

**Online Data Appendix for
“The Rug Rat Race”**

by

Garey Ramey
University of California, San Diego

and

Valerie A. Ramey
University of California, San Diego
National Bureau of Economic Research

Table A1. U.S. Time Use Surveys

Study Title and Survey Organization	Time Period	Sample Parents, 18-64, not students	Notes
“1965-66 Americans’ Use of Time” * Survey Research Center †	Fall 1965 – Spring 1966	1,194	Some oversampling
“1975-76 Time Use in Economic and Social Accounts” * Survey Research Center †	Fall 1975 – Summer 1976	3,343	Panel aspect
“1985 Americans’ Use of Time” * Survey Research Center †	Jan. 1985 – Dec. 1985	928	
“National Human Activity Pattern Survey” * Survey Research Center †	Fall 1992 – Summer 1994	1,524	Methodology led to undercount of childcare
“1995 Electric Power Research Institute Study” EPRI †	Jan. 1995 – Dec. 1995	478	
“Family Interaction, Social Capital, and Trends in Time Use” Survey Research Center †	Mar. 1998 – Dec. 1999	455	
“National Survey of Parents” Survey Research Center †	May 1999 – Jun 2000	974	Includes only parents
“American Time Use Survey” Bureau of Labor Statistics	Jan. 2003 – Dec. 2008	03: 7,771 04: 5,082 05: 5,335 06: 5,264 07: 4,859 08: 4,941	Activity codes are different from earlier codes

* indicates that the study is part of the American Heritage Time Use Study.

† indicates that John Robinson was a principal investigator for the survey.

U.S. Activity Codes

A. Total Childcare

AHTUS (1965, 1975, 1985, 1992-94)	tmain33 - tmain39, tmain65, tmain96
1995, 1998, 2000	act20 – act27, act29
ATUS (2003-2008)	0301, 0302, 0303, 0401, 0402, 0403, 0801, 160107,180381,180481,180801

B. Work

AHTUS (1965, 1975, 1985, 1992-94)	tmain10-tmain12, tmain92, tmain93
1995, 1998, 2000	act0, act1, act3, act5, act9
ATUS (2003-2008)	0501, 0503, 1805

C. Chores

AHTUS (1965, 1975, 1985, 1992-94)	tmain20-tmain27, tmain30-tmain32, tmain40, tmain67-68, tmain95
1995, 1998, 2000	act10-act19, act30, act31, act34-act39, act42
ATUS (2003-2008)	02, 0304, 0305,0404,0405,07,08,09,10,160104,160105, 160106,160108,180280,180382,180399,180482,180499, 1807,180802,180803,180806,180807,1809,1810

D. Subcategories of Childcare for 1965-2000

Care of younger children	tmain33 (act20)
Care of older children, or mixed age	tmain34 (act21)
Educational activities	tmain37, tmain38 (act22, act23)
Play	tmain36, tmain65 (act24, act25)
Travel, activities	tmain39, tmain96 (act27,act29)
Medical care	tmain35 (act26)

E. Subcategories of Childcare for 2003-2008

Physical care and supervision	030101,030106,030109, 040101,040106,040109
Education	030102,030186,0302,040102,040186,0402
Play	030103,030104,030105,040103,040104,040105
Health	0303,0403,
Organizing & attending activities	030108,030110,040108,040110
Chauffering (travel, picking up, waiting, etc.)	030111,030112,040111,040112,180381,180481,180801

Construction of household income for the cross-section regressions

The household income variable was “hufaminc” in the CPS data set. The CPS variable gives ranges of income, with a top code of \$150,000 and above. We used the midpoints of the ranges. For the top-coded category, we used information from Saez’s (2008) annual U.S. distribution of income for families, including realized capital gains, to compute the average income for the top category. We converted income to 2008 dollars using the Consumer Price Index.

Comparison of trends in median household income and childcare time

Annual data on median household income of married couple families with one or more children under age 18, in 2008 dollars, from 1974 to 2008 is from Table F-10 from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements. Data from 1969 to 1973 is from Table A6. We converted the earlier data to 2008 dollars.

Canadian Time Use Data

We use microdata from 1986 (cycle 2), 1992 (cycle 7), 1998 (cycle 12) and 2005 (cycle 19) of the Time Use Survey from Canada’s General Social Survey. There were three ways in which the sample of parents differed from the U.S. data. First, the definition of a “parent” in Canada is someone whose own child ages 0 to 18 is in the household, whereas in the U.S. it is someone who lives in a household with a child ages 0 to 18. Second, in Canada all childcare refers to household children; in the U.S. it refers to both household and nonhousehold children. Third, because of data limitations, the adults in the Canadian data are ages 20 to 64, compared to 18 to 64 in the U.S. data. To preserve cultural comparability with the U.S., we limited the sample to Canadians for whom English was one of the main languages spoken at home.

A key complication arose in constructing a consistent series of childcare across time. Time spent in childcare in 1986 and 1992 referred to children ages 0 to 18, whereas time spent in childcare in 1998 and 2005 referred to children ages 0 to 14. Using this definition would bias the time trends down.

To create a consistent variable over time, we used all childcare and adult care time. For 1986, this was variable DVCHILDC, plus variables DURAC_41 and DURAC_42. DVCHILDC included only childcare time in 1986, so we added in the two adult care variables. For 1992, 1998, and 2005, DVCHILDC included both childcare and adult care. (See the table in Appendix J of the documentation of the GSS 2005 for more details.)

We also compared this series to a constructed childcare series that we expect to give an upward bias in the trend. In particular, we constructed this series by linking several series over time. For 1986 and 1992, we used the available childcare series that covered care of children ages 0 to 18 (DVCHILDC in 1986 and CHLDDOMS in 1992). Because the childcare series in 1998 and 2005 omitted care of children ages 15 to 18, we attempted to augment the series in the cases where we thought that child of this age was present. In particular, in 1998 and 2005, we substituted total family care time for

childcare time in those households that had a nonzero probability of having a child ages 15 to 18. We determined that probability as follows:

1998 survey: The variable CHR1518C indicated the number of children ages 15 to 18. If this variable was positive, we substituted total family care time for childcare time.

2005 survey: This survey did not contain the variable CHR1518C. We had to use other variables to indicate a probability of a child between the ages of 15 to 18. These cases were:

- (1) The respondent had a child below the age of 19 (CHRTIME6=1) and no children ages 0 to 14 (CHR0014C=0) in the household.
- (2) The respondent likely had a child between the ages of 12 and 18 in the household (CHRTIME6=4, 5, or 6), the number of respondent's children of any age in the household (CHRINHSDC) was greater than the number of respondent's children ages 0 to 14 (CHR0014C), and the respondent had a child ages 0 to 24 in the household (LIVARR12 = 3 or 4).

The table below gives the change in each measure for all parents from 1986 to 2005

Measure	Change (in hours per week)
1. Childcare of ages 0-14 in 2005 and childcare of ages 0-18 in 1986	2.39
2. Total family care (children and adults)	2.45
3. Constructed childcare variable that substitutes total family care in some households in 2005	2.84

We know that Measure 1 will bias the estimate of the change downward because of the change in definition. We know that Measure 3 will bias the estimate of the change upward because of the substitution of total family care in some households in 2005. The change in total family care, the consistent measure, lies between the upper and lower bound.

Table A2. Trends in Weekly Hours Spent on Childcare by All Adults

	(1)	(2)		(1)	(2)	
Variables	All Women	All Men		All Women	All Men	
Constant	9.396 (0.243)**	2.205 (0.184)**		college	-1.204 (0.621)	0.398 (0.350)
1965	1.123 (0.424)**	0.223 (0.318)		(1965)*college	0.117 (1.301)	0.009 (0.778)
1985	-0.835 (0.421)*	-0.063 (0.319)		(1985)*college	0.728 (0.984)	-0.645 (0.620)
1993	-1.624 (0.318)**	-0.412 (0.244)		(1993)*college	-0.569 (0.749)	-0.630 (0.464)
1995	0.598 (0.597)	0.223 (0.441)		(1995)*college	0.481 (1.401)	0.560 (0.889)
1998	1.172 (0.630)	1.668 (0.463)**		(1998)*college	1.569 (1.383)	-0.187 (0.885)
2003	2.376 (0.265)**	1.344 (0.198)**		(2003)*college	1.639 (0.683)*	0.585 (0.402)
2004	2.250 (0.287)**	1.436 (0.211)**		(2004)*college	2.183 (0.711)**	0.361 (0.423)
2005	1.991 (0.289)**	1.518 (0.214)**		(2005)*college	2.436 (0.716)**	0.429 (0.426)
2006	2.273 (0.293)**	1.253 (0.213)**		(2006)*college	1.068 (0.715)	0.963 (0.428)*
2007	1.950 (0.296)**	1.318 (0.215)**		(2007)*college	2.510 (0.718)**	0.649 (0.433)
				Observations	38,340	30,938
				R-squared	0.09	0.04

This table reports the results of regressing total childcare on the variables of interest for the sample of all men and women 18-64 who are not students.

The omitted year is 1975.

Controls for individuals' ages (dummies for 18-24, 25-34, 35-44, 45-54, 55-64) are included in all columns.

Standard errors in parentheses.

* significant at 5%; ** significant at 1%.