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HOUSEHOLD WORK AND FAMILY CARE:  
AN ANALYSIS OF TIME BUDGET DATA

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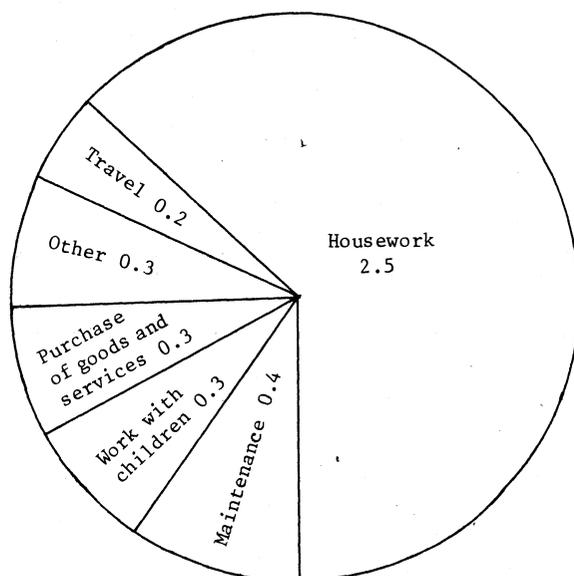
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## Introduction

This report deals with time spent on household work and family care. Household work and family care is defined as consisting of a number of different types of activities. Household work is the major component and includes such activities as food preparation, house cleaning and washing and ironing clothes. Maintenance of the dwelling and other household equipment is another important aspect of household work and family care. Also included are the more directly work aspects of child care, the purchase of goods and services, and all travel in connection with household work and family care<sup>1)</sup>. Diagram 1 shows the relative amounts of time spent on the different types of activities making up household work and family care.

Diagram 1. Time spent on different types of household work and family care. Average for all persons, all days. Hours



Household work and family care.  
Average time per day 4.0 hours.

The report is based on data from the Central Bureau of Statistics' Time Budget Survey 1971-72 in which a national sample of persons kept detailed time diaries over a period of days. The main results from the survey are published in NOS A 692 The Time Budget Survey 1971-72 Vol. I Central Bureau of Statistics 1975.

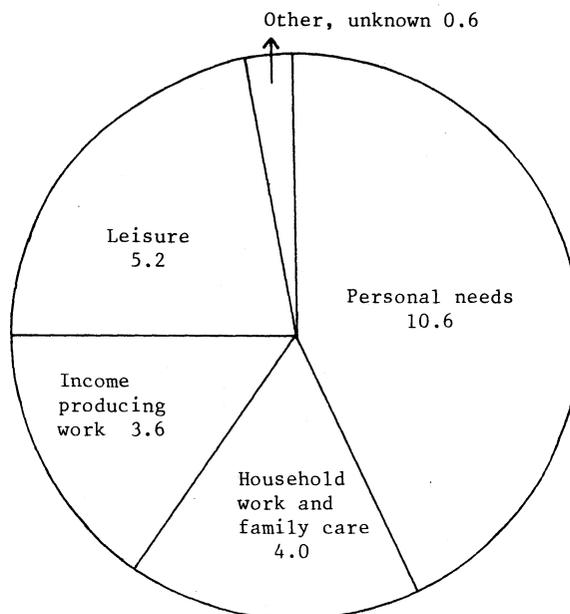
The primary objective of this report is to present a more in depth analysis of household work and family care than was possible in the general publication on the use of time. The report contains discussions of some of the previously published figures as well as additional tables. Particular emphasis is placed upon describing the time use of persons in different types of families and in different employment situations. Daily and weekly activity patterns are also investigated.

A report dealing only with household work and family care would leave far too many questions unanswered. Household work and family care must be seen in relation to other types of activities, particularly to income producing work. The second objective of this report is to set household work and family care in a total work perspective.

Four major types of activities are identified in the Time Budget Survey. Household work and family is one and has already been described. Income producing work and the journey to and from work are a second major type of activity. Sleep, personal hygiene and eating make up the third type, known as personal needs and leisure is the fourth.

Diagram 2 shows the relative amounts of time spent on these activities per day.

Diagram 2. Time spent on different major activities. Average for all persons, all days. Hours



Very few persons have a time use pattern similar to the one described in Diagram 2. The time use patterns begin to be more recognizable if men and women are studied separately and if averages are calculated for the different days in the week.

Table 1. Men and women by time spent on different major activities. Averages for different days in the week. Hours

	Men				Women			
	All men	Week-days	Satur-days	Sun-days	All women	Week-days	Satur-days	Sun-days
Household work and family care .....	2.1	2.0	3.1	1.8	5.8	6.2	5.7	4.0
Income producing work, journey to work, etc. ....	5.4	6.8	2.7	1.2	1.9	2.3	1.3	0.5
Leisure .....	5.3	4.4	7.0	8.6	5.0	4.3	6.0	7.3
Personal needs ...	10.6	10.1	10.8	12.1	10.5	10.6	10.7	11.9
Other, unknown ...	0.7	0.7	0.4	0.3	0.5	0.6	0.3	0.3
Total .....	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Number of respondents .....	1 463	1 463	471	471	1 577	1 577	526	533

There are large differences between men and women in the amount of time spent on household work and family care and on income producing work. Average figures such as these still cover over considerable variation in time use, variations that the analysis will attempt to uncover.

#### Comparison with other countries

Is the average time spent on household work and family care in Norway high or low in comparison with other countries? The International Time Budget Study 1965-1966, in which twelve countries conducted time budget surveys using a common research design, can help provide an answer. The study is described in length in The Use of Time, A. Szalai ed. 1972 and will

only briefly be touched upon here. There are a number of differences in the research designs used in the Norwegian and in the international study, making direct comparisons difficult. Of particular importance are the differences in the sample populations. The international study limited itself geographically to urban centers of between 45 000 and 160 000 inhabitants and the immediately surrounding communities. Only persons between the ages of 18 and 65 were interviewed. The Norwegian sample was a national one including rural as well as urban areas and consisted of persons from 15 to 74 years of age.

In so far as possible these differences are controlled for in table 2 which presents figures from the Norwegian and from the international survey. Average times have been calculated for Norwegians between 18 and 65 years of age, living in cities of over 50 000 population or in districts surrounding these. Due to the small number of observations it was not possible to satisfy the upper population limit of 160 000. The Norwegian subsample thus includes urban areas with considerably larger populations.

Table 2. Time spent on household work and family care in different countries. Average for all persons. Hours

	Average time	Number of respondents
The Time Budget Survey		
Norway National sample, persons 15-74 years of age .....	4.0	3 040
Norway, cities and surrounding districts with over 50 000 inhabitants, persons 18-65 years of age .....	3.8	789
The international Time Budget Study <sup>1)</sup>		
Belgium .....	3.2	2 077
Kazanlik Bulgaria .....	2.7	2 096
Olomouc Czechoslovakia .....	4.1	2 192
Six cities France .....	4.0	2 805
100 electoral districts* Fed. Rep. Germany.	4.3	1 500
Osnabrück Fed. Rep. Germany .....	3.9	978
Hoyerswerda German Dem. Rep. ....	4.7	1 650
Győr Hungary .....	4.2	1 994
Irma-Callao Peru .....	3.5	782
Torun Poland .....	3.8	2 754
Forty-four cities USA .....	3.7	1 243
Jackson USA .....	3.6	778
Pskov USSR .....	3.4	2 891
Kragujevac Yugoslavia .....	3.8	2 125
Maribor Yugoslavia .....	5.0	1 995

\* National sample.

1) "Everyday life in twelve countries." J. P. Robinson, P. E. Converse and A. Szalai The Use of Time 1972, p. 114.

Table 2 shows a considerable similarity between countries in time use despite large variations in cultural, political and economic structure. The average time ranges from 2.7 hours per day in Kazanlik, Bulgaria to 5.0 hours per day in Maribor, Yugoslavia. The Norwegian time use lies in the middle of this range; 6 sites use less time, 7 sites use more time on household work and family care than Norwegians.

Structure of the report

This report is divided into five sections. The first describes the data source, the Time Budget Survey 1971-72. The survey design and the strengths and weaknesses of the data for an analysis of household work and family care are discussed. Definitions of the variables used in the report are also given. The second section contains a more theoretical introduction to the subject of time use and attempts to identify some of the underlying assumptions made in evaluating a time use pattern. The third section explores differences in time use between persons in different family and employment situations. Time spent on different types of activities such as housework and work with children is discussed. The division of labour between married persons, the effects of family size, the age and number of children etc. are taken up. The role of the respondent's own employment situation is discussed, as is the role of the spouse's employment status for married persons. The fourth section describes daily, weekly and seasonal activity rhythms. The fifth section deals with the relationship between household work and family care and other types of activities. A measure of a person's total work load is constructed by adding together the time spent on household work and family care and the time spent on income producing work. The sixth section contains a brief summary of the findings. The report is followed by appendices including the index of tables and diagrams and a few supplementary tables.

## SECTION I THE TIME BUDGET SURVEY 1971-72

### 1. Purpose

The primary goal of the Time Budget Survey 1971-72 was to provide a comprehensive description of the use of time in Norway. The Central Bureau of Statistics had previously lacked systematic coverage of some of the activities appearing in the study. The Time Budget Survey 1971-72 provided new insights into the frequency and duration of these activities. Other activities appearing in the study were well documented in other statistics and the contribution of the Time Budget Survey with regard to these activities was the opportunity to study them in relation to total time use.

### 2. Survey design

The survey was based on a national sample of persons between 15 and 74 years of age per January 1, 1971 not living in institutionalized housing such as hospitals, hotels etc.

There were 5 215 persons in the sample. Persons were assigned particular days to fill out their time diary. The time diary periods, which were either 2 or 3 days in length, covered together the calendar year from September 1, 1971 to August 31, 1972. The time diaries were usually distributed one or two days prior to the period in which the diary was to be kept and collected the day after the period's conclusion. Interviewing was generally conducted in connection to the distribution of the diaries.

The time diary used in the survey consisted of an introduction explaining how one was to keep a time diary, an example of how it was to be done and space for reporting time use for two or three days. The days in the diary were divided into time intervals. Between midnight and 6 a.m. half hour and hour intervals were used; otherwise the intervals were of 15 minutes in length.

Participants in the survey were asked to report, in their own words, what they did in each time interval. If several activities occurred successively in the course of a time interval, the activity taking the longest time was to be reported. If two or more activities occurred simultaneously the respondent was to decide which one was the most important. Space was provided for registering up to two activities per time period, one to be designated as the more important activity.

### 3. Design effects

The figures presented in the NOS publication and in this present report refer only to time spent on or the percentage participating in different activities as one's primary activity. The great advantage of this system is that it gives everyone a 24 hour day to allocate among different activities. If simultaneous time use was presented, individuals in the habit of doing several things at once would manage to stretch their day to exceed 24 hours, presenting numerous difficulties for interpretation.

In most cases there is a good correspondence between the time spent on an activity and the total time spent on such an activity. Income producing work will, for example, almost always be reported as the most important activity and the correspondence between time reported in this study and the total time spent on income producing work should be good. Likewise, most of the common household work and family care activities such as food preparation and house cleaning will tend to be reported as primary activities. A few persons reported mending clothes while watching television or fixing food while entertaining guests, but the additional time represented by these simultaneous activities was so little that it does not affect the figures for average time.

Certain leisure activities, on the other hand, such as conversation or listening to the radio often occur simultaneously with other activities which are regarded as more important. The time spent, for example, listening to the radio as one's primary activity will, therefore,

be considerably less than the total time spent listening to the radio.

Keeping a detailed diary places large demands on one's memory if activities are not recorded frequently. Some types of activities are more easily forgotten than others. Discrete activities and tasks such as cooking dinner or doing the dishes are probably more faithfully reported than more continuous or less action oriented activities such as picking up around the house or child care.

A good deal of time may be spent on short but frequent activities. Activities with a duration of under 8 minutes are seldom registered in the time diaries, being possible only when a 15 minute period was used for three or more successive activities. This aspect of the survey design has consequences for a study of household work and family care. Many of the tasks associated with family care are of such short duration as to be omitted from the time accounting system employed. They are nevertheless so frequent in the course of the day that the total time spent on them is of registerable size.

Time diary data gives only limited opportunities to study certain kinds of household work and family care such as the care of sick persons or small children. An important characteristic of these activities is that they are not only time-consuming but are also time-structuring. Care of a sick person may require that one stays at home to be of assistance when needed. Time spent directly giving such assistance will generally be quite small in relation to the time spent at home because of the responsibility for tending the person. A time diary will only measure the time used giving direct assistance thus giving a biased picture of the time demands of the activity.

#### 4. Coding of activities

The activities reported by the respondents were coded centrally in accord with a list of 91 activities. This list was to a large extent modelled after the one used in the International Time Budget Study. These activities were in many cases further classified into groups of 20 or, at the least detailed level, 5 types of activities. (See pages 9-11 for a complete list of activities and activity groups).

Certain aspects of the coding procedure have special relevance for a study of household work and family care. The division of activities into leisure activities on the one hand and household work and family care on the other presents particular problems. Time spent with children as one's primary activity is, for example, divided into time spent "socializing with children" which is a leisure activity and "work with children" which is a family care activity. It seems reasonable to assume that child care regularly has elements of both leisure and work and that distinguishing between the two can be difficult. To a certain degree the coding procedure employed represents an artificial division which complicates the study of families with children.

Many other household work and family care activities can serve as leisure activities for some people, at some times. Gardening has been classified as household work. Many people, however, truly enjoy tending their gardens and experience it more as a free time hobby than as work. Cooking is also classified as household work. Those fond of cooking will at least occasionally experience it as a leisure activity. Likewise some activities classified as leisure can be experienced as work. Although carpentry is, for example, classified as a leisure activity it may well be considered work by an individual. As the respondents were not specifically instructed to characterize their activities as either work or leisure the classification of activities is, to some degree, arbitrary.

### 5. Reliability of the findings

In addition to such design effects as outlined earlier in this section one must take sampling variance and sample bias into account when evaluating the reliability of the estimates. Sampling variance, expressed in terms of standard deviation, is a measure of the uncertainty with findings based on only a part of the population. The Bureau has calculated standard deviation for a few selected averages and the results of these calculations is presented in table 3.

Table 3. Standard deviation and average time spent on household work and family care by persons in groups for household size and position in the household. Hours

	Average time	Standard deviation	Number of respondents
<u>Unmarried persons in parents' household</u> .....	1.6	0.08	354
<u>Household size</u>			
3 persons .....	1.6	0.19	108
4 " .....	1.4	0.15	104
5 " .....	1.8	0.29	56
6 and more persons .....	1.6	0.22	71
<u>Married men</u> .....	2.3	0.07	1 051
<u>Household size</u>			
2 persons .....	2.3	0.14	281
3 " .....	2.1	0.14	227
4 " .....	2.4	0.16	283
5 " .....	2.3	0.20	166
6 and more persons .....	2.4	0.24	94
<u>Married women</u> .....	6.4	0.08	1 153
<u>Household size</u>			
2 persons .....	5.1	0.16	319
3 " .....	6.2	0.16	252
4 " .....	7.0	0.13	299
5 " .....	7.2	0.22	174
6 and more persons .....	7.9	0.24	109
<u>Other unmarried and previously married persons</u> .....	3.5	0.15	232
<u>Household size</u>			
1 persons .....	3.7	0.17	232
2 " .....	3.3	0.33	73
3 " .....	2.5	0.45	33

One can also calculate the approximate size of standard deviations for percentages with the help of the formula

$$s = \sqrt{\frac{P(100-p) \cdot 1.5}{n}}$$

where p in the percentage the standard deviation is calculated for and n is the number of observations.

If the standard deviation were known, an interval could be constructed which would, with a particular probability, cover the true value of the estimated quantity. The true value is that would be found from a complete census instead of from a sample survey. This interval is called a confidence interval. The interval formed by the estimated quantity  $M$ , minus twice the standard deviation and  $M$  plus twice the standard deviation will, with 95 percent probability, cover the true value.

In general, standard deviation increases with a decreasing number of observations and when a percentage estimate approaches 50 per cent. One should therefore exercise caution in drawing conclusions on groups represented by small numbers of respondents. When comparing percentages or average times one must be aware that both figures are uncertain and that the uncertainty of the difference between them is usually larger than the uncertainty of the individual percentages and averages.

Only estimates based on 20 or more observations are included in the tables.

Sample bias can occur when persons with a particular characteristic are not represented in the sample in the same degree that they occur in the population. This can be caused, for example, by a high percentage of non-response in the sample population from this particular group of persons.

There were 2 175 non-respondents to the survey, representing 42 per cent of the total sample. Contact on the days specified in the sample design was not established with 1 275 persons (25 per cent of the total sample) and 616 persons (12 per cent) were unwilling to participate in the study.

Table 4. Respondents, non-respondents, the total sample and the population 15-74 years of age by age and sex. Percentages

	Respondents	Non-respondents	Total Sample	Population 15-74 years of age (1.1. 1971)
<u>Age</u>				
15-24 years .....	19	20	20	22
25-44 " .....	36	28	32	32
45-64 " .....	35	35	35	34
65-74 " .....	10	17	13	12
Total .....	100	100	100	100
<u>Sex</u>				
Men .....	48	50	49	50
Women .....	52	50	51	50
Total .....	100	100	100	100
Number of persons .....	3 040	2 175	5 215	2 754 000

Table 4 shows that for example the oldest age group is somewhat underrepresented in the sample. The average time spent on an activity will be influenced by this sample bias to the extent that this age group participates considerably more or considerably less than the average population.

In a time budget study, sample bias can also occur when, because of non-response, all the days in the week or times of the year are not equally represented. Table 5 shows the distribution of all the days being studied by day in the week and time of the year.

Table 5. Days studied<sup>1)</sup> by day in the week and time of the year

Day in the week	Time of the year						Whole year
	September/ October	November/ December	January/ February	March/ April	May/ June	July/ August	
Monday .....	174	173	168	147	184	145	991
Tuesday .....	148	169	179	152	181	155	984
Wednesday .....	154	171	168	166	184	155	998
Thursday .....	211	195	165	176	183	143	1 073
Friday .....	192	185	163	177	181	130	1 078
Saturday .....	185	152	175	168	166	151	997
Sunday .....	195	159	172	165	167	146	1 004
All days .....	1 259	1 204	1 190	1 151	1 246	1 025	7 075

1) Each respondent has reported time use for 2 or 3 days.

Table 5 shows that March/April and July/August are somewhat underrepresented in the sample. These are typical vacation times and it was not possible to contact many of the persons in the sample who were on vacation trips. The effect of this upon the findings will be a tendency to underestimate the time spent certain vacation activities such as skiing, suning, swimming or fishing. The effect of this on estimates for time used on household work and family care is considered to be negligible.

#### 6. Definitions of some variables

The content of most variables can be read from the specifications in the tables. A few variables require further explanation.

#### Classification of activities

Activities have been classified in different ways for use in the tables. The most aggregated classification, Classification I, is most frequently used in this report although reference is made to household work and family care on both the more detailed classifications II and III.

Classification I	Classification II	Classification III
Household work and family care	Housework	Food preparation, setting of table, serving Dish washing, clearing the table House cleaning Washing and ironing Mending of clothes Heating, wood chopping, water fetching Private production of food
	Maintenance	Care of garden, lot and animals Construction, larger remodelling Painting, smaller remodelling Maintenance and repair of dwelling and household equipment Maintenance and repair of other equipment
	Work with children	Childcare and help to children Help with school work Other work with children
	Purchase of goods and services	Purchase of grocery goods Purchase of clothes, shoes Purchase of durable goods Other and unspecified purchases Personal care outside the home Visits to public offices and institutions Other errands
	Other household work and family care	Help to other households, collective projects Other household work and family care

Classification I	Classification II	Classification III
Household work and family care (cont.)	Travel in connection to household work and family care	Travel in connection to household work and family care
Income producing work, journey to work, etc.	Income producing work	Ordinary work in main occupation Overtime in main occupation Agriculture, forestry and fishing on own property/boat Work in secondary occupation
	Time in connection to work	Meals at the work place Time spent at place of work either before or after work hours Other pauses
	Journey to work	Journey to work
Personal needs	Personal care/sleep	Bedrest in connection to illness Personal hygiene and dressing Night sleep Other rest or sleep
	Meals	Meals Coffee and tea drinking Other refreshments
Education	Education	Full time instruction Part time instruction Home work and study in connection to instruction Reading of professional literature, other studies Travel in connection to education
Leisure	Sport and outdoor recreation	Competition sport, training Skiing Hiking in the woods Walking Swimming, sunning Boat trips Other trips
	Entertainment	Restaurant, cafe visit Sports events (spectator) Cinema Theater, concert, opera Museum, art exhibition Other entertainment
	Socializing	Play with children Conversation with children Other socializing with children Visits by/with family or friends Parties Other gatherings Games, dance Conversation Other socializing
	Radio and television	Listening to radio Watching television
	Reading	Reading newspapers Reading books Reading magazines, journals Unspecified reading
	Other leisure	Leadership in voluntary public service, other political activities Participation in labour professional organizations Participation in humanitarian organizations Participation in religious organizations Participation in other organizations

Classification I	Classification II	Classification III
Leisure (cont.)	Other leisure (cont.)	Handwork Carpentry Playing of musical instrument Other hobbies Letter writing Listening to records, tapes Relaxing
	Travel in connection to leisure time activities	Travel in connection to leisure time activities
Other, unknown	Other, unknown	Other, unknown

Definitions of some variable

Location was determined by the Bureau's personell for each time interval based upon the description of the activity and the proceeding sequence of activities.

Workday is used as a common designation for Mondays through Fridays.

Occupation. Persons with normally more than 14 hours per week in income producing work are considered economically active and are further classified in accordance to the Standard for Occupation Classification in Official Norwegian Statistics and by employment status. Persons with less than 15 hours per week in income producing work and with a pension as principle source of income or who were born before 1901 (approx. 70 years of age or older) are classified as pensioners. Housewives born before 1901, in accordance to this rule, are classified as pensioners.

Life cycle phase

This classification is based on whether the respondent has children living at home or not, marital status and the household composition in general.

Unmarried persons living in parents household includes unmarried persons living with at least one of their parents and who do not themselves have children living at home under 16 years of age.

Other unmarried persons includes all unmarried persons not living with at least one of their parents and who do not themselves have children under 16 years of age living at home.

Married persons without children includes all married persons who do not have children, irregardless of age, living at home. This group is some times further classified according to the respondent's age.

Single persons with children under 16 years of age includes unmarried and previously married persons with children under 16 years of age living at home.

Previously married persons are those previously married persons who do not have children under 16 years of age living at home.

## SECTION II. INTERPRETING TIME USED ON HOUSEHOLD WORK AND FAMILY CARE

In this section certain key questions involved in interpreting time use will be briefly discussed. How much work is there to be done? How much of it will the household itself do and who in the household will do it? How shall one interpret observed time differences?

1. The perceived work load

In every household there is a certain amount of household work and family care to be done. Both objective and subjective factors play a role in defining this work load. Under objective conditions it is reasonable to consider the size and age composition of the household, the size and standard of the dwelling and the availability of goods and services. The household's preferences and the prevailing cultural norms in terms of what constitutes acceptable standards will effect the way it perceives the work load imposed by the family and housing situation. The preparation of food for a given number of persons can be accepted, for example, as a necessity. The household's preferences with regard to the types of meals to be served can, however, mean the difference between simple and complicated meal preparation. The amount of work involved in washing windows may be a function of the number and type of windows in the dwelling and possibly the area in which one lives. The household's preferences will, however, to a very large extent, determine how often these windows are washed.

2. Division of labour between the household and the society at large

The amount of household work and family care thus perceived as needed is divided between the household unit and the society at large. The responsibility for a number of services previously performed by the household unit can now be shared by societal institutions - day care centers being one highly debated example of this. Many goods necessary for household maintenance can be purchased ready-made rather than produced by the household itself from raw materials. Clothing and to an ever increasing degree food are examples of this.

When a person has more things he or she wants or has to do than hours to do them in, time becomes a scarce and valuable resource. If a person or household collectively decides that they are using too much time on household work and family care relative to alternative expenditures of time they have a number of possibilities for reducing their time input.

One option is to substitute home produced goods and services with comparable goods and services produced outside the home. This substitution generally represents greater financial outlays for the household but also a reduction in the amount of time household members spend on household work and family care. The extent to which functions will be transferred to out-of-home production will depend on the price differences between the alternative means of production and the value of the time saved.

Another option for reducing the time spent on household work and family care, while maintaining the same standard, is to increase the efficiency of the work performed. Investing in time saving appliances, better organizations of tasks and increased work tempo can increase production per unit of time.

A third option involves a lowering of standards. Holding the reliance on goods and services produced outside the home constant, the household can simply decide to produce less. They can decide, for example, that the floors do not really need to be washed quite so often.

If time is not considered a scarce resource in relation to money the household may decide to spend more time on money-saving activities. By substituting goods and services produced outside the home with home production they can reduce their level of expenditures. The economic return per hour on money saving home production is often very low. Those engaging in home production in order to save money will then be primarily persons with limited opportunities for investing this time in income producing work.

### 3. Division of labour within the household

The household work and family care functions undertaken by the household must be divided amongst the household members. It can be assumed that an individual's physical and mental ability to undertake work responsibility will be a factor in this division. A child's stage of development will, for example, be important in determining what responsibilities lie within its range of ability. Health may exclude some persons from sharing in the household work.

The utility derived from alternative uses of time for each individual will also effect the way a household allocates responsibility for household work and family care. The traditional pattern whereby the man, with his higher expected earning capacity, takes income producing work outside the home while the woman does the non-paid and time consuming work in the home exemplifies for many the economically most rational way to divide the labour within the household. Decreasing the differences in the income earning potentials of men and women weakens this economic rationalization.

### 4. Explaining time use differences

The amount of time used on household work and family care does not have a direct relation to objective needs or, given the level of objective needs, to the household's well-being. People will differ in how they perceive and are able to realize objective needs and in the degree to which they rely on the production of goods and services outside the home. Households will also differ as to how they divide the household work and family care responsibilities among their members.

The fact that a working mother may spend less time sewing and repairing clothes than a housewife with a comparable sized family does not necessarily imply that the working woman's family is less well dressed. One might rather advance the hypotheses that the working woman's family makes greater use of ready made clothes and purchases new clothes more often thus reducing the time necessary for maintenance. Perhaps other members in the household use correspondingly more time on these tasks. The employed woman will also because of a relative shortage of time be more motivated to rationalize her work effort in order to obtain maximum effectiveness.

Differences in observed time use can then be expressions of the following factors or any combination of them.

1. Differences in objective work load
2. Differences in the amount of in home production of goods and services
3. Differences in the division of labour within the household
4. Differences in standards of performed work
5. Differences in work efficiency

This report deals primarily with average times used by groups of people. Group characteristics determine which of these explanatory factors may be most relevant. Some of these factors are assumed to be more applicable to group level analysis than others. It is, for example, relatively easy to imagine that the objective work load varies from one identifiable group of persons to another. Work efficiency and standard vary certainly from one person to another. It is, however, more difficult to formulate hypotheses about how these factors vary on the group level.

### 5. Household work and family care is work

As discussed in section I the activities listed under household work and family care can be experienced differently by different persons, at different times. Sometimes the activities might be considered highly rewarding and at other times pure drudgery. In this, household work and family care is not considered to be significantly different from income producing work. Both have pleasant and non-pleasant sides. The time spent on household work and family care will be regarded as a work obligation of equal standing with income producing work.

## SECTION III. THE EFFECTS OF FAMILY AND EMPLOYMENT SITUATIONS ETC. ON TIME SPENT ON HOUSEHOLD WORK AND FAMILY CARE

1. Indicators of objective work load

By way of introduction to this section three indicators of objective work demands will be investigated: household size, number and age of children, and dwelling size.

Household size

The amount of household work and family care to be done is expected to increase with household size. Some economies of scale are expected so that the total time used by a household with 4 members will be less than the time used by four single-person households.

The added responsibilities attendant with larger households are not likely to fall evenly on the shoulders of all the household members. There is a close correlation between household size and the number of children in the household (children under 15 years of age are not included in the Time Budget Survey). Also as shown in the introduction there are large differences in the amount of time spent on household work and family care by men and women. Table 6 shows how the average time used varies with household size for persons with different positions in the household.

Table 6. Persons in groups for household size and position in the household by time spent on household work and family care. Average for all days. Hours<sup>1)</sup>

	Household size (persons)						Total
	1	2	3	4	5	6 or more	
Single persons not living in parents' household .....	3.7 (232)	3.3 (73)	2.5 (33)	:	:	:	3.5 (344)
Married men .....	-	2.3 (281)	2.1 (227)	2.4 (283)	2.3 (166)	2.4 (94)	2.3 (1 051)
Married women .....	-	5.1 (319)	6.2 (252)	7.0 (299)	7.2 (174)	7.9 (109)	6.4 (1 153)
Unmarried persons living in parents' household .....	-	:	1.6 (108)	1.4 (104)	1.8 (56)	1.6 (71)	1.6 (354)
All persons .....	3.7 (232)	3.8 (723)	3.7 (648)	4.3 (712)	4.4 (415)	4.5 (298)	4.0 (3 040)

1) Number of respondents is in parenthesis.

A married woman living alone with her husband uses on the average 5.1 hours per day on household work and family care. With a third person in the household her time use increases by 1.1 hour per day. The increase associated with the fourth, and fifth members is respectively 0.8 and 0.2 hours per day. In households with children the time spent by others than the housewife is not effected by size of the household. The figures suggest that larger households represent a time savings for single persons.

Age and number of children

Both the number of children in the household and their age is expected to have an effect on the amount of time the parents use on household work and family care. In general the time spent is expected to increase with the number of children and to be greatest when the children are young.

Table 7. Married couples<sup>1)</sup> with children in groups for the age of youngest child and the number of children in the household by time spent on household work and family care. Average for all days. Hours<sup>2)</sup>

Number of children	Age of youngest child				All age groups
	0-2 years	3-6 years	7 years and over		
1 child .....	8.6 (108)	7.6 (62)	8.2 (322)	8.2	(492)
2 children .....	11.0 (126)	9.2 (49)	9.0 (409)	9.4	(584)
3 or more children .....	12.2 (43)	9.2 (48)	9.6 (407)	9.8	(498)
All married couples with children ..	10.2 (277)	8.6 (159)	9.0 (1 138)	9.2	(1 574)

1) Figures for married couples are a sum of average time used by married men and by married women in the different types of families. Husband and wife in the same family have not been interviewed. 2) Number of respondents is in parenthesis.

In households with one child the time spent by the parents on household work and family care is little effected by the child's age. Married couples with one child under 3 years of age use on the average 24 minutes per day more than those with one child, 7 years of age and older. In households with children under 3 years of age the effect of how many children there are is strongest. This is probably due to a tendency to space births relatively closely. These households are thus likely to have several small children, thereby compounding the household size effect with an age effect.

Table 8 shows how time spent on selected housework activities by married women increases with the number of children in the household. The time used by married men on these tasks is not corelated with the number of children in the family. (See the NOS A 692 Time Budget Survey 1971-72 Vol. I)

Table 8. Married women in groups for the number of children in the household by time spent on selected types of housework. Average for all days. Hours

	No children	1 child	2 children	3 children	4 or more children	All married women
Preparation of food, setting the table, serving .....	1.5	1.6	1.7	1.8	2.0	1.7
Dish washing, cleaning the table .	0.8	0.9	0.9	0.9	1.0	0.9
House cleaning .....	1.0	1.0	1.2	1.2	1.3	1.1
Washing and ironing .....	0.4	0.5	0.7	0.7	0.8	0.5
Mending clothes .....	0.3	0.4	0.5	0.5	0.6	0.4
Total .....	4.0	4.4	5.0	5.1	5.7	4.6
Number of respondents .....	345	260	298	166	96	1 165

Married women without children spent 4 hours per day on these tasks. With one child in the household this time increases by 24 minutes per day, with a second child the time spent increases by another 36 minutes per day. There is little difference in time spent by married women with 2 and with 3 children. Of the activities listed, preparation of food, washing and ironing show the greatest variation with the number of children in the household.

There is surprizingly little difference in time spent on housecleaning. This suggests that others, possibly the children themselves, help out.

#### Dwelling size

Various aspects of the housing situation can logically be expected to influence the time spent on household work and family care. Dwelling size is one rather central aspect. One might expect time spent on housecleaning and dwelling maintenance to be positively correlated with dwelling size. There is, of course, a correlation between dwelling and household size. Eventual effects of the former will then best be seen if household size is controlled for.

Table 9. Married couples<sup>1)</sup> in groups for number of rooms in the dwelling and household size by time spent on house cleaning and dwelling maintenance. Average for all days. Hours<sup>2)</sup>

	Number of rooms			Total
	1-3	4-5	6 or more	
Household size				
2 persons .....	1.3 (296)	1.3 (232)	1.4 (71)	1.3 (601)
3 " .....	1.5 (186)	1.4 (229)	1.6 (62)	1.5 (479)
4 " .....	1.6 (179)	1.6 (337)	1.7 (84)	1.6 (582)
5 " .....	1.3 (50)	1.5 (224)	1.4 (67)	1.5 (341)
6 or more persons ....	1.8 (26)	2.0 (105)	2.0 (80)	1.9 (211)
All married couples ..	1.4(1 069)	1.5(1 677)	1.6(522)	1.5(2 221)

1) Figures for married couples are a sum of average time used by married men and by married women in the different types of families.

2) Number of respondents is in parenthesis.

Table 9 shows that time spent on these tasks is little effected by dwelling size. There are perhaps other aspects of the dwelling which have greater significance for time spent on cleaning and maintenance such as, for example, the general condition of the dwelling, type of floor surface, windows, etc. We however lack data on these conditions. Variations in dwelling standards may have more influence on how strenuous the work load is than on how much time is used.

With a background in these work load indicators we now turn to differences in men's and women's time use at different phases in the life cycle.

## 2. Time use in different types of families

The variable "life cycle phase" is intended as a rough indicator of common stages in family development. It begins with unmarried persons who live in their parents' household. This groups is strongly dominated by adolescents and young adults who have not yet established their own household. Most of these persons will eventually marry. Some will move away from their parents' home before they marry. Others will establish their own households but never marry. The group "Other unmarried persons" is therefore a strongly mixed groups of persons in all age groups. Most married persons become parents, often relatively few years after marriage. The groups of younger married persons without children is therefore small. While the children are living at home, the parents are classified by the age of the youngest child. The group of older married persons with children is dominated by married persons with adult children who have left home. The group "previously married" includes divorced and widowed persons but is numerically dominated by elderly widows. The category of single persons with children includes, in a sense, variations on the common development pattern. This group includes all unmarried and previously married persons with children under 16 years of age. The group is too small for further division by the children's age.

The time spent on household work and family care is the lowest for unmarried persons living in their parents' household. Almost twice as much time is used by married persons not living with their parents. Marriage, prior to child rearing, represents a savings of time spent on household work and family care, in relation to the time spent by two unmarried persons. Married women with children under 7 years of age spend the most time on household work and family care, 3.8 hours per day more than younger married women without children. After this stage, the average time spent decreases but not to level of unmarried or young married persons.

Table 10. Persons in groups for sex and life cycle phase by time spent on household work and family care. Average for all days<sup>1</sup>). Hours

	Men	Women
Unmarried persons living in parents' household .....	1.3 (219)	2.1 (138)
Other unmarried persons .....	2.3 (129)	4.0 (108)
Married persons under 45 years of age, without children living at home .....	2.0 (49)	3.7 (68)
Married persons with youngest child under 7 years of age .....	2.2 (205)	7.5 (231)
Married persons with youngest child 7 years of age or older .....	2.3 (547)	6.7 (591)
Single persons with children under 16 years of age .....	1.9 (21)	5.7 (83)
Married persons 45 years of age and over, without children living at home .....	2.3 (254)	5.6 (276)
Previously married persons .....	2.2 (36)	5.2 (82)
All persons .....	2.1 (1 463)	6.6 (1 577)

1) Number of respondents is in paranthesis.

Table 10 raises some interesting questions not easily answered by reference to objective differences in the amount of household work and family care associated with different family situations. Why do, for example, unmarried women use significantly less time on household work and family care than do previously married women? Why do younger married women without children use less time than older married women without children? Later in this section employment status will be used to help explain these differences.

The life cycle phase appears to play very little role in how much time men spend on household work and family care. An exception to this is the average time spent by unmarried men living in their parents' household. The life cycle phase appears to have, on the other hand, a very significant effect on how much time women spend on household work and family care.

The differences in time used by men and women are striking. Such differences were expected for married men and women and, to some degree, for male and female children living in their parents' home. A perhaps more unexpected finding is the large difference in average time use between single men and women. It also surprising how little men's average time use is effected by life cycle phase - particularly in the face of such large variation in the average time used by women. Diagram 3 shows how much time men use in the different life cycle phases relative to that women use. Hundred per cent would mean that the men use equally as much time as the women do.

The amount of time men use relative to that which women use is least in households with children. When the youngest child is under 7 years of age, men use only 29 per cent as much time on household work and family care as women. Younger married couples without children display a more equalitarian division of household work and family care than older married couples without children. Younger married men use 54 per cent as much time as the women do, older married men 41 per cent.

#### How is this time used?

Table 11 shows how much time is used on the various activities which make up household work and family care.

Diagram 3. Time spent on household work and family care by men in per cent of time spent by women in similar life cycle phases. Average for all days

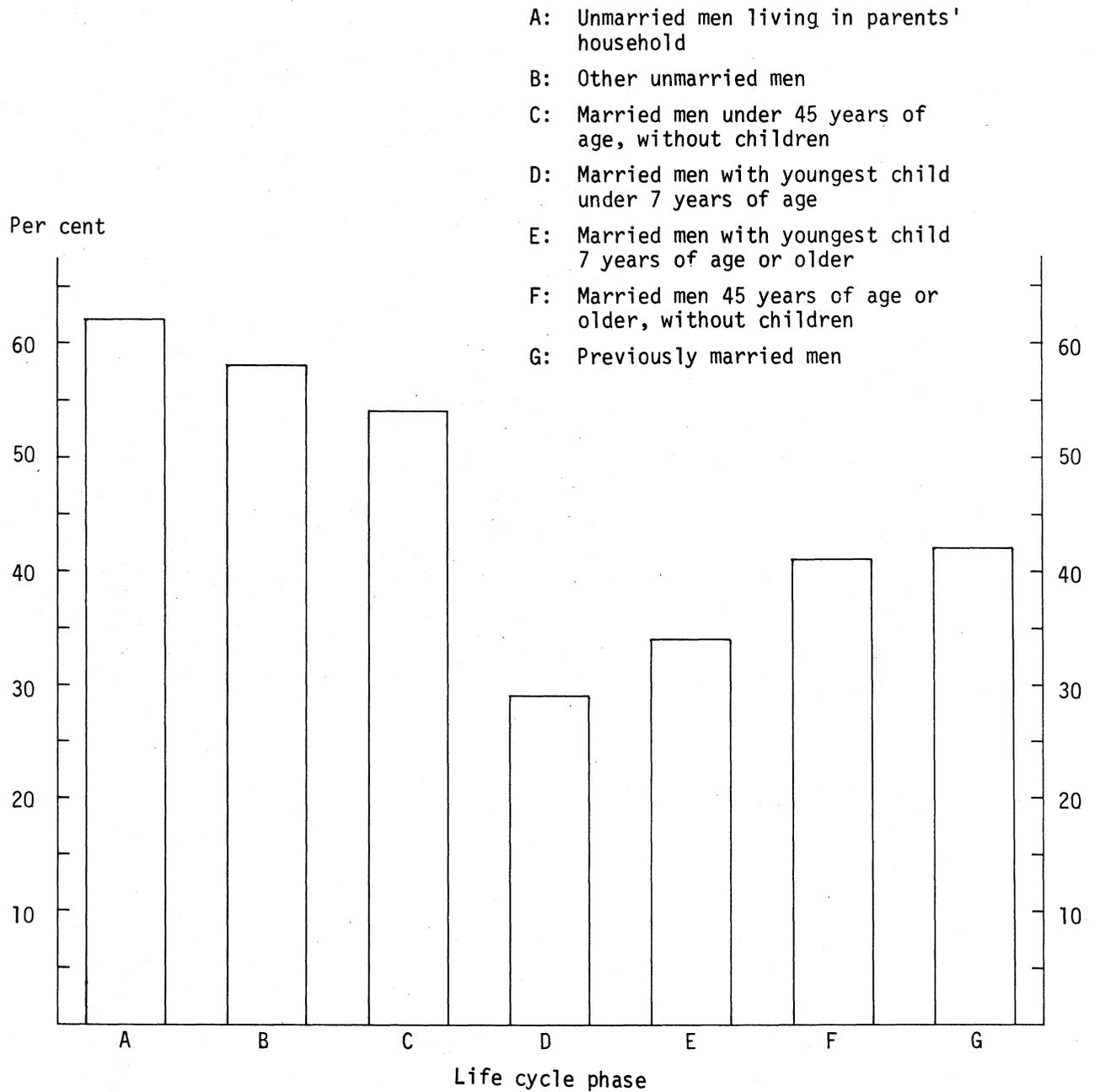


Table 11. Persons in groups for sex and life cycle phase by time spent on different types of household work and family care. Average for all days. Hours

	House- work	Main- ten- ance	Work with child- ren	Purchase of goods and services	Other household work and family care	Travel in connection to house- hold work and family care	Total	Number of respon- dents
Unmarried persons living in parents' household								
men .....	0.3	0.4	0.0	0.2	0.2	0.2	1.3	219
women .....	1.3	0.1	0.0	0.3	0.2	0.2	2.1	138
Other unmarried persons								
men .....	1.0	0.5	0.0	0.2	0.3	0.2	2.2	129
women .....	2.8	0.2	0.0	0.5	0.3	0.2	4.0	108
Married persons under 45 years of age, without children living at home								
men .....	0.5	0.9	0.0	0.2	0.2	0.2	2.0	49
women .....	3.0	0.1	0.0	0.3	0.1	0.2	3.7	68
Married persons with youngest child 0-2 years of age								
men .....	0.6	0.7	0.3	0.3	0.3	0.2	2.4	133
women .....	4.7	0.1	2.1	0.4	0.3	0.3	7.9	144
Married persons with youngest child 3-6 years of age								
men .....	0.4	0.6	0.1	0.2	0.3	0.2	1.8	72
women .....	4.9	0.1	1.0	0.4	0.1	0.2	6.7	87
Married persons with youngest child 7 years of age or older								
men .....	0.6	0.8	0.1	0.3	0.3	0.2	2.3	547
women .....	5.1	0.2	0.5	0.4	0.2	0.3	6.7	591
Single persons with children under 16 years of age								
men .....	:	:	:	:	:	:	:	21
women .....	3.9	0.3	0.4	0.4	0.4	0.3	5.7	83
Married person 45 years of age and over, without children living at home								
men .....	0.8	0.7	0.0	0.3	0.3	0.2	2.3	254
women .....	4.5	0.3	0.0	0.3	0.3	0.2	5.6	276
Previously married persons								
men .....	0.8	0.4	0.1	0.5	0.2	0.2	2.2	36
women .....	3.9	0.3	0.1	0.4	0.2	0.3	5.2	82
All men .....	0.6	0.7	0.1	0.2	0.3	0.2	2.1	1 463
All women .....	4.3	0.2	0.4	0.4	0.3	0.2	6.6	1 577
All persons .....	2.5	0.4	0.3	0.3	0.3	0.2	4.0	3 040

Housework

Housework dominates the total time spent on household work and family care. Younger married couples without children use considerably less time on housework than older married couples without children. Large differences in the amount of time spent on housework are also observed for single men and women not living in their parents' household. Single men get by with much less housework than do single women. A possible explanation for this is presented in table 12.

Table 12. Single persons<sup>1)</sup> in groups for sex and life cycle phase by number of persons in the household. Percentages

	Live alone	Live with others	Total	Number of respondents
Unmarried men .....	42	58	100	129
Unmarried women .....	73	27	100	108
Previously married men .....	69	31	100	36
Previously married women .....	88	12	100	82

1) Includes persons not living in parents' household and who do not have children under 16 years of age.

Single men to a larger degree than single women live together with other persons and are thus able to benefit from economies of scale with regard to housework and possibly from traditional division of labour patterns. Controlling for household size reduces but by no means eliminates the differences between single men and women.

An other possible explanation is that single men rely more on goods and services produced outside the home than single women do. Table 13 suggests that this is the case.

Table 13. Percentage of single men and women living alone who eat dinner out regularly and who send out their laundry<sup>1)</sup>

	Eat dinner out	Send out their laundry	Number of respondents
Men .....	20	46	189
Women .....	5	12	355

1) Source: Survey of Housing Conditions 1973 Central Bureau of Statistics unpublished data.

Single men may also be willing to accept somewhat lower and therefore less time demanding standards with regard to housework tasks.

#### Work with children

Work with children is shown in table 12 for all households with children but decreases sharply as the children grow older. This is in part a definitional question. Due to the nature of the work itself infant and toddler care is assumed to be better covered in the time diaries than work with older children. Infant care requires blocks of time which are easily registered by the time diary. Work with older children is likely to be more fragmented and occur in rapid succession or simultaneously with other activities within a time period. Much of the additional work load resulting from children, especially older ones, is better reflected in added time spent on housework, especially on food preparation, clothes washing and mending and house cleaning.

As mentioned in section I time spent on activities with children as one's primary activity is classified as either as a type of work or as a type of leisure. Table 14 shows the total time spent on activities with children.

Table 14. Married men and women in groups for age of the youngest child by time spent on activities with children<sup>1)</sup>. Average for all days. Hours<sup>2)</sup>

	Age of youngest child (years)			All age groups
	0-2	3-6	7 and over	
Men .....	0.6(133)	0.4(72)	0.2(547)	0.3(752)
Women .....	2.5(144)	1.4(87)	0.7(591)	1.1(822)

1) Includes work with children, play reading aloud, conversation and other socializing with children. Conversation with children and adults are coded as conversations in general and not included here. 2) Number of respondents is in paranthesis.

Married men with children under 3 years of age use on the average 36 minutes per day on activities with children, half of this going to play, reading aloud and other socializing. Married women with children under 3 years of age use on the average 2 1/2 hours per day of which 24 minutes goes to play, reading aloud etc. Married men with youngest child 7 years of age and older use on the average 6 minutes per day on work with children and 6 minutes on play, conversation and socializing with children. The corresponding figures for married women are 30 minutes on work with children, 12 minutes on play, conversation and socializing.

#### Purchase of goods and services and travel

Purchase of goods and service takes on the average 18 minutes a day. There is very little variation between the different types of families in time spent on this activity. Similarly the time spent on travel in connection to household work and family care and other forms for household work and family care shows little variation.

#### Time spent away from home

As discussed in section I the data on family care derived from the time budget survey is insufficient to measure the structuring effect of family care - especially child care - on the use of time. The amount of time spent away from home can be used however as an indication of this aspect of family care.

Persons in all life cycle phases spend most of their time at home. Part of this time is mandatory in the sense that it is the consequence of certain work obligations or personal needs which must be fulfilled at home. Other time at home is more or less the result of free choice. Interest in different types of leisure activities is expected to vary with age. The preference for home oriented leisure activities is expected to be higher among older than among younger persons. To control for possible age effects only persons under 45 years of age are included in table 15.

Care of children is an important source of mandatory time at home. The responsibility for small children implies continuous supervision of the children by at least one adult not the least when the children are asleep. Traditionally this has meant that the mother stays home with the children in the day time and that both parents stay at home in the evenings. Alternative child care arrangements are in the minority. Only 27 per cent of mothers with children under 7 years of age reported that the children were cared for by someone other than she or her spouse during some part of the day time.

Table 15. Persons under 45 years of age in groups for sex and life cycle phase by time spent away from home. Average for all days. Hours<sup>1)</sup>

	Men	Women
Unmarried persons living in parents' household .....	10.8(215)	9.0(134)
Other unmarried persons .....	9.9( 63)	10.2( 40)
Married persons without children living at home .....	10.8( 49)	8.3( 68)
Married persons with youngest child under 7 years of age .....	9.8(199)	4.1(229)
Married persons with youngest child 7 years of age or older .....	9.7(262)	4.4(354)
Single persons with children under 16 years of age .....	:	6.2( 43)

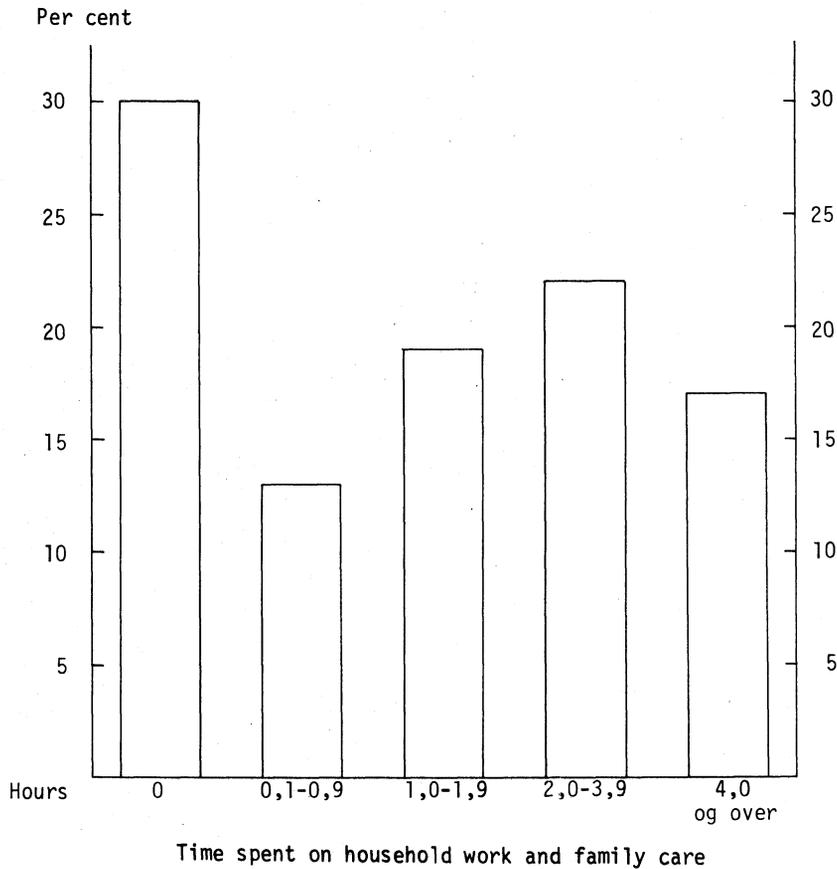
1) Number of respondents is in parenthesis.

Parents, and particularly the mother, spend more time in the dwelling than persons without children and that time is related to the age of the children. Mothers of children under 7 years of age spend on the average 4.1 hours per day away from home, mothers with older children spend somewhat more time. In contrast, married women without children spend on the average 8.3 hours per day away from the home. Married men with children spend more time at home than those without. The differences, while not as large as for women, are still significant. Married men with children under 7 years of age spend one hour more per day at home than married men without children.

Variation behind the averages

Thus far only data on average times has been presented. The average time men use on household work and family care has been shown to be little effected by life cycle phase or household size. One must not, however, draw the conclusion that all men participate equally often and equally long. As shown in diagram 4 there is considerable variation behind these stable averages. The figures are for week days. Weekly activity patterns are treated in detail in section IV.

Diagram 4. Percentage of men who use different amounts of time on household work and family care on week days



On weekdays men spend on the average 2 hours per day on household work and family care but a third of the men have not done any such work while 17 per cent have used 4 hours or more. More than 60 per cent of men used less time than the calculated average of 2 hours per day.

The average time women use on household work and family care has been shown to vary with life cycle phase. Table 16 shows the variation in time use behind these average figures.

Table 16. Women in groups for life cycle phase by time spent on household work and family care on weekdays. Percentages

	Time (hours)					Total	Number of respondents
	Under 3	3.0-4.9	5.0-6.9	7.0-8.9	9.0 and over		
Unmarried women living in parents' household .....	72	16	7	3	2	100	138
Other unmarried women .....	44	22	15	10	9	100	108
Married women without children living at home .....	21	20	27	22	10	100	344
Married women with youngest child under 7 years of age ....	4	14	17	28	37	100	231
Married women with youngest child 7 years of age or older .	8	15	18	26	33	100	591
Single women with children under 16 years of age .....	15	24	19	19	23	100	83
Previously married women .....	15	22	34	19	10	100	82
All women .....	19	17	20	21	23	100	1 577

Some groups of women exhibit greater variation in time use than others. 72 per cent of the unmarried women in their parents' household use less than 3 hours per day on weekdays. Married women without children, single women with children and previously married women show large variation in the number of hours used on household work and family care. Of the previously married women 15 per cent spend under 3 hours per day while 10 per cent use more than 3 times so much time.

### 3. Employment status and time use

Some of the observed life cycle differences can not be readily attributed to objective differences in the work load attendant family composition. The relative balance between in home and out of home production of goods and services is an alternative explanation. This balance is effected by the value one places on alternative uses of one's time and it is in this light we turn to a discussion of the role of employment status.

Income producing work and household work and family care are competing uses of time for the individual. It is hardly surprising therefore that there are significant differences in the amount of time spent on household work and family care by employed and non-employed persons. The differences are particularly large for women.

Table 17. Persons in groups for employment status<sup>1)</sup> and sex by time spent on household work and family care. Average for all days. Hours<sup>2)</sup>

	Employed	Non-employed
Men .....	2.0(1 125)	2.6( 338)
Women .....	4.3( 556)	6.6(1 021)

1) Persons with 15 hours or more per week in income producing work are classified as employed.

2) Number of respondents is in parenthesis.

Employment frequency

The decision to undertake gainful employment outside the home will, in itself, incorporate an evaluation of the resulting work load. Severe time press, in terms of large time commitments to both income producing work and to household work and family care, is then expected to occur seldom, primarily among persons who for a variety of reasons have little choice in how they will allocate their time.

Married women's employment frequency is especially influenced by the amount of household work and family care to be done. Table 18 shows that the propensity of married women to take gainful employment outside the home varies with an indicator of their objective work load - the age and number of children in the household.

Table 18. Employment frequencies<sup>1)</sup> for married women in groups for the number of children and the age of the youngest child. Percentages<sup>2)</sup>

	No children	Age of youngest child			Total
		0-2 years	3-6 years	7 years and over	
Number of children					
None .....	37 (344)	-	-	-	37 (344)
1 child .....	-	32 (56)	26 (31)	43 (174)	38 (261)
2 children .....	-	9 (59)	13 (31)	35 (209)	28 (299)
3 or more children .....	-	16 (29)	32 (25)	36 (198)	25 (262)
All married women .....		19 (144)	21 (87)	34 (591)	32(1 166)

1) See note to table 17. 2) Number of respondents is in parenthesis.

Employment frequencies are negatively correlated with the number of children and positively correlated with the age of the youngest child.

The propensity for women to take gainful employment also varies with age. Older women have often spent many years at home caring for their children and have thus lost contact with the employment market. Despite reductions in their work load caused by the children maturing and leaving home, they relatively seldom see income producing employment. Table 19 shows how employment frequencies for women vary after age and marital status. In this table another definition of employment status is used. Here persons are considered employed if they reported income producing work as their principle or secondary occupation. No particular number of hours per week has been used as a cut off point.

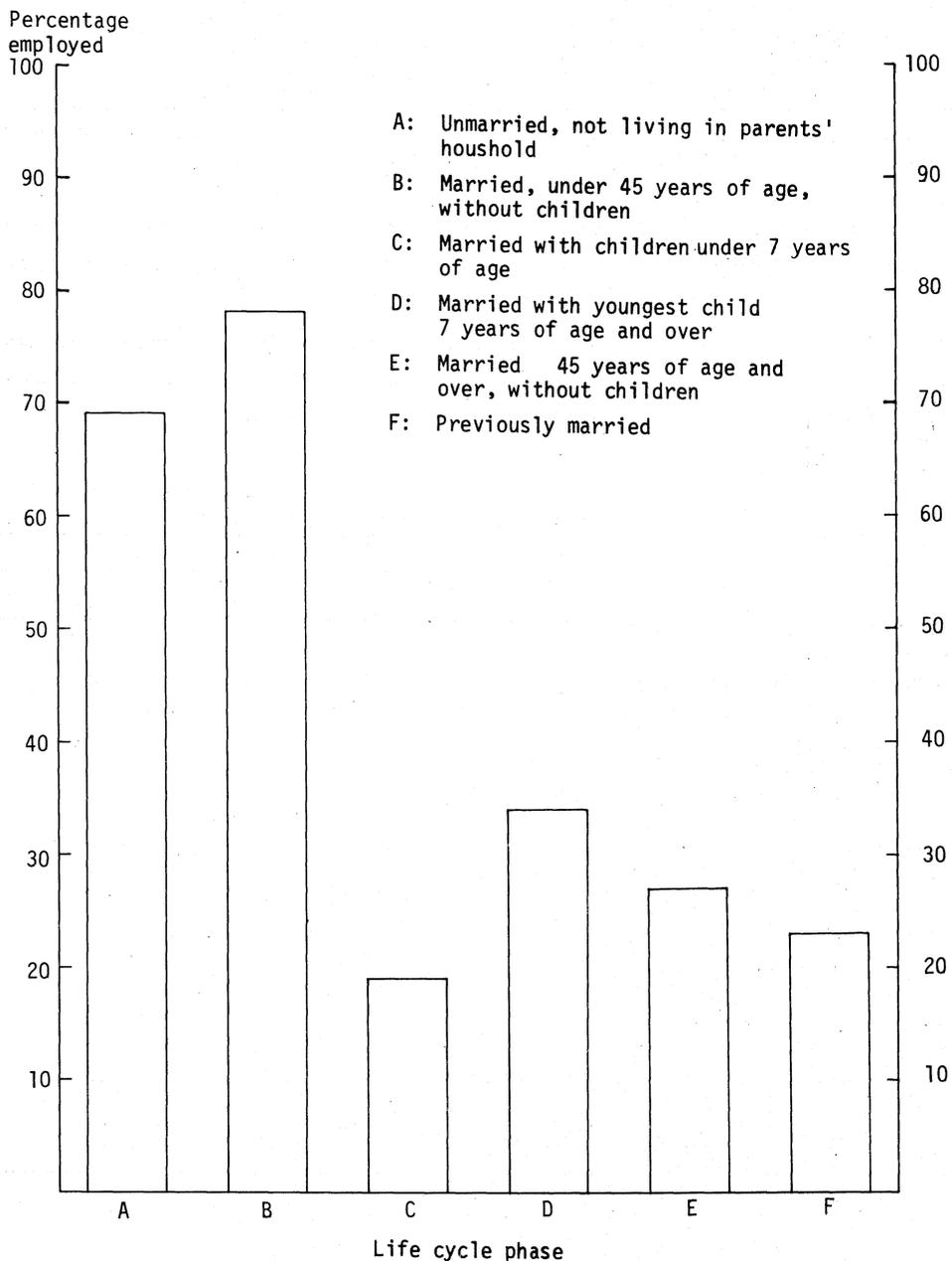
Table 19. Employments frequencies for women in groups for marital status and age. Percentages<sup>1)</sup>

	Unmarried	Married	Previously married	All women
Age				
15 - 19 years .....	44.3	18.3	48.2	43.0
20 - 24 " .....	77.2	21.7	59.7	49.7
25 - 29 " .....	80.6	16.6	66.7	28.9
30 - 39 " .....	76.6	15.6	68.5	24.0
40 - 49 " .....	74.8	18.4	72.1	28.0
50 - 59 " .....	71.8	16.3	62.6	31.5
60 - 64 " .....	60.7	9.0	41.8	26.3
65 - 69 " .....	43.4	3.9	24.2	18.1
70 years and over .....	8.6	0.8	4.2	4.2
Total .....	56.7	15.2	30.9	27.9

1) Source: Unpublished table Census of the population 1960.

If we only considered employed persons with 15 hours or more per week in income producing work, we get the following employment frequencies for women in different life cycle phases.

Diagram 5. Employment frequencies for women in different life cycle phases. Percentages



We have earlier seen large differences in time use between younger and older married women without children and in diagram 5 we see large differences in employment frequency for the same groups. Younger married women without children have comparably high employment frequency and use little time on household work and family care. Older married women without children have low employment frequency and use relatively much time on household work and family care.

One could advance the hypothesis that the younger women make greater use of outside help with household work than the older women do. Table 20 however suggests that this is not the case.

Table 20. Younger and older married couples<sup>1)</sup> without children by whether they have received help with household work in the month prior to interviewing. Percentages<sup>2)</sup>

	Have received help	Have not received help	Unknown	Total	Number of respondents
Married couples, under 45 years of age, without children .....	3	93	4	100	116
Married couples, 45 years of age and over, without children .....	13	83	4	100	529

1) Married couples are classified by age of main income earner. 2) Source: Survey of Housing Conditions 1973 NOS A 673 Central Bureau of Statistics 1974

Providing that they are no significant differences in work efficiency between the two groups, the extra time spent by older women should result in higher work standards, for example a cleaner house etc. Unfortunately data on work efficiency is lacking.

Table 21 shows how time spent on household work and family care varies with employment status and life cycle phase. Controlling for employment status reduces the differences between persons in different life cycle phases but does not eliminate them.

Table 21. Persons in groups for sex, employment status and life cycle phases by time spent on household work and family care. Average for all days. Hours<sup>1)</sup>

	Men			Women		
	Employed	Non-employed	All men	Employed	Non-employed	All women
Unmarried persons not living in parents' household.	1.9 (106)	3.7 (23)	2.3 (129)	3.6 (74)	5.0 (34)	4.0 (108)
Married persons under 45 years of age, without children .....	2.0 (44)	:	2.0 (49)	3.3 (53)	:	3.7 (68)
Married persons with children under 7 years of age	2.2 (195)	:	2.2 (205)	5.6 (45)	7.9 (186)	7.5 (231)
Married persons with youngest child 7 years of age or older	2.3 (509)	3.4 (38)	2.3 (547)	5.2 (203)	7.5 (388)	6.7 (591)
Married persons 45 years of age and over, without children .....	1.9 (174)	3.3 (80)	2.3 (254)	4.6 (75)	6.0 (201)	5.6 (276)
Previously married persons ..	:	:	2.2 (36)	:	5.5 (63)	5.2 (82)

1) Number of respondents is in parenthesis.

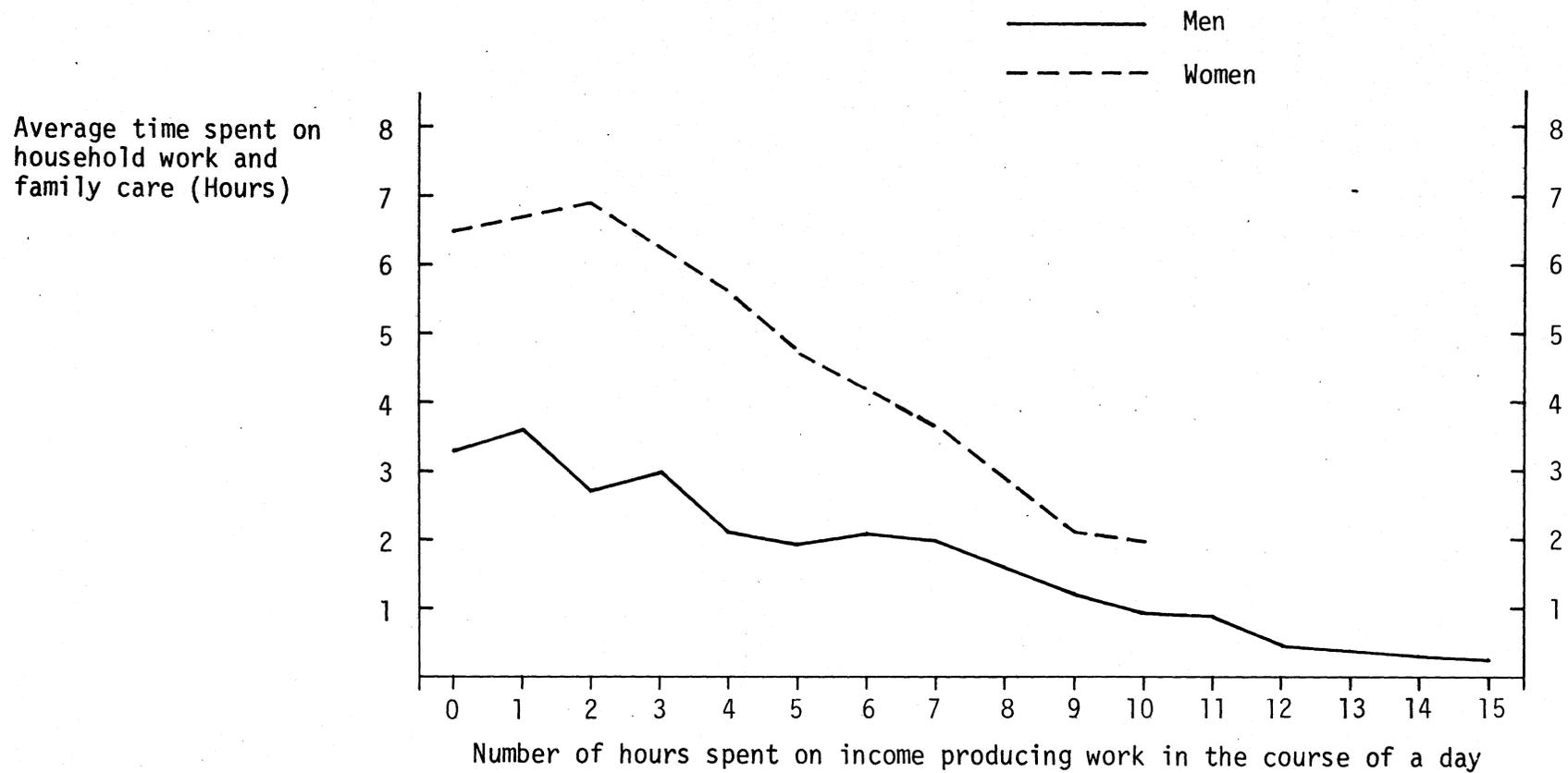
#### Hours of paid work

Diagram 6 shows that the average time devoted to household work and family care is negatively correlated for both men and women with the number of hours spent in income producing work in the course of the day. The relationship is however stronger for women.

More over women, with any given number of hours of income producing work, use more time on household work and family care than do men with the same amount of paid work. Women, for example, with 5 hours per day of income producing work use on the average 4.7 hours on household work and family care. The corresponding figure for men is 1.9 hours. Women with 8 hours of income producing work use on the average 2.9 hours on household work and family care, men 1.6 hours.

Employed women are in general, however, employed for fewer hours per day than employed men are. On weekdays employed women spend on the average 5.7 hours in income producing work while employed men spend on the average 8.1 hours.

Diagram 6. Relationship between time spent on income producing work and on household work and family care. Average for all days



#### 4. Income, household equipment and househelp

##### Income

The ability to substitute out of home for in home production of goods and services can, to a certain extent, be expected to vary with income. Families with high incomes have greater possibilities than those with low incomes for shifting the burdens of household work and family care from the family to commercially available goods and services. They can effectively buy time free from these obligations.

The value of a unit of time in terms of potential earning capacity increases with income. In the higher income brackets the expected return on an investment of time will be higher in specialized income producing activities than in generalized household work and family care. In families where both spouses have high earning capacity it will "pay" to transfer time intensive household work and family care to other (lower paid) persons, it will "pay" to have a housekeeper etc. so that both spouses can devote their time to income producing activities. The household might also invest in "time saving appliances" for the home such as a dishwasher, automatic washing machine etc. in hopes that a more capital intensive work process would be more effective. One might expect, then, that time spent on household work and family care would decrease with rising income.

Consumption in general, however, is expected to increase with rising income as the individual tries to increase the rewards derived from time spent on different purposes. As so eloquently argued by Staffan Linder in The Married Leisure Class, the consumption of goods and services itself takes time. Goods and services must be planned for, purchased, maintained and even discarded after use - all of which takes time. As the sheer quantity of goods we possess increases, the total time spent managing and maintaining them will increase.

Table 22 tends to support the latter hypothesis. Time spent on household work and family care tends to increase with income. It should be noted that the available income data is for the principal income earner and not for the household as a whole.

Table 22. Married couples<sup>1)</sup> in groups for income of main income earner, household size and employment situation by time spent on household work and family care. Average for all days. Hours<sup>2)</sup>

	Kroner				Unknown	All income groups
	Under 15 000	15 000-29 000	30 000-44 000	45 000 and over		
<u>Husband employed, wife not</u>						
<u>Household size</u>						
2-3 persons .....	8.5 (152)	8.5 (226)	8.4 (202)	8.9 (68)	7.5 (50)	8.5 (698)
4 persons .....	10.0 (29)	10.2 (122)	10.0 (164)	9.4 (74)	9.6 (29)	10.0 (418)
5 or more persons .....	10.1 (36)	10.4 (126)	10.1 (154)	11.3 (80)	10.0 (26)	10.4 (422)
All married couples where husband is employed, wife not.	9.4 (218)	9.6 (475)	9.4 (522)	9.8 (223)	8.9 (106)	9.5 (1 544)
<u>Both husband and wife employed</u>						
<u>Household size</u>						
2-3 persons .....	6.0 (23)	5.5 (111)	6.5 (137)	6.7 (43)	:	6.2 (321)
4 persons .....	:	7.8 (52)	7.8 (68)	8.5 (22)	:	8.0 (152)
5 or more persons .....	:	7.8 (38)	8.2 (50)	:	:	8.2 (116)
All married couples where both husband and wife are employed.	7.2 (32)	6.5 (202)	7.2 (255)	7.5 (80)	:	7.1 (590)

1) Figures for married couples are a sum of average time for married men and married women in the different groups. 2) Number of respondents is in parenthesis.

Household equipment

The expected return on household machinery will vary by the amount of time saved by its use and by the value of that time. Acquisition will be a function of the "need" for household appliances as defined above and the financial ability to satisfy this need. Table 23 shows how the possession of various household equipment varies with life cycle stage. The percentage of households owning these appliances is lowest among younger unmarried persons. It increases significantly among younger married persons and those in the childrearing stages. The percentages owning the appliances decreases among the older households.

Table 23. Percentage of households in different life cycle phases owning different types of household equipment<sup>1)</sup>

Life cycle phase <sup>2)</sup>	Washing machine	Deep freezer	Dishwashing machine	Number of respondents
Younger unmarried persons .....	40	33	1	207
Younger married couples .....	64	51	1	116
Younger families with children .....	90	73	7	854
Older families with children .....	93	84	9	664
Older married couples .....	82	77	3	529
Older unmarried persons .....	46	38	1	536
All households .....	76	66	5	2 906

1) Source: Survey of Housing Conditions 1973. NOS A 673, SSB 1974.

2) Households are here classified by age, marital and parental status of their main income earner. The division between younger and older is placed at 45 years of age.

Table 24 shows that possession of these appliances is positively correlated with income.

Table 24. Percentage of households in different income groups owning different types of household equipment<sup>1)</sup>

Household income (kroner)	Washing machine	Deep freezer	Dishwashing machine	Number of respondents
Under 10 000 .....	58	43	0	174
10 000 - 19 900 .....	64	56	1	405
20 000 - 29 900 .....	76	66	1	426
30 000 - 39 900 .....	86	72	3	486
40 000 - 49 900 .....	82	69	5	339
50 000 - 59 900 .....	84	76	6	202
60 000 and over .....	86	80	17	353
Unknown .....	70	61	4	521

1) Source: Survey of Housing Conditions 1973. NOS A 673, SSB 1974.

Do household appliances really represent a savings in the time spent household work and family care? It is assumed that they lead to higher productivity per unit of time (greater effectiveness) but is this increase in productivity expressed in terms of a time savings or in some other manner, such as decreased physical exertion, increased standards etc.?

Table 25 shows how the time married women use on dishwashing varies with having a dishwasher. Married women with dishwashers use less time than ones without dishwashers. Of course, we can not say whether the dishwasher itself represented a time savings or whether other factors are responsible for the observed differences. The number of observations is also very small and the results therefore uncertain.

Table 25. Married women with and without a dishwasher and in groups for household size by the time spent on dishwashing and clearing the table<sup>1)</sup>. Average for all days. Hours<sup>2)</sup>

	With dishwasher	Without dishwasher
<u>Household size</u>		
2-3 persons .....	0.6 (22)	0.8 (547)
4 persons .....	0.7 (25)	0.9 (271)
5 and more persons .....	0.6 (39)	1.0 (252)
All married women .....	0.6 (86)	0.9 (1 070)

1) Due to coding procedures it is not possible to separate out time spent clearing the table.

2) Number of respondents is in parenthesis.

A similar tendency although less pronounced is observed in connection to an automatic washing machine.

Table 26. Married women with and without an automatic washing machine and in groups for household size by the time spent on washing and ironing clothes<sup>1)</sup>. Average for all days. Hours<sup>2)</sup>

	With automatic washing machine	Without automatic washing machine
<u>Household size</u>		
2 persons .....	0.3 (84)	0.4 (234)
3 " .....	0.4 (94)	0.5 (154)
4 " .....	0.6 (117)	0.7 (177)
5 " .....	0.6 (68)	0.7 (106)
6 and more persons .....	0.7 (45)	0.9 (70)
All married women .....	0.5 (408)	0.6 (741)

1) Due to coding procedures it is not possible to separate out time spent on ironing clothes.

2) Number of respondents is in parenthesis.

More rather than less time is used on food related tasks by married women in households with a deep freezer, as shown in table 27. The differences are however small. The motivation for buying a deep freezer may be different than that for buying the other appliances. Purchase of a deep freezer may be indicative of a commitment to use time on food related tasks, perhaps in order to reduce food expenditures.

Table 27. Married women with and without a deep freezer and in groups for household size by time spent on food preparation, purchase of groceries and private production of food. Average for all days. Hours

	Food preparation, setting the table, serving	Purchase of grocery goods	Private production of food	Number of respondents
<u>With deep freezer</u>				
<u>Household size</u>				
2 persons .....	1.5	0.2	0.2	235
3 " .....	1.6	0.2	0.2	177
4 " .....	1.7	0.2	0.2	215
5 " .....	1.8	0.2	0.2	133
6 and more persons .....	1.9	0.1	0.1	96
All married women with deep freezer ....	1.7	0.2	0.2	856
<u>Without deep freezer</u>				
<u>Household size</u>				
2 persons .....	1.3	0.2	0.1	84
3 " .....	1.4	0.2	0.1	75
4 " .....	1.6	0.2	0.1	82
5 " .....	1.8	0.2	0.0	41
6 and more persons .....	2.2	0.2	0.0	21
All married women without deep freezer .	1.5	0.2	0.1	303

Help with household work

In contrast to the distribution of household appliances help with household work is received most frequently by elderly, single persons and by persons with low incomes.

Table 28. Households in groups for life cycle phase and income by whether they received help with household work in the month prior to interviewing. Per cent<sup>1)</sup>

	Received help	Did not receive help	Unknown	Total	Number of respondents
<u>Life cycle phase<sup>2)</sup></u>					
Younger unmarried persons .....	10	85	5	100	207
Younger married couples .....	3	93	4	100	116
Younger families with children .....	9	89	2	100	854
Older families with children .....	5	90	5	100	664
Older married couples .....	13	83	4	100	529
Older married persons .....	26	70	4	100	536
<u>Household income (kroner)</u>					
Under 10 000 .....	19	77	4	100	174
10 000 - 19 900 .....	16	80	4	100	405
20 000 - 29 900 .....	10	87	3	100	426
30 000 - 39 900 .....	8	89	3	100	486
40 000 - 49 900 .....	7	88	5	100	339
50 000 - 59 900 .....	5	90	5	100	202
60 000 and over .....	16	80	4	100	353
Unknown .....	16	80	4	100	521
All households .....	12	84	4	100	2 906

1) Source: Survey of Housing Conditions 1973, NOS A 673, SSB 1974.

2) See note 2 to table 23.

Table 29 shows the effect of having regular househelp on the married women's time use. Married women with househelp use on the average an hour less per day than women without househelp. Househelp is clearly a supplementary contribution to the household, not a replacement for one's own effort.

Table 29. Married women with and without regular househelp and in groups for household size by time spent on household work and family care. Average for all days. Hours<sup>1)</sup>

	With regular househelp	Without regular househelp
2-3 persons .....	4.3 (39)	5.7 (512)
4 and more persons .....	6.7 (34)	7.3 (545)
All married women .....	5.5 (73)	6.5 (1 057)

1) Number of respondents is in parenthesis.

5. Division of labour within the household

Differences in men's and women's time use have been described earlier in this section and references made to how the labour is divided in different types of families. This topic will now be addressed in greater detail. Common division of labour patterns will be discussed and some of the factors influencing this division identified.

Common patterns

Table 11, page 19, showed that housework is women's work. Younger married women without children, for example, use six times as much time on housework as younger married men without children. Married women with children under 7 years of age use eight times as much time as men in this life cycle phase. This pattern is already established by unmarried persons still living in their parent's household.

Maintenance work is largely men's work. Women participate comparatively more in maintenance work, however, than men do in housework. Married men with their youngest child 7 years of age or older spend four times as much time on maintenance work as do married women in this type of household. Here again unmarried persons living in their parents' household exhibit the same pattern as the married population.

Work with children is women's work irregardless of the age of the youngest child. The purchase of goods and services is quite equally divided between men and women, as are travel and other types of household work and family care.

Table 30. Persons in groups for sex and type of household by time spent on different types of housework. Average for all days. Hours

	Food pre- paration, setting table, serving	Dish- wash- ing, clearing the table	House clean- ing	Wash- ing and iron- ing	Mending clothes	Heating, wood chop- ping, water fetching	Private produc- tion of food	Total	Number of respon- dents
All men .....	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.6	1 463
of these:									
Married men without children .....	0.2	0.1	0.1	0.0	0.0	0.2	0.2	0.8	303
Married men with children .....	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.6	755
All women .....	1.4	0.8	1.0	0.5	0.4	0.1	0.1	4.3	1 577
of these:									
Married women without children .....	1.5	0.8	1.0	0.4	0.3	0.0	0.2	4.2	345
Married women with children .....	1.7	0.9	1.1	0.6	0.5	0.0	0.1	4.9	820

Table 30 shows that preparation of food, setting the table and serving food take approximately one third of the time devoted to housework. Women use on the average one hour and 24 minutes per day on these activities, men 12 minutes. About a hour per day is used on dish-washing by married women, men used about 6 minutes. Washing, ironing and mending of clothes are exclusively women's activities and take on the average about an hour per day.

The average time spent on an activity is the result of several factors. It is a function of the duration of the activity and the frequency with which it is performed. An activity can take a long or a short time and can be performed by many or few persons. The average duration of an activity is the time spent by persons who have participated in the activity in the course of the day. The frequency with which it is performed is measured by the percentage of the population who has participated in the activity at least once in the course of the day. Frequency can be interpreted in two ways. It can be interpreted as the probability that an individual will participate in the activity on any particular day. Here it is assumed that all or most individuals participate in the activity some time or another, but not necessarily daily. In the majority of cases this is the best way to view frequencies. Alternatively, if an activity is such that one participates daily or not at all (for example child care) another interpretation of frequency is called for. In this case frequencies more correctly refer to the percentage of the population who participates at all. Diagrams 7 and 8 percent frequencies and durations of different activities. Diagram 7 illustrates men's activity pattern, diagram 8 women's. (See appendix for average times and percentages for each activity.)

Diagram 7. Average duration and frequency of different activities. Figures for all men, all days.

Percentage of men who have participated in the activity in the course of a day

		Over 40	Between 10 and 40	Under 10 <sup>1)</sup>
Average duration per day for men participating in the activity	Over 1 hour	—	Care of garden, lot and animals Maintenance of household equipment	Major and minor remodelling Help to other household Private production of food Maintenance of dwelling
	Between $\frac{1}{2}$ and 1 hour	—	Preparation of food, setting the table, serving Dish washing, cleaning table House cleaning Purchase of groceries Travel in connection to household work and family care	Child care Other work with children Purchase of other than groceries or clothes Medical treatment Errands Heating, wood chopping, water fetching
	Under $\frac{1}{2}$ hour	—	—	Washing, ironing, mending of clothes Purchase of clothes Visits to public offices

1) Household work and family care activities performed by less than 1 percent of men are omitted from this diagram.

Diagram 8. Average duration and frequency of different activities. Figures for all women, all days.

Percentage of women participating in the activity in the course of the day

		Over 40	Between 10 and 40	Under 10 <sup>1)</sup>
Average duration per day for women participating in the activity	Over 1 hour	Preparation of food, setting table, serving House cleaning Washing and ironing	Child care Mending clothes	Private production of food Lesser remodeling Help to other households Personal care outside the home Medical treatment
	Between $\frac{1}{2}$ and 1 hour	Dish washing, cleaning the table	Purchase of groceries Care of garden, lot, and animals Travel in connection to household work and family care	Purchase of clothes and other goods Other work with children Maintenance of household equipment Heating, wood chopping, water fetching
	Under $\frac{1}{2}$ hour	—	—	Help with children's school work Visits to public offices Errands

1) See note 1, diagram 7.

The woman's work load contains of a number of basic housework chores which have both high frequency and long duration, that is they are performed by more than 40 per cent of all women and take on the average over an hour per day. These activities account for two-thirds of the total time women use on household work and family care. On nine out of 10 days women prepare and serve food and set the table (frequency 89 per cent. See appendix). Or 8 out of 10 days women spend time on house cleaning (Frequency 81 per cent). High frequency tasks irregardless of duration are missing from the man's household work and family care schedule. Men's schedules are to a larger degree dominated by low frequency activities. Preparation and serving of food and setting the table are the most frequently mentioned activities for men. Men participate in them approximately 3 days out of 10.

Despite the dominance of women's work schedule by daily tasks the amount of time they use varies considerably from day to day. Table 31 shows how the individual's time use varies from one weekday to the next. In almost 40 per cent of the cases, the time spent by women has varied more than 2 hours from one weekday to the next. The variation from day to day is smaller for men.

Table 31. Men and women by differences in time spent on household work and family care from one weekday to the next<sup>1)</sup>. Percentages

	Difference in time				Total	Number of respondents
	Less than 0.5 hour	0.5-0.9 hour	1.0-1.9 hours	2 hours and over		
Men .....	31	20	23	26	100	988
Women .....	18	19	25	38	100	1 051

1) Each respondent kept a time diary for 2 or 3 days. This table includes persons who have kept a time diary for at least 2 weekdays and measures the difference between them.

#### The employment situation and the division of labour

The division of labour within the family is expected to vary with the employment status of the different family members. Non-employed respondents are expected to use more time than employed ones. The respondent is expected to use more time when his or her spouse is employed than when the spouse is non-employed.

Table 32. Married men and women in groups for own and spouse's employment status by time spent on household work and family care. Average for all days. Hours<sup>1)</sup>

	Spouse		All
	Employed	Non-employed	
<u>Married men</u>			
Employed .....	2.2 (264)	2.1 (550)	2.1 (922)
Non-employed .....	3.6 (29)	3.2 (104)	3.3 (133)
<u>Married women</u>			
Employed .....	4.9 (332)	4.8 (41)	4.9 (376)
Non-employed .....	7.4 (645)	6.2 (135)	7.2 (790)

1) Number of respondents is in parenthesis.

The respondent's own employment status appears to have much more effect on the time he or she uses on household work and family care than does the spouse's employment status. For employed persons the spouse's employment status has no effect on average time use. For non-employed persons the spouse's employment status does play a certain role. Non-employed women

with employed husbands use on the average 1.2 hours more per day on household work and family care than do women in households where both she and her husband are non-employed. The employed man uses correspondingly less time than the non-employed man. The amount of time a couple spends on household work and family care varies with the employment situation. When both spouses are employed the total average time used is 7.1 hours per day. When only the man is employed, a couple uses on the average 9 and a half hours per day. The man's relative share of the total time spent is 31 per cent when the woman is employed, 22 per cent when she is not.

Although the wife's employment status has little effect on the husband's average time use it does effect how often he participates in the various tasks. This implies that men with employed wives participate more often but use less time than other married men.

Table 33. Married men with and without employed wives by average time spent on selected types of housework and by the percentage participating in the activity in the course of a day. Average for all days

	Average time used by men Hours	Percentage of men participating	Number of respondents
<u>Wife employed</u>			
Food preparation, setting the table, serving .....	0.3	43	293
Dishwashing, clearing the table ....	0.1	27	293
House cleaning .....	0.1	19	293
<u>Wife non-employed</u>			
Food preparation, setting the table, serving .....	0.2	26	604
Dishwashing, clearing the table ....	0.1	14	604
House cleaning .....	0.1	13	604

#### Occupation and the division of labour

Table 34 shows how much time men in different occupational groups use on household work and family care.

Table 34. Employed men in groups for occupation and marital status by time spent on household work and family care. Average for all days. Hours<sup>1)</sup>

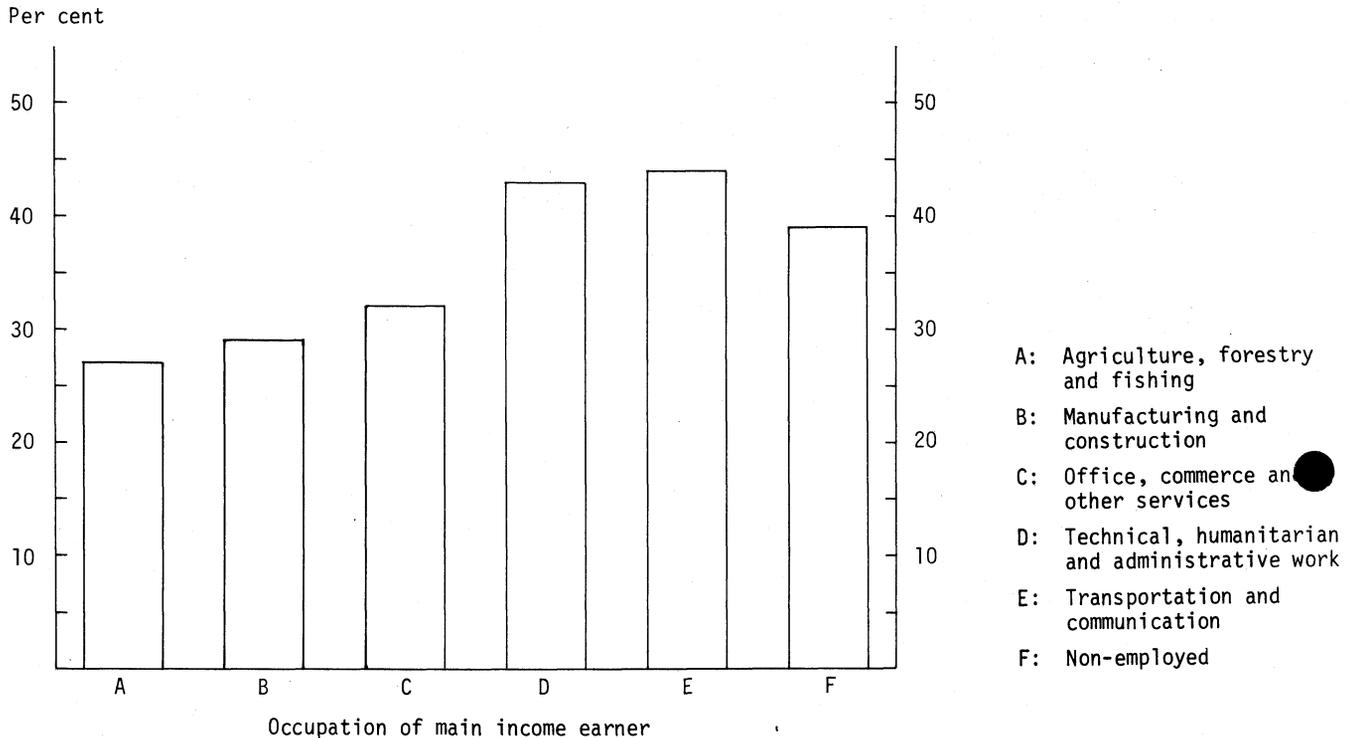
	Self-employed in agriculture, forestry and fishing	Other self-employed	Wage earners in manufacturing and construction	Other wage earners	Total
Not married .....	1.3 (26)	:	1.5 (103)	1.5 (112)	1.5 (263)
Married .....	1.8 (81)	2.1 (103)	1.9 (317)	2.4 (421)	2.1 (922)
All employed men .....	1.7 (107)	2.2 (125)	1.8 (429)	2.2 (533)	2.0 (1 185)

1) Number of respondents is in parenthesis.

Married men who are self-employed in the primary industries or who are wage earners in heavy industry use somewhat less time on household work and family care than married men in other occupations. It does not seem reasonable to assume that these differences reflect differences in the objective amount of work to be done. Neither does it seem reasonable to assume that these groups have a greater ability to substitute expensive out-of-home production for time consuming in-home production of goods and services. The division of labour within the family suggests itself as a possible explanation.

Diagram 9 shows how much time men spend in relation to women in households with different occupational classifications. Hundred per cent would mean that the men used equally as much time as the women.

Diagram 9. Time spent on household work and family care by men in per cent of time spent by women in households where the main income earner has the same occupation. Average for all days<sup>1)</sup>



1) The diagram is based on time use of married men and women with youngest child 7 years of age and over.

Men in households where the main income earner is employed in the primary industries use 27 per cent as much time as the women do while men in households where the main income earner is employed in transportation and communication use 44 per cent as much time as the women. The differences can be the result of many factors such as for example, the work hours associated with different occupations or a connection between occupation, socio-economic status and the division of labour. This question falls however, outside the boundaries of this report.

## SECTION IV. ACTIVITY RHYTHMS

## 1. Day in the week

The figures presented thus far have been averages for all of the days in the week. It is expected that the great majority of persons experience some kind of a weekly variation in their activities. Day to day variations Mondays through Fridays are assumed to have little effect on average times, despite fluctuations in the individual's time use from day to day. Saturdays and Sundays are, on the other hand, expected to be characterized by distinctive time use patterns.

Some activities will be more effected by day in the week than other activities. The greatest variation is expected in connection with activities which can be flexibly sheduled to a convenient time, rather than in those which are daily by nature, such as food preparation, child care etc. Some persons are expected to display greater weekly variation in time spent on household work and family care than others, due to the scheduling of their other activities.

Table 35. Persons in groups for sex and employment status by time spent on different types of household work and family care. Averages for different days in the week. Hours

	House- work	Main- tenance	Work with chil- dren	Purchase of goods and ser- vices	Other house- hold	Travel in connection to household work and family care	Household work and family care Total	Number of respon- dents
Employed men								
Weekdays .....	0.5	0.6	0.1	0.2	0.2	0.1	1.7	1 125
Saturdays ....	0.8	1.1	0.1	0.5	0.3	0.4	3.2	367
Sundays .....	0.8	0.5	0.1	0.0	0.4	0.1	1.9	365
Employed women								
Weekdays .....	3.3	0.2	0.2	0.4	0.1	0.2	4.4	556
Saturdays ....	3.4	0.3	0.2	0.4	0.2	0.2	4.7	194
Sundays .....	3.0	0.2	0.2	0.0	0.2	0.1	3.7	201
Non-employed men								
Weekdays .....	1.0	0.8	0.0	0.4	0.4	0.3	2.9	338
Saturdays ....	1.0	0.7	0.0	0.4	0.4	0.3	2.8	104
Sundays .....	0.5	0.2	0.1	0.1	0.1	0.1	1.1	106
Non-employed women								
Weekdays .....	5.2	0.3	0.6	0.4	0.3	0.3	7.1	1 021
Saturdays ....	4.5	0.2	0.6	0.5	0.2	0.3	6.3	332
Sundays .....	3.2	0.1	0.5	0.0	0.2	0.1	4.1	332

Employed persons use more time on household work and family care on Saturdays than on the other days of the week. The figures indicate that employed men have a tendency to save maintenance work and shopping errands for Saturdays. On Sundays employed men use approximately what they use on Mondays through Fridays. Employed women have a reasonably constant time use pattern throughout the week but use somewhat less time on house work on Sundays.

Non-employed persons use more time on household work and family care on weekdays than on Saturdays or Sundays. Particularly Sundays are maintained as a relative day of rest.

Most of the weekly variation stems from shopping, maintenance and housework activities. As almost all stores are closed on Sundays little time can then be used on the purchase of goods and services. Time spent on work with children does not vary by day in the week.

In table 36 time spent on selected types of housework is examined.

Table 36. Persons in groups for sex and employment status by time spent on selected types of housework. Averages for different days in the week. Hours

	Preparation of food setting the table, serving	Dish- washing, cleaning the table	House- cleaning	Washing and ironing	Number of respondents
<b>Employed men</b>					
Weekdays .....	0.2	0.1	0.1	0.0	1 125
Saturdays .....	0.2	0.1	0.2	0.0	367
Sundays .....	0.2	0.2	0.1	0.0	365
<b>Employed women</b>					
Weekdays .....	1.1	0.5	0.7	0.4	556
Saturdays .....	1.3	0.6	1.0	0.2	194
Sundays .....	1.3	0.7	0.5	0.1	201
<b>Non-employed men</b>					
Weekdays .....	0.3	0.2	0.2	0.0	338
Saturdays .....	0.3	0.2	0.3	0.0	104
Sundays .....	0.2	0.2	0.1	0.0	106
<b>Non-employed women</b>					
Weekdays .....	1.6	0.9	1.2	0.7	1 021
Saturdays .....	1.6	0.9	1.2	0.3	332
Sundays .....	1.4	0.9	0.5	0.1	332

Food preparation and dishwashing show little variation. While many families may have a special Sunday dinner, it does not take longer time to prepare, serve and wash up after it. The weekly variation in housework stems largely from cleaning, washing and ironing which are kept to a minimum on Sundays.

#### The effect of employment schedules

The observed weekly activity rhythms can in large measure be attributed to income producing work schedules. The structuring influence of paid work is so profound that it influences time use not only of the employed but also of non-employed family members.

Paid work is concentrated in the week's first five days. Paid work was reported by 87 per cent of employed men and 77 per cent of employed women on these days. Part time employment, sick leave, vacations etc. probably account for a good deal of the cases where paid work was not reported on week days by employed persons.

It is becoming more and more common for employed persons to have Saturdays off. However in 1971-72, 49 per cent of the employed men reported some income producing work on Saturdays as did 46 per cent of the employed women. Sundays are traditionally a day of rest from work and for the large majority of employed persons a day off. Paid work was reported on Sundays by 27 per cent of employed men and by 17 per cent of employed women.

Table 37. Percentage of employed men and women reporting income producing work in the course of the day on different days of the week<sup>1)</sup>

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Employed men ....	86 (375)	92 (392)	91 (389)	84 (418)	83 (407)	49 (388)	27 (284)
Employed women ..	74 (201)	80 (178)	76 (186)	77 (191)	79 (177)	46 (198)	17 (205)

1) Number of days studied is in parenthesis. Each respondent reported time use for 2 to 3 days.

Table 38. Percentage of employed men and women in different occupations reporting income producing work on different days of the week<sup>1)</sup>

	Self-employed in agriculture, forestry, and fishing	Other self- employed	Wage earners in manu- facturing and construction	Other wage earners
<b>Men</b>				
Weekdays .....	94 (107)	89 (125)	86 (420)	86 (533)
Saturdays .....	87 (38)	61 (44)	32 (136)	50 (170)
Sundays .....	70 (37)	36 (44)	15 (137)	24 (166)
<b>Women</b>				
Weekdays .....	:	:	76 (50)	77 (449)
Saturdays .....	:	:	:	46 (158)
Sundays .....	:	:	:	13 (163)

1) Number of respondents is in parenthesis.

Weekly employment schedules vary considerably by occupation. The self-employed in agriculture, forestry and fishing report paid work on Sundays more frequently than do persons in other occupations; wage earners in manufacturing and construction report it least often.

Most household work and family care is performed by non-employed persons. The employment world's schedule has little direct effect on them outside of opening hours for shops and other services which place limits on when these activities can be done. Employment schedules have however an indirect effect.

Leisure represents the primary alternative allocation of time to work, as personal needs/sleep can be regarded as fairly constant. Leisure is often enjoyed in the company of other persons, most frequently other household members. To the extent that these other persons are employed, their employment schedules will effect the non-employed persons possibilities for leisure. Non-employed persons have greater flexibility in planning of their household work and family care schedules than employed persons. Nevertheless, they tend to conform to paid work schedules, i.e. working during "normal" working times for employed persons.

#### Sundays: A special case

If time free from the obligations of paid work were sufficient to explain weekly time use patterns, the time spent on household work and family care would be highest when time spent on income producing work was lowest - i.e. on Sundays. This is, however, not the case.

Cultural traditions prescribe the use of Sundays for religious and/or recreational activities rather than for household work and family care. Religious sanctions exist against work on Sundays. A strict interpretation of these forbidding all household work and family care on Sundays is rare. Many persons do however try to avoid the more characteristically work tasks associated with household work and family care, particularly activities such as house cleaning and doing the laundry.

#### 2. Time of the day

Household work and family care is not spread evenly throughout the day. Diagram 10 shows the percentage of all persons reporting household work and family care at different times of the day, for different days of the week.

The percentage of persons reporting household work and family care on weekdays increases sharply in the morning hours starting from about 6.00 a.m. and reaches its day time high between 10.30 and 11.00 a.m. when 36 per cent of all persons are so engaged. From 11.30 a.m. to 8.00 p.m. the percentage of persons reporting household work and family care is fairly constant, between 25 and 30 per cent. After 8.00 p.m. the percentage drops sharply.

Diagram 10. Percentage of persons reporting household work and family care at different times of the day, on different days in the week

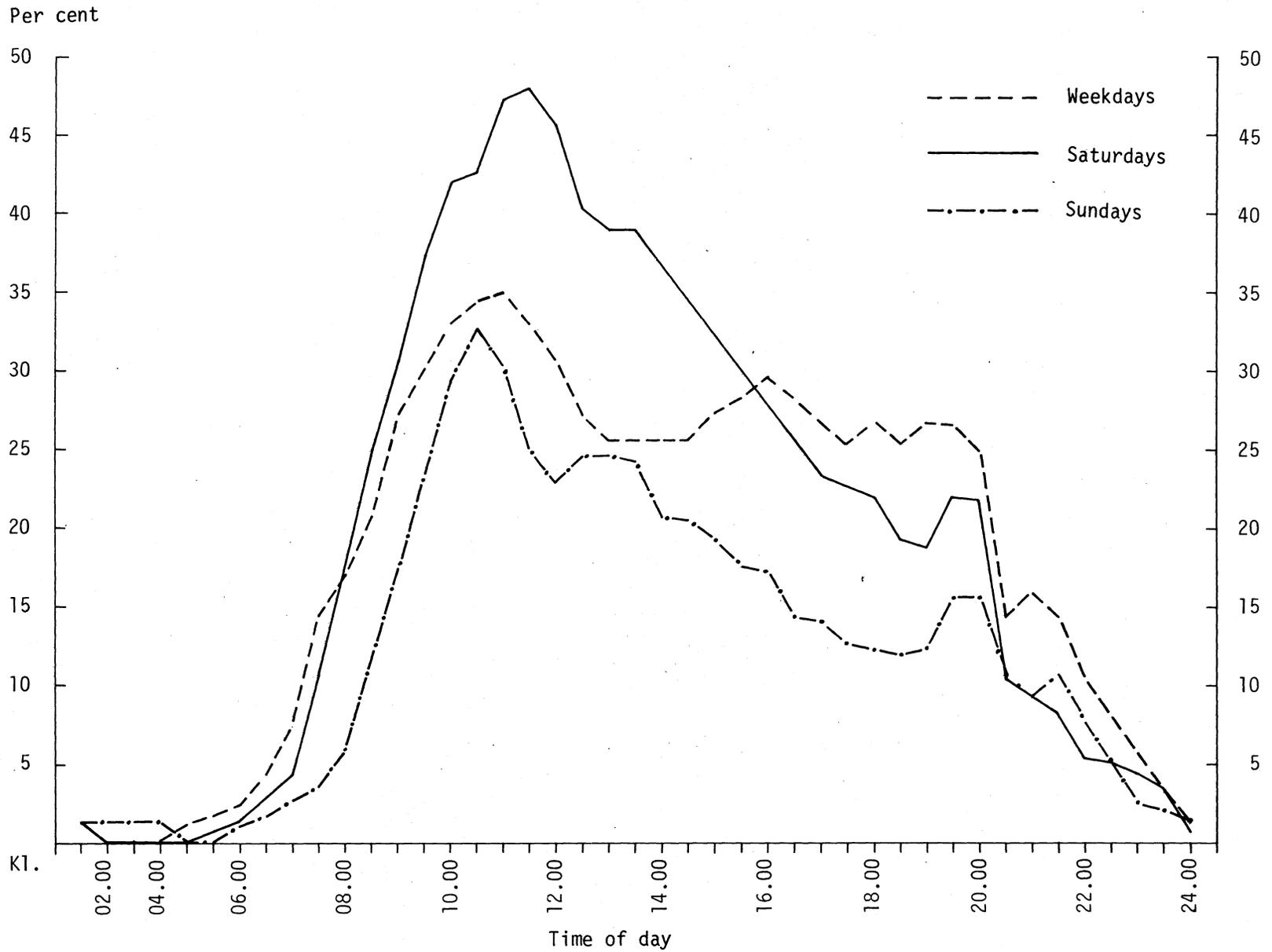


Diagram 11. Percentage of employed men reporting household work and family care at different times of the day on different days in the week

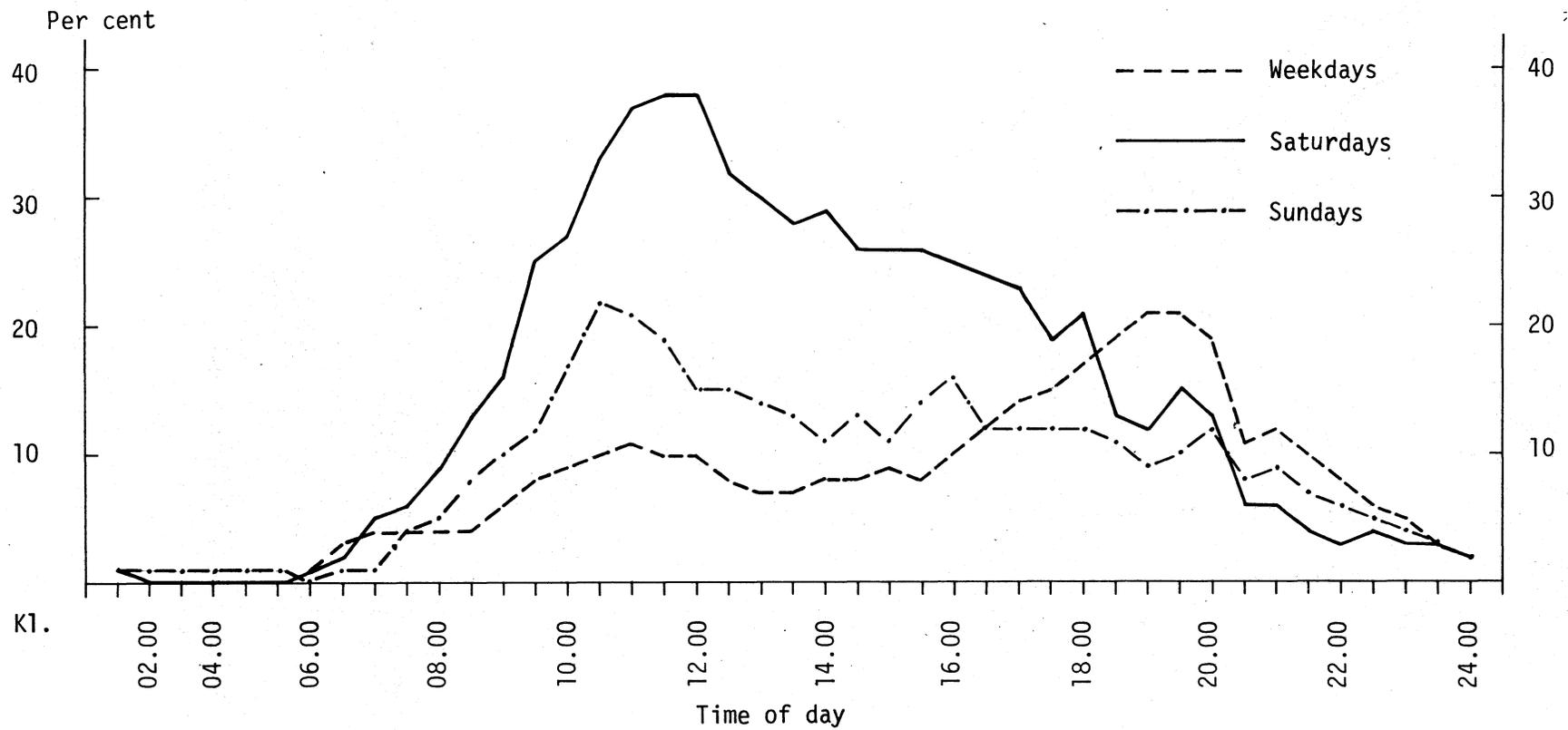


Diagram 12. Percentage of employed women reporting household work and family care at different times of the day on different days in the week

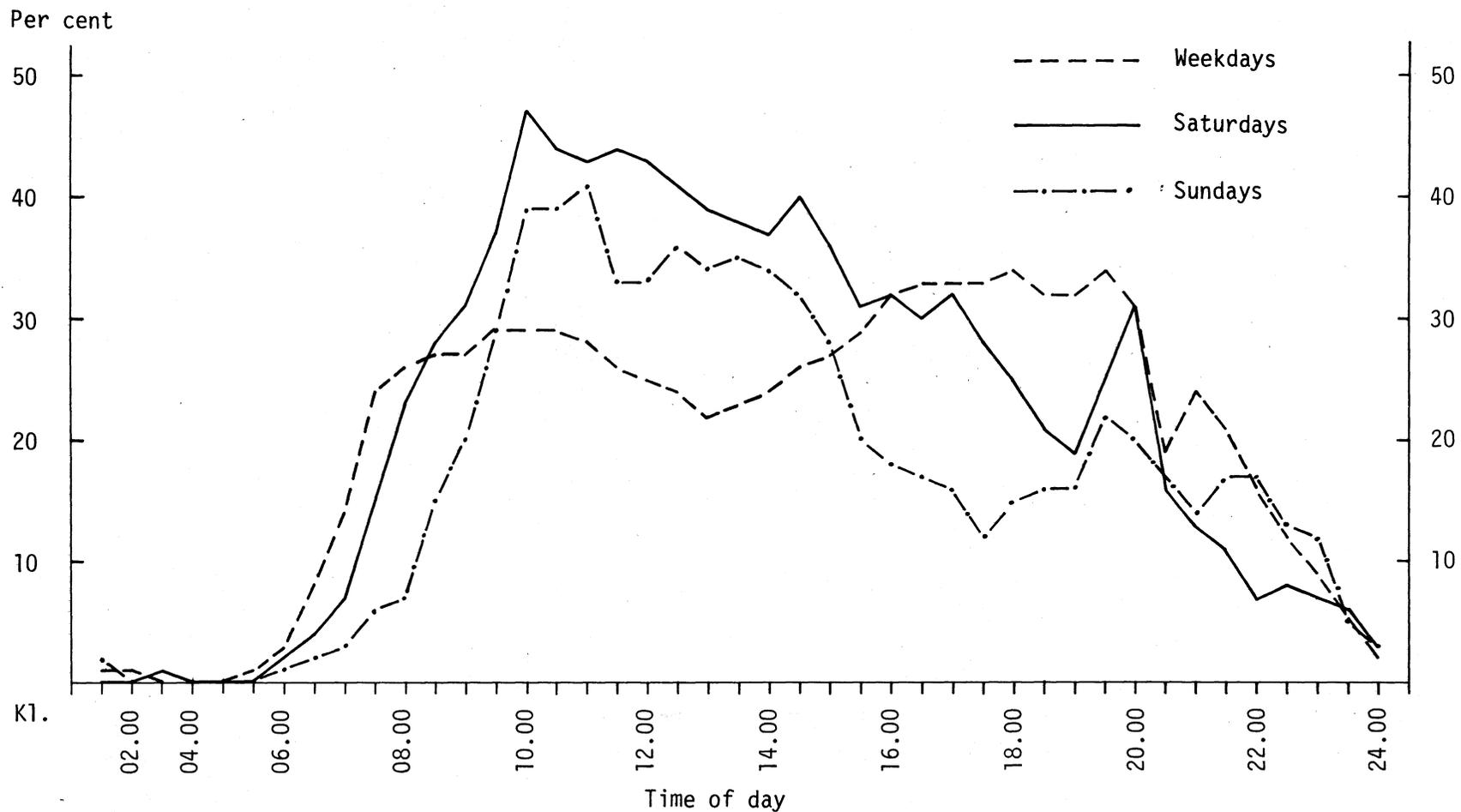


Diagram 13. Percentage of housewives reporting household work and family care at different times of the day on different days in the week

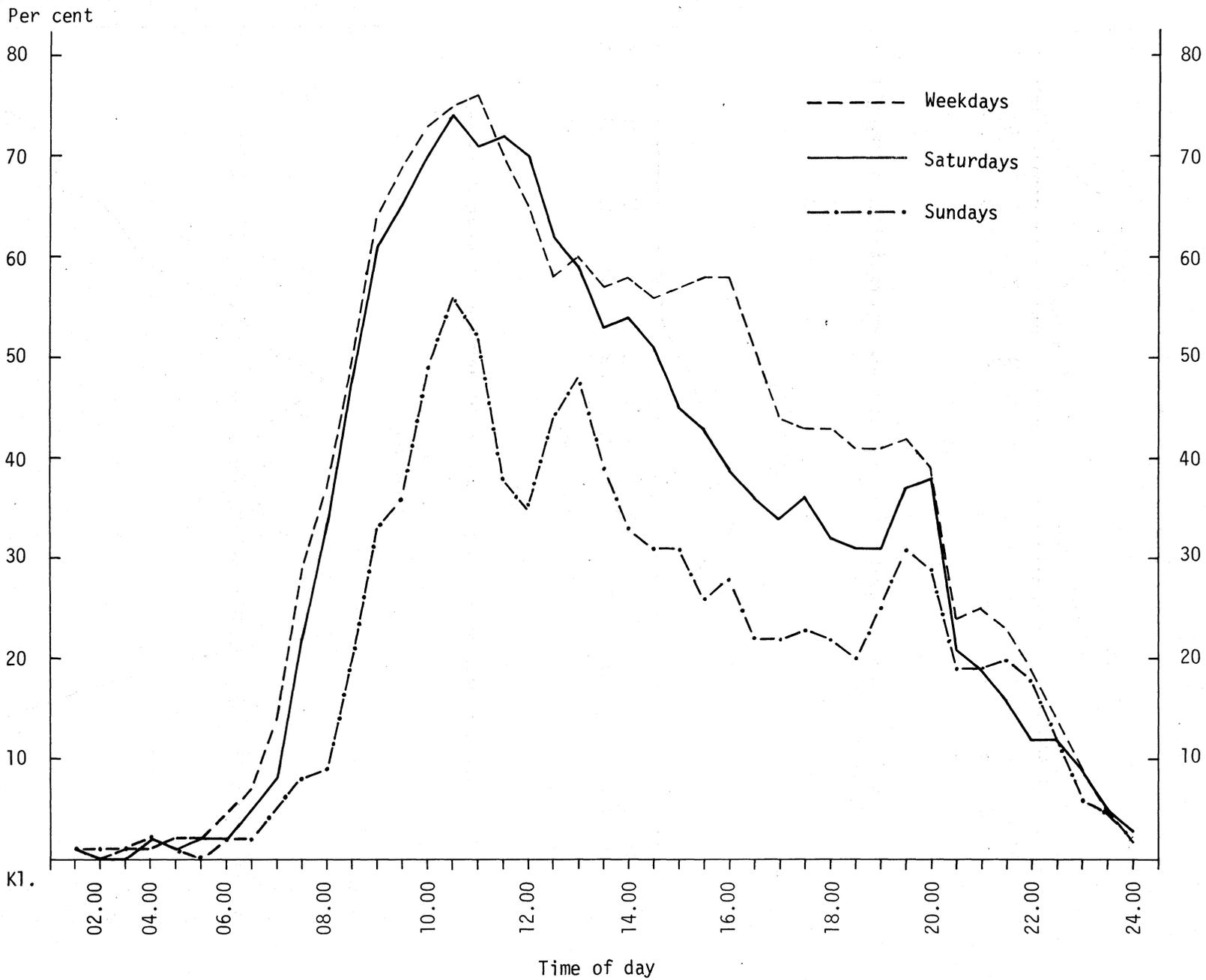


Diagram 14. Percentage of housewives reporting work with children at different times of the day on week days

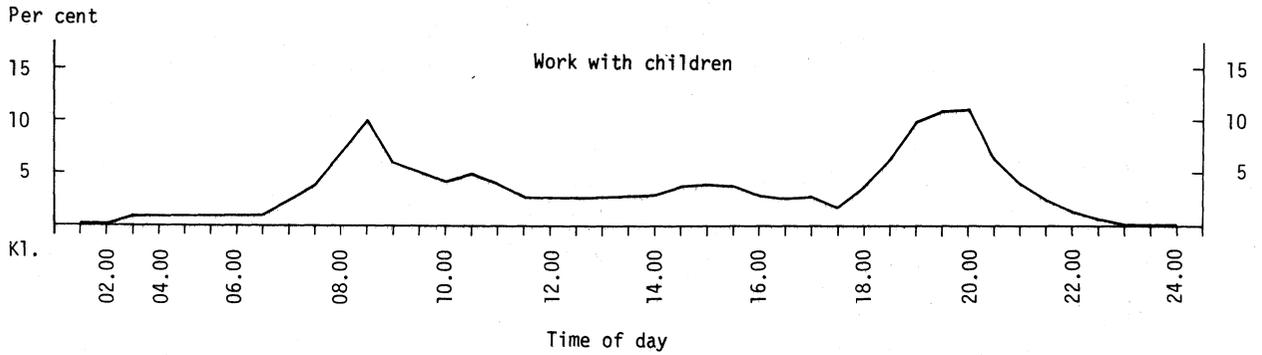


Diagram 15. Percentage of housewives reporting purchase of goods and services at different times of the day on week days

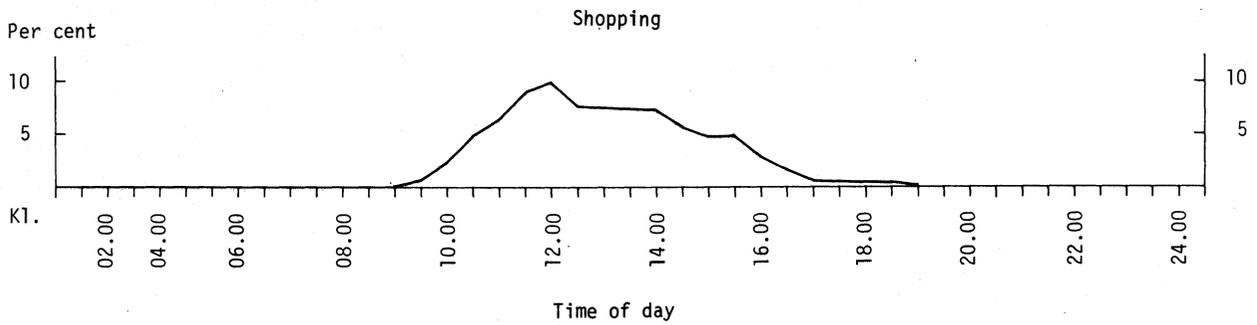
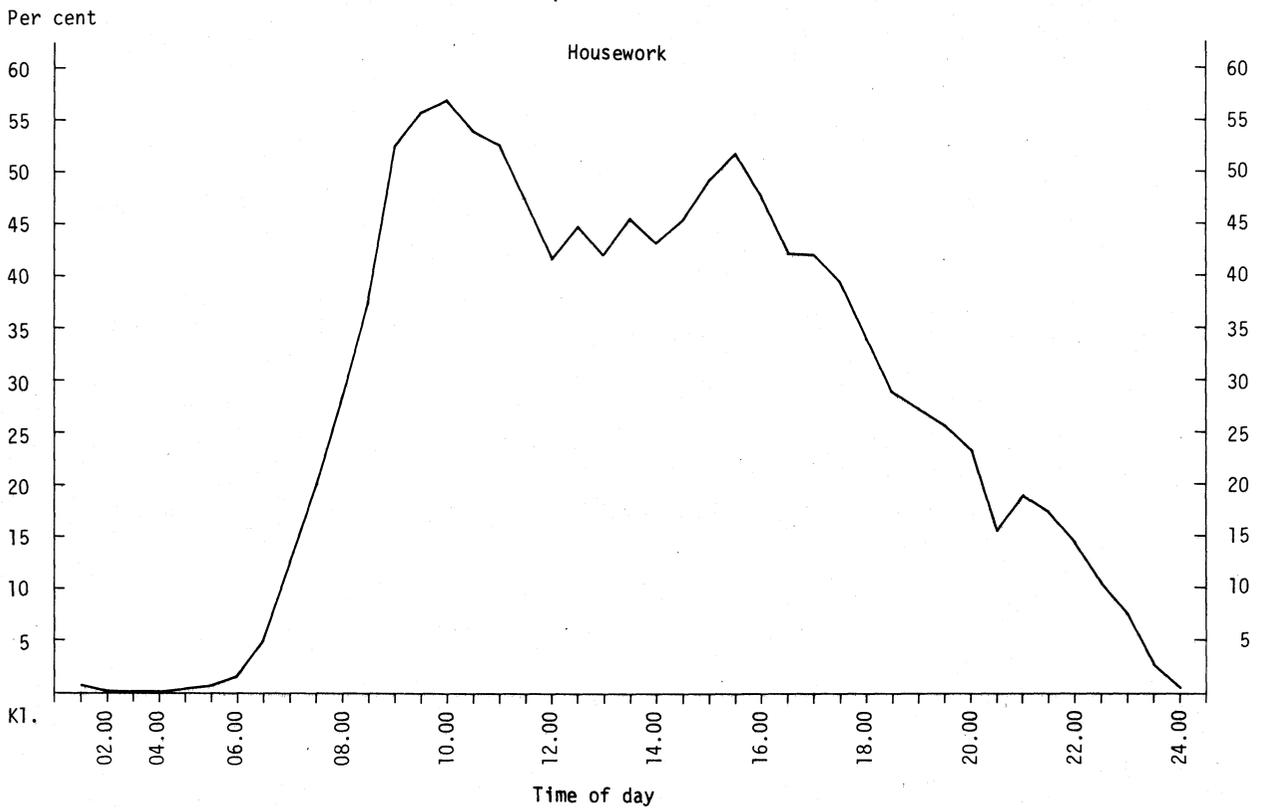


Diagram 16. Percentage of housewives reporting housework at different times of the day on week days



On Saturdays a slightly different pattern is observed. More persons report household work and family care in the mornings on Saturdays than on weekdays, less report it in the early evenings. The highest frequency is observed a half hour later than on weekdays and the percentage reporting household work and family care steadily decreases from this top of 49 per cent to 28 per cent between 6.30 and 7.00 p.m. Between 7.00 and 8.00 p.m. there is a sudden hop, perhaps associated with putting the children to bed.

The pattern on Sundays is much the same as on Saturdays with the exception that household work and family care is not reported quite as early in the morning as on other days.

Diagrams 11, 12, and 13 show daily and weekly variation for different groups of persons. On weekdays employed men report most household work and family care in the evening between 6.30 and 7.30 p.m. and little during the day time when the majority of them are at their place of employment. On Saturdays they report most household work and family care between 11.30 a.m. and noon.

Employed women also report most household work and family care in the evenings on week days but the differences between the day time and evening percentages is smaller than was the case for employed men. This is probably due to a greater prevalence of part time employment among employed women. On Saturdays and Sundays most household work and family care is done in the mornings.

Housewives report most household work and family care in the morning between 10.00 and 11.30 a.m. all days of the week. On Sundays there is a sharp decrease in the percentage of housewives performing household work and family care between eleven and one o'clock. On other days the percentage decreases more gradually from the morning peak. Non-employed married women under 70 years of age are classified here as housewives.

The various types of household work and family care have different daily rhythm patterns, as illustrated in diagrams 14, 15 and 16 for housewives on weekdays. Work with children is characterized by two peaks, one at breakfast time and the other in the evening between 7.00 and 8.00 p.m. Shopping tends to occur between 9.30 a.m. and 3.00 p.m. Housework is most frequently reported in the morning hours reaching its peak between 9.30 and 10.00 a.m. Later in the afternoon a secondary peak is observed. Housework is reported by a relatively large number of housewives late in the evening.

### 3. Season of the year

Household work and family care is dominated by daily or weekly activities. The majority of activities are uncorrelated with season of the year. (See table in appendix ). An exception to this is the private production of food. This activity has a seasonal top in the summer and fall months.

Table 39. Persons by time spent on and percentage participating in the private production of food. Averages and percentages for different times of the year

	Average time per day (hours)	Percentage parti- cipating in the course of a day	Number of respondents
November - December .....	0.1	3	544
January - February .....	0.0	2	518
March - April .....	0.0	1	511
May - June .....	0.1	3	497
July - August .....	0.5	22	536
September - October .....	0.2	11	434
The whole year .....	0.1	7	3 040

Table 40. Persons by time spent on and percentage participating in care of garden, lot, and animals. Averages and percentages for different times of the year

	Average time per day (hours)	Percentage parti- cipating in the course of a day	Number of respondents
November - December ...	0.1	11	544
January - February ....	0.1	11	518
March - April .....	0.2	18	511
May - June .....	0.4	29	497
July - August .....	0.3	23	536
September - October ...	0.2	15	434
The whole year .....	0.2	18	3 040

## SECTION V. GENERAL TIME USE PATTERNS AND TOTAL WORK LOADS

### 1. General time use patterns

A day consists of 24 hours which in our terminology must be used for something. Time used on one type of activity is simply not available for allocation to other types of activities. Ultimately the time spent on any activity is negatively correlated with time spent on other activities.

The strength of this negative correlation, or the degree to which two activities are competing uses of time will vary according to the activity pairs and the actual amounts of time involved. Some activities will be more sensitive than others to changes in time use. The relationship between two activities may assume a different character in the low, middle and high ranges of time expenditure.

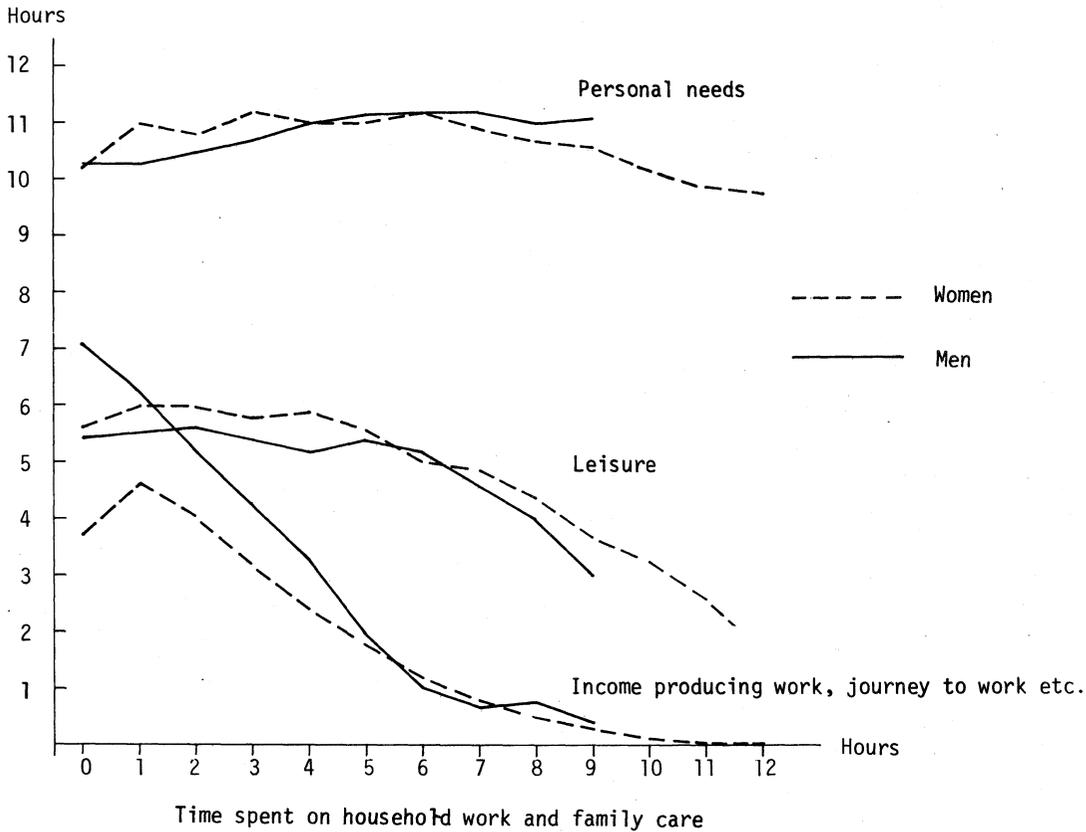
Within certain ranges of time individual activities can exhibit complementary rather than competitive relationships whereby the time spent on the one is positively correlated with the time spent on the other. Alternatively, two activities can be independent of one another within certain limits so that time spent on the one activity does not vary with the time spent on the other.

Diagram 17 shows time use patterns associated with different time commitments to household work and family care.

Diagram 17 shows a strong negative correlation between paid and non-paid work. For men, increases in non-paid work are by in large compensated for by decreases in the average time used on paid work. For women an increase in non-paid work is associated with less, but not correspondingly, less paid work.

Women spending less than 1 hour on household work and family care spend less time on paid work than would be expected from the slope of the curve otherwise. These women are likely to be young students under education. (Education is not represented on this diagram).

Diagram 17. Men and women in groups for time spent on household work and family care by average time spent on income producing work, journey to work etc., leisure, and personal needs. Average for all days. Hours



As a result of the strong correlation between income producing work and household work and family care, other types of activities are largely independent of the amount of time used on household work and family care. It is only when a great deal of time is spent on the latter, that the negative correlations with other types of activities become evident. Leisure is more sensitive to competing time use from non-paid work than are personal needs. To put it another way we sacrifice our leisure time rather than our sleep when there is a lot of household work and family care to be done. Men spending under 6 hours per day on household work and family care have, on the average, somewhat less leisure time than women do.

There is a slight, positive correlation for men between time spent on household work and family care and time spent on personal needs, while for women these two activities are independent of one another until more than 8 hours per day are used on the former. The positive correlation for men reflects increased participation in household work and family care on Saturdays when less time is devoted to paid work leaving more time for both the other types of activities.

## 2. Total work load

Household sustenance commonly entails both income producing work and household work and family care. In the remainder of this section the two types of work will be equated and the total time spent by the individual on them will be taken as an indicator of the person's total work load.

As mentioned earlier both types of work are assumed to have positive and negative aspects. The relative demands and benefits derived from the alternative work forms will not be evaluated here. The assumption will rather be made that they are sufficiently similar to justify adding the times together.

It is assumed that beyond certain limits time spent on work has a negative correlation with standard of living. Extreme work loads, represented in the number of hours spent working, result in less time for rejuvenating rest, relaxation and leisure activities. With reduced possibilities for rejuvenation it becomes increasingly harder to sustain the work effort and the individual must be said to have an exhausting activity schedule. Overwork will have negative consequences for the individual's physical and mental health and for his or her relationships with others.

Table 41 shows the total work load in hours for men and women. It seems that the 10 hour work day has not been left so very far behind.

Table 41. Men and women by total hours of work in the course of a day.<sup>1)</sup> Percentages

	Hours						Total	Number of respondents
	0	1-4	5-8	9-10	11-13	14 and more		
Men .....	10	20	20	25	21	4	100	1 463
Women .....	4	19	36	22	17	2	100	1 577

1) Sum of time spent on income producing work, journey to work and on household work and family care in the course of a day.

One-fourth of the men reported over 10 hours work in the course of the day, as did approximately one-fifth of the women.

Weekly activity rhythms have been shown to exist for both paid work and household work and family care. The greatest work load is expected on week days. Although the work loads on Saturdays are less than on week days they are sufficiently large to justify calling Saturdays a day of work for many people, particularly for employed persons.

Table 42. Persons in groups for sex and employment status by total hours of work. Percentages for different days in the week

	Hours						Total	Number of respondents
	0	1-4	5-8	9-10	11-13	14 and more		
<b>Employed men</b>								
Weekdays .....	3	7	15	36	33	6	100	1 125
Saturdays .....	5	38	41	16	7	3	100	367
Sundays .....	25	49	17	4	4	1	100	365
All days .....	6	16	19	29	25	5	100	1 125
<b>Non-employed men</b>								
Weekdays .....	23	38	29	7	3	0	100	338
Saturdays .....	23	49	22	5	1	0	100	104
Sundays .....	54	37	8	1	0	0	100	106
All days .....	27	39	25	6	3	0	100	338
<b>Employed women</b>								
Weekdays .....	1	6	19	27	41	6	100	556
Saturdays .....	3	19	43	17	15	3	100	194
Sundays .....	8	58	27	3	4	0	100	201
All days .....	3	15	24	22	32	4	100	556
<b>Non-employed women</b>								
Weekdays .....	4	15	43	25	12	1	100	1 021
Saturdays .....	4	21	52	17	5	1	100	332
Sundays .....	8	55	32	4	1	0	100	332
All days .....	4	22	42	21	10	1	100	1 021

Work days of over 10 hours are reported by 39 per cent of employed men on weekdays. The corresponding figure for employed women is 47 per cent. More employed women have long workdays on Saturdays than do employed men. On Saturdays 18 per cent of employed women work more than 10 hours as opposed to 10 per cent of employed men. Among non-employed women the percentage having such high total work time is considerably lower but still here there are 13 per cent who report over 10 hours on weekdays.

Table 42 clearly shows that long work days are not a rarity. While lacking data as to whether this represents a stressful and fatiguing situation for the persons involved it exceeds common notions of acceptable work hours. The tables presented in this section give an indication of what demands are being placed on individuals in different work and family situations. It is the task for others to decide whether these demands are unacceptably high and if this is the case, which steps can be taken to remedy the situation.

Table 43. Married persons in groups for sex, own and spouse's employment status<sup>1)</sup> and age of youngest child by total hours of work on weekdays. Percentages

	Hours						Total	Number of respondents
	0	1-4	5-8	9-10	11-13	14 and more		
Employed married men with children under 7 years								
Spouse non-employed .....	1	9	16	34	31	9	100	157
Spouse employed at least 1 hour per week .....	3	3	14	36	32	12	100	58
Employed married men with youngest child 7 years of age or older								
Spouse non-employed .....	3	6	15	36	36	4	100	321
Spouse employed 1-29 hours per week .....	7	7	9	36	36	5	100	106
Spouse employed 30 hours or more per week .....	2	7	17	35	35	4	100	82
Employed married men without children								
Spouse non-employed .....	3	9	19	38	26	4	100	120
Spouse employed at least 1 hour per week .....	2	7	13	36	35	7	100	98
Married women <sup>2)</sup> with children under 7 years								
Non-employed .....	0	7	44	30	18	1	100	161
Employed at least 1 hour per week ..	1	4	20	25	42	8	100	57
Married women <sup>2)</sup> with youngest child 7 years of age or older								
Non-employed .....	0	7	39	35	17	2	100	291
Employed 1-29 hours per week .....	0	4	26	38	30	2	100	154
Employed 30 hours or more per week ..	2	4	11	21	53	9	100	90
Married women <sup>2)</sup> without children								
Non-employed .....	4	17	53	17	8	1	100	113
Employed at least 1 hour per week ..	1	5	20	25	17	7	100	111

1) The number of observations permitting, the households are classified by the number of hours of paid work the wife has. 2) With employed spouses.

The spouse's employment status has little effect on the total number of hours employed, married men work on weekdays. Men have long work hours irrespective of life cycle phase, perhaps so long that they lack the capacity to adjust to the changing work demands of different family situations.

Half of the employed, married women with young children have over 10 hours work per day as opposed to approximately one fifth of the women with small children and who are not gainfully employed outside the home. Long work days are the rule for married women with older children and full time employment. Of these women, 62 per cent had more than 10 hours work per day, 9 per cent had 14 hours or more. The percentage of women with older children working over 10

hours per day is somewhat higher than the percentage of women with younger children (30 per cent as opposed to 25 per cent). Long work days are then not just a temporary problem facing young families.

Employed single persons do not escape the fate of a long work day. Many of these persons live alone and must shoulder all the responsibility for housekeeping. Their situation may be considered most comparable to that of married persons without children where both spouses are employed. Table 44 shows that 39 per cent of single employed men work over 10 hours a day on weekdays. The corresponding figures for employed married men without children and with employed wives is 30 per cent. Of the single, employed women 39 per cent work more than 10 hours on weekdays while only 24 per cent of the employed married women without children report so long work days.

Table 44. Employed, single men and women without children and not living in parents' household by total hours of work on weekdays. Percentages

	Hours						Total	Number of respondents
	0	1-4	5-8	9-10	11-13	14 and over		
Employed men .....	2	7	22	30	35	4	100	126
Employed women .....	0	13	19	29	35	4	100	98

Table 45 shows that the total work load varies with occupation. The percentage of men with over 10 hours work per day (on weekdays) is highest among wage earners in manufacturing (47 per cent) and lowest among self-employed in agriculture, forestry and fishing (33 per cent). The latter group may have greater freedom to spread their work load over all days in the week. The percentage of women reporting over 10 hours work per day is also highest among wage earners in manufacturing and construction.

Table 45. Persons in groups for sex and occupation by total hours of work on weekdays. Percentages

	Hours						Total	Number of respondents
	0	1-4	5-8	9-10	11-13	14 and over		
<u>Men</u>								
Self-employed in agriculture, forestry, fishing .	2	6	22	37	28	5	100	107
Other self-employed .....	3	3	22	35	34	3	100	125
Wage earners in manufacturing and construction .	4	7	6	36	41	6	100	420
Other wage earners .....	2	7	21	36	28	6	100	533
Non-employed .....	23	38	29	7	3	0	100	276
<u>Women</u>								
Self-employed .....	1	0	21	30	37	11	100	62
Wage earners in manufacturing and construction .	2	9	11	25	45	8	100	57
Other wage earners .....	1	6	20	27	41	4	100	445
Housewives .....	1	10	44	29	15	1	100	780
Other non-employed .....	12	33	39	12	4	0	100	229

## SECTION VI. SUMMARY AND CONCLUSION

Household work and family care takes on the average for all persons 4 hours per day. Large differences exist between the amount of time used to this purpose by men and women. Men use on the average 2.1 hours per day, women 5.8 hours per day.

The amount of time women use on household work and family care has been shown to vary with the size and composition of the household. The time spent is lowest for unmarried girls living in their parents' household. Almost twice as much time is used daily by unmarried women not living with their parents. Household work and family care demands the most time when there are small children in the household. After this stage the time used decreases but not to the low levels of unmarrieds or younger marrieds without children. The amount of time used on household work and family care by married women is positively correlated with household size.

Men's time use is, on the other hand, largely unaffected by household size or life cycle phase.

Household work and family care is composed of several different types of activities. Housework is the major component and accounts for 62 per cent of the average time spent on household work and care or 2 1/2 hours per day. Women spend considerably more time on housework than men. Large differences are observable even for single men and women. The second major component is the maintenance of household equipment and the dwelling. It requires on the average 0.4 hours per day and is primarily the man's task. Work with children is a third component and is reported in appreciable amounts only by women in households with very young children. The purchase of goods and services and travel in connection to household work and family care are equally performed by men and women and show very little variation between the different types of households.

Women's work loads tend to consist of several basic household chores which have both high frequency and long duration, while the man's contribution is largely composed of infrequent activities. Both men and women exhibit considerable day to day variation.

Income producing work and household work and family care are competing uses of time. Employed persons use less time on household work and family care than non-employed persons, the difference being particularly large for women. Employed women still report, however, spending substantial amounts of time on household work and family care. For a given number of hours spent on income producing work in the course of a day, women use more time on household work and family care than men. The time use of married persons is little effected by their spouse's employment status.

Distinctive time use patterns can be observed for different days in the week. These patterns reflect the influence of common employment schedules and, in the case of Sundays, other cultural traditions. Employed persons do more household work and family care on Saturdays than on weekdays while non-employed persons do more on weekdays than on Saturdays. On Sundays, less household work and family care is done than otherwise. Most of the weekly variation stems from shopping, maintenance and house work activities, particularly housecleaning, and the washing and ironing of clothes.

On weekdays the percentage of persons reporting household work and family care reaches its day time high between 10:30 and 11:00 a.m., is fairly constant in the afternoon and early evening, and declines sharply after 8:00 p.m. On week-ends, particularly Saturdays, the morning peaks are more pronounced. Work with children is characterized by two peak periods, one between 8:00 and 8:30 a.m., the other between 7:00 and 8:00 p.m. Housework by housewives on weekdays is likewise characterized by two peak periods, the largest of the two occuring between 8:30 and 11:00 a.m., the other between 3:00 and 4:30 p.m.

There is little seasonal variation in the amount of time spent on different household work and family care activities. An exception to this, however, is the private production of food.

A person's total work load is taken to be the sum of time spent on income producing work and on household work and family care in the course of a day. One-fourth of the men reported over 10 hours work in the course of a day, as did approximately one-fifth of the women. Nearly half of employed women and 40 per cent of employed men reported working over 10 hours on weekdays. Long work days are considerably less frequent for non-employed persons. There is relatively little variation in the per cent reporting long work days in the different life cycle phases. Wage earners in manufacturing and construction report long work days more frequently than persons in other occupational groups.

The figures presented in this report have shown that the traditional division of labour within the family still predominates. Men, more than women, engage in income producing work outside the home. Women, more than men, perform household work and family care in the home. Whatever can be said for the traditional division of labour, it does contain a certain degree of equality with respect to the number of hours worked per week by men and women. Of course gross inequalities can exist in individual household, but the differences in average times are relatively small.

Table 46. Persons in groups for sex and life cycle phase by total hours of work. Averages for different days in the week. Hours<sup>1)</sup>

	Weekdays	Saturdays	Sundays	Per week
Unmarried persons in parents' household				
Men .....	6.8 (219)	6.5 (66)	2.2 (70)	40.0
Women .....	5.7 (138)	3.1 (45)	2.0 (47)	30.5
Other unmarried persons				
Men .....	8.9 (129)	6.2 (53)	2.2 (52)	52.9
Women .....	8.2 (108)	7.8 (34)	4.4 (36)	53.2
Married persons under 45 years of age, without children living at home				
Men .....	9.3 (49)	:	:	55.4
Women .....	9.1 (68)	6.0 (24)	4.0 (25)	55.5
Married persons with youngest child under 7 years of age				
Men .....	9.9 (205)	6.6 (59)	4.1 (58)	60.2
Women .....	9.1 (231)	7.4 (77)	5.5 (74)	58.4
Married persons with youngest child 7 years of age or older				
Men .....	9.5 (547)	6.5 (189)	3.4 (191)	57.4
Women .....	9.4 (591)	7.7 (200)	4.8 (208)	59.5
Married persons, 45 years of age and over, without children living at home				
Men .....	8.0 (254)	5.4 (70)	2.5 (68)	47.9
Women .....	7.8 (276)	7.1 (84)	4.4 (81)	50.5
Single persons with children under 16 years of age				
Men .....	:	:	:	:
Women .....	8.6 (83)	7.6 (34)	4.2 (33)	54.8
Previously married persons				
Men .....	7.3 (36)	:	:	41.8
Women .....	7.2 (82)	6.8 (28)	3.5 (29)	46.3
All persons .....	8.6 (3 040)	6.5 (997)	3.7 (1 004)	53.2

1) Number of respondents is in parenthesis.

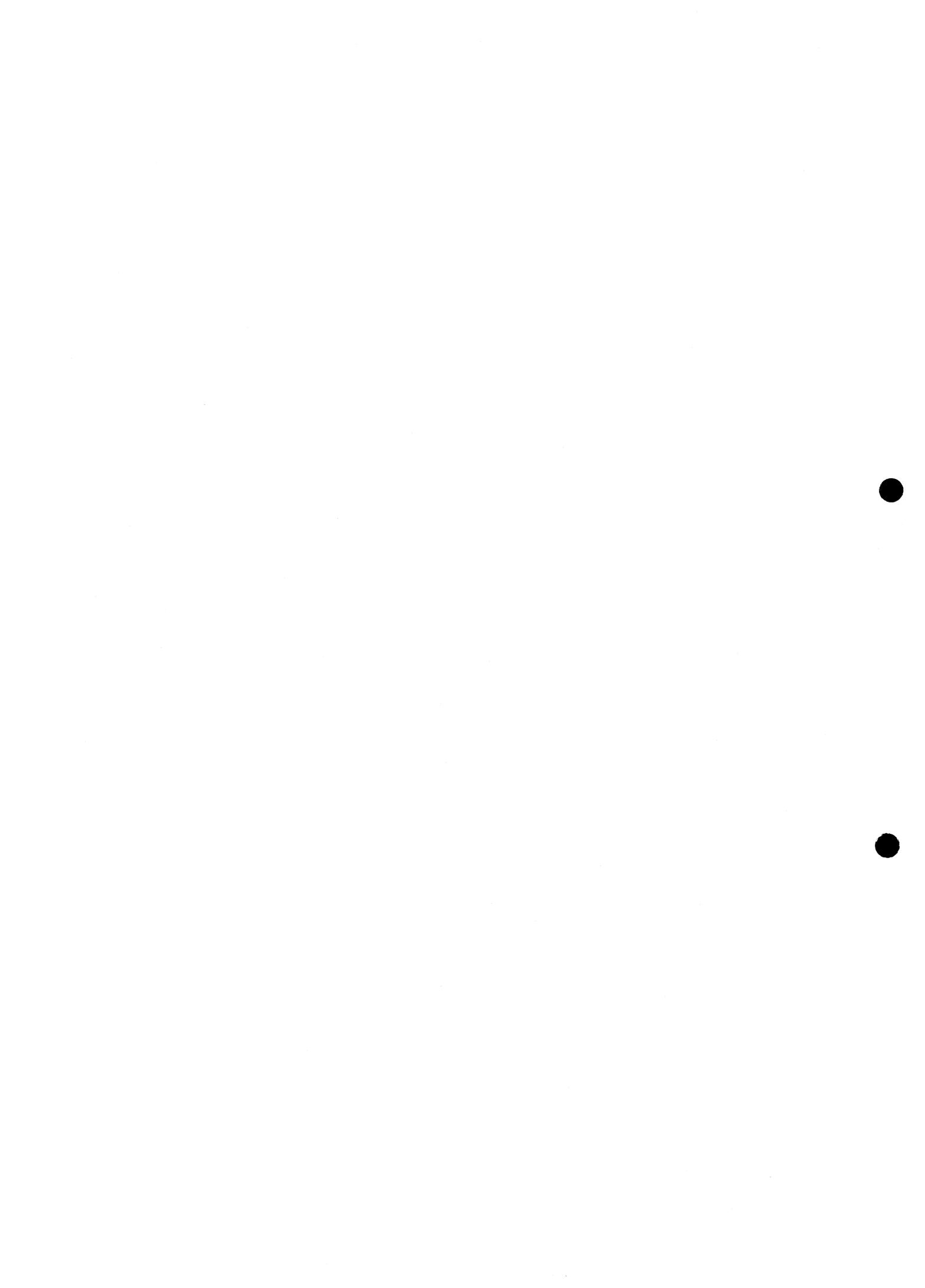
The most striking difference is between unmarried men and women living in their parents' household. Here the boy's involvement in income producing work more than compensates for the girl's greater contribution to household work and family care. He spends 9 1/2 hours more per week on work activities than she does. Young married men and women without children spend equally as much time per week working. In households with children under 7 years of age men work slightly more than women. In households with older children, the reverse is true.

The traditional division of labour is thus shown to entail a degree of equality between the sexes with regard to the number of hours worked per week. This equality breaks down, however, when the wife takes gainful employment outside the home as shown in table 47.

Table 47. Married persons in households where the wife is employed, in groups for sex and life cycle phase by total hours worked. Average per week. Hours

	No children	Youngest child under 7 years	Youngest child 7 years of age or older
Married men .....	56.0 (98)	60.9 (58)	54.6 (188)
Married women .....	62.3 (111)	63.7 (57)	65.1 (244)

This inequality in time use creates pressure to redefine responsibilities within the home. If the woman is to take employment outside the home, either the man or the society must be prepared to relieve her of some of the demands of household work and family care.



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## Supplementary tables

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	Men			Women		
	Average time spent on the activity in the course of a day (Hours)	Percentage who have participated in the activity in the course of a day	Average time spent by those participating in the activity (Hours)	Average time spent on the activity in the course of a day (Hours)	Percentage who have participated in the activity in the course of a day	Average time spent by those participating in the activity (Hours)
<b>HOUSEHOLD WORK AND FAMILY CARE</b>						
<u>House work</u>						
Food preparation, setting of table, serving .....	0.2	29	0.6	1.4	89	1.6
Dish washing, clearing the table .....	0.1	17	0.5	0.8	84	0.9
House cleaning .....	0.1	15	0.8	1.0	81	1.2
Washing and ironing .....	0.0	3	0.4	0.5	44	1.1
Mending of clothes .....	0.0	0	:	0.4	32	1.3
Heating, wood chopping, water fetching .....	0.1	9	0.9	0.1	6	0.5
Private production of food .....	0.1	6	2.2	0.1	8	1.7
House work, total .....	0.6	49	1.3	4.3	95	4.4
<u>Maintenance</u>						
Care of garden, lot and animals .....	0.2	15	1.5	0.2	20	0.8
Construction, larger remodelling .....	0.1	3	3.6	0.0	0	:
Painting, smaller remodelling .....	0.1	3	2.5	0.0	1	2.0
Maintenance and repair of dwelling and household equipment .....	0.1	4	1.4	0.0	1	0.0
Maintenance and repair of other equipment .....	0.2	14	1.5	0.0	2	0.7
Maintenance, total .....	0.7	32	2.1	0.2	22	1.0
<u>Work with children</u>						
Childcare and help to children .....	0.1	9	0.6	0.4	31	1.3
Help with school work ...	0.0	1	:	0.0	3	0.3
Other work with children.	0.0	2	0.5	0.0	5	0.6
Work with children, total	0.1	10	0.7	0.4	34	1.4
<u>Purchase of goods and services</u>						
Purchase of grocery goods	0.1	18	0.5	0.2	37	0.5
Purchase of clothes, shoes .....	0.0	1	:	0.0	3	0.6
Purchase of durable goods	0.0	0	-	0.0	0	-

## Supplementary tables (cont.)

Table 1 (cont.). Men and women by time spent on different types of household work and family care, percentage participating in the activities and time spent by those participating. Average for all days

	Men			Women		
	Average time spent on the activity in the course of a day (Hours)	Percentage who have participated in the activity in the course of a day	Average time spent by those participating in the activity (Hours)	Average time spent on the activity in the course of a day (Hours)	Percentage who have participated in the activity in the course of a day	Average time spent by those participating in the activity (Hours)
Other and unspecified purchase .....	0.1	9	0.7	0.1	9	0.8
Personal care outside the home .....	0.0	1	:	0.0	2	1.1
Medical treatment .....	0.0	2	0.7	0.1	2	1.3
Visit to public offices and institutions .....	0.0	4	0.2	0.0	4	0.3
Other errands .....	0.0	5	0.6	0.0	3	0.3
Purchase of goods and services, total .....	0.2	30	0.9	0.4	46	0.8
<u>Help to other households, collective projects</u> .....	0.1	5	2.4	0.1	4	2.1
<u>Other household work and family care</u> .....	0.2	23	0.7	0.2	25	0.6
<u>Travel in connection to household work and family care</u> .....	0.2	24	0.7	0.2	36	0.6
HOUSEHOLD WORK AND FAMILY CARE, TOTAL .....	2.1	78	2.7	5.8	97	5.9

Table 2. Persons by time spent on different types of household work and family care. Average for different times of the year

	September- October 1971	November- December 1971	January- February 1972	March- April 1972	May- June 1972	July- August 1972	The whole year
<b>HOUSEHOLD WORK AND FAMILY CARE</b>							
<u>House work</u>							
Food preparation, setting of table, serving .....	0.8	1.0	0.8	0.8	0.8	0.8	0.8
Dish washing, clearing the table .....	0.4	0.4	0.5	0.4	0.4	0.5	0.4
House cleaning .....	0.6	0.6	0.6	0.6	0.5	0.6	0.6
Washing and ironing .....	0.3	0.2	0.2	0.3	0.2	0.3	0.3
Mending of clothes .....	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Heating, wood chopping, water fetching .....	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Private production of food .	0.2	0.1	0.0	0.0	0.1	0.5	0.1
House work, total .....	2.6	2.7	2.4	2.3	2.2	2.9	2.5
<u>Maintenance</u>							
Care of garden, lot and animals .....	0.0	0.1	0.1	0.2	0.4	0.3	0.2
Construction, larger remodelling .....	0.1	0.1	0.0	0.1	0.0	0.1	0.0
Painting, smaller remodelling .....	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Maintenance and repair of dwelling and household equipment .....	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Maintenance and repair of other equipment .....	0.1	0.1	0.1	0.1	0.2	0.1	0.1
Maintenance, total .....	0.5	0.3	0.2	0.4	0.7	0.6	0.4
<u>Work with children</u>							
Childcare and help to children .....	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Help with school work .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other work with children ...	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Work with children, total ..	0.3	0.3	0.3	0.3	0.3	0.2	0.3
<u>Purchase of goods and services</u>							
Purchase of grocery goods ..	0.2	0.2	0.1	0.1	0.2	0.2	0.2
Purchase of clothes, shoes .	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of durable goods ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other and unspecified purchase .....	0.1	0.1	0.2	0.2	0.1	0.1	0.1
Personal care outside the home .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medical treatment .....	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Visit to public offices and institutions .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other errands .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of goods and services, total .....	0.3	0.4	0.3	0.3	0.3	0.3	0.3

Table 2 (cont.). Persons by time spent on different types of household work and family care.  
Average for different times of the year

	September- October 1971	November- December 1971	January- February 1972	March- April 1972	May- June 1972	July- August 1972	The whole year
<u>Help to other households, collective projects .....</u>	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<u>Other household work and family care .....</u>	0.1	0.2	0.2	0.2	0.2	0.2	0.2
<u>Travel in connection to household work and family care .....</u>	0.2	0.2	0.2	0.2	0.2	0.2	0.2
HOUSEHOLD WORK AND FAMILY CARE, TOTAL .....	4.1	4.2	3.7	3.8	4.0	4.5	4.0
Number of respondents ...	544	518	511	497	536	434	3 040