

SEMINAR ON TIME USE SURVEY
Wednesday, December 8, 1999

TIME USE SURVEY IN JAPAN

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Introduction

There is a growing need to improve statistics on non-economic activities and daily life, and the time use survey is one of effective ways to learn about such subjects. In recent years, this kind of survey attracts considerable attention. Time allocation data are expected to provide comparable social statistics on different countries or groups of the population. Moreover, these data are expected to contribute to the formulation of gender and family policies, and to the improvement of the national accounts, particularly producing data for satellite accounts of household production.

In Japan, the interest has clearly increased towards measuring the economic value of the invisible work done in the household since the 1995 World Women's Meeting in Beijing.

This paper will introduce mainly *the Survey on Time Use and Leisure Activities* that is one of major time use surveys conducted in Japan.

1. Time Use Surveys in Japan

There are two major surveys on time-use in Japan. One is *the Survey on Time Use and Leisure Activities* (by the Statistic Bureau), and the other is *NHK's Time Use Survey* (by NHK - Japan Broadcasting Corporation). The survey of the Statistic Bureau is a large-scale sample survey which offers detailed data by region and personal attribute, while the survey of NHK is based on a smaller sample, but it offers longer time series data as well as data on secondary activity.

2. Outline of the Survey on Time Use and Leisure Activities

a. Purpose of the Survey

The purpose of this survey is to obtain comprehensive data on actual state of people's daily life that cannot be fully covered by economic statistics. For this purpose, it collects data on people's daily time budgeting as well as all sorts of leisure activities in which people were engaged during a year.

b. Origin of the Survey

This Survey was first conducted more than 20 years ago, in 1976. Since then, it has been carried out every five years, and the fifth survey was taken in October 1996.

In mid-1970's when this survey was planned, the Japanese economy was shifting from high growth to lower growth after the first oil crisis in 1973. People's preference was shifting from economic growth to improvement of quality of life.

c. Structure of the Survey

The survey consists of two questionnaire modules: the time use module covering daily

activities and time used for them, and the leisure activities module covering leisure activities during a year such as sports, studies and researches, social activities, hobbies and amusements, and travels and excursions.

d. Reference Date

The 1996 survey’s reference date was October 1, 1996. As for the time use survey, two consecutive days during the nine-day period from September 28 (Saturday) to October 6 (Sunday) were designated in advance for each enumeration district, in order to investigate time budgeting by day of the week.

e. Sample

The survey used a two-stage stratified random sampling method. Out of about 900,000 enumeration districts demarcated for the whole country in the 1995 Population Census, about 6,600 enumeration districts were selected for the first stage. For the second stage, from each enumeration district which contains about 50 households on the average, 15 households were selected, and the total size for the whole country was about 99,000 households and 270,000 persons aged 10 and over.

f. Items Investigated

The questionnaire consists of the following four sections.

- ◆ Personal Characteristics
- ◆ Household Characteristics – only for the household head
- ◆ Items for leisure activities

Five categories of leisure activities were investigated.
(sports, studies and researches, social activities,
hobbies and amusements, and travels and excursions)

- ◆ Items for time use
Daily activities were classified into 20 categories.

g. Survey Method

A self-enumeration method was used. A booklet of questionnaires was filled in by each household member. The statistical divisions of prefectural governments functioned as field offices for data collection, which is the normal practice for most censuses and surveys of the Statistics Bureau. The questionnaires were distributed to and collected from sample households by enumerators under the supervision of the prefectural governments.

h. Tabulation and Publication of the Results

The questionnaires were collected by prefectural governments, and then submitted to the

Statistics Center where the results were tabulated after data editing. The 1996 results were reported at the Cabinet Meeting and released to the public in September 1997. The results are published in a series of reports. Major figures and findings have been made available on Internet (<http://www.stat.go.jp/15e.htm>).

3. Activity Classifications

For collecting data on time allocation, 20 categories of daily activities were set, and grouped into the three broad categories. The classification is as follows:

Category I Activities (Physiologically necessary activities)

(1) Sleep, (2) Personal care, and (3) Meals

Category II Activities (Activities which a person is committed to perform as a member of the family or the society)

(4) Commuting to and from school or work, (5) Work, (6) Schoolwork, (7) Housekeeping, (8) Nursing, (9) Child care, and (10) Shopping

Category III Activities (Other activities, which are mostly done in free time)

(11) Moving (excluding commuting), (12) TV, radio, newspapers or magazines, (13) Rest and relaxation, (14) Studies and researches (excluding schoolwork), (15) Hobbies and amusements, (16) Sports, (17) Social activities, (18) Social life, (19) Medical examination or treatment, and (20) Other activities

4. Major Findings Concerning Time Use

a. Difference of Time Allocation between Men and Women

Table 1 shows how much time the Japanese people spent on each category of activities in the day.

Men slept 15 minutes longer than women, but women spent more time on personal care and meals. As for category I activities in total, women allocated 11 minutes longer than men.

Paid work and housework showed the biggest difference between men and women. Men worked 2 hours 35 minutes longer than women, but men spent only 24 minutes on

Table 1 Average time spent per day by Sex (People 10 years old and over, weekly average)

	(In hours. minutes)	
	Men	Women
Category I activities	10.29	10.40
Sleep	7.55	7.40
Personal care	0.58	1.19
Meals	1.35	1.42
Category II activities	7.10	7.17
Commuting to and from school or	0.43	0.23
Work (paid)	5.13	2.38
Schoolwork	0.48	0.41
Housework (incl. related activities)	0.24	3.34
Housekeeping	0.10	2.37
Nursing	0.01	0.05
Child care	0.02	0.19
Shopping	0.11	0.33
Category III activities	6.21	6.03
Moving(excluding commuting)	0.25	0.24
Watching TV, listening to radio, reading newspapers or magazines	2.37	2.29
Rest and relaxation	1.13	1.17
Studies and researches(excluding schoolwork)	0.12	0.12
Hobbies and amusement	0.42	0.30
Sports	0.17	0.10
Social Activities	0.04	0.04
Social Life	0.27	0.27
Medical examination and treatment	0.06	0.08
Other activities	0.17	0.22

housework and related activities while women allocated 3 hours 34 minutes.

As for category III activities, which include all sorts of leisure activities, men could spend 18 minutes more than women.

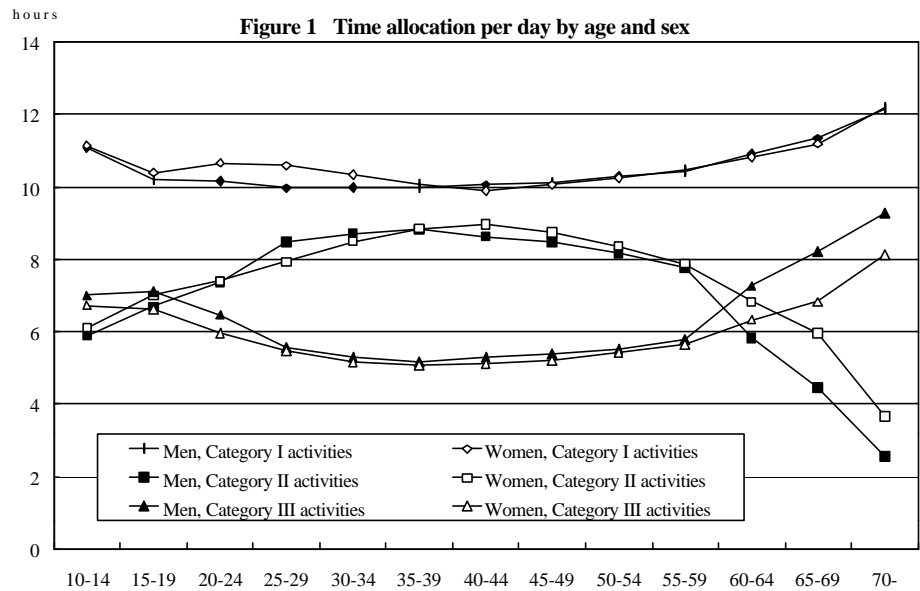
b. Time Use by Age Group

Status of time allocation to the three broad categories by age group is shown in figure 1.

Among men, those aged 25-34 years spent the least time on category I activities, while, among women, those aged 40-44 years spent the least time on category I activities.

For other age groups, the younger or the older, the more they spent time on category I activities, and people aged 70 and over spent more than half a day.

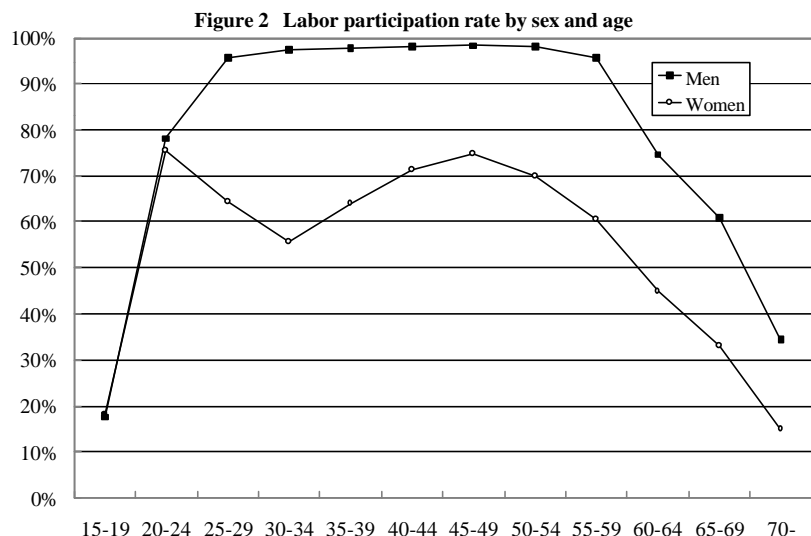
Contrary to category I activities, men of 35-39 and women of 40-44 years allocated the longest time, nearly 9 hours, in category II activities. As for category III activities, men under 20 as well as 60 and over spent more than 7 hours and women of the same age groups spent more than 6 hours.



5. Characteristics of Women in Work

a. Comparison between Men and Women

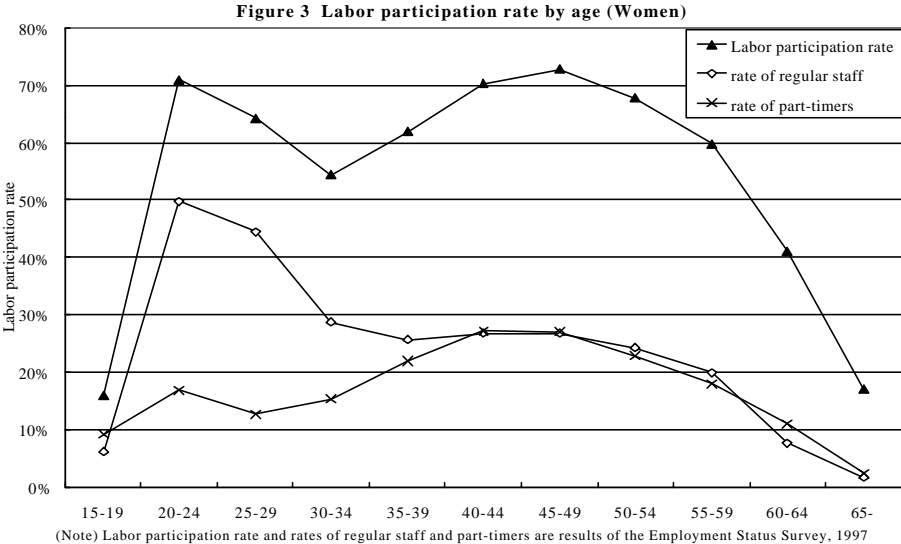
Figure 2 shows percentages of people in work by age group. There is a clear difference between men and women. Here, a person in work or a working person is defined as a person who is usually engaged in



work for pay or profit. For men, more than 95% were in work in the age between 25 and 59, while the figures for women were lower especially in the age of 30 and 34. The reason of this decline in working women is that many women quit their jobs in order to engage themselves in housework when they get married or give births. As their children grow up, many women go back to paid work again, but mostly as part-timers.

b. Regular Employees and Part-timers

These situations can be seen in figure 3, which shows percentages of regular employees and part-timers by age group. The percentage of regular employees declined from the age of 20-24 to the age of 30-34 and stayed flat in the thirties and forties. To the contrary, the rate of part-timers was relatively low in the twenties and raised to the age of 40-44, where the rate was the highest marking about 25%.



6. Women’s Time Use for Housework

a. Difference of Paid Work and Housework between Men and Women

Table 2 shows time allocation to paid work and housework by marital status for men and women aged 15 and over.

Married women spent on housework 4 hours 10 minutes longer than unmarried women, while there is only 10-minute difference between marital status for men. As for working time, married women worked shorter than unmarried women, in contrast, married men allocated longer time than unmarried men.

Table 2 Average time spent on paid work and housework per day for people 15 years old and over by sex and marital status (weekly average) (In hours. minutes)

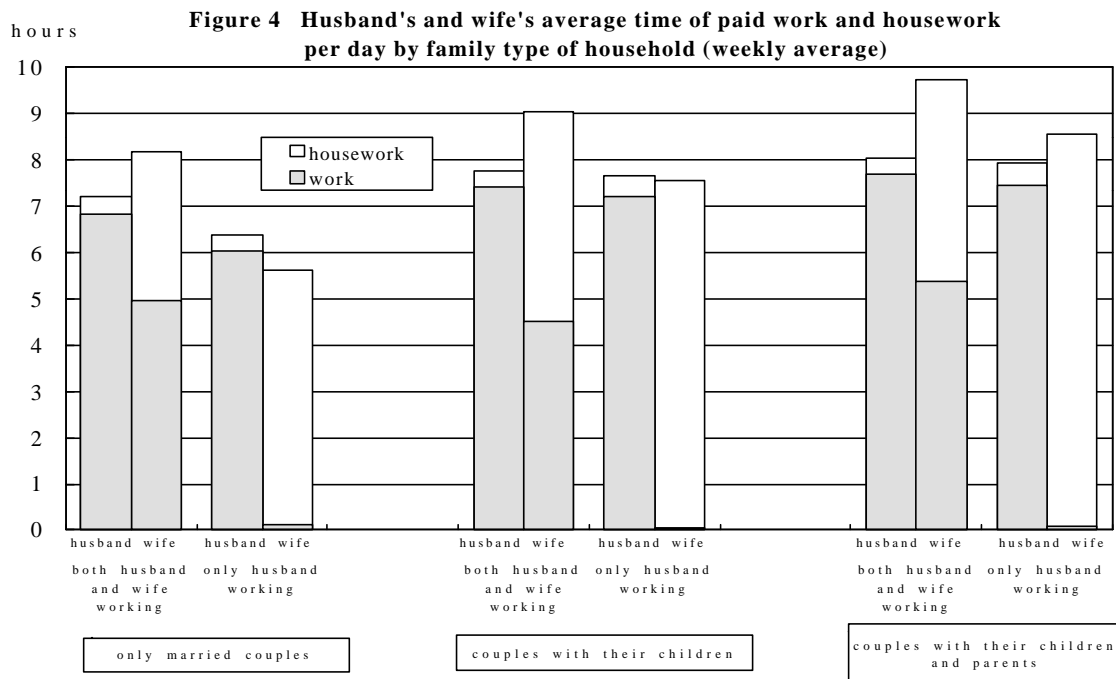
	Men		Women	
	Married	Never married	Married	Never married
Work (paid)	6.08	4.40	2.39	3.42
Housework (incl. related activities)	0.28	0.18	5.09	0.59

These figures show that married couples tend to assign their housework to the wives and their paid work mainly to the husbands.

b. Couples' Paid Work and Housework by Type of Family

As shown in figure 4, time allocation to housework also differed according to type of family.

Wives in the families consisting of only married couples, spent less time on housework than those in the families with children. Husbands allocated less than 30 minutes to housework regardless of the type of family. As for total time of paid work and housework, working wives spent more time than their husbands, irrespective of their family type. Especially those with children spent more than nine hours.



For the families of couples with their children and parents, wives both in work and not in work allocated more time to paid work and housework than their husbands. Wives in work spent more time on paid work and housework than their husbands did, which is the longest time, 9 hours 43 minutes.

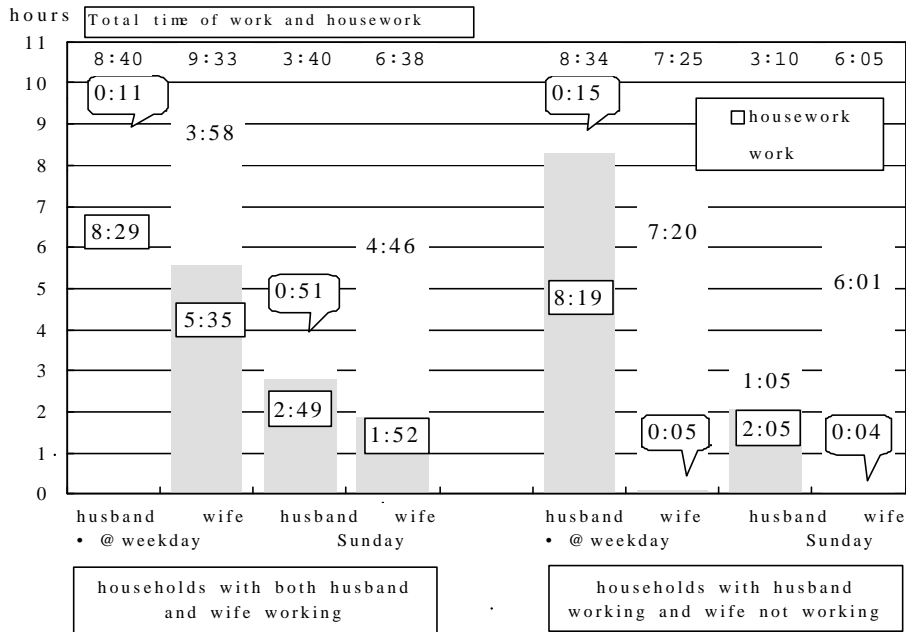
c. Couples' Paid Work and Housework by Day of the Week

Figure 5 shows how much time was allocated to paid work and housework on weekdays and Sundays for the families of couples only.

Husbands spent more than eight hours and a half on paid work and housework on weekdays, but they did only less than four hours on Sundays. Wives not in work allocated 7 hours 25 minutes on weekdays, less time than their husbands did. However, on Sundays, wives not in work spent 6 hours 5 minutes, more time than their husbands did. Wives in work had more burdens, allocating 9 hours 33 minutes on weekdays and 6 hours 38 minutes on Sundays, more time than their husbands did.

On Sundays, wives spent more than six hours or about twice as long as their husbands did.

Figure 5 Husband's and wife's average time of paid work and housework by wife's usual economic activity (household of a married couple only)

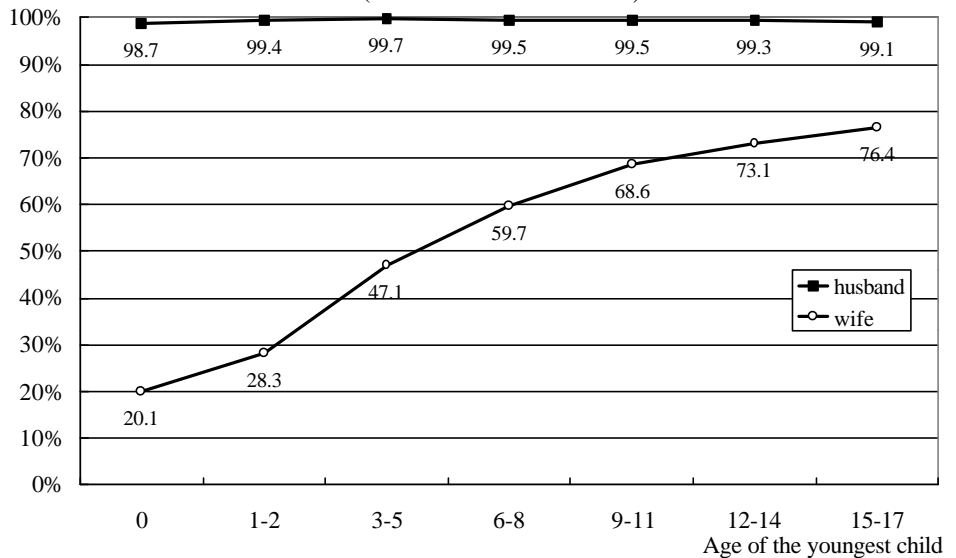


d. Housework by Age of Children

Figure 6 shows the percentages of people in work by age of their youngest children.

More than 98% of husbands were in work regardless of children's age. On the other hand, only 20% of wives were in work when their youngest child was aged zero. Along with the growth of children, the percentage rose sharply.

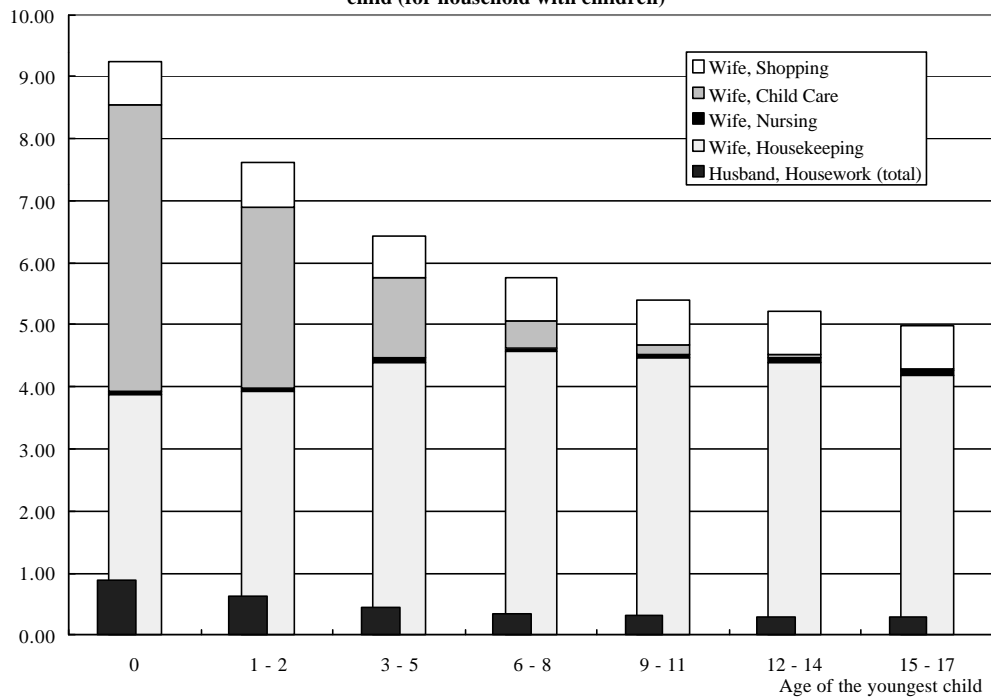
Figure 6 Labor participation rate of husband and wife by age of their youngest child (for households with children)



Similarly, as for time allocation to housework, there was a clear difference between wives and husbands, as shown in figure 7.

Husbands spent only 53 minutes to housework even if the youngest child was aged zero. Wives with children aged zero allocated 9 hours 15 minutes, but the allocated time declined sharply along with the growth of the children.

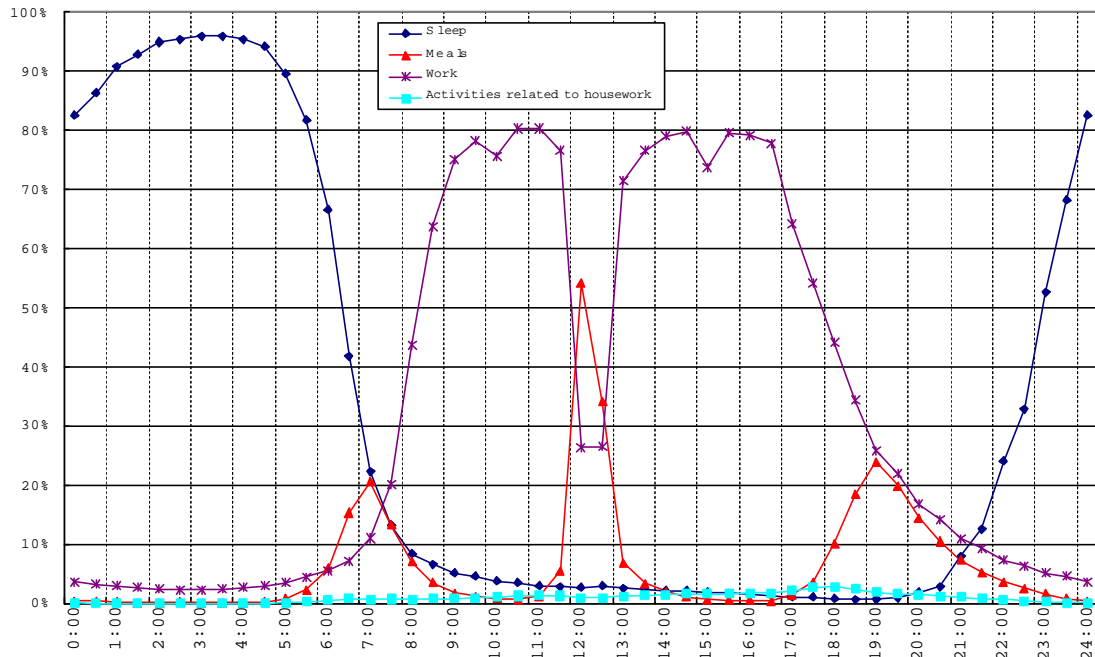
Figure 7 Husband's and wife's average time of housework by age of their youngest child (for household with children)



7. Status of Daily Activities by Time of the Day

a. Basic State of Daily Activities

Figure 8-1 Participation ratio in main activities by time slot (working men, weekday)



Figures 8-1, 8-2 and 8-3 are graphs showing participation ratio in main activities by time of the day on weekdays.

Figure 8-2 Participation ratio in main activities by time slot (working women, weekday)

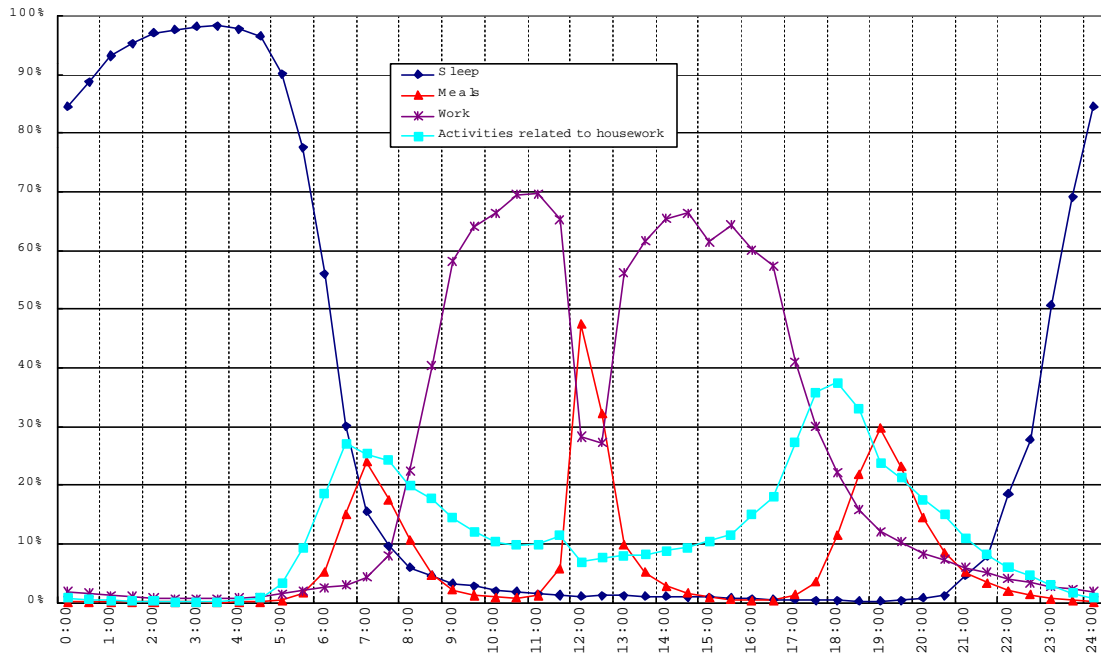
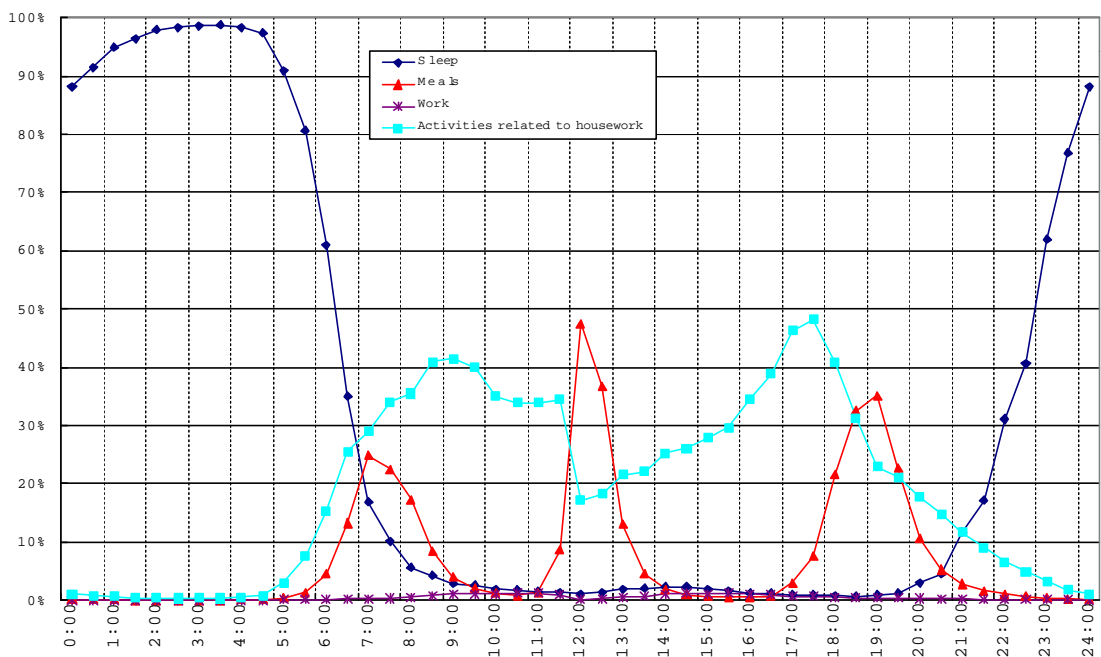


Figure 8-3 Participation ratio in main activities by time slot (women not in work, weekday)



More than 75% of working men worked during 9:00am to 5:00pm except lunchtime, and 11% still worked at 9:00-9:30pm. As for women in work, the participation ratio shows a similar pattern as men's, but declines more sharply after 5:00pm.

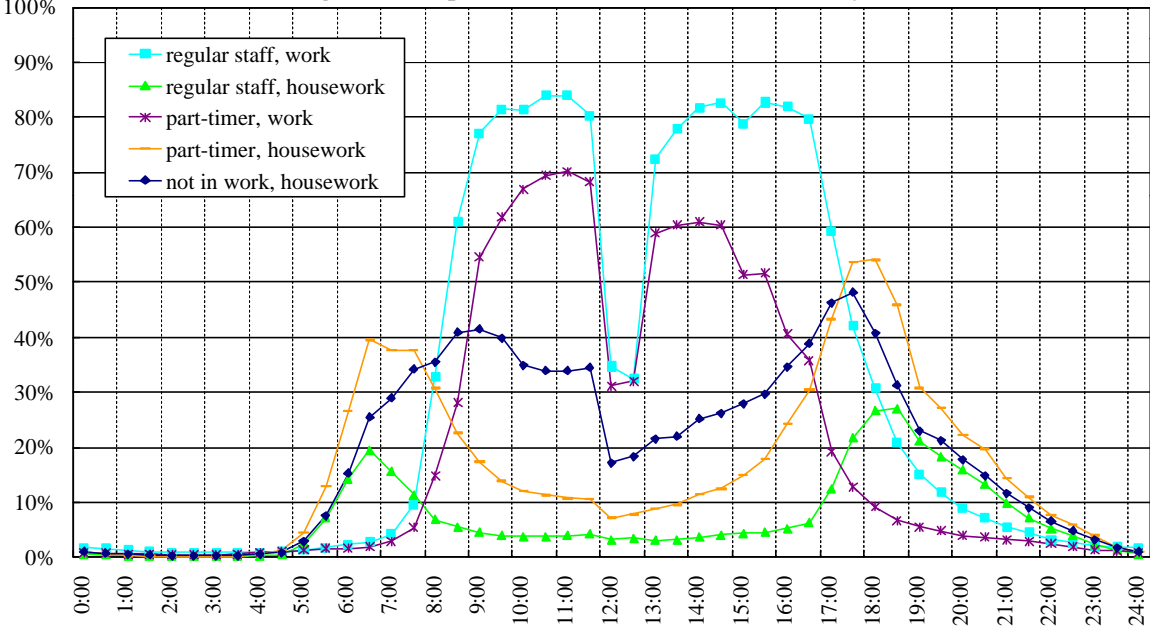
As for the participation ratio in housework, the ratio for women not in work was more than 40% at 8:30-9:30am showing a peak in the morning, and was 48% at 5:30-6:00pm, another peak in the evening. It is notable that the peak in the evening was steeper than the one in the morning. In the afternoon, the ratio was relatively low, indicating that many women enjoyed their free

time.

The pattern of housework of working women was different. The peak in the morning was earlier, at 6:30-7:00am, and declines sharply due to work. Nevertheless, the peak in the evening was at 6:00-6:30pm, similar to the pattern for women not in work.

b. Regular Employees and Part-timers

Figure 9 Women's participation ratio in work and housework by time slot (regular staff, part-timer and not in work, weekday)



Participation ratio of work and housework by form of employment are shown in figure 9.

The peak of housework in the morning was the same for regular employees and part-timers. However, the ratio for regular employees declines steeper than for part-timers. In the evening, the peak for regular staff was at 6:00-7:00pm and for part-timers at 5:30-6:30pm. For regular employees, the ratio of housework rose steeply after 5:00pm.

8. Issues Concerning the Survey on Time Use and Leisure Activities

a. Improvement of Data on Unpaid Work

One important policy issue in Japan is to promote full and equal participation in society by both sexes. For evaluating the present status, unpaid work and its data are to be improved under the Action Program. The Economic Planning Agency released the estimation of unpaid work in the satellite account of the SNA, using the results of *the Survey on Time Use and Leisure Activities*. In order to provide data for more accurate estimation, it might be necessary for us to study further itemization of collected data and methods of collecting and categorizing these data.

b. International Comparison

Japan's *Survey on Time Use and Leisure Activities* uses a pre-coding method, under which respondents classify their daily activities into 20 categories. On the contrary, many other countries employ after-coding methods in their surveys, under which respondents at first write out specifically daily activities and time bands in free hand, and the activities are classified later.

The after-coding method enables more detailed classification than the pre-coding method. However, it involves such problems as long time and intensive training for massive classifying work and heavy response burdens.

On the other hand, the pre-coding method is effective to tabulate a large number of responses. In fact, *the Survey on Time Use and Leisure Activities* held in 1996, the data were input through Optical Mark Readers directly from the questionnaires.

The Statistics Bureau and the Statistic Center need to devise methods for international comparison of time use data such as conversion factors between the two methods. At the same time, an effective coding method for the after-coding method might have to be studied.

Conclusion

As described above, *the Survey on Time Use and Leisure Activities* provides detailed data on time use according to individual and household characteristics due to its large sample size. However, the pre-coding method precludes us from more detailed information necessary for unpaid work estimation and gender work sharing.

The next *Survey on Time Use and Leisure Activities* is to be conducted in October 2001. The Statistics Bureau and the Statistic Center are planning to review the methods and details of the next survey to meet domestic and foreign demands, especially for unpaid work estimation and for international comparisons. We are considering whether another smaller after-coding survey could be conducted as a part of the time use module of the next Survey, while maintaining the present large-scale survey.

Reference: Classification of Activities

Activities	Examples and/or notes	Activities	Examples and/or notes
1.Sleep	Time from going to bed till getting up	10.Shopping	Purchase of food, clothes, or other goods Including window-shopping
2.Personal care	Washing face, bathing, dressing, hair-dressing, etc.	11.Moving	Moving other than “4 Commuting to and from school or work”
3.Meals	Includes drinking before or after meals. If the main purpose is socializing, included “18 Social life”.	12.Watching TV, listening to radio, reading newspapers or magazines	
4.Commuting to and from school or work	Going to work or school and returning	13.Rest and relaxation	Conversation with family, office colleagues, etc.
5.Work	Work for pay or profit Includes helping family business. Rest between work time should be classified according to the activity actually done.	14.Studies and researches	Studies and researches other than “6 Schoolwork” Those as a part of work are included in “5 Work”.
6.Schoolwork	Studying by students at school, such as high school, college and university. Homework is included.	15.Hobbies and amusements	Seeing a movie or a play, playing or listening to music, caring for pets, gardening, flower arrangement, chess, mahjong, etc.
7.House-keeping	Cooking, table setting, Cleaning house, Caring for family members other than little child, Keeping the family account, visits to the public office on personal or family matters.	16.Sports	Athletic amusements such as baseball, volleyball, tennis, etc. Include light exercises and outdoor leisure such as jogging, hiking, etc.
8.Nursing	Helping family or related person to have a meal, take a bath, dress, move indoors, and to do other movement	17.Social activities	Voluntary activities or other social activities to promote social welfare by providing one’s effort, skill and time without pay
9.Child care	Caring for little child(ren) Including activities concerning education of the child(ren)	18.Social life	Seeing friends, taking with neighbours, attending meetings, funerals, wedding, receiving friends at home,etc
		19.Medical examination or treatment	Stay in bed due to illness, seeing a doctor for treatment, etc.
		20.Other activities	Activities not classified elsewhere