity, these two countries have shared many socio-cultural similarities. There are several common factors in Korea and China. First, they belong to the Confucian cultural sphere or the Chinese cultural sphere. People in these countries have used and are still partly using the same Chinese characters, although pronunciation and meaning of some words are somewhat different.

Because of the Confucian tradition, these countries have shared the patriarchal stem family, the tradition of ancestor worship and predominance of men over women. Filial piety is also one of the most important factors of the Confucianism, which is different from Western countries. Although the effects of the Confucianism are somewhat different in these two countries, the Confucian tradition is still prevalent even under the trends of the globalization of the world.

Second, both Korea and China have experienced the demographic transition from high birth and death rates to low birth and death rates in a very short period of time (Sodei, 1996). The total fertility rate decreased by half in less than 15 years from 6.0 in 1960 to 2.92 in 1975 In Korea. In China, it took much faster for the fertility rate to decline by half from 6.06 in 1965 to 3.32 in 1975 and then to 2.55 in 1980 (Kim, I. , 2013). The decline of fertility rates in the East Asia was much faster than that of European countries.

Third, the drastic decline of fertility rates was carried out by the strong leadership of centralized governments in these countries. In Korea, the national family planning programs were initiated by the government in 1962 after the post-Korean War baby boom. Chinese government started to adopt the national family planning programs, mainly focusing on the 'one-child policy' since 1979.

Fourth, economic development was also achieved in a very short period of time in these countries. Korea initiated the first fiveyear economic development plan in 1962. Since then, Korean economy has consistently improved over time. China started economic liberation policy and adopted so-called 'socialist market economy system' in 1978. Since then, Chinese economy has also continuously grown.

Although there are similarities in Korea and China, there are also some differences, too. China is different from Korea in terms of adopting the welfare policies. Korea has adopted many welfare policies in implementation of national pension system and health insurance system especially in postwar baby boom and birth control, while economic growth reached the peak after at the time of the Olympic Games in 1988. However, China with huge population and substantial regional differences has not yet established an unified nationwide welfare system. Another big difference is that Korea is a capitalist state, whereas China is formally a socialist country.

In the process of the socioeconomic transformation, the rapid fertility transition has influenced the drastic changes of the population aging in both Korea and China, whose speed turns out to be the fastest in the world. This paper shows the trends of the rapid processes of the population aging in both Korea and China, then compares the participatory activities of the elderly. This paper compares the different patterns of the participatory activities of the Korean and Chinese elderly focusing on the similar but different cultural background. Finally, this paper analyzes the determinants of the participatory activities of the elderly in both countries. Regression analysis is employed for checking the determinants.

II. Factors affecting participatory activities of the elderly

Along with health and security, participation is one of the three pillars of active aging. It is assumed that when labor market, employment, education, health and social policies and programs support their full participation in socioeconomic, cultural and spiritual activities, people will continue to make a productive contribution to society in both paid and unpaid activities as they age (WHO, 2002).

The word 'active' refers to continuing participation in social, economic, cultural, spiritual, and civic affairs, not just the ability to be physically active or to participate in the labor force (Park, 2013: 94). According to the National Statistical Office (2012), older people aged 65 and over showed much lower rate of participation in various participatory activities, compared to the national average. Participatory activities, however, can help to protect against morbidity and mortality, and participatory activities deserves much greater attention as a protective factor (Greaves and Farbus, 2006).

Active aging is a concept recently deployed by the European Commission, the World Health Organization, and used also in Human Resource Management. This concept evokes the idea of longer activity, with a higher retirement age and working practices adapted to the age of the employee. It also extends to the social engagement of the elderly in the collectivity (Wikipedia, 2017).

The concept of active aging was originally inspired by the work of Robert Havighurst on activity theory (Havighurst, 1961), according to which elders' well-being relies on them staying active in later life; from this point of view, staying active is a key to the successful aging. The activity theory proposes that successful aging occurs when older adults stay active and maintain social interactions. It takes the view that the aging process is delayed and the quality of life is enhanced when old people remain socially active. Activity theory assumes a positive relationship between activity and life satisfaction of the elderly. Neugarten asserted that satisfaction in old age depended on active maintenance of personal relationships and endeavors (Neugarten, 1964).

The activity theory rose in opposing response to the disengagement theory. The disengagement theory of aging states that aging is an inevitable, mutual withdrawal or disengagement, resulting in decreased interaction between the aging person and others in the social system he/she belongs to (Cumming and Henry,1961). The theory claims that it is natural and acceptable for older adults to withdraw from society.

The elderly as getting older show lower rate of participation in various participatory activities. Participatory activities of the elderly may be thus a good indicator of the productive and successful aging of the elderly. In this paper, participatory activities indicate the participation in the various activities including cultural and participatory activities of the elderly. In recent years, active aging has become a new paradigm that guides aging policy in Korea (Kim, D., 2013), and expanding opportunities for more active participation of older citizens has become a significant policy agenda (Park, 2013: 95).

Leitner and Leitner (1985) indicate several good points by the leisure activity (participatory activities) of the elderly as follows: 1) Improvement of the physical health; 2) Providing the opportunity of social contact; 3) Improvement of the morale and life satisfaction; 4) Self-confidence of the elderly life; 5) Confidence in usefulness and self validity; 6) Improving the technology of selfness; 7) Enjoyment of the pleasant life. Watching TV or listening to radio, which is a passive activity, seems to dominate the leisure time of the elderly. However, the elderly have done low participation in other activities. This calls for more attention to the causes of inactivity and ways to enhance the opportunities for participatory activities of older people.

Several researches on the activity of the elderly in Korea indicate that the Korean elderly have mostly spent their time on watching TV or listening to the radio (Kim, Y.H. 1975; Kim, Y.M. 1990; Lee, K.O. et al. 1994; Kim, I.K. et al. 1999). Activity of the elderly in Korea has shown a changing pattern, from the activity within the family (basically watching TV or listening to the radio) to the activity outward in Korea (Kim, I.K. et al. 1999). This research tests whether the activity theory is applicable both for the Korean and Chinese elderly.

Participatory activities of the elderly depends on the socioeconomic conditions of the elderly such as sex, age, marital status, educational attainment, income and living arrangements (Atchley, 1976; Buleta, 1970; Cutler, 1977; Gordon et al., 1976; Jin, Y.A., 1995; Lee, K.O et al, 1994; Lee, S.M., 1991; Osgood, 1995). Proper leisure activity (participatory activities) of the later life has a significant relationship to the life satisfaction and emotional well-being of the elderly (Kelly, 1992; Lee and Ishii-Kuntz, 1987; Mancini, 1982; Nam, 1998; Preston, 1987; Seo, 1994; Won, 1995). This research also tests whether the participatory activities influence the life satisfaction of both the Korean and Chinese elderly.

III. Research methods and the characteristics of samples

The data for this paper were collected in Gyunggi Province in Korea and Shandong Province in China. Gyunggi Province and Shandong Province are the most closely located in Korea and China. Korean data were collected in Incheon Special city and 10 cities in Gyunggi Province. Chinese data were collected in four cities like Jinan, Qingdao, Yantai and Taian in Shandong Province. The data are based on the same questionnaire at the almost same time, Chinese data in 2009 and Korean data in 2010.

The number of the Korean data for the analysis is 1014, while that for the Chinese data is 890. For the Chinese data, the age group of 60-64 was included in the survey. For the comparative purpose, however, the number of the elderly aged 60-64 was not included in the analysis. So, the final number of the Chinese data for the analysis turned out to be 738.

The analysis is composed of frequency distribution, cross tabulation and ordinary regression analysis. In the regression analysis, participation score is used as the dependent variable. Participation score was calculated as combining all the 12 questions on the participatory activities of the elderly.

IV. Analysis of participatory activities of the elderly

Table 1 shows the socio-demographic characteristics of the respondent elderly in Kyunggi province in Korea and Shandong province in China. Age is mostly evenly distributed for the younger elderly both in Kyunggi province and Shandong province, but for the older elderly somewhat skewed to the older among the Korean elderly. That is, the proportion of the elderly aged 80 and over for the Korean elderly is 24.2 percent, while that for the Chinese elderly is 14.9 percent.

In terms of sex composition, the proportion of the female elderly is slightly higher than that for the male elderly in both provinces. The proportion of the elderly who are currently married is much higher for the Chinese elderly than that for the Korean elderly (74.4 percent vs 52.8 percent). In terms of the educational attainment, the proportion of the elderly with no schooling is a little higher for the Korean elderly and that for the elderly with college or higher is also a little higher for the Korean elderly.

The proportion of the elderly living alone (25.1 percent) is much higher for the Korean elderly but that for the elderly living with spouse only is much higher for the Chinese elderly (58.0 percent). The proportion of the elderly who identified themselves healthy is much higher for the Chinese elderly than for the Korean elderly. This may be due to the fact that the proportion of the older elderly is higher for the Korean elderly than for the Chinese elderly.

Table 2 shows the frequency distribution of participatory activities of the Korean and the Chinese elderly. First of all, almost all the Korean elderly (94.1 percent) watch TV or listen to the radio every day. The next most frequent proportion of participating in everyday activities is 'drinking alcohol or tea' (46.9

Variables	Category	Korean elderly	Chinese elderly	
	65-69	28.3	31.8	
	70-74	24.8	31.4	
Age	75-79	22.7	21.8	
	80+	24.2	14.9	
Sex	Male	41.7	48.0	
Sex	Female	58.3	52.0	
Marital status	Currently married	52.8	74.4	
Marital status	Currently unmarried	47.2	25.6	
	No schooling	28.2	15.2	
Educational attainment	Elementary school	31.8	44.6	
Educational attainment	Secondary school	32.9	35.1	
	College or higher	7.1	5.1	
	Live alone	25.1	14.3	
	Live with spouse only	36.6	58.0	
Living arrangements	Live with unmarried child	14.0	3.5	
	Live with married child	24.3	24.2	
	Good	31.0	45.8	
Health status	Ordinary	26.3	33.4	
	Poor	42.6	20.7	
Total		1014 (100.0)	738 (100.0)	

Table 1. Socio-demographic characteristics of the respondent elderly (%)

percent), followed by 'doing exercise' (43.1percent), 'leisure activity' (23.3 percent), and 'religious activity' (8.1 percent).

'Religious activity' as of 24.6 percent indicates the most frequent proportion among the activities which the Korean elderly participate in 1-2 times a week. In terms of 'no participation', the highest proportion is 'volunteer activity' (86.5 percent), followed by 'learning activity' (83.0 percent), 'cultural activity' (69.2 percent), 'going trips' (61.6 percent) and 'hobby activity' (52.0 percent).

Generally speaking, Korean elderly in Kyunggi province are more likely to participate in simple activities like watching TV or Listening to the radio or drinking alcohol or tea, and doing exercise. On the other hand, they are not willing to participate in the high-level activities like volunteer activity, learning activity, cultural activity, going trips and hobby activity. This finding is similar to the previous works on the activities of the Korean elderly (Kim, Y.H. 1975; Kim, Y.M. 1990; Lee, K.O. et al. 1994; Kim, I.K. et al. 1999).

As in the case of the Korean elderly, majority of the Chinese elderly (85.4 percent) watch TV or listen to the radio every day. The next most frequent proportion of participating in everyday activities among the Chinese elderly is 'going shopping' (51.2 percent), 'doing exercise' (39.2 percent), and 'learning activity' (21.1 percent). Relatively many respondents participate in everyday activity such as 'hobby activity' (15.8 percent), 'visiting relatives or friends' (15.3 percent), 'drinking alcohol or tea' (15.2 percent).

Unlike the Korean elderly, almost all the Chinese elderly (93.1 percent) do not participate in the religious activity. In terms of 'no participation', the next highest proportion is 'volunteer activity' (86.7 percent), 'cultural

		Korean elder	rly	Chinese elderly				
Category	Everyday	1-2 times a week	No participation	Everyday	1-2 times a week	No participation		
TV or Radio	94.1	3.8	0.1	85.4	6.4	7.4		
Leisure activity	23.3	19.7	46.1	19.5	8.9	64.6		
Going shopping	2.6	11.9	40.9	51.2	19.3	26.4		
Alcohol or tea	46.9	19.1	22.0	15.2	7.6	60.6		
Hobby activity	11.8	14.1	55.7	15.8	5.6	71.6		
Cultural activity	3.9	10.2	69.2	9.0	2.5	86.0		
Doing exercise	43.1	16.4	31.8	39.2	3.3	55.7		
Going trip	0.8	1.2	61.6	2.2	1.5	84.5		
Relatives or friends	1.9	4.7	43.4	15.3	14.3	45.3		
Learning activity	2.3	5.3	83.0	21.1	6.5	66.9		
Religious activity	8.1	24.6	52.0	2.6	2.9	93.1		
Volunteer activity	3.0	4.0	86.5	1.1	1.5	86.7		

Table 2. Comparison of the frequency distribution of participatory activities of the Korean and Chinese elderly¹⁾ (%)

activity' (86.0 percent), and 'hobby activity" (71.6 percent). In some sense, the Chinese elderly show similar pattern in terms of participating in relatively simple activities and not participating in the relatively high-level activities.

Compared to the Korean elderly, however, the Chinese elderly show very different patterns of participation in some activities like 'going shopping', 'visiting relatives or friends', 'learning activity', and 'religious activity'. About half (51.2 percent) of the Chinese elderly in Shandong province go shopping every day but among the Korean elderly only 2.6 percent go shopping every day. The proportion of the Chinese elderly (15.3 percent) who visit relatives or friends every day is much greater than that for the Korean elderly (1.9 percent).

Among the Chinese elderly who participate in any learning activity every day is 21.1 percent, which is also much greater than that for the Korean elderly (2.3 percent). The most striking difference is in the religious activity. The proportion of the Chinese elderly who do not participate in the religious activity is 93.1 percent, while that for the Korean elderly is only 52.0 percent.

Table 3 shows the activity which respondents think the most important. The activity which the Korean elderly think the most important turns out to be 'doing exercise' (31.8 percent), followed by 'watching TV or listening to the radio' (22.6 percent), 'religious activity' (16.6 percent), 'leisure activity' (9.2 percent), and 'hobby activity' (6.5 percent). On the other hand, the activity which the Chinese elderly think the most important is 'watching TV or listening to the radio' (37.0 percent), followed by 'doing exercise' (24.4 percent), 'leisure activity' (8.6 percent), 'going shopping' (7.9 percent), and 'hobby activity' (5.6 percent).

The most important activity for the Korean

Category	Korean elderly	Chinese elderly	
Watching TV or listening to radio	22.6	37.0	
Leisure activity	9.2	8.6	
Going shopping	0.6	7.9	
Drinking alcohol or tea	2.1	1.7	
Hobby activity	6.5	5.6	
Cultural activity	1.3	2.1	
Doing exercise	31.8	24.4	
Going trips	0.9	0.6	
Visiting relatives or friends	1.6	3.5	
Learning activity	0.5	4.0	
Religious activity	16.6	1.5	
Volunteer activity	1.8	0.4	
Total	1014 (100.0)	738 (100.0)	

Table 3. The activity which respondents think the most important (%)

elderly is 'doing exercise' but that for the Chinese elderly is 'watching TV or listening to the radio'. Anyway, the two most important activities for both Korean and Chinese elderly are 'watching TV or listening to the radio' and 'doing exercise'. However, the noteworthy differences between the Korean elderly and the Chinese elderly in the activity which respondents think the most important are religious activity and going shopping.

The proportion of 'religious activity' which the Korean elderly think the most important activity is 16.6 percent but that for the Chinese elderly is only 1.5 percent. On the other hand, the proportion of 'going shopping' which the Korean elderly think the most important activity is only 0.6 percent but that for the Chinese elderly is 7.9 percent.

Table 4 indicates the degree of satisfaction with the activities in which the elderly participate. Among the Korean elderly in Kyunggi province, 45 percent of the respondents are satisfied, whereas 11.4 percent of the respondents are not satisfied with the participatory activities. Among the Chinese elderly in Shandong province, 67.5 percent of the respondents are satisfied, whereas only 6.1 percent of the respondents are not satisfied with the activities.

The degree of the satisfaction of the

Chinese elderly is greater than that of the Korean elderly, especially the proportion of being very much satisfied is much greater among the Chinese elderly (20.5 percent) than that for the Korean elderly (3.8 percent). On the whole, the Chinese elderly are more likely to be satisfied with their activities than the Korean elderly although their levels of activities are somewhat lower than that of the Korean elderly.

Table 5 shows the result of the regression analysis on the participation of the elderly. For the Korean elderly in Kyunggi province, age, educational attainment (middle school and over), and having friends nearby turned out to be significantly affecting the participatory activities. For the Chinese elderly in Shandong province, more variables such as sex (being male), educational attainment (middle school and over), health status (healthy), work status (working), and having friends nearby are significantly affecting the participatory activities.

The results of regression analysis elaborate quite different pattern of the participatory activities between the Korean and Chinese elderly. Among the several factors, educational attainment and having friends nearby turned out to be significant variables both for the Korean and Chinese elderly. Sex is not a sig-

Category	Korean elderly	Chinese elderly	
Very much satisfied	3.8	20.5	
Somewhat satisfied	41.2	47.0	
Neutral	43.6	26.5	
Somewhat dissatisfied	9.2	4.2	
Very much dissatisfied	2.2	1.9	
Total	1014 (100.0)	738 (100.0)	

Table 4. Degree of satisfaction with participatory activities (%)

nificant variable for the Korean elderly but significant for the Chinese elderly. On the other hand, age seems to be a significant variable for the Korean elderly but not for the Chinese elderly. Health status and work status are not significantly affecting the participatory activities for the Korean elderly but significant for the Chinese elderly.

Does the degree of participatory activities affect the satisfaction with activities of the elderly? Table 6 shows χ^2 tests of participatory activities on affecting the satisfaction with activities of the elderly. The participation score consistently affects the degree of satisfaction for the Korea elderly. The proportion of being satisfied for the Korean elderly with low participation score is only 21.3 percent but that with high score is 61.1 percent. For the Chinese elderly in Shandong province, however, participation score does not significantly affect the satisfaction with activities.

Do participatory activities affect the general life satisfaction of the elderly? Table 7 shows χ^2 tests of participatory activities on affecting the life satisfaction of the elderly. The participation score consistently affects the degree of life satisfaction for the Korea elderly. That is, the higher participation score do the elderly have, the more satisfactory are the elderly. The proportion of being satisfied for the

Catagory	Ko	orean elde	rly	Chinese elderly			
Category	Β β Ρ-ν		P-value	Β β		P-value	
Male	24	01	.72	2.87	.15	.01	
Age	09	06	.07	07	05	.44	
Married	62	04	.33	-1.88	09	.16	
Middle school +	4.01	.23	.00	5.56	.29	.00	
Healthy	1.03	.05	.11	2.78	.14	.01	
Working	.17	.01	.81	2.96	.09	.09	
Having friends nearby	6.60	.23	.00	5.01	.23	.00	
Constant	20.73		.00	8.55		.24	

Participation score	Satisfaction with activities							
		Korear	n elderly		Chinese elderly			
	Dis- satisfied	Neutral	Satisfied	Total	Dis- satisfied	Neutral	Satisfied	Total
Low	21.3	57.4	21.3	100.0	9.3	26.9	63.8	100.0
Middle	11.3	43.0	45.7	100.0	6.5	23.7	69.8	100.0
High	5.6	33.3	61.1	100.0	9.1	21.2	69.7	100.0
Total	11.6	43.0	45.4	100.0	8.1	24.8	67.1	100.0
χ² (P)	78.8 (.00)					1.2	(.87)	

Participation	Life satisfaction							
		Korear	n elderly		Chinese elderly			
score	Dis- satisfied	Neutral	Satisfied	Total	Dis- satisfied	Neutral	Satisfied	Total
Low	19.8	54.0	26.2	100.0	9.5	19.8	70.7	100.0
Middle	11.2	46.0	42.8	100.0	15.4	24.2	60.4	100.0
High	8.4	34.1	57.5	100.0	6.7	20.0	73.3	100.0
Total	12.1	43.8	44.1	100.0	11.4	21.5	67.1	100.0
χ ² (P)	49.1 (.00)					3.7	(.45)	

Table 7. χ^2 tests of participatory activities on affecting the life satisfaction of the elderly

Korean elderly with low participation score is only 26.2 percent but that with high score is 57.5 percent. For the Chinese elderly in Shandong province, however, participation score does not significantly affect the life satisfaction. This finding indicates that the activity theory which assumes a positive relationship between activity and life satisfaction of the elderly seems to be verified for the Korean elderly but not for the Chinese elderly.

V. Summary and conclusion

This paper compared the different patterns of the participatory activities of the Korean and Chinese elderly focusing on the similar but different cultural background. This paper showed the trends of the rapid processes of the population aging in both Korea and China, then compared the participatory activities of the elderly. This paper also analyzed the determinants of the participatory activties of the elderly in both countries using cross-tabulations and regression analysis.

The frequency distribution indicates that Korean elderly in Kyunggi province are more likely to participate in simple activities like watching TV or Listening to the radio or drinking alcohol or tea, and doing exercise. On the other hand, they are not willing to participate in the high-level activities like volunteer activity, learning activity, cultural activity, going trips and hobby activity. Compared to the Korean elderly, the Chinese elderly show very different patterns of participation in some activities like 'going shopping', 'visiting relatives or friends', 'learning activity', and 'religious activity'.

The most important activity for the Korean elderly is 'doing exercise' but that for the Chinese elderly is 'watching TV or listening to the radio'. However, the noteworthy differences between the Korean elderly and the Chinese elderly in the activity which respondents think the most important are religious activity and going shopping. In terms of the satisfaction with the participatory activities, Chinese elderly are more likely to be satisfied with their own participatory activities than the Korean elderly although their level of activities are on the average lower than that of the Korean elderly.

 χ^2 tests indicate that sex, educational attainment, health status, marital status and having friends nearby are significantly related to the participation both for the Korean and Chinese

elderly. Living arrangement is not found to be significantly related to the participation both for the Korean and the Chinese elderly. For the Korean elderly, however, age and occupational status are not significantly related to the participation but significantly related to the participation for the Chinese elderly.

The results of regression analysis elaborate quite different patterns of the participatory activities between the Korean and Chinese elderly. Among the several factors, educational attainment and having friends nearby turned out to be significant variables both for the Korean and Chinese elderly. Sex is not a significant variable for the Korean elderly but significant for the Chinese elderly. On the other hand, age seems to be a significant variable for the Korean elderly but not for the Chinese elderly. Health status and work status are not significantly affecting the participatory activities for the Korean elderly but significantly influencing for the Chinese elderly.

In terms of the relationship of the participation to the satisfaction, the participation score consistently affects the degree of satisfaction with activity of the elderly for the Korea elderly. For the Chinese elderly in Shandong province, however, participation score does not significantly affect the satisfaction with activity. The participation score consistently affects the degree of life satisfaction for the Korean elderly, that is, the higher the participation score, the more likely to be satisfied with the activities. For the Chinese elderly in Shandong province, however, participation score does not significantly affect the life satisfaction.

Korea and China have shown similar socio-demographic background but somewhat different political and welfare systems. Somehow, this study shows that the Korean elderly and the Chinese elderly have different patterns of doing participatory activities and different degree of life satisfaction. The activity theory seems to be applicable for the Korean elderly in Kyunggi province but not for the Chinese elderly in Shandong province.

Why does this difference happen? A comparison on the health care of the elderly between Japan and Korea implies that the longterm care needs of the elderly may be significantly affected by the socioeconomic environment of a country as well as socio-demographic status of the elderly (Kim and Maeda, 2001).

Considering that even the long-term care needs of the elderly may be affected by the socioeconomic transformation, the different patterns of the participatory activities of the Korean and Chinese elderly might also be explained by the different political and welfare systems between Korea and China. Nevertheless, it may be too impetuous to arrive at this conclusion. Further studies on the comparison of the national characteristics of the Korean and Chinese elderly in terms of the productive aging may be necessary in order to more clearly analyze the different patterns of the participatory activities of the elderly in Korea and China.

註

1) In the original question, the answer categories were composed of 'Everyday'', '1-2 times a week', '3-4 times a week', '1-2 times a month', '1-2 times 3-4 month', and ' No participation'

Reference

- Atchley, R.C. 1976. "Selected social and psychological differences between men and women in later life." Journal of Gerontology 31: 204-211.
- Buleta, G.L. 1970. "Leisure orientation and recreation activities of retirement ommunity residents." Journal of Leisure Research 2.
- Cutler, S.J. 1977. "Aging and voluntary association participation." Journal of Gerontology 32: 470-479.

- Gordon, .C. et al. 1976. "Leisure and lives: Personal expressivity across the life span." in R.H. Binstock and E. Shanas (eds.), Handbook of Aging and Social Science. New York: Van Norstrand Reinhold.
- Greaves, C. J. and L. Farbus. 2006. "Effects of creative and social activity on the health and well- being of socially isolated older people: Outcomes from a multi-method observational study." The Journal of the Royal Society for the Promotion of Health 126. 3: 133-142.
- Havighurst, R. J. 1961. "Successful aging." The Gerontologist 1: 8-13.
- Cumming; Elaine and William Earl Henry (1961). Growing Old. New York: Basic.
- Jin, Y.A., 1995. "Effects of the leisure activity on the life satisfaction of the elderly in Korea." Thesis. Sejong University.
- Kelly, J.R. 1992. Activity and Aging. Newbury Park: Sage.
- Kim, D.B. 2013. "Policies for active ageing of older Koreans." in Choi et al. (eds.), Ageing in Korea: Today and tomorrow. Elderly Information Center.
- Kim, Ik Ki. 2013. "Population ageing in Korea: An overview." in Choi et al. (eds.), Ageing in Korea: Today and tomorrow. Elderly Information Center.
- Kim, Ik Ki. et al. 1999. Life of the Korean Elderly: Diagnosis and Prospect. Seoul: Center for Human Resources.
- Kim, I. K. and D. Maeda. 2001. "A Comparative Study on Socioeconomic Changes and Long-term Health Care Needs of the Elderly in Japan and Korea." Journal of Cross-Cultural Gerontology 16: 237-255.
- Kim, Y.M. 1990. A Study on the Welfare Policy for the Korean Elderly. Center for Korean Welfare Policy.
- Kim, Y.H. 1975. "A study on the leisure activity of the Korean elderly." Thesis. Kyungbook University.
- Lee, K.O. et al. 1994. Analysis of the Lives of the Korean Elderly and Policy Implications. Korean Institute for the Health and Social Affairs.
- Lee, G.R. and M. Ishii-Kuntz. 1987. "Social interaction,

loneliness, and emotional well-being among the elderly." Research on Aging 9: 459-482.

- Lee, S.M., 1991. "Effects of the leisure activity on the life satisfaction of the middle aged and the elderly in Korea." Thesis. Ehwa Women' s University.
- Leitner M.J. and S.F. Leitner. 1985. Leisure in Later Life. New York: The Haworth Press.
- Mancini, K.A. 1982. "Self-conception and life satisfaction: Integrating aged subculture and activity theory." Journal of Gerontology 37: 723-732.
- Nam, K.M. 1998. "Patterns of leisure activities and life satisfaction of the elderly in Korea." in Study on the Current Welfare for the Elderly. Cheongju University Press: 150-181.
- National Statistical Office. 2012. 2012 Statistics of the older population.
- Neugarten, B. L. et al. (eds.). 1964. Personality in Middle and Late Life. New York: Atherton Press.
- Osgood, N.J. 1995. "Leisure." in G.L. Maddox (ed.), The Encyclopedia of Aging. N.Y. Springer Publishing Company.
- Park, Yeong-Ran. 2013. "Active ageing of older Koreans" in Choi et al. (eds.), Ageing in Korea: Today and tomorrow. Elderly Information Center
- Preston, E.M. 1987. Factors Affecting Nursing Home Residents' Loneliness, Leisure Satisfaction and Leisure Activity. Doctoral Dissertation. University of Maryland.
- Seo, B.S. 1994. A Study on the Elderly. Seoul: Kyomun Publishing Company.
- Sodei, Takako. 1996. Comparison of Low Fertility and Population Aging in Japan, Korea and China. International Longevity Center, Tokyo.
- Wikipedia, 2017.
- Won, Y.H. 1995. "Effects of the living arrangements on the life satisfaction of the elderly in Korea" Korean Gerontology 15-2: 97-116.
- World Health Organization, 2002. Active Ageing: A policy framework.