LMF2.5: Time use for work, care and other day-to-day activities

Definitions and methodology

Time-use surveys record information on how people allocate their time across different day-to-day activities. The surveys involve respondents keeping a diary of their activities over one or several representative days for a given period. This information on daily activities is then re-coded into a set of descriptive categories, so that a 24 hours period (or 1440 minutes) can be "split" into a sequence of "primary" activities in which respondents are involved during a day.

Many surveys classify activities into "main" or "primary" activities or as "parallel" or "secondary" activities. This is especially important for the identification of the total time dedicated to childcare since parents often combine the provision of care with other activities, for example, watching TV with their child. The answer as to what is the primary or secondary activity will vary across households and countries (see "comparability and data issues"), which suggests that, where possible, both primary and secondary activities should be taken into account when assessing time spent with children (time use diaries facilitate recording whether activities involved the presence of other people).

Time use data for primary activities is grouped in six broad categories:

- (1) Work-related activities include time spent on paid work (full or part-time) and/or at studying, and time spent looking for work. For working people, it includes main jobs and also (potential) second jobs. Breaks in the work place, as well as the time spent on commuting to work, to school or university (LMF2.6) are also included.
- (2) *Unpaid work* includes domestic activities except time exclusively spent caring for a child or another person, which is separately identified. Unpaid work includes a large range of home-activities such as cleaning, washing, repair work, or caring for pets etc. and non-home activities such as volunteer work, shopping, etc.
- (3) Care work covers the time spent caring for a child or another adult (regardless of whether that person lives in the household). Care work refers here to the provision of personal care but also the supervision and the education of a child, including reading and talking with children, as well as transporting children. Going together to the cinema, watching television with a child, etc. are considered as primary leisure activities with childcare as a secondary activity.
- (4) *Personal care* concerns sleeping (but not taking a nap, see below), eating and drinking, and other household, medical, and personal services (hygiene, visits to the doctor, hairdresser, etc.) consumed by the respondent.
- (5) *Leisure* includes a wide range of indoor and outdoor activities such as walking and hiking, sports, entertainment and cultural activities, socializing with friends and family, volunteering, taking a nap, playing games, watching television, using computers, recreational gardening, etc.
- 6) *Unspecified time* includes all activities not covered elsewhere (use of government services, religious and spiritual activities, sexual activities, time spent filling in time use diaries, etc.)

Other relevant indicators: Usual weekly working hours among men and women (LMF2.1); Time spent travelling to and from work (LMF2.6).

Key findings

Table LMF2.5.A consider the distribution of time by men and women (age 15 and over) over a 24 hour period across the above-mentioned six *primary* categories of activities. Not surprisingly, in all countries for which data are available, most of the time is spent on personal care activities (including sleeping). Cross-country variation in the proportion of time spent on personal care for both men and women is relatively small, and ranges from 43% in Norway and Sweden to 52% in France. By contrast, the proportion of total time dedicated to paid work varies much more: for men this ranges from 30% in Mexico, to 15% in Italy, France, Finland and Spain; for women it ranges from 17% in Latvia to 6% in Turkey.

Compared to time spent on personal care and paid work, respondents spend little time on care work. For men, the proportion of total time spent on care work varies from 1% in Belgium to 3.5% in Mexico, and for women from 1.7% in Germany to 22% in Turkey. In all countries, women spend more time on care work as a primary activity than men, and in many they spend around twice as much time (or more) on care work. The largest differences are recorded in Japan, Korea and Turkey, where women spend on average 4-6 times more time on care work than men.

Table LMF2.5.B shows that the amount of time allocated to care activities is largely determined by the presence of children in the household. The proportion of time spent care as a primary activity is also sensitive to the age of children, and data are therefore presented for blocks of countries which consider different age categories of children in the time use survey.

The labour market status of parents is an important determinant of time spent on care work as a primary activity, with respondents in paid work tending to spend less time on care work (compare Table LMF2.5.B, panels A and B). Table LMF2.5.B also shows that in most countries single-parents spend slightly more time on care work than partnered parents, working or not. In Canada and Poland, by contrast, for both working and non-working respondents, single-parents spend on average less time in care activities than partnered parents.

Chart LMF2.5.A shows time spent on care work as a *primary* and/or *secondary* activity by men and women (aged 25-44) with children below school age (data for Austria, Canada, Finland, France, Italy, Korea, Norway, Spain and the United States are not fully comparable as they do not include care as a secondary activity, see notes to chart LMF2.5.A). Not surprisingly, for both men and women, time spent on care work varies with the number of young children in a household. Generally, time spent on care work increases with the number of children, and the increase is usually larger for women than for men. Furthermore, the increase in time spent on caring when a second child arrives in a household is often considerably smaller than when the first child was born.

Chart LMF2.5.B shows that, across countries, the total amount of time dedicated to care work by women decreases with the age of the youngest child in the household. Cross-country differences are, however, quite large, especially for women with a child under 3 years of age. For example, Polish mothers with a child not yet 1 year old spend about 21% of their time on care work, while this is only 13% in Belgium.

Table LMF2.5.A: Time allocated in main activities, by gender, 1999-2012/2013 Distribution (%) of time spent in each activity over 24 hours, age 15 and over ^b

	Panel A. Men								Panel B. Women						
	Paid work or study	Unpaid work	Care work	Personal care	Leisure	Unspecified	Total		Paid work or study	Unpaid work	Care work	Personal care	Leisure	Unspecified	Total
Australia	20.3	10.5	2.2	45.0	20.6	1.4	100	Australia	11.1	17.3	5.3	46.2	18.6	1.6	100
Austria	22.5	9.4	1.5	44.0	22.0	0.6	100	Austria	14.1	17.3	3.2	44.9	20.0	0.5	100
Belgium	15.6	9.7	0.8	44.9	26.5	2.6	100	Belgium	10.1	16.1	1.9	46.6	23.1	2.2	100
Canada	22.1	10.3	1.7	43.6	21.7	0.6	100	Canada	16.4	15.1	3.4	45.1	19.3	0.7	100
Estonia	21.0	11.5	1.8	44.1	21.3	0.3	100	Estonia	14.8	19.2	3.5	43.8	18.3	0.3	100
Finland	15.4	11.2	1.0	43.8	25.5	3.1	100	Finland	12.6	15.4	2.5	45.2	21.5	2.7	100
France	14.5	9.7	1.0	51.7	22.5	0.6	100	France	10.1	14.9	2.3	52.8	19.1	0.8	100
Germany	17.4	9.8	1.4	44.4	25.8	1.2	100	Germany	11.3	15.9	1.7	47.4	23.7	0.0	100
Italy	14.5	8.2	1.2	49.2	25.7	1.2	100	Italy	7.6	21.0	2.4	48.4	19.1	1.4	100
Japan	26.3	4.7	0.5	44.3	23.2	1.0	100	Japan	14.9	15.3	1.9	45.4	21.2	1.2	100
Korea	26.5	3.0	8.0	45.8	22.2	1.7	100	Korea	15.4	13.7	3.4	45.5	19.3	2.6	100
Latvia	24.2	8.8	1.2	44.9	20.8	0.3	100	Latvia	17.2	16.7	2.4	45.3	18.1	0.3	100
Mexico	30.0	4.4	3.5	43.7	17.7	0.6	100	Mexico	12.1	22.5	8.6	41.8	14.1	0.8	100
New Zealand	19.9	11.3	1.1	47.7	19.3	0.7	100	New Zealand	11.5	17.8	2.9	48.9	18.2	0.7	100
Norway	18.6	11.7	1.6	42.6	25.0	0.4	100	Norway	13.9	13.9	2.5	44.2	25.1	0.4	100
Poland	21.7	6.2	1.5	46.6	23.7	0.3	100	Poland	11.6	18.8	3.3	46.2	19.8	0.3	100
Slovenia	18.9	11.4	1.6	43.8	24.2	0.3	100	Slovenia	13.8	19.7	2.6	43.9	19.7	0.2	100
Spain	14.8	8.9	2.0	48.7	24.7	0.9	100	Spain	9.9	17.8	3.6	47.8	20.0	0.9	100
Sweden	20.1	10.0	1.8	42.5	24.4	1.2	100	Sweden	14.8	14.0	3.0	44.4	23.0	0.9	100
Turkey	20.2	2.6	3.5	46.7	19.8	7.2	100	Turkey	6.1	3.7	22.0	46.8	17.6	3.8	100
United Kingdom	20.1	9.5	1.6	43.3	24.7	0.9	100	United Kingdom	11.9	16.6	3.6	44.6	22.3	1.0	100
United States	20.4	10.2	1.6	43.7	22.2	2.0	100	United States	15.1	14.8	3.2	45.2	19.3	2.3	100
Bulgaria	16.5	11.7	1.2	49.6	20.7	0.3	100	Bulgaria	12.4	20.6	2.2	48.5	16.2	0.2	100
Lithuania	22.4	9.7	1.6	45.3	20.5	0.3	100	Lithuania	16.9	18.5	2.6	45.6	16.1	0.3	100

a) 1999: New Zealand; 2000: Estonia, Hungary; 2001: Slovenia, Sweden, United Kingdom; 2002: Latvia, Lithuania, Mexico; 2004: Poland; 2006: Australia, Belgium, Turkey; 2008: Italy; 2008/2009: Austria; 2009: Finland, Korea; 2009/2010: France, Spain; 2010: Canada, Norway, United States; 2011: Japan; 2012/2013: Germany.

b) Covers the total population from age 15 onwards, except for European countries where samples include adults from 20 to 74 years of age and Germany and Japan where the population aged 10 years or older is covered. Source: For European countries, National Time Use Surveys as reported in the Harmonised European Time Use Surveys dataset (HETUS) dataset except for Austria, Canada, Finland, France, Spain, Norway; results from National Time Use surveys for Australia, Canada, Japan, Korea and Mexico.

Table LMF2.5.B: Time dedicated to care activities, 1999-2010^a Proportion (%) of time spent on care as primary activity^b, age 15 and over^c

	Panel A	A. Working responder	ts			Panel B. Non-working respondents				
	Single	adult	Partnered adults			Single	Single adult		Partnered	
	with child(ren)	without child	with child(ren)	without child		with child(ren)	without child	with child(ren)		
		Children u	nder age 7			Children under age 7				
Austria	10.0	0.2	7.1	0.5	Austria		0.5	16.5		
Belgium	5.5	0.2	5.0	0.8	Belgium	9.0	0.3	9.6		
Bulgaria	2.6	0.2	3.4	0.8	Bulgaria	8.3	1.0	7.4		
Canada	6.1	0.3	6.8	0.5	Canada	14.9	0.7	16.0		
Estonia	4.8	0.9	5.1	1.2	Estonia	12.1	1.5	11.8		
Finland	7.1	0.2	7.6	0.4	Finland		0.4	14.9		
France	6.0	0.4	5.9	0.5	France	6.1	0.5	9.5		
Italy	10.3	0.3	6.7	0.3	Italy	13.3	0.9	10.7		
Korea	5.9	0.4	4.1	1.0	Korea		0.0	5.5		
Latvia	2.6	0.6	3.8	1.0	Latvia	10.0	1.7	7.6		
Lithuania	1.0	0.6	4.3	1.1	Lithuania		1.5	12.7		
Norway	8.7	0.2	7.8	0.8	Norway		0.1	11.4		
Poland	3.3	0.8	6.3	1.5	Poland	10.5	1.3	13.0		
Slovenia	5.3	0.5	4.9	1.1	Slovenia	5.6	0.8	6.9		
Spain	8.5	0.5	7.8	0.6	Spain	12.1	1.2	11.6		
Sweden	6.5	1.0	6.5	1.7	Sweden	10.0	0.7	10.0		
United Kingdom	6.9	0.4	6.7	1.4	United Kingdom	12.6	1.0	13.0		
United States	7.2	0.5	6.6	0.6	United States	10.7	0.9	12.1		
		Children from	n age 7 to 11			Children from age 7 to 11				
Germany	1.0	0.8	2.8	2.0	Germany		0.6	5.6		
		Children	under 15				Children	under 15		
Australia	10.0	1.1	7.8	1.1	Australia	15.8	1.6	15.8		
		Children	under 18				Children	under 18		
Mexico	7.0	3.4	5.4	3.0	Mexico	16.5	3.4	5.6		
New Zealand	3.7	0.1	3.4	0.2	New Zealand	4.8	0.1	4.1		

a) 2000: Estonia, Hungary; 2001: Slovenia, Sweden, United Kingdom; 2002: Germany, Mexico; 2003: Latvia, Lithuania; 2004: Poland; 2005: Belgium; 2006: Australia, Belgium, Japan, New Zealand; 2008: Italy; 2008/2009: Austria; 2009: Au Finland, Korea; 2009/2010: France, Spain; 2010: Canada, Norway, United States.

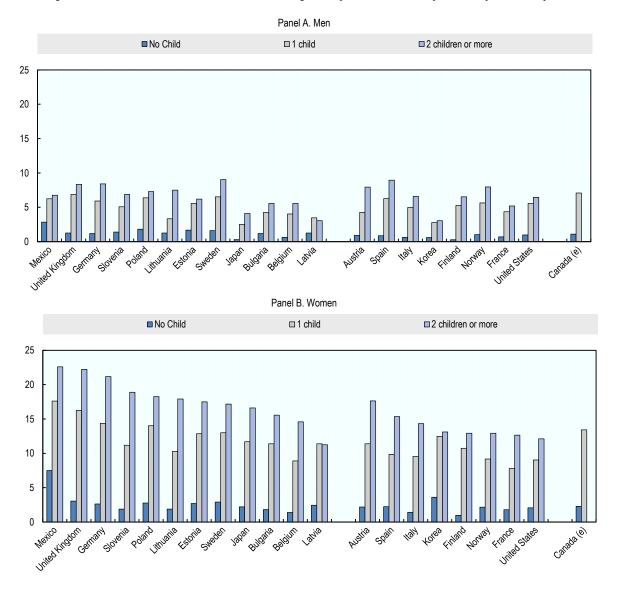
b) Information only shown if estimate based on at least 30 diaries.

c) Covers all the population from age 15 onwards, except for European countries where samples include adults from 20 to 74 years of age.

Source: For European countries, National Time Use Surveys as reported in the Harmonised European Time Use Surveys dataset except for Austria, Canada, Finland, France, Spain, Norway; results from National Time Use surveys for Australia, Canada, Korea and Mexico.

Chart LMF2.5.A: Percentage of time dedicated to care work, by number of children under school age^a, 1999-2010^b

Proportion (%) of time with care declared as primary (and secondary) activity^c, 25-44-year-olds^d

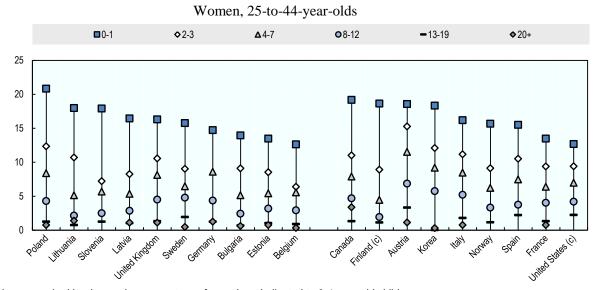


Countries are ranked by decreasing percentage of time dedicated to care activities by women with two children or more.

- a) School age refers génerally to children under age 7, except for the US and Japan where data refer to children under 6, and to children under 5 in Mexico.
- b) 2000: Estonia; 2001: Slovenia, Sweden, United Kingdom; 2002: Germany, Mexico; 2003: Latvia, Lithuania; 2004: Poland; 2006: Belgium, Japan; 2008: Italy; 2008/2009: Austria; 2009: Finland, Korea; 2009/2010: France, Spain; 2010: Canada, Norway, United States.
- c) Care work includes here all episodes of care work declared as primary or secondary activity, except for Austria, Canada, Finland, France, Italy, Korea, Norway, Spain and the United States where only care as a primary activity is considered. Care work also includes the time spent to care for household members or to informally help other households.
- d) Except Japan, where data concerns those aged 15 and over.
- e) For Canada, information on number of children not available. Data for '1 child' refer to '1 child or more'

Source: For European countries, National Time Use Surveys as reported in the Harmonised European Time Use Surveys dataset (HETUS) dataset except for Austria, Canada, Finland, France, Spain, Norway; results from National Time Use surveys for Australia, Canada, Korea and Mexico.

Chart LMF2.5.B: Percentage of time spent on care work^a by women, by age of youngest child, 1999-2010^b



Countries are ranked by decreasing percentage of care time dedicated to 0-1 year old children.

a) Care work includes here all episodes of care work declared as primary or secondary activity, except for Austria, Canada, Finland, France, Italy, Korea, Norway, Spain and the United States where only care as a primary activity is considered. Care work also includes the time spent to care for household members or to informally help other households.

b) 2000: Estonia; 2001: Slovenia, Sweden, United Kingdom; 2002: Germany, Mexico; 2003: Latvia, Lithuania; 2004: Poland; 2006: Belgium; 2008: Italy; 2008/2009: Austria; 2009: Finland, Korea; 2009/2010: France, Spain; 2010: Canada, Norway, United States. c) No information on household children aged 18 or older in Finland and the United States.

Source: For European countries, National Time Use Surveys as reported in the Harmonised European Time Use Surveys dataset (HETUS) dataset except for Austria, Canada, Finland, France, Spain, Norway; results from National Time Use surveys for Australia, Canada, Korea and Mexico.

Comparability and data issues

Several factors affect data comparability across countries, including differences in: sample composition; the categorization of activities; and, the sampling of diary days even when data collection complies with standardised guidelines. Large differences are also related to how simultaneous activities are recorded – if at all. In general, data is coded so as to categorize people engaged in one activity at the time. In some cases, surveys include separate questions designed to learn about simultaneous activities (i.e. watching television while cooking, or caring for children while performing other activities), which allows distinction of activities in "primary" and "secondary" activities. However, the reality is that while "primary" activities are comprehensively tracked, the recording of "secondary" is more prone to error because they are often omitted by the respondents. The comparability of estimates on secondary activities also suffers because some activities only take a few minutes of one's time (for example, moving laundry from the washer to the dryer) so that they are not reported consistently enough to produce reliable estimates. Because of the omission of secondary activities, the amount of time devoted to specific tasks that may be performed simultaneously with other tasks is typically under-reported among primary activities.

Care work is one of the activities which is most affected by these issues, and to overcome these problems surveys ask questions on secondary activities and whether or not activities took place in the presence of children. Obviously, the same care activity can be coded as either a primary or secondary activity by two different respondents, depending on his/her perception and on cultural norms. Accounting for the presence of children during an activity, which is sometimes defined as "passive" childcare (for

example, having dinner with children (Jones, 2008)), more than doubles time spent on caring for most of the countries for which data is available.

For eight European countries (Finland, France, Germany, Italy, Norway, Spain, Sweden, and the United Kingdom), data have been taken from the *Harmonised European Time Use Surveys* (HETUS) which provides standardised statistics on average time spent on different activities, as collected by national surveys carried out since the late 1990s until the mid-2000s. These countries have time—use surveys that closely follow Eurostat's Guidelines on Harmonised Time-use Surveys (Eurostat, 2004). While there are differences across countries in the age of the population covered, all countries provide information for people aged between 20 and 74. The main characteristics of the national survey are summed-up in the following table:

Source, period and population covered by the Harmonised European Time Use Surveys

	Fieldwork period	Age of population covered	Sample size (Number of respondents)	Size of population, 1,000	Comments	
Belgium – Statistics Belgium and Vrije Universiteit Brussel	January 2005 – January 2006	12 –	12 824	8 800		
Germany – Federal Statistical Office Germany	April 2001 – April 2002	10 –	12 655	73 641	Two weekdays, one weekend day	
Estonia – Statistical Office of Estonia	April 1999 – March 2000	10 –	5 728	1 290		
Latvia – Central Statistical Bureau of Latvia	February - August 2003, October – November 2003	10 -	3 804	2 115		
Lithuania – Statistics Lithuania	January-December 2003	10 -	4 768	3 454		
Hungary – Hungarian Central Statistical Office	September 1999 – September 2000	15 – 84	10 792	8 206		
Poland – Central Statistical Office	1.06.2003- 31.05.2004	15 -	20 264	30 904		
Slovenia – Statistical Office of the Republic of Slovenia	April 2000 – March 2001	10 –	6 190	1 990		
Sweden – Statistics Sweden	October 2000 – September 2001	20 – 84	3 998	6 538		
United Kingdom – Office for National Statistics	June 2000 – September 2001	8 –	10 366	53 016		

For the other countries, national surveys have been used as listed below:

Australia: The 2006 Time-use Survey (TUS) is conducted by the Australian Bureau of Statistics (ABS) across all states and territories. The survey collects information from people aged 15 years and over and is based on a sample of about 3,900 households. TUS provides nationally-representative estimates for those characteristics which are relatively common and for sub-groups that are relatively large and fairly evenly spread geographically. For the most recent Survey, enumeration was conducted over four 13-day periods in 2006, chosen to contain a representative proportion of public holidays and school holidays. The survey collects information by personal interview from usual residents, covering about 98% of the people living in Australia.

Austria: The most recent time use survey was collected in 2008/2009. Approximately 8 200 individuals were surveyed and filled out time use diaries by themselves. All household members age 10 or older were asked to keep a time use diary.

Canada: The Canadian time-use survey is administered as part of the General Social Survey (GSS) program. The most recent GSS survey covering time-use was taken in 2010 via retrospective interviews. The sample size is around 15 000, and provides reliable estimates for the country as a whole and provinces

individually, as well as for some population groups. Data for the 2010 wave of the GSS were collected from January to December 2010, with collection for the November sample extending until mid-December.

Finland: The most recent time use survey was collected in 2009. Between April 2009 and May 2010 approximately 3 500 individuals were surveyed and filled out time use diaries by themselves. All household members age 10 or older were asked to keep a time use diary.

France: The most recent time use survey was collected in 2009/2010. Approximately 20 000 individuals were surveyed and filled out time use diaries by themselves. All household members age 10 or older were asked to keep a time use diary.

Italy: The most recent time use survey was collected in 2008. Between February 2008 and January 2009 approximately 40 000 individuals were surveyed and filled out time use diaries by themselves. All household members age 10 or older were asked to keep a time use diary.

Japan: The 2006 Survey on Time use and Leisure is divided into several sub-samples, with respondents for each sub-sample asked to report their time-use on two consecutive days during 14 to 22 October. A sample of 80 000 households was selected, covering around 200 000 persons.

Korea: The 2009 time use survey is the third survey to collect information on how Koreans spend their time. The sample for the 2009 Time use Survey consists of about 20 000 individuals aged 10 years. All the household members age 10 and over were asked to keep the time-diary except those who were absent from home during the whole survey period, had serious physical or mental impediments, or who could not keep a time-diary by themselves.

Mexico: The 2002 National Survey on Time use (Encuesta Nacional sobre Uso del Tiempo, ENUT) is a module of the National Survey of Household Income and Expenses (Encuesta Nacional de Ingresos y Gastos de los Hogares, ENIGH. The fieldwork for the Time-use Survey took place from 18 November to 13 December of 2002. It covered 28 days, with 4 rounds of 7 days each.

New Zealand: The one-off Time use Survey in 1999 gathered information from residents aged twelve and over. The data collection was undertaken between July 1998 and June 1999. The survey refers to the civilian, non-institutionalised population aged 12 years and over living in private households and with usual residence in the country. The sample represents a total of approximately 8 500 Maori and non-Maori people.

Norway: The most recent time use survey was collected in 2010. Approximately 3 100 individuals were surveyed and filled out time use diaries by themselves.

Turkey: In 2006 approximately 390 households were interviewed each month by the Turkish Statistical Institute (TURKSTAT), totalling 5 070 selected households for the year. 11 815 members of households aged 15 years and over were asked to complete two diaries - one for a weekday and one for a weekend day - by recording all of their daily activities during 24 hours at ten-minute intervals.

United States: The American Time use Survey (ATUS) sample is drawn from households that have completed their final month of interviews for the Current Population Survey. In 2010, the sample consisted of approximately 10 000 individuals and information was collected through retrospective interviews.

Sources and further reading: Eurostat (2004), Guidelines on the Harmonised Time Use Surveys; Hetus Metadata: https://www.testh2.scb.se/tus/Introduction3.html#Part0; Jones M. (2008), "Measuring passive Childcare in Time Use Surveys: a Comparison of International Methodologies", Statistics New Zealand; Chenu A. and L. Lesnard (2008), "Time Use Surveys: a Review of their Aims, Methods, and Results", European Journal of Sociology, Vol. 47, No. 3, December, p. 335-359