

Care-giving and Freedom: Evidence from Tim-use Survey in Korea

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The paper to be presented at the annual RC19 conference on Social Policies: Local Experiment and Travelling Ideas in University of Montreal, 20-22 August 2009. This paper is supported by the research grant of the Korea Institute of Public Affairs (2008) and BK21 Programme of the Graduate School of Public Administration, Seoul National University, Korea.

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1. Introduction

Even though one chooses to care their children and elderly parents out of love or economic consideration (Becker, 1965; Folbre, 2004), other opportunities for good life should not be shut out to care-givers. Yet, care-givers is often faced with a situation in which he/she is not free to pursue their life plan because there is little time to exercise them, with all capabilities and functioning those individuals might have. Care-giving could also be a social constraint preventing care-givers from accumulating their human functionings and capabilities, which will be vital ingredient of freedom. With all benefits which the care-givers provide to care-receivers and the society as a whole, such situations are not fair to them. Nevertheless, care-givers have been faced with unfavourable situations in many societies because of inadequate social supports. This study will examine the time metrics of care-giving within the Korean families from the perspective of freedom. It will try to answer, first, who give care to the family members in need of care, and secondly how free care-givers are in terms of time spent for care-giving and for accumulation of human capability. This study will approach to these questions from the viewpoint of human capability, and will use data from the Korean Time Use Survey in 2004.

II. New families and care in Korea

For the last several decades in which the welfare state in Korea has developed from a minimal structure to comprehensive set of welfare programmes, it has acquired distinctive social policy orientations that place heavy burden on family in terms of care responsibility. One of the important rationales for social policy in Korea was ‘welfare developmentalism’ which saw social policy as an instrument for economic development (Gough, 2001). Based on such a policy rationale, there has been placed strong emphasis on social protection for those workers, strategic for economic development. In other words, social policy programmes were designed to protect mainly those engaged in wage-paying work in the labour market (Kwon, 2005), but little attention has been paid to social care for children, the elderly and the disabled. The other dimension often identified as a core feature of the Korean welfare state is the notion of Confucian familism, involving ‘a strong reliance on the family as the site of social welfare and service delivery’ (Goodman & Peng, 1996: 193). In this context care responsibility has fallen almost exclusively into families, and, in particular, female family members.

More importantly the welfare state and the society in general have not appreciated the work of family

care-givers, nor provided social and economic supports that care-givers may need. Given the inadequate public care programmes and strong social norm of familism, women have responded to the situation by reducing care responsibility, notably giving birth to smaller number children than ever before. Fertility rate was 1.16 in Korea in 2006 (1.21 in 2009) down from 1.47 in 2000 and 1.59 in 1990. (For that matter, other East Asian countries are also showing the lowest rate in the world: fertility rate in Japan 1.21, Taiwan 1.14, Hong Kong 1.02 and Singapore 1.09) (CIA, 2009)

With such low fertility rate and the extension of life expectancy, Korea has witnessed the rapid demographic transition. In the emerging demographic structure it would be increasingly difficult for the society to carry out care responsibility. The old age dependency ratio arose from 10.1 per cent in 2000 to 12.6 per cent in 2006 and estimated 21.7 in 2020. At the same time the working population will decrease rapidly from 2018 (National Statistical Office, 2008). It is feared that the demographic transition would undermine economic potential of the country.

It is true that East Asian countries have extended and strengthened their welfare state to meet the rising welfare demand for the last decade. This is particularly the case with Korea, which responded to the economic crisis of 1997-8 with strong social policy initiatives. Despite such extension of the welfare state, it is difficult to assert that vulnerable people in the society are now adequately protected by the welfare state. Social protection for children, the elderly and the disable has not been addressed in the same manners of urgency. Nevertheless it is fair to acknowledge the policy efforts made by the Kim Dae-jung government (in office 1998-2003), which came to power in the wake of the economic crisis in 1997. Kim government made it clear at the outset that it would set gender mainstreaming as one of policy priorities. In 2001 the Ministry of Gender Equality was established (renamed as Ministry of Gender Equality and Family in 2003 and now the Ministry of Gender Equality) in order to improve gender equality and promote public policy for families. The number of childcare institutions has increased rapidly and the number of children cared by them has been tripled, reaching to 930,000 in 2004 from 294,700 in 1995. Further to such development, the Long-term Care Insurance for the Elderly was introduced in 2008 so that part of care responsibility for the elderly will be shifted from family to public sphere.

Despite such development, some feminist scholars argue that the arrangement of care is still heavily tilted toward to women in particular without sufficient external supports (Hur, 2005). More importantly there is assertion that care responsibility of family members has not been eased (Chang et al., 2007). This argument suggests that despite increase in institutional care, the burden that family care-givers shoulder has not been reduced significantly. There is a range of explanations about unchanged family responsibility of care. First, change in family structure that has taken place over the

years might have made caring more difficult. According to Table 1, the average number of household was five in 1975 but that figure came down to 2.9 in 2005. This figure suggests that a common family structure is now the nuclear family that consists of parents and two or one children.

Table 1 Distribution of households by numbers of household members in Korea

	One	Two	Three	Four	Five	Six & over	Average
1975	4.2	8.3	12.3	16.1	18.3	40.7	5.0
1985	6.9	12.3	16.5	25.3	19.5	19.5	4.1
1995	12.7	16.9	20.3	31.7	12.9	5.5	3.3
2005	20.0	22.2	20.9	27.0	7.7	2.2	2.9

Source: Korea National Statistical Office (1975/1985/1995)
Korea National Statistical Office (2005)

This diversity in the family structure does not suggest that care is no longer provided by family care-givers such as mothers, wives and daughters. On the contrary care-giving is still family responsibility, but nuclear family has less flexibility in managing care than the extended family used to have. It must be the case that with a small number of family members within the same household there is little room to manoeuvre the allocation of care burden. Due to this disadvantage, the external care support which has increased in recent years would not have reduced family care responsibility to a large extent. For instance, parents remain as the main care-givers to the children as Table 2 shows in the below, although the share of care facilities in child care increased.

Table 2 Distribution of Care-givers for Childcare

	Parents	Relative	Maid	Facilities & Others
1995	55.9	10.2	0.8	33.1
2005	60.5	17.0	1.0	65.3

Source: National Statistical Office (1999/2005): 1999 survey investigated only children under 6 and 2005 survey investigate children under 10. 2005 survey is multiple-response data.

Secondly, as women's labour market participation that has increased steadily over the last three decades (see Table 3), they may be stretched themselves to shoulder work and care at the same time. On the employment side, women are employed on a more precarious contract. Table 4 shows that employment status is clearly different by gender. It shows that irregular employment, i.e., employed under short-term or temporary contract without full employment security, has increased much higher for female workers than male ones. It is also worth noting that women's labour market participation in Korea is relatively low and remains stable since the 1990s. What is the underlying reason for women's precarious employment and stagnated labour market participation? Is it related to women's

responsibility of care?

Table 3 Labour Market Participation Rate (%)

Year	1970	1975	1980	1985	1990	1995	2000	2005	2007
Female	39.3	40.4	42.8	41.9	47.0	48.4	48.6	50.0	
Male	77.9	77.4	76.4	72.3	74.0	76.4	74.2	74.4	

Source: National Statistical Office

Table 4 Employment Status by Gender

		1990	1995	1997	1998	2000	2005
Men	Regular	64.5	67.6	64.6	64.7	59.2	62.3
	Irregular	25.5	32.4	35.4	41.9	40.8	37.7
Women	Regular	37.6	42.8	38.4	34.8	31.1	38.2
	Irregular	62.4	57.2	61.6	64.2	66.9	61.8

Source: National Statistical Office

Not only in the context of labour market participation, this paper will also shed light on constraints and disadvantage that care-givers have to bear due to the care-giving from the perspective of freedom. Using data from the 2004 Korean Time Use Survey (KTUS), this study will analyse the amount and pattern of the time use on care, but also other activities other than care-giving, particularly those are related to the accumulating human capability. This will enable us to see whether and to what extent care-giving hinder freedom of care-givers. The Survey selected 12,650 households and their approximately 32,000 of family members on the basis of enumeration districts according to the 2000 Population and Housing Census by using random stratified systematic sampling method. The Survey 2004 was conducted for 12 days from July 2 to 13 and used a time diary method which makes every respondent put down their daily activities according to 9 broad and 137 detailed categories with the basis of 10 minute intervals for 2 consecutive days per person. Another feature the Survey has is that it gathered the information not only on all the primary activities but also on the secondary activities conducted with the primary ones simultaneously. If we can capture those simultaneous activities with well-designed method, we can appropriately estimate the “real” amount of care-giving time provided in households which has been underestimated by consideration on care-giving activities as the primary ones only. Moreover, because it asks the respondents report their demographic features such as age, education, income and so on as well, it can make it feasible to analyse the relation between the individual features and the patterns of time-use which they display in daily life. In other words, the KTUS can tell us what types of person uses how much time on what kinds of activities empirically.

III. Care-giving and freedom of care-givers

Every human being has to a right to be free. Once this belief is accepted as the basic rule of the society, the state has an obligation to protect the freedom of every citizen. To be free we need resources, while there should be no unnecessary interference with us to lead our lives. In his famous theory of freedom and human capability, Sen argues that human being should have adequate functionings and capabilities to be free to pursue their life in a way that they value (Sen, 1993). Functioning is not only referring to doing valuable things but also being in adequate physical and mental conditions, such as being nourished and educated. The conception of functioning also includes social and institutional conditions external to personal attributes such as living environment free from malaria and institutional arrangement not allowing racial discrimination. N-tuple of functionings composes a capability set which enable individual to achieve what he values over the life course. Individuals with a similar set of functionings do not necessarily to lead a similar life because they may combine functionings into different sets of capability. Here, Sen contrasts well-being achievement and well-being freedom. Well-being achievement is dependent on a person's achieved functionings while well-being freedom of a person is related to the range of his choices combining his different functionings into particular capability sets. With capability sets of functionings, a person may pursue to achieve her/his own goal of life (overall agency goals), which may not be necessarily concerning her/his own well-being (well-being achievement) (Sen, 1993: 35-39).

From the perspective of public policy, the well-being freedom is more relevant than well-being achievement as the objective of policy. For example, the state may provide opportunities for a person to nourish himself, but not force him to eat and be nourished. In a democracy, the state must uphold that every citizens be able to free. Therefore the state should not obstruct individual's freedom in the process of making sure citizens' welfare. To elaborate the idea further, Alkire divides the concept of freedom into three different components (Alkire, 2004).

- Opportunity Freedom: freedom to achieve valued functionings.
- Functionings: valuable beings and doings (or need) such as being nourished, being safe, educated and so on.
- Process Freedom: ability to take action in certain spheres of life – empowerment, to participation and to practical reason.

To illustrate let us take example to nourishment. People at large would choose to take opportunity to be nourished if such opportunity were present. However for a certain context of lives, particular

persons may be undernourished for a different reasons and disadvantages. To use Alkire's illustration again (Alkire, 2004),

- Person A could be Undernourished because she could have eaten but chose not to.
- Person B could be Undernourished because she lacked the capability to eat.
- Person C could be Nourished because she had the capability to eat and enjoyed it.
- Person D could be Nourished because she was coerced into eating against her will.

In the cases of Persons A and B, the well-being is not achieved while Persons C and D have achieved valuable functioning. From the point of agency freedom, Person D's functioning is not valuable because it was forced upon the person. She did not have process freedom which means that she did not have power to live her life in a way she valued. Only Person C has all three components: opportunity freedom, functioning and process freedom. Nevertheless we cannot say that her life is better than Person A, who had opportunity freedom and process freedom while not achieving a particular functioning, i.e., being nourished. She was able to live her life in her own way. Nevertheless she does not have one of valuable functionings, which may affect her freedom in the future. In the case of Person B, she did not have opportunity freedom and functionings because she did not have capability.

In Sen's conceptions and Alkire's elaboration of freedom and capability, there is a lack of attention to time, although it is an essential component of freedom. If one does not have time, she/he cannot be free with all functionings and capabilities that the person might have. Their lack of attention to time is understandable because everyone has 24 hours a day and 7 days a week no matter whether they are poor or rich, well-educated or illiterate, and healthy or weak. Sen seems to assume that time is distributed in an equal manner. It is, however, only the case in an analytical space. If we bring agency in a particular kind of life, that is an individual's process of living their own life, time is not equally distributed. Someone has more time than others.

Let us go back to Person B and her neighbour Person E.

- Person B could be Undernourished because she lacked the capability to eat.
- Person E could be Undernourished because she did not have time to eat although she had capability to eat.

This contrast shows that the lack of time can hinder one from gaining functionings. Yet, if we look closely into the case of Person B', her being undernourished might be her own chose. She might have

chosen to do something else instead of eating. Assume that Person E is in a school where lunch is served only from 12 to 1 in the afternoon. She likes to read a book in a quiet library while other people are eating. She reads a lot of books but she is undernourished. Then, the case of Person E would be the same as that of Person A, who chose not to eat. Nevertheless if we look again at the case of Person E from a different angle, it would be a different story. Let us take different examples of functionings: training and caring a baby. There is a training course for Person E to learn a valuable skill from 12 to 1 in the afternoon, but she needs to take care of her baby at home during the daytime. She chooses to take care of her baby. So she does what she thinks valuable, but she is undertrained. Can we say for sure that she chose not to be trained in the same manner as someone chooses not to eat for reading books?

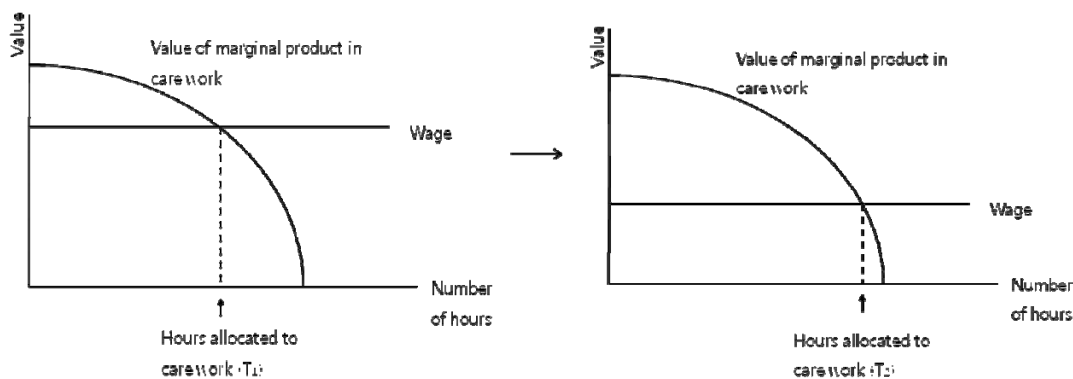
There is an important similarity and difference between reading a book in a quiet library and taking care of baby at home in Person E's life. They are similar in the sense that they are regarded as valuable activity of life by the agency. They differ in the sense that there is a sense of obligation in taking care of her baby. Even though she might have wanted to take the training course, there would be a moral obligation to take care of the vulnerable person. If there is strong social norm according to which female members of the family should take care of baby, obligation would be felt strongly by Person E. Accordingly there is no social support for caring baby. For this reason, she may not choose not taking her time to take care of the baby. With reasoning we can say that Person E's case is different from Person A's.

From this discussion we can draw a hypothesis: care-givers are less free because of time disadvantages. We can also divide the time disadvantage into different kinds. Person E may spend long hours on care-giving and has little time to do other things. This would be one kind of disadvantage. Otherwise she may have frictions of time-use between care-giving and other activities. As in our example, training course can take place at the time when she needs to take care of baby.

Time disadvantage is not just about freedom at present, but also about freedom in the future because it is likely to result in one's lacking in functionings and consequently capabilities. This can be illustrated well by Figure 1, which is modified from the Gary Becker's initial figure (Folbre, 2004). Becker's argument is that care-givers decision on allocating time on care is related to the marginal product in care work and market wage (figure in the left). Given this logic of the argument, if care-givers fail to obtain functionings due to time constraints, their range of capability sets would be smaller, and their expected wage level would be lower. In this case, as the figure in the right side clearly shows, care-givers would allocate more time to care-giving until the value of marginal product equals the wage. As a consequence the freedom of care-givers is reduced at the time of T2. The hypothesis we have

discussed should be tested with empirical evidence. In the following section we will analyse the time use of care-givers.

Figure 1 Allocation of time between care and wage work at different times

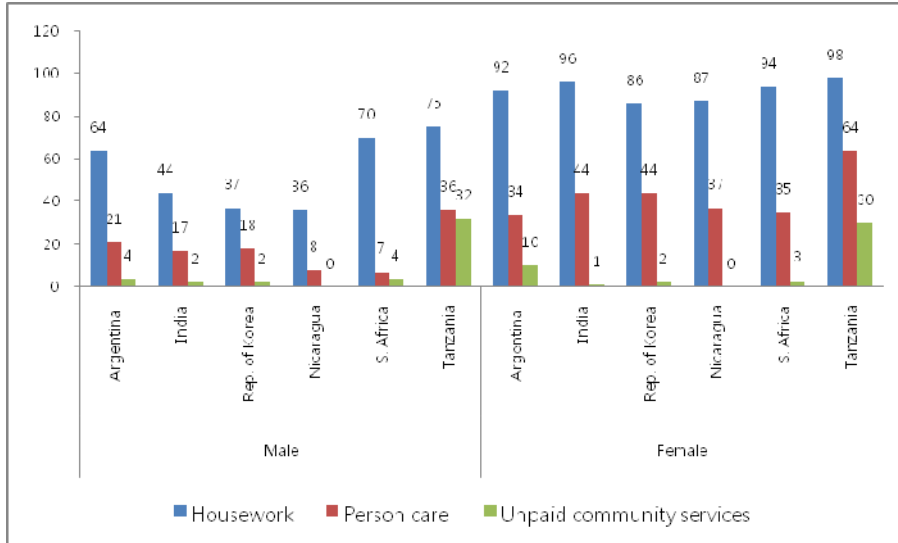


IV. Care-givers' time-use: who care and what else they do

Before analysing care-givers' time-use, it would be necessary to overview the patterns of care giving in Korea from a comparative perspective. To do this we will compare participation rates and mean time spent on care for men and women in several countries including Korea. It would provide us with basic pattern of care giving in Korea in the context of international perspective.

Figure 2 shows the participation rates according to sub-categories of unpaid care work for men and women across several developing countries including Korea. Those categories are consisted of housework which usually contains the work for household maintenance such as cleaning the house, washing the dishes and cooking, unpaid care for persons in the household like children and the frail elderly, and unpaid community services such as cooking for collective celebration, participation in meetings and involvement in civil responsibilities (Budlender, 2008: 15). The entire pattern shows the gender difference in participation rates on unpaid care work in every six countries described below. Except for unpaid community services which take a tiny part of the whole unpaid care work, women are much more engaged both in house work and person care than men. If we look into the gap in participation rate by gender, Korea shows the third highest difference gap between men and women in the activities about household maintenance (49) next to India and Nicaragua. Participation rate of the Korean men to unpaid housework and person care is lower side among the countries in comparison.

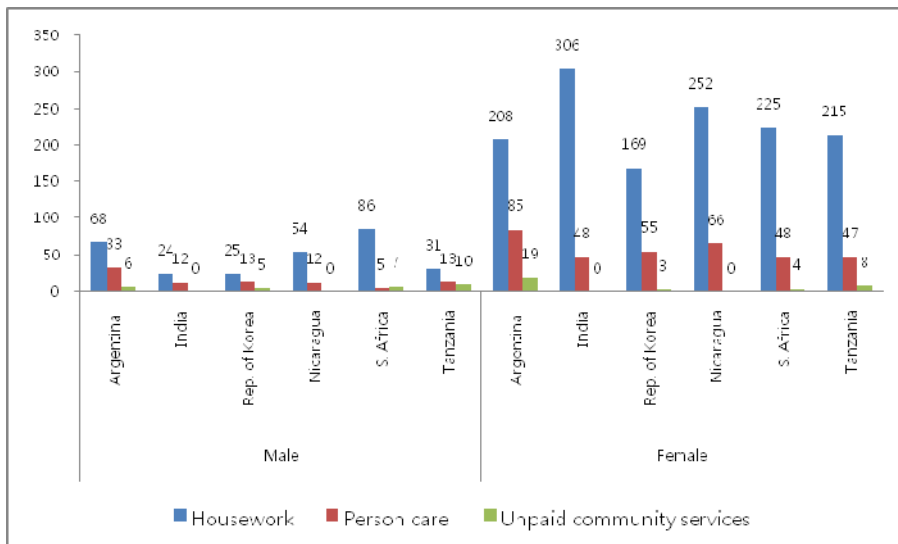
Figure 2 Participation rates by sub-categories of unpaid care work and gender



Source: (Budlender, 2008)

Figure 3 shows an international comparison of the mean time spent on unpaid housework and care-giving activities. It shows a similar pattern to that of participation rate. If we calculate the minutes spent on sub-category activities of unpaid care work as suggested shown in Figure 3, there is a clear gender differences in the two unpaid care activities, in particular unpaid housework and care-giving. In Korea, women who participate in unpaid care work spend almost 7 times much more time than men do. Also in the care-giving to children and the elderly in the household, Korean women spend 55 minutes a day while Korean men do only 18 minutes which are less quarter of amount of time spent by women.

Figure 3 Mean time spent per day on sub-categories of unpaid care work and gender



In our study, we follow the classification of activities of the Korean Time Use Survey (KTUS), which is different from the International Classification of Activities for Time Use Surveys (ICATUS).¹ Although it is not fully designed for international comparison, the classification system in the KTUS is known to have a comprehensive coverage in Korean daily activities. It has 137 identifiable activities and can be classified as 9 main categories of activity which is composed of self related (sleep, eat, self-maintenance), work related (work and job seeking), school related (regular and irregular schooling), housekeeping related (cleaning, food preparation, shopping, etc.), care related (childcare, elderly care, spouse care, other care), civil related (help others, community participation, volunteering), nonproduction related (leisure, social interaction, religion, hobby activities, etc.), locomotion related (commuting, any subordinated moving), and other activities.

Care-giving activities in KTUS are again divided into four sub-categories: care giving to children, spouse, elderly and others in the same household, and the basic statistics such as participation rate², mean population time³ and mean actor time⁴ spent on each care activity out of 63,268 are shown in Table 5. It shows that on average a quarter of Korean population spend some time on care-giving activities on daily basis and the average time for care is estimated as 25 minutes. The majority of care-givers are women and they spend almost 4 times more on care than men. If we narrow down our focus into the people who are really participated in the care activities (i.e. mean actor time), the average care time increases up to 96 minutes per day. In this case, women spend 106 minutes which is longer than that of men (69 minutes). The difference between mean population time and mean actor time arises from the fact that the majority do very little or do not engage at all in care-giving activities, and while the former takes the whole population take into account, the latter takes only those who are intensely engaged in into account. Therefore some cautions should be kept in interpreting the figures and discussions below.

Who are the care-givers?

Table 5 Participation rate (%) and mean population time (minutes) spent on care

		Child Care	Elderly Care	Spouse Care	Other Care	Total Care
N	all	13,096	1,460	3,688	1,543	16,703
	women	9,827	880	3,272	1,239	12,369
	men	3,269	580	416	304	4,334
Participation Rate	all	21%	2%	6%	2%	26%
	women	16%	1%	5%	2%	20%
	men	5%	1%	1%	0%	7%
Mean	all	21	2	2	1	25

Population Time (min.)	women	33	2	2	2	39
	men	7	2	1	1	10
Mean Actor Time (min.)	All	99	75	29	60	96
	women	112	71	25	56	106
	men	62	81	59	78	69

Gender difference in the participation rate and the amount of time on care is still consistent when we look into the sub-categories. Through the childcare, elderly care, spouse care and other care, much more women are engaged in with more minutes than men. Also among four sub-categories of care, childcare takes up the largest portion of time which is more than 10 times longer than any other care activities. However, when it comes to the real participant level instead of population level, a slightly different picture appears. While women spend 112 minutes on childcare that is twice as much as men's amount, they spend even less than men in all other care activities such as 71 vs. 81 minutes on elderly care, 25 vs. 59 minutes on spouse care and 56 vs. 78 minutes on other care. Moreover, the average amount of time for childcare is relatively stable for both women and men (mean value is larger than its standard deviation), but all other activities show much more variations across individuals (mean value is smaller than its standard deviation). Again it must be noteworthy that the number of real participants for each care activities except for childcare is very small, thus it is not desirable to make any decisive conclusion from this findings. We leave it for the future study to investigate the reason instead of pinning down right now.

Table 6 Segmentation by the amount of Time spent on Care

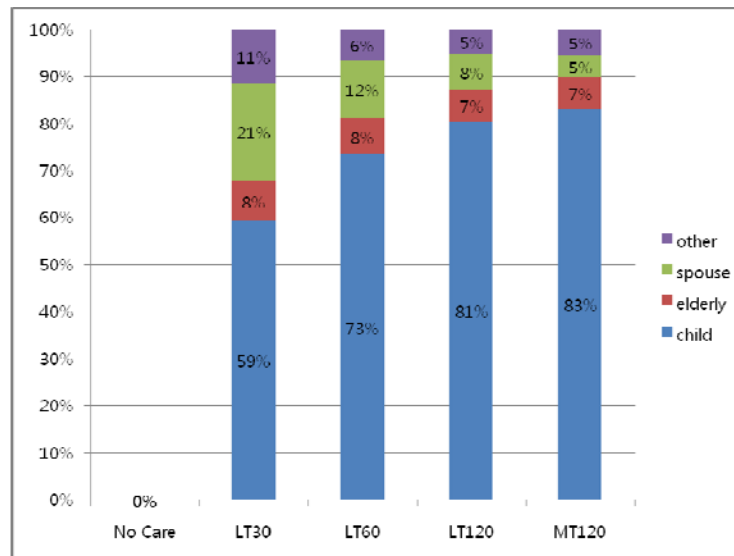
Care Time	N	Ratio	Male	Age	Education	HSize	Kid	Emp	Doubinc
No Care	46,565	74%	0.55	40.13	1.82	3.05	0.05	0.56	0.19
LT30	4,263	7%	0.28	42.55	1.90	3.16	0.15	0.63	0.40
LT60	3,870	6%	0.35	40.83	2.02	2.99	0.30	0.65	0.37
LT120	3,743	6%	0.29	40.04	2.11	2.78	0.43	0.57	0.33
GT120	4,827	8%	0.15	38.30	2.19	2.49	0.63	0.31	0.19

- Education is recorded as middle school graduate (=1), high school graduate (=2), college and more (=3).
- HSize indicates the number of members in the household.
- Male, Kid, Emp, Doubinc are all recorded as binary value.

As noted the above, the majority of care-givers are women. Although it is not shown here due to the restriction of space, we found that most of them are married and between thirties and forties with high school diploma. To grasp the idea that who are the usual care-givers with respect to care intensity, we segment the sample into five categories based on the length of care-time: Table 6 shows some interesting demographic characteristics. Among non-caregivers, 55% of them are male with slightly less than high school diploma and less likely having kid. Not many non-caregivers are double income

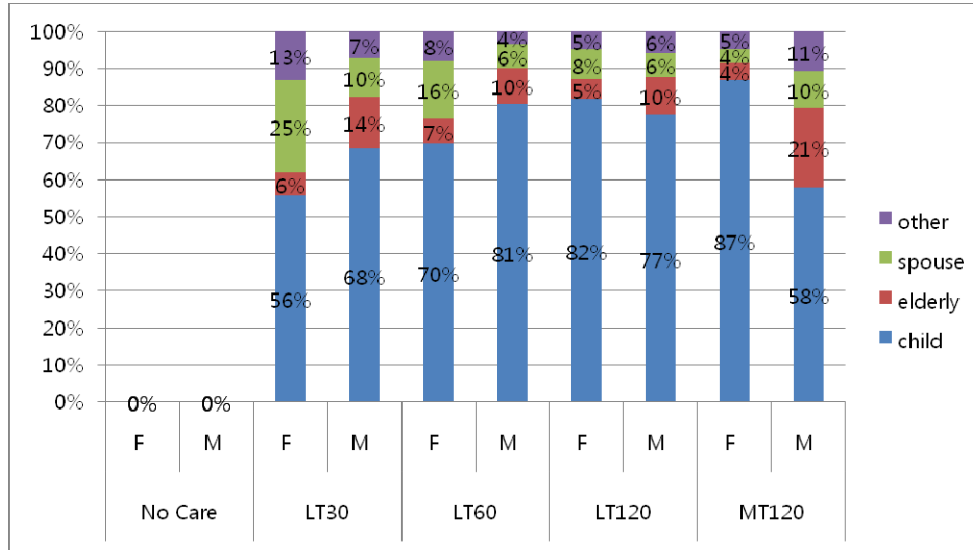
earners. As care-time increases, however, the ratio of male caregivers is decreasing, so is average age, household size, employed status, and the likelihood of double income earners in the same household. Instead, education level and the likelihood of having a kid below 18-year-old are increasing. For instance, those who spend more than 120 minutes on care everyday are usually women (85%) living with single income earner (81%) and kid (63%). And they seem to have less chance to be involved in labour market -- only 31% of them are employed even with higher education level and lower average age than any other group.

Figure 4 Distribution of Care Activities by care-time



When it comes to the details of care related activities, another interesting point is worth mentioning. Even with the dramatic increase in care-time the distribution of time spending tends to be skewed with increasing care-time amount in average as in Figure 4. For those who spend less than 30 minutes per day on care-giving, 59% of time is pointed to childcare and 41% to the elderly, spouse and other family members. But for those who spend more than 120 minutes on care giving, 83% for childcare and only 17% for others. This indicates that the more time is spent for care giving for children on average. This reflects an important point; the care for the elderly, which had been traditionally regarded as a heavier burden on the family members' shoulder, is not a major burden anymore in terms of time spending. Even in the group who spend more than 2 hours per day on care, only 7% of their care time is used for the elderly, and the portion is almost identical across the groups. Main changes occur in childcare and spouse care; the former keep increasing and the latter decreasing. Even with the lowest fertility rate in Korean history, childcare has taken up a lion share of care-time and spouse becomes the most vulnerable care object than any others.

Figure 5 Distribution of Care-giving Activities by care-time and gender



In Figure 5 we divide the distribution of caregiving activities by gender to see any differences in caregiving pattern. In most caregiving activities, women are the major caregivers, and childcare is the major field. But there is a notable difference in time-use pattern on caregiving between men and women. That is, while both women and men are concentrated on childcare, men spend relatively more time on elderly care. For instance, across caretime groups the portion of time for the elderly by men takes up 14%, 10%, 10% and 21%, which is contrast with 6%, 7%, 5%, and 4% by women. This finding raises an interesting but undelved questions to understand caregiving activities. It is childcare which has more restrictions on individuals' execution of freedom compared with elderly care and it is women who tend to bear the more burden of childcare than men do. But the question on why men spend more time on the elderly care rather than women is still unanswered. Is this a reflection of division of care labour between men and women or is this due to the different nature of care between child and the elderly?

Since the data we use now is a cross-sectional one, it does not allow us to investigate the dynamics of time-use on care. As a substitute, we look into the caregiving activities by age group to examine the serial-changes of caregiving pattern. With respect to elderly care, women only in teen age group spend noticeable time while men do across much wider span of ages, especially in forties and fifties. On childcare, however, women spend their time from twenties to eighties with great intensity compared with men. Especially during the most socially active and productive time of their life such as twenties and thirties, women are bound to childcare and mean minimize their caretime.

What do care-givers do?

Table 7 Difference in time-use between caregivers and non-caregivers (in minutes)

Activities	Caregivers (n:16703)	Non-caregiver (n:46565)	Differences	
			Minutes	Percent
Self management	625.2	643.8	-18.6	-3%
Work	148.7	204.7	-56	-27%
School	11.5	93.8	-82.3	-88%
House keeping	164.1	66.6	97.5	146%
Person care	96.4	0	96.4	n.a.
Comm. Participation	2.8	3.6	-0.8	-22%
Leisure	285.4	316.7	-31.3	-10%
Travelling	90.8	98.3	-7.5	-8%
Others	15.1	12.5	2.6	21%

Table 7 shows difference in daily time use between care-givers and non care-givers. Since care-givers spent 96 minutes in average, they spend less in other activities. The exception is housekeeping (and activities categorized as ‘Others’), in which care-givers spend almost same amount of time. Given time on care-giving and housekeeping, care-givers spend less time on activities that can increase their human capabilities. They spend less time on work (-27%), school (-88%) and leisure (-10%), which may increase human capital. They also spend less on community activities (-10%), which may increase their social capital. It is true that people decide to do care-giving activities either because they do not have work or because they do not go to school. Nevertheless, care-giving tend to prevent care-givers from doing these activities, which will, in turn, reinforce the care-givers’ previous situation.

Table 8 gives time-use difference by care-giving time with reference to female care-givers. Here it becomes clear that women’s time-use on housekeeping increases with care-giving. Those who spend less than 30 minutes on care spend on housekeeping almost twice as much as non care-givers. For those who spend more than two hours on care spend 231.8% more on housekeeping. In contrast, regarding male care-givers, time on housekeeping decreases as care time increase (see Appendix 1). Such female’s double burden of care-giving and housekeeping places constraints on female care-givers from doing other activities. As care-time increases, time of work, and leisure decrease accordingly. Regarding to time on ‘school’, which includes formal education and adult education, decreases not so much as time on care-giving increase. Although most care-givers tend to spend much less on ‘school’, it practically disappears (from 94 to 2).

Table 8 Difference in time-use by care-giving time (women)

Activities	Non-caregiver	Less than 30 min		Less than 60 min		Less than 120		More than 120	
Self manage	643.8	624	-3.1%	622	-3.4%	629	-2.3%	608	-5.6%
Work	204.7	182	-11.1%	160	-21.8%	126	-38.4%	43	-79.0%
School	93.8	17	-81.9%	14	-85.1%	7	-92.5%	2	-97.9%
House keeping	66.6	199	198.8%	203	204.8%	203	204.8%	221	231.8%
Person care	0	15	n.a	39	n.a.	81	n.a.	232	n.a.
Comm. Participation	3.6	4	11.1%	4	11.1%	3	-16.7%	2	-44.4%
Leisure	316.7	295	-6.9%	292	-7.8%	280	-11.6%	247	-22.0%
Travelling	98.3	88	-10.5%	91	-7.4%	89	-9.5%	69	-29.8%
Others	12.5	17	36.0%	17	36.0%	16	28.0%	16	28.0%

V. Conclusion

This study has examined the time metrics of care-giving within the Korean families from the perspective of freedom, using Time-Use Survey 2004. This paper has paid special attention to time-use of care-givers on both care-giving and other activities in order to find out whether care-giving put constraints on care-givers in accumulating human capability. Care-giving can be individual's choice, but it is a moral obligation for the vulnerable. Yet, familism, and other social norm (including economic calculation) tend to oblige a certain group of people, in particular women, to do care for others. In the end, care-giving reduces the opportunity freedom of care-givers in that care-giving constrains time for accumulating individuals functioning capability. In a nutshell, our hypothesis is that there is a 'care-trap' in which care-givers fail to obtain functionings due to time constraints. In consequence, their range of capability sets would be restricted, and their freedom doing other than care-giving is reduced in the future.

Our study of the Time-Use in Korea shows that there is a significant difference in time-use between non care-givers at large and care-givers, and women are more likely to be care-givers than men. Care-giving on average is devoted more time to children than to the elderly or others. Further with regard to women care-givers one of the important characteristics of care-giving is that the more they spend on care, the more time they spend on housekeeping. It shows that there is a double burden of care-giving, and it inevitably reduces time for women on other activities. For instance, care-givers spend less on 'School', 'Work' and 'Leisure', and they decrease significantly as care-time increases. From this

observation, we may speculate that care-givers' opportunity to accumulate human capabilities in terms of human and social capital.

Our study is a cross-sectional one, which cannot capture changes over time. In the future studies, it will be necessary to follow over time how the care-giving affect the lifelong time-use pattern in following period. In this study we do not find out how the low fertility over the last decade has affected care pattern, nor have we not been able to gauge the impact of the increase in institutional care in Korea in recent years. But they all have important implications for future public policy.

Endnote

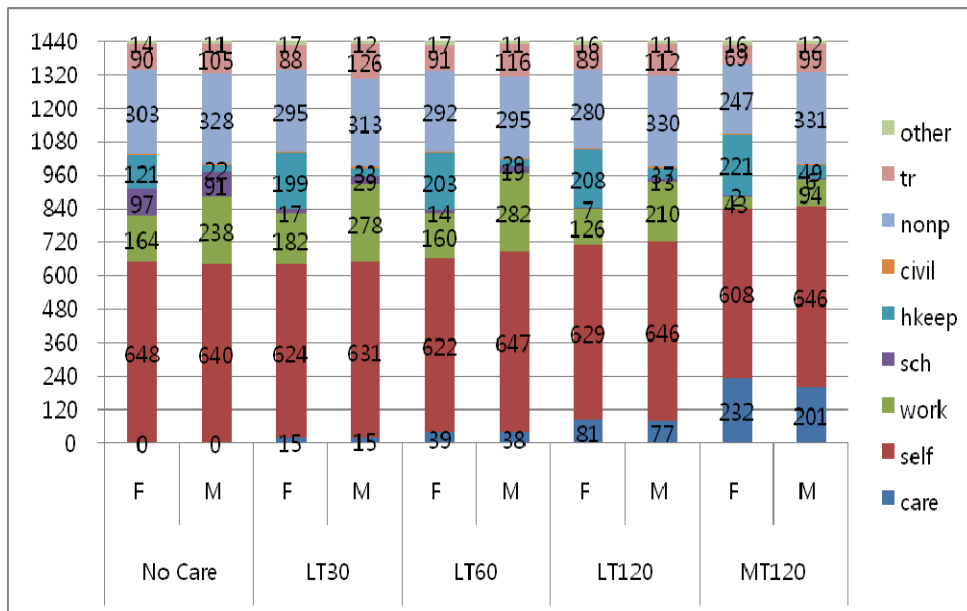
¹ It makes small differences in descriptive statistics from Budlender's one as shown in table 5, but is still consistent with our conclusion.

² Participation rate is the proportion of the surveyed population that was recorded as engaging in a particular type of activity.

³ Mean population time is measured by the number of minutes that an average person in the sample spent on a particular activity including those who spend no time.

⁴ Mean actor time provides the number of minutes that a person spent on a particular type of activity averaged only over those who performed that activity.

Appendix 1 Mean time spent on daily activities by care-time spectrum and gender



Reference

- Alkire, S. (2004). *Measuring Freedoms alongside Well-being*. Paper presented at the WeD Conference, Hanse Institute, Bremen.
- Becker, G. S. (1965). A Theory of the Allocation of Time. *the Economic Journal*, 75, 493-517.
- Budlender, D. (2008). *The statistical evidence on care and non-care work across six countries*. Geneva: United Nations Research Institute for Social Development.
- Chang, H., Hong, S., Lee, S., Kim, Y., Kang, E., & Kim, K. (2007). *Research into Care Work within Families*: Korea Women's Development Institute.
- CIA. (2009). The World Factbook. Retrieved 5 July, 2009, from www.cia.gov/library/publications/the-world-factbook
- Folbre, N. (2004). A theory of the misallocation of time. In N. Folbre & M. Bittman (Eds.), *Family Time* (pp. 7-24). London: Routledge.
- Goodman, R., & Peng, I. (1996). The East Asian Welfare States: Peripatetic Learning, Adaptive Change, and Nation-Building. In G. Esping-Andersen (Ed.), *Welfare State in Transition: National Adaptations in Global Economies*. London: Sage.
- Gough, I. (2001). Globalization and Regional Welfare Regimes: The East Asian Case. *Global Social Policy*, 1(2), 163-189.
- Hur, R. (2005). Searching for paradigm for gender mainstreaming: from development to care. *Korea Women Studies*, 21(1), 199-231 (in Korea).
- Kwon, H. J. (2005). Transforming the Developmental Welfare State in East Asia. *Development and Change*, 36(3), 477-497.
- National Statistical Office. (2008). *National Statistical Yearbook*. Seoul: NSO.
- Sen, A. (1993). Capability and Well-Being. In M. C. Nussbaum & A. Sen (Eds.), *The Quality of Life* (pp. 453). Oxford: Oxford University Press.