

**CHANGING TIMES OF AMERICAN YOUTH:
1981-2003**

F. Thomas Juster, Hiromi Ono and Frank P. Stafford

Institute for Social Research
University of Michigan
Ann Arbor, Michigan 48106

November 2004

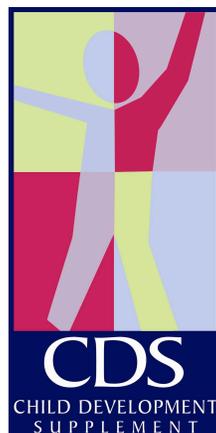


Table of Contents

Introduction	3
Executive Summary	5
Table 1: Weekly Average Time Use of American Children Ages 6-17, 2002-03 and 1981-82	8
Table 2A: Weekend Time Use by Age	9
Table 2B: Weekday Time Use by Age	10
Table 3: Weekly Average Time Use by Age	11
Table 4: Weekly Average Time Use by Gender	12
Table 5A: Weekly Average Time Use, Children in Families with Computers and Internet	13
Table 5B: Weekly Average Time Use, Children in Families with Computer, Without Internet	14
Table 5C: Weekly Average Time Use, Children in Families without a Computer	15

Introduction

For Americans of all ages, time has become a major preoccupation. How American children and teens spend their time is the subject of this report, based on the latest time diary data from the University of Michigan Child Development Supplement. Part of the Panel Study of Income Dynamics conducted at the U-M Institute for Social Research (ISR), the Child Development Supplement is a nationally representative, longitudinal study of children and their families, examining a broad array of developmental outcomes within the context of family, school and neighborhood environments.

Beyond the intrinsic interest in reliable information about how much time today's children and youth actually spend reading, sleeping, or doing homework, the study provides valuable insights into a wide variety of important issues that bear on children's physical, social and intellectual development. Analyzing the way children spend their time today compared to their patterns of time-use as long as twenty years ago and as recently as 5 years ago reveals trends that have implications for the health and well-being of U.S. children and adolescents.

Major funding for the Child Development supplement was provided by the National Institute for Child Health and Human Development.

In 1997, U-M researchers interviewed 2,394 families with children under age 13 for a similar study. In 2002-2003, the research team re-interviewed 2,017 of these families, obtaining data on 2,908 children and adolescents between the ages of 6 and 17.

For each participating household, researchers conducted personal interviews with parents, caregivers, teachers and the children themselves. Youth ages 10 years and older and, with help from their parents, children ages 6-9 filled out a 24-hour time diary about a randomly selected weekday and a randomly selected weekend day. These time diaries provide a detailed account of the type, number, duration and location of activities during 24-hour-period, providing an unbiased measure of how children spend their time that has been proven to be more reliable than the estimates available from other measures, such as responses to direct questioning about how much time children spend studying, watching television or reading.

Over two decades ago in 1981-1982, researchers at the ISR conducted a pilot study with a national sample of 322 children ages 6 to 17, using time diaries to assess how they spent their time. Although the pilot sample was small, and some of the activity categories are

different from those used in the later, larger studies, many comparisons can be made between how children spend their time today and how they spent their time twenty years ago. Some of these changes are predictable, while others run counter to common expectations.

The U-M Panel Study of Income Dynamics

The Panel Study of Income Dynamics (PSID), begun in 1968, is a longitudinal study of a representative sample of U.S. men, women, and children and the families in which they reside. It emphasizes the dynamic aspects of economic and demographic behavior, but its content includes a broad range of sociological and psychological measures. As a consequence of low attrition rates and long-term success in following young adults as they form their own families, the sample size has grown from 4,800 families in 1968 to more than 7,000 families in 2001. At the conclusion of 2003 wave of data collection, the PSID had collected information about more than 65,000 individuals spanning as much as 36 years of their lives. The study is directed by U-M economist Frank Stafford, and has been supported by a large number of government agencies, foundations, and other organizations over the years, with primary funding from the National Science Foundation. For more information, see <http://psidonline.isr.umich.edu/>

The U-M Institute for Social Research

Established in 1948, the Institute for Social Research (ISR) is among the world's oldest survey research organizations, and a world leader in the development and application of social science methodology. ISR conducts some of the most widely-cited studies in the nation, including the Survey of Consumer Attitudes, the National Election Studies, the Monitoring the Future Study, the Panel Study of Income Dynamics, the Health and Retirement Study, the Columbia County Longitudinal Study and the National Survey of Black Americans. ISR researchers also collaborate with social scientists in more than 60 nations on the World Values Surveys and other projects, and the Institute has established formal ties with universities in Poland, China, and South Africa. ISR is also home to the Inter-University Consortium for Political and Social Research (ICPSR), the world's largest computerized social science data archive. Visit the ISR Web site at www.isr.umich.edu for more information.

Executive Summary

American children between the ages of 6 and 17 have seen an increase in time spent studying and time spent in school over the last 20 years. At the same time, there has been a decline in time spent in active sports and out-of-doors activities. New on the scene is computer time which accounts for just under one hour per day for 15-17 years olds who have both a computer and [Internet](#) access in the home.

- There are distinct patterns of time use by age and day of the week which persist across the decades. Children of all ages spend more time on the weekends than weekdays in sports and outdoor activities, playing, watching TV, doing household chores, and sleeping.
- Formal school settings now account for more time for all age groups, particularly for children age 6-8
- TV is just as important in terms of weekly hours
- Reading time remains limited
- Playing games (much of it video games) remains at similar levels
- Computer time averages about an hour per week for the youngest and about 4 hours per week for those age 15-17
- Time in sports and outdoor activities has declined substantially
- Girls devote more time to household work, personal care, studying and passive leisure (other than TV)
- Boys devote more time to sports, TV and playing
- Both boys and girls average about two and three-quarters hours per week in computer activity

Examining *weekly* average time of those children in families with computers in the home as of 2002/03 shows

- Far more time in computer related activities with a computer/Internet access
- Much less time in Television viewing – about 7 hours per week less for those 15-17
- Greater study time of older children in families with a computer and Internet

- More time in church, visiting and socializing for computer/Internet family children
- More time in art and hobbies for computer family children
- More time reading for computer family children

TIME AT SCHOOL

During the school year, American children age 6-17 spend about 6 to 7 hours a day at school during the weekday. This varies by age, with 15-17 year olds devoting about 6 hours per weekday and younger children, age 6-8, devoting almost 7 hours per weekday. Twenty years ago, in the early 1980's, less time was spent in school. The weekday average was about 5 to 6 hours, with younger children, age 6-8, at school for about 5 hours and children age 12-14 spending about 5.75 hours at school compared to over 6.5 hours for the 12-14 year olds of today.

WORKING

Market work comparisons are limited across the years because of differences in the measurement of paid housework in 1981/82 and 2002/03. If market work and household work are added, in combination they accounted for about 5-6 hours per week in both 1981/82 and 2002/03.

TELEVISION, COMPUTERS, VIDEO GAMES

Time spent in television viewing as a primary activity averages 1.5 to 2 hours on weekdays with 6-8 year olds of today spending almost as much time as in 1981/82 – an hour and 40 minutes, and other groups spending a bit under two hours per day – compared to 1981/82 when the weekday average was some over two hours on weekdays. Today, time watching television on weekends is at least as high or higher than it was for each age group of children in the early 1980's. Children age 9-11 watch equal amounts of TV on weekends in both time periods - something over 3 hours per day of viewing as a primary activity. Reading time (or being read to) persists as an activity with small amounts of daily time – averaging less than 15 minutes per day on both weekends and weekday both now and 20 years ago for all ages groups, except for 15-18 year olds as of the 1980's where it was slightly more than 15 minutes on weekend days.

Along with television, playing games – notably video games, absorbs a great deal of time. On weekends this averages from about 1 to 2 and one half hours per day, with children age 6-8 spending the most time. On weekdays the time averages about half an hour to a bit over one hour, again with the 6-8 year olds the highest. While the age and day of the week patterns differ some, the general level of time playing games by 6-17 year olds is about the same as the early 1980's.

What is new on the scene is computer time. Non-existent in the early 1980's study, we can see that it averages about 1 hour per week of primary time for 6-8 year olds and averages just under 4 hours per week for 15-17 years olds. This weekly computer time is concentrated more on weekend days.

Another way to think about this is to combine television, playing games and computer time into an aggregate – media and game time, which, along with time in school has risen over the past twenty years. Sleeping and naptime are not lower than twenty years ago (greater one weekends and for younger children throughout). So, with 24 hours in a day, both now and twenty years ago, what has declined? Household work has not. Though modest, it is about the same and maybe a bit higher than 20 years ago. And time spent eating is very close to what it was.

PHYSICAL ACTIVITY

One pattern is a shift away from time use in physical activity. There are some distinct declines in time spent in sports and outdoor activities. For example, in the early 1980's this averaged over an hour and a quarter for 12-14 year olds on weekends; now this is down to about 50 minutes on the weekend. Across the week such time averaged about 6.5 hours in the early 1980's for 12-14 year olds and has declined to about 4.5 hour per week in 2002/03.

DIGITAL DIVIDE

How do computer resources in the home shape the lives of young children today? Presumably families with more resources and education are more likely to acquire computers and Internet connections, which can be used by the children. For children age 6-17 we have combined weekday and weekend time into a single weekly average and examined the weekly time use patterns for those children living in families with one or more functioning computers versus those who living in families without a computer in the home. Of those with a computer we also measured whether the family had an Internet connection. This is presented in three tables below, one for those with one or more computers and an Internet connection, the second for those with one or more functioning computers and a third group with no functioning computer in the home.

There are some notable differences in weekly time use between children living in families with a computer compared to those living in a family without a computer. Of the children with access to a computer and Internet in the home (approximately 74%), computer time averages about five hours a week for those age 12-17. In families with no functioning computer in the home (about 14% of the children), computer time of those age 12-17 averages only about one seventh as much per week, about 40 minutes of primary time. Computers are interesting in that respondents seldom mention computer activity as a secondary – evidently working with a computer commands the attention (or frustration?) of the user.

Greater family resources seem to predict computer and Internet access within the family but the presence of a computer seems to further shape the lives of young children, providing an alternative to passively viewing of television and motivating greater reading and interaction with peers and adults. This hypothesis will be examined more closely as our research progresses.

TABLE 1
WEEKLY AVERAGE TIME OF AMERICAN CHILDREN
AGE 6-17, 2002-03 and 1981/82
(Hours:Minutes per Week)

	2002/03	1981/82
Market Work	0:53	2:06
Household Work	5:43	3:43
Personal Care	8:13	5:56
Eating	7:06	8:28
Sleep, naps	68:12	62:38
School	32:27	26:21
Studying	3:58	2:38
Church	1:34	2:05
Visiting, Socializing	4:47	2:12
Sports	2:59	4:04
Outdoor Activities	0:50	1:40
Hobbies	0:12	0:27
Art Activities	0:48	0:40
Television	14:36	15:44
Other Passive Leisure	2:46	0:39
Playing	8:05	7:20
Reading	1:17	1:09
Being read to	0:05	0:03
Computer Activities	2:45	0:00
	----	----
Missing Data	0:45	20:06
TOTAL	168:00	168:00

TABLE 2A
WEEKEND TIME OF AMERICAN CHILDREN
BY AGE, 2002-03 and 1981-82
(Hours:Minutes per Day)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:00	0:09	0:39 <i>0:48</i>
Household Work	1:21 <i>0:27</i>	1:31 <i>0:51</i>	1:40 <i>1:12</i>	1:19 <i>1:00</i>
Personal Care	1:18 <i>0:45</i>	1:12 <i>0:44</i>	1:13 <i>1:00</i>	1:17 <i>0:51</i>
Eating	1:29 <i>1:20</i>	1:20 <i>1:18</i>	1:09 <i>1:08</i>	1:04 <i>1:05</i>
Sleep, naps	11:06 <i>10:41</i>	10:44 <i>9:56</i>	10:33 <i>10:04</i>	10:29 <i>9:22</i>
School	0:03	0:06	0:07	0:07
Studying	0:05 <i>0:02</i>	0:09 <i>0:12</i>	0:20 <i>0:15</i>	0:24 <i>0:30</i>
Church	0:41 <i>0:56</i>	0:37 <i>0:53</i>	0:36 <i>0:32</i>	0:30 <i>0:37</i>
Visiting, Socializing	1:01	1:06	0:58	1:31
Sports	0:23 <i>0:30</i>	0:40 <i>0:42</i>	0:40 <i>0:51</i>	0:27 <i>0:37</i>
Outdoor Activities	0:12 <i>0:23</i>	0:12 <i>0:39</i>	0:12 <i>0:25</i>	0:11 <i>0:26</i>
Hobbies	0:02 <i>0:05</i>	0:01 <i>0:03</i>	0:04 <i>0:08</i>	0:05 <i>0:03</i>
Art Activities	0:11 <i>0:04</i>	0:07 <i>0:04</i>	0:09 <i>0:07</i>	0:06 <i>0:10</i>
Television	2:35 <i>2:16</i>	3:04 <i>3:05</i>	3:01 <i>2:49</i>	2:42 <i>2:37</i>
Other Passive Leisure	0:14	0:15	0:40	0:54
Playing	2:43 <i>3:00</i>	2:14 <i>1:32</i>	1:28 <i>0:35</i>	0:59 <i>0:21</i>
Reading	0:14 <i>0:09</i>	0:15 <i>0:10</i>	0:13 <i>0:10</i>	0:07 <i>0:18</i>
Being read to	0:01	0:01	0:00	0:00
Computer Activities	0:12	0:19	0:39	0:58
Missing Data	----	----	----	----
Missing Data	0:09	0:08	0:09	0:11
TOTAL	24:00	24:00	24:00	24:00

TABLE 2B
WEEKDAY TIME OF AMERICAN CHILDREN
BY AGE, 2002-03 and 1981-82
(Hours:Minutes per Day)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:00	0:01	0:22 <i>0:28</i>
Household Work	0:25 <i>0:15</i>	0:32 <i>0:18</i>	0:38 <i>0:27</i>	0:39 <i>0:34</i>
Personal Care	1:08 <i>0:49</i>	1:06 <i>0:40</i>	1:08 <i>0:56</i>	1:13 <i>1:00</i>
Eating	1:00 <i>1:21</i>	0:57 <i>1:13</i>	0:54 <i>1:09</i>	0:49 <i>1:07</i>
Sleep, naps	10:07 <i>9:55</i>	9:43 <i>9:08</i>	9:02 <i>7:53</i>	8:35 <i>8:19</i>
School	6:46 <i>4:52</i>	6:38 <i>5:15</i>	6:35 <i>5:44</i>	5:52 <i>5:14</i>
Studying	0:29 <i>0:08</i>	0:39 <i>0:29</i>	0:49 <i>0:33</i>	0:50 <i>0:33</i>
Church	0:04 <i>0:09</i>	0:05 <i>0:09</i>	0:05 <i>0:09</i>	0:03 <i>0:03</i>
Visiting, Socializing	0:16	0:25	0:25	0:53
Sports	0:10 <i>0:24</i>	0:17 <i>0:21</i>	0:33 <i>0:40</i>	0:33 <i>0:46</i>
Outdoor Activities	0:06 <i>0:09</i>	0:06 <i>0:08</i>	0:04 <i>0:07</i>	0:06 <i>0:11</i>
Hobbies	0:01 <i>0:02</i>	0:01 <i>0:02</i>	0:01 <i>0:04</i>	0:02 <i>0:06</i>
Art Activities	0:08 <i>0:04</i>	0:07 <i>0:03</i>	0:07 <i>0:03</i>	0:04 <i>0:12</i>
Television	1:34 <i>1:39</i>	1:46 <i>2:26</i>	1:51 <i>2:22</i>	1:55 <i>1:48</i>
Other Passive Leisure	0:09	0:10	0:24	0:39
Playing	1:14 <i>1:51</i>	0:56 <i>1:05</i>	0:45 <i>0:31</i>	0:35 <i>0:14</i>
Reading	0:11 <i>0:05</i>	0:12 <i>0:09</i>	0:11 <i>0:10</i>	0:07 <i>0:12</i>
Being read to	0:02	0:01	0:00	0:00
Computer Activities	0:06 ----	0:10 ----	0:25 ----	0:38 ----
Missing Data	0:04	0:08	0:04	0:06
TOTAL	24:00	24:00	24:00	24:00

TABLE 3
WEEKLY AVERAGE TIME OF AMERICAN CHILDREN
BY AGE, 2002-03
(Hours:Minutes per Week)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:02	0:26	3:06
Personal Care	8:15	7:53	8:04	8:39
Household Work	4:49	5:39	6:30	5:52
Eating	8:00	7:28	6:50	6:25
Sleep, naps	72:46	70:06	66:14	63:53
School	33:52	33:17	33:05	29:33
Studying	2:33	3:36	4:40	4:59
Church	1:41	1:41	1:38	1:16
Visiting, Socializing	3:22	4:19	4:02	7:26
Sports	1:34	2:42	4:02	3:32
Outdoor Activities	0:58	0:54	0:40	0:51
Hobbies	0:10	0:07	0:11	0:18
Art Activities	1:00	0:50	0:51	0:32
Television	12:57	15:01	15:22	15:00
Other Passive Leisure	1:12	1:24	3:21	5:05
Playing	11:41	9:09	6:43	4:53
Reading	1:22	1:33	1:25	0:49
Being read to	0:12	0:04	0:02	0:00
Computer Activities	0:57	1:27	3:23	5:08
Missing Data	0:41	0:52	0:35	0:51
TOTAL	168.00	168.00	168.00	168.00

TABLE 4
WEEKLY AVERAGE TIME OF AMERICAN GIRLS AND BOYS
AGE 6-17, 2002-03
(Hours:Minutes per Week)

	GIRLS	BOYS
Market Work	0:55	0:52
Household Work	6:44	4:42
Personal Care	9:14	7:11
Eating	7:06	7:06
Sleep, naps	68:12	68:12
School	32:04	32:51
Studying	4:21	3:34
Church	1:34	1:33
Visiting, Socializing	4:46	4:49
Sports	2:14	3:44
Outdoor Activities	0:52	0:49
Hobbies	0:09	0:14
Art Activities	0:57	0:39
Television	14:04	15:08
Other Passive Leisure	3:37	1:54
Playing	6:04	10:07
Reading	1:26	1:08
Being read to	0:05	0:04
Computer Activities	2:41	2:48
Missing Data	0:54	0:35
TOTAL	168.00	168.00

TABLE 5A
WEEKLY AVERAGE TIME OF AMERICAN CHILDREN, 2002-03, BY AGE
LIVING IN FAMILIES *WITH A COMPUTER AND INTERNET*
(Hours:Minutes per Week)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:03	0:16	3:11
Personal Care	8:10	7:36	7:48	8:46
Household Work	5:01	5:25	6:11	5:19
Eating	8:00	7:29	6:50	6:25
Sleep, naps	72:57	69:41	66:12	62:18
School	33:54	32:44	33:15	30:21
Studying	2:26	3:31	5:03	5:20
Church	1:55	1:38	1:45	1:20
Visiting, Socializing	3:50	4:54	4:31	7:50
Sports	1:32	3:02	3:57	3:44
Outdoor Activities	0:58	0:44	0:36	0:53
Hobbies	0:05	0:07	0:12	0:16
Art Activities	1:06	1:04	0:50	0:35
Television	11:40	14:27	14:01	14:03
Other Passive Leisure	1:10	1:27	3:27	5:00
Playing	11:51	9:38	6:40	4:58
Reading	1:28	1:42	1:42	0:58
Being read to	0:12	0:06	0:03	0:00
Computer Activities	1:08	1:41	4:05	6:06
Missing Data	0:38	1:02	0:34	0:37
TOTAL	168.00	168.00	168.00	168.00

TABLE 5B
WEEKLY AVERAGE TIME OF AMERICAN CHILDREN, 2002-03, BY AGE
LIVING IN FAMILIES *WITH A COMPUTER, NO INTERNET*
(Hours:Minutes per Week)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:00	0:08	4:42
Personal Care	8:37	8:08	8:47	8:41
Household Work	3:52	7:16	7:24	9:31
Eating	7:27	6:56	7:16	6:12
Sleep, naps	73:44	71:01	65:47	66:25
School	32:11	34:21	32:55	30:24
Studying	2:35	3:32	3:11	4:15
Church	0:58	1:29	1:15	1:10
Visiting, Socializing	2:47	3:13	2:20	5:25
Sports	1:36	1:40	5:29	3:05
Outdoor Activities	0:32	1:40	1:12	0:59
Hobbies	0:54	0:12	0:06	0:38
Art Activities	1:06	0:19	1:37	0:22
Television	15:33	16:49	18:34	14:39
Other Passive Leisure	1:18	1:14	3:11	5:25
Playing	11:43	7:41	6:31	2:56
Reading	1:06	1:27	0:33	0:18
Being read to	0:22	0:00	0:00	0:00
Computer Activities	0:43	0:34	1:34	2:16
Missing Data	0:56	0:30	0:25	0:54
TOTAL	168.00	168.00	168.00	168.00

TABLE 5C
WEEKLY AVERAGE TIME OF AMERICAN CHILDREN, 2002-03, BY AGE
LIVING IN FAMILIES *WITHOUT A COMPUTER*
(Hours:Minutes per Week)

	6-8	9-11	12-14	15-17
Market Work	0:00	0:00	1:52	1:41
Personal Care	8:24	9:02	9:03	7:53
Household Work	4:28	5:05	7:34	6:55
Eating	8:19	7:30	5:53	5:09
Sleep, naps	71:25	71:06	66:39	72:05
School	34:44	34:46	32:24	24:02
Studying	2:59	4:00	3:54	3:23
Church	1:18	2:04	1:08	0:58
Visiting, Socializing	1:54	2:43	2:51	6:36
Sports	1:40	2:11	3:11	2:25
Outdoor Activities	1:16	0:52	0:25	0:35
Hobbies	0:00	0:01	0:08	0:13
Art Activities	0:30	0:20	0:04	0:23
Television	16:20	15:51	20:53	21:19
Other Passive Leisure	1:13	1:20	2:56	5:31
Playing	11:07	8:28	7:05	5:53
Reading	1:10	0:59	0:28	0:17
Being read to	0:07	0:02	0:00	0:00
Computer Activities	0:23	1:13	0:46	0:32
Missing Data	0:43	0:28	0:47	2:09
TOTAL	168.00	168.00	168.00	168.00