

**Why Has Young Children's TV Viewing Time Decreased?  
A Report on the 2013 Children's Time Use Survey\***

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\*This paper is based on the authors' article "*Yōji No Terebi Shichō-Jikan No Genshō To Sono Haikei ~Yōji Seikatsu Jikan Chosa 2013 No Kekka Kara~*" [Why Has Young Children's TV Viewing Time Decreased?: A Report on the 2013 Children's Time Use Survey], originally published in the November 2013 issue of "*Hoso Kenkyū to Chosa*" [the NHK monthly report on Broadcast Research]. Full text in Japanese may be accessed at:

[http://www.nhk.or.jp/bunken/summary/research/report/2013\\_11/20131104.pdf](http://www.nhk.or.jp/bunken/summary/research/report/2013_11/20131104.pdf)

## **Abstract**

The Public Opinion Research Division of the NHK Broadcasting Culture Research Institute conducts an annual Rating Survey on Young Children's TV Viewing, the results of which indicate that young children's TV viewing hours have been decreasing over a long period of time. Given this, a Children's Time Use Survey was conducted in March 2013, for the first time in a decade, in an attempt to ascertain changes in young children's time use and media use.

The results of this latest Children's Time Use Survey show that both the TV doer rate and the average amount of viewing time for all children surveyed have declined for both Mondays (weekdays) and Sundays (holidays) since the previous survey was conducted a decade earlier (March 2003). In particular, Mondays showed a notable decline in TV doer rate, which fell by 10%, and average viewing time per child, which fell by more than 30 minutes—the greatest amount of change found in the results of this latest survey. These declines are in large part due to an increase in the number of parents—specifically mothers—who are older and working full-time, meaning that young children in daycare centers account for an increasingly higher proportion of the overall young children surveyed. At more than nine hours per day, the period of time that young children spend in daycare on Mondays is also longer than it was a decade ago. As a result, their free time to watch TV or play at home has dramatically decreased. Furthermore, there is an “early to bed, early to rise” trend amongst young children overall, with an increasing number of young children having their nighttime TV viewing hours curtailed.

In contrast, when it comes to viewing rates and average viewing time per child for recorded programs and videos, the figures have increased on Sundays, although no change was observed on Mondays. On a time slot basis, the viewing of recorded programs and videos has increased from early evening through nighttime on both Mondays and Sundays, suggesting the possibility that some evening TV viewing has been partially replaced by video viewing. Similarly, the TV viewing time of the parents, who were surveyed along with their children, has also fallen dramatically, which has probably influenced young children's TV viewing behavior.

## **Introduction**

We conducted the Children's Time Use Survey in March 2013 for the first time in a decade in an attempt to ascertain a time-based perspective of young children's living activities and media use. Time use surveys focused on young children have been conducted by the Japan Broadcasting Corporation (NHK) on two previous occasions. The first was in 1979, when the first children's time use survey was conducted to form the benchmark documentation for examining the impact of TV on young children. In 2003, we conducted the Children's Time Use Survey along the same lines, using the same methodology as the current NHK National Time Use Survey—the regular survey that the NHK conducts once every five years—to reveal the actual state of young children's use of a variety of media: not only TV, but also videos and video games. This most recent survey was conducted exactly a decade after the 2003 survey; in that decade, the families, the society, and the media environment in which young children live have changed greatly. As ascertaining the changes in time use over the

course of the decade was regarded as the most important aim of this latest survey, it was conducted with as few changes to the 2003 survey question sheet as possible.

While the survey itself covered all aspects of young children's lives and activities, this paper mainly discusses changes in young children's TV viewing and the factors that affect it, such as changes in the attributes of young children or their non-TV time use. The survey is outlined below.

Survey Dates: Sunday and Monday, March 3 and 4, 2013

Survey Subjects: Children aged four months to pre-school age (born between April 2006 and October 2012) living in the Tokyo metropolitan area (within 50 kilometers of Tokyo)

Survey Respondents: 1,500 people selected from the Basic Resident Register using two-stage random stratified sampling (10 people x 150 locations)

Survey Method: Distribution and collection method. The survey respondents, who were the parents of young children, were asked to fill in survey sheets that were in the same format as the National Time Use Survey (diary format with an hour line in 15-minute units for each pre-coded activity name).

Number of Valid Survey Respondents: 985 (65.7%)

The activities surveyed are shown in Table 1. In addition to the children's activities, the parents' TV and video viewing was also surveyed in an attempt to explore the relationship between the TV viewing of the parents and children. The activities surveyed were virtually unchanged from the 2003 survey; however, the activity "Internet (looked at websites or videos on the Internet)" was added<sup>1)</sup> in response to changes in young children's media usage environment. The key indicators used in this paper are defined as follows:

- ① Doer rate: percentage of the total who performed a certain activity for 15 minutes or more during one day.
- ② Doer average amount of time: for only those young children who performed a certain activity for 15 minutes or more, the average amount of time spent doing so.
- ③ Overall average amount of time: the average amount of time for all young children surveyed, including those who did not perform the activities.<sup>2) 3)</sup>

## **1. Families with Young Children – Characteristics of the Sample Composition and Changes**

Before getting into an analysis of the young children's time use data, we will discuss the characteristic features of the attributes of the children themselves, as well as their parents.

Firstly, the largest age group of parents<sup>4)</sup> asked to complete the survey was "35 to 39 years" (36%), followed by "30 to 34 years" (28%) and "40 to 44 years" (20%) (Figure 1). In 2003, the largest age group was "30 to 34 years" (39%), indicating that in the intervening decade parental ages have risen, with parents aged 35 and over now accounting for more than half of the total.

**Table 1. Activity Classifications**

**(1) Young Children’s Activities**

Definitions of Major Activity Categories

Essential Activities: Highly essential activities conducted in order to maintain and improve the individual

Obligatory Activities: Highly obligatory or structured activities conducted in order to maintain and improve the family and society

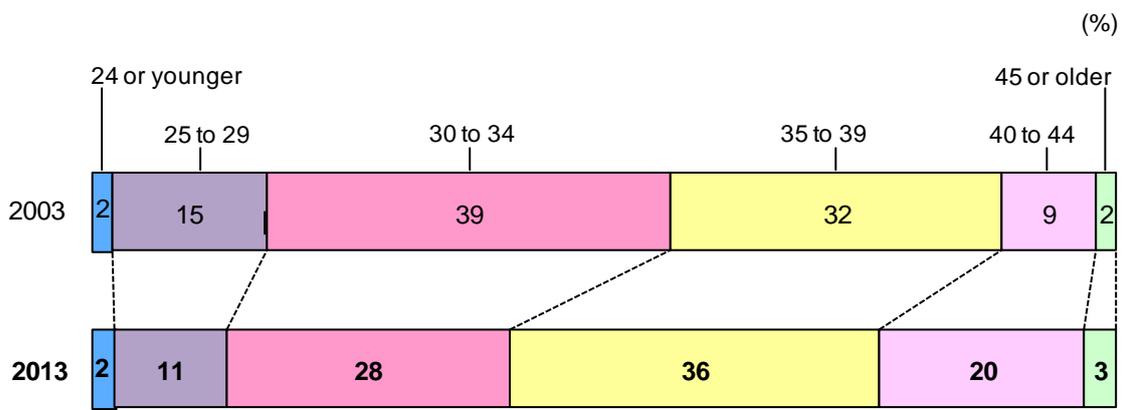
Discretionary Activities: Highly discretionary activities conducted in order to maintain and improve humanity

	Activity Name	Specific Examples
	At home	Time spent at home or in the garden
Essential Activities	Sleeping	Sleeping at night, daytime nap, dozing (30 minutes or more)
	Eating meals	Breakfast, lunch, dinner, eating between meals, breastfeeding, snacking, eating out
	Personal care	Toileting, diaper changing, showering, getting haircuts, etc.
	Convalescing or recuperating	Going to the doctor or hospital, undergoing medical examination or treatment, hospitalization, sick in bed, receiving vaccinations or health check-ups
Obligatory Activities	Kindergarten or daycare center	(Includes going from home to pre-school and back, meals eaten at pre-school, napping while at pre-school, etc.)
	Outings with parents	Parents taking children on commonplace outings
Discretionary Activities	TV	(Time in which the parent thinks the child was “watching or listening to” TV)
	Child-only TV	Of the above, time in which only the child was watching TV
	Recorded programs and videos	Watching pre-recorded TV programs, videos, or DVDs
	Child-only videos	Of the above, time in which only the child was watching videos
	Video games and handheld games	Playing with video games, computer games, or handheld- game devices
	Child-only games	Of the above, time in which only the child was playing video games
	Internet	Looking at websites or videos, or playing games on the Internet
	Picture books and comics	Looking at or reading picture books or comics (including those read to the child by the parent)
	Radio, CDs	Listening to the radio, digital audio players, CDs, or tapes
	Playing outdoors	Playing outdoors in a park or garden, riding a tricycle or bicycle, going for a walk
	Playing indoors	Playing indoors at home, at a friend’s house, or at a relative’s house; helping out; tidying up
Playing location unknown	Playing without remembering if the location was indoors or outdoors	
Private lessons	Attending cram school or lessons such as sports or music classes; working with children’s self-study materials; practicing music or other skills at home	
Outdoor amusement	Going to a sightseeing spot, amusement park, zoo, etc.; watching a festival; driving, hiking, or traveling; attending an event, movie, play, etc.	
Resting	Sleeping for less than 30 minutes, doing nothing in particular, grizzling	
Other/ Unknown Activities	Unknown activities	Time when it is unclear what the children are doing, even when they are asked what they are doing
	Other	Activities that do not correspond with any of the above

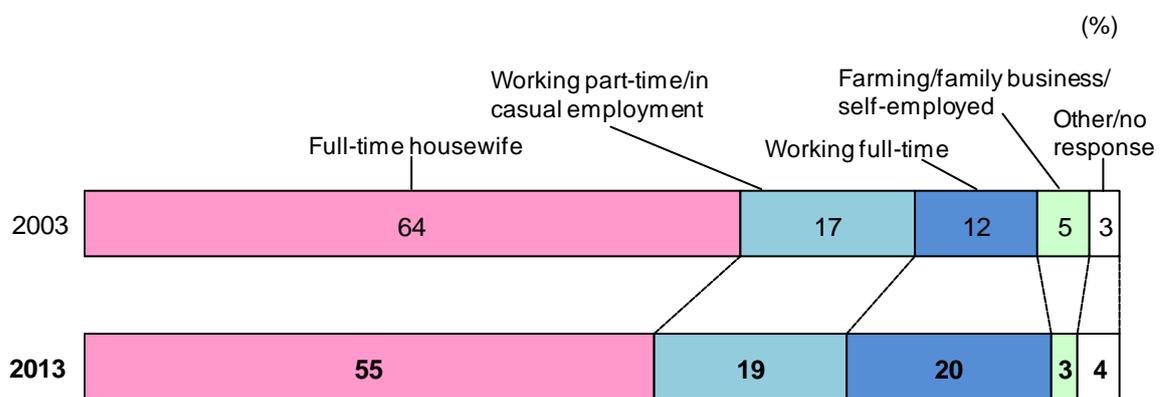
**(2) Parents' TV and Video Viewing**

Watching TV Watching TV with the child	Of this time, the time in which the survey respondent and the target child watched TV together
Watching recorded programs and videos Watching recorded programs and videos with the child	Of this time, the time in which the survey respondent and the target child watched a video together

**Figure 1. Changes in Parental Age**



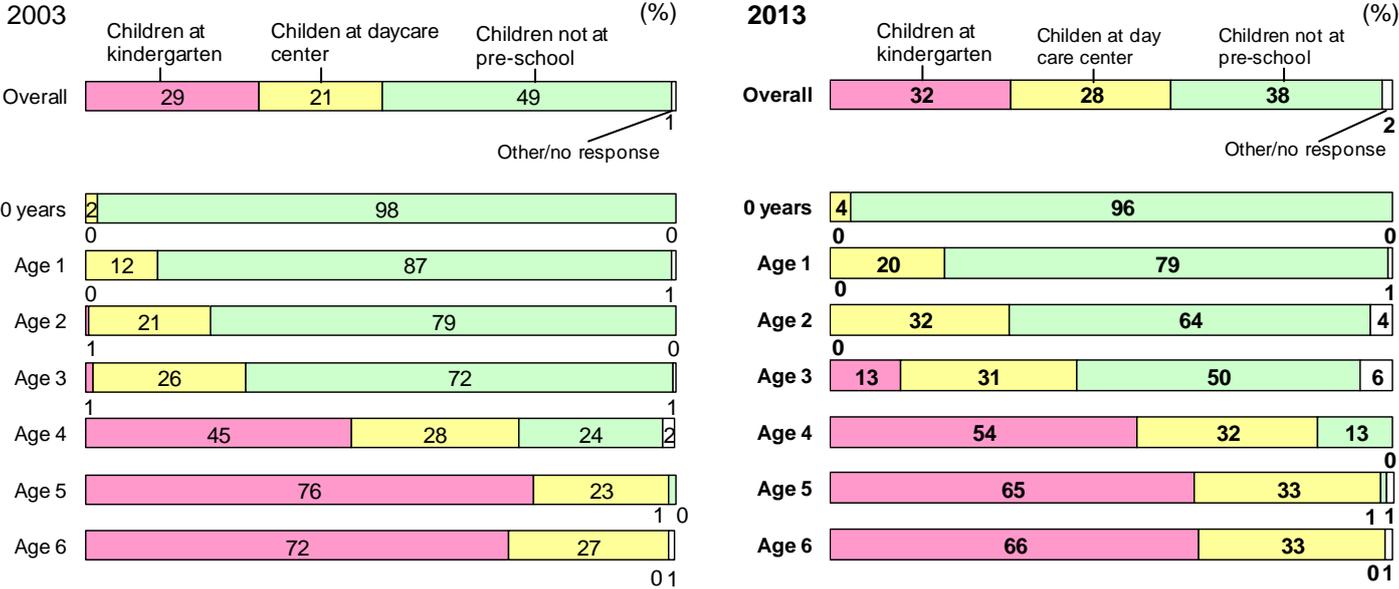
**Figure 2. Changes in Mothers' Employment Status**



Next, when we look at the employment situation of the mothers of the surveyed children—which was asked as a supplementary question—over half responded “full-time housewife,” while “working full-time” and “working part-time” each accounted for around 20% (Figure 2). However, compared to a decade ago, there was a decrease in the percentage who identified as a “full-time housewife” (64% → 55%) and an increase in the percentage who were “working full-time” (12% → 20%). The percentage of mothers “working full-time” increased irrespective of the child’s age group, accounting for about 20% in all age groups.

This increase in working mothers has changed the pattern of children’s pre-school attendance (Figure 3). Overall, compared to a decade ago, the percentage of “children attending daycare centers” has increased (21% → 28%) and the percentage of “children not attending pre-school” has decreased (49% → 38%). When the changes are observed on an age basis, the number of two- to four-year-old “children not attending pre-school” has declined, while the percentage of five-year-old “children attending kindergarten” has fallen and that of “children attending daycare centers” has risen. In particular, amongst children in the age group of one- to three-year-olds, the fact that the percentage of children attending kindergarten or daycare has increased is having effects, such as those discussed below, on the overall structure of young children’s time use.

**Figure 3. Changes in the Ratios of “Children Attending Kindergarten,” “Children Attending Daycare Centers,” and “Children Not Attending Pre-School”**



**2. Young Children’s Daily Time Use – Increase in Obligatory Time, Decrease in Free Time**

Here we will employ the time use data to analyze how young children spend their time each day. Firstly, let us look at the allocation of time over the 24 hours in a day. The activities in the Children’s Time Use Survey were classified into four main categories: “essential activities,” such as sleeping and eating; “obligatory activities,” such as going to kindergarten or daycare; “discretionary activities,” such as using media or playing; and “other/unknown activities.” The amount of time spent on each of these four time use classifications on Mondays was totaled and the results listed alongside those of the 2003 survey (Table 2; see Table 1 for the definitions of classifications and specific activities). Based on the results of the survey, for young children overall, “essential time” occupied 13 hours 47 minutes, while “obligatory time” occupied 5 hours 7 minutes, “discretionary (free) time” occupied 4 hours 21 minutes, and “other/unknown time” occupied 46 minutes. Regarding trends observed on an age basis, the younger the child’s age, the more hours of sleep accounted for much of essential time—which was the longest overall—and the longer essential time was. Obligatory

time increased with children’s age, as the percentage of children attending pre-school increased, while free time were slightly longer for younger children, who had less obligatory time. Regarding types of pre-schooling, obligatory time for children in daycare centers, with their longer hours of operation, was by far the longest, while their amount of free time was very short, at two to three hours.

Compared to the results of the 2003 survey, for young children overall, obligatory time increased by almost an hour and free time decreased by more than an hour. On an age basis, obligatory time increased for one- to three-year-olds, and free time decreased for all age groups except for children under one. Obligatory time increased due to the fact that the number of young children attending pre-school increased in the lower age groups, resulting in a decrease in free time.

**Table 2. Overall Average Allocation of Time in a Day  
(Age, Pre-School Attendance, Monday)**

	Essential Activity		Obligatory Activity		Discretionary Activity		Other/Unclear	
	Hours: Mins		Hours: Mins		Hours: Mins		Hours: Mins	
	2003	<b>2013</b>	2003	<b>2013</b>	2003	<b>2013</b>	2003	<b>2013</b>
Children overall	13:50	<b>13:47</b>	4:10	<b>5:07</b>	5:27	<b>4:21</b>	0:32	<b>0:46</b>
0 years	16:03	<b>15:55</b>	1:13	<b>1:11</b>	6:05	<b>5:37</b>	0:40	<b>1:16</b>
Age 1	14:57	<b>15:01</b>	1:58	<b>2:54</b>	6:24	<b>5:10</b>	0:40	<b>0:54</b>
Age 2	14:15	<b>14:07</b>	2:44	<b>4:03</b>	6:18	<b>4:59</b>	0:42	<b>0:50</b>
Age 3	13:55	<b>13:42</b>	3:19	<b>4:38</b>	6:08	<b>4:56</b>	0:38	<b>0:44</b>
Age 4	13:05	<b>13:21</b>	5:33	<b>6:17</b>	4:56	<b>3:48</b>	0:27	<b>0:35</b>
Age 5	12:54	<b>13:00</b>	6:27	<b>6:55</b>	4:16	<b>3:29</b>	0:22	<b>0:36</b>
Age 6	12:34	<b>12:41</b>	6:47	<b>7:14</b>	4:17	<b>3:22</b>	0:21	<b>0:43</b>
Children at kindergarten	13:06	<b>13:28</b>	5:56	<b>5:58</b>	4:34	<b>3:58</b>	0:24	<b>0:35</b>
Children at daycare center	11:56	<b>12:00</b>	8:41	<b>9:15</b>	2:58	<b>2:08</b>	0:25	<b>0:37</b>
Children not at pre-school	15:05	<b>15:24</b>	1:09	<b>1:15</b>	7:05	<b>6:19</b>	0:41	<b>1:02</b>

Notes: - The figures in the table are reference values, as the sample of children under one was small and there was therefore a large margin of error (same below).

- In a time use survey, if a respondent is simultaneously engaged in two or more activities, he/she is asked to underline all concurrent activities. Thus, when the amounts of time for all of the activities in one day are added up, they exceed 24 hours. Therefore, in order to calculate these three classifications, the given order of priority was essential > obligatory > discretionary. Calculations were performed so as to prevent duplications, yielding a total of 24 hours.

For comparison, let us also look at changes in the average time spent doing basic activities by all young children surveyed (Table 3). Within essential time, while there was a decrease in sleep time on both Sundays and Mondays, the amount of time devoted to personal care—such as bathing, face washing, and diaper changing—increased on both Sundays and Mondays. Time spent eating meals on Sundays increased. Within obligatory time, the average time that all young children spent at kindergarten/daycare centers on Mondays increased; in particular, the hours of care increased for children attending daycare centers, reaching an average of 9 hours 1 minute. Furthermore, as the amount of time spent at kindergarten/daycare centers increased, the amount of waking time spent at home on Mondays decreased. In free time, there was a decrease in the amount of time spent engaged in media contact (undivided attention), playing, and private lessons, as well as resting and so on.

**Table 3. Overall Average Time Spent Doing Basic Activities**

		Monday		Monday	
		Hours: Mins		Hours: Mins	
		2003	<b>2013</b>	2003	<b>2013</b>
Essential	Sleeping	10:44	<b>10:33</b>	11:03	<b>10:52</b>
	Eating meals	1:47	<b>1:45</b>	2:03	<b>2:13</b>
	Personal care	1:12	<b>1:17</b>	1:09	<b>1:14</b>
Obligatory	Kindergarten/daycare	3:29	<b>4:30</b>	0:05	<b>0:03</b>
	Going out	0:41	<b>0:37</b>	1:18	<b>1:22</b>
Free	Media contact (undivided attention)	1:50	<b>1:30</b>	1:58	<b>1:55</b>
	Playing, music or other lessons, resting, etc.	3:37	<b>2:51</b>	5:31	<b>5:07</b>
	Awake and at home	7:37	<b>6:48</b>	8:36	<b>8:31</b>

- Notes:
- For media use, only the portion that constituted undivided attention was deemed “free time” and totalized.
  - Internet use was included in “media contact” in the 2013 survey; however, the values in the 2003 data do not include the Internet.
  - Information on “playing, private lessons, resting, etc.,” was sought by subtracting “mass media contact (undivided attention)” from free time.

### 3. Decreased TV Doer Rates and Amount of Viewing Time

In this chapter, I would like to introduce the detailed data related to media use, starting with TV viewing. In this survey, the activity “watching TV” does not include “when the TV was just on”; it includes only the times during which the parent judged and recorded that “the

child was actually watching or listening to the TV.” The same applies to the viewing of recorded programs and videos.

Table 4 shows the TV doer rates and amount of time alongside the results from the 2003 survey. The doer rate in a day for young children overall in the present survey was 77% for both Monday and Sunday; the overall average amount of time was 1 hour 39 minutes on Monday and 1 hour 49 minutes on Sunday. On an age group basis, the doer rate for children aged below one was low, at 53% on Monday and 43% on Sunday; however, for children aged three to five it was high, at 80% or more on both Monday and Sunday. On a pre-school attendance basis, the doer rate for children attending kindergarten was 80% or more, while it was slightly lower for children at daycare centers and children not in pre-school. However, the doer rate and average amount of time for all children were both higher on Sunday than Monday for children at daycare centers, and those figures were almost the same as those of children attending kindergarten. However, for children not at pre-school, both the doer rate and the average amount of time for all children were both slightly lower on Sunday than Monday.

Looking at the changes from 2003 to 2013, both the doer rate and the average amount of time for all children declined on both Monday and Sunday. On Monday, the doer rate dropped by 10% and the average amount of time for all children decreased by 30 minutes or more; among the results of this survey, TV viewing was the activity that showed the greatest amount of change. This can be said to have been affected by the fact that, as seen in Section 2, obligatory time has increased greatly over the past ten years. When we examine the data on an age basis, we can see that, in all age groups except for children under one, the doer rate and average amount of time decreased on Monday; on Sunday, the doer rate and average amount of time decreased amongst children aged three and five.

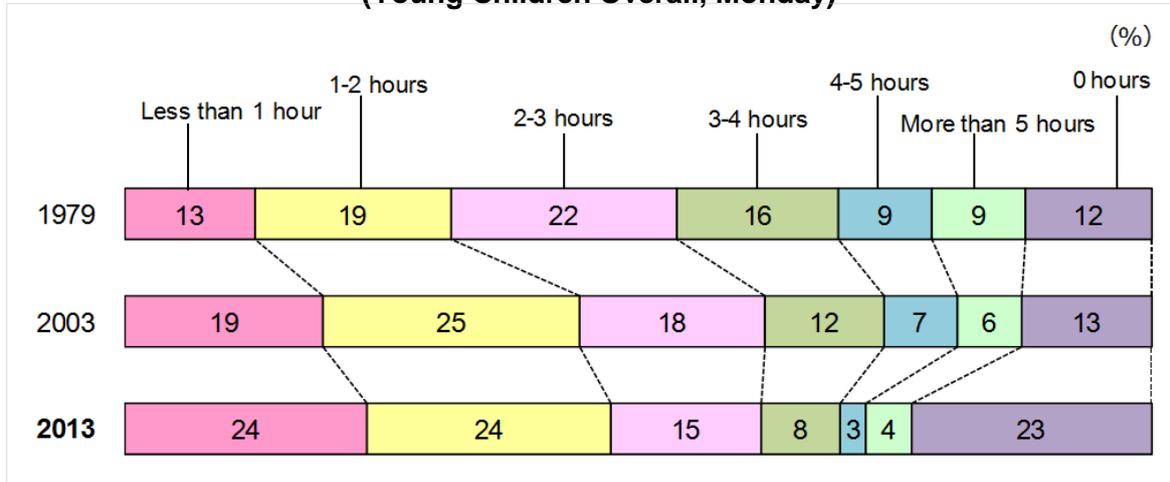
**Table 4. TV Doer Rates and Amount of Time (Gender, Age, Pre-School Attendance)**

	Monday						Sunday					
	Doer rate		Doer average time		Average amount of time for all children		Doer rate		Doer average time		Average amount of time for all children	
	%		Hours:Mins		Hours:Mins		%		Hours:Mins		Hours:Mins	
	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013
Children overall	87	<b>77</b>	2:31	<b>2:09</b>	2:12	<b>1:39</b>	84	<b>77</b>	2:27	<b>2:22</b>	2:03	<b>1:49</b>
Boys	87	<b>76</b>	2:30	<b>2:08</b>	2:11	<b>1:37</b>	83	<b>76</b>	2:29	<b>2:25</b>	2:03	<b>1:50</b>
Girls	88	<b>78</b>	2:33	<b>2:10</b>	2:14	<b>1:41</b>	84	<b>79</b>	2:25	<b>2:18</b>	2:02	<b>1:49</b>
0 years	68	<b>53</b>	2:21	<b>2:15</b>	1:36	<b>1:12</b>	55	<b>43</b>	2:12	<b>2:20</b>	1:12	<b>1:01</b>
Age 1	89	<b>74</b>	2:33	<b>2:23</b>	2:17	<b>1:45</b>	76	<b>66</b>	2:04	<b>2:29</b>	1:33	<b>1:39</b>
Age 2	86	<b>73</b>	2:27	<b>2:19</b>	2:07	<b>1:41</b>	81	<b>70</b>	2:06	<b>2:14</b>	1:42	<b>1:34</b>
Age 3	89	<b>80</b>	2:39	<b>2:14</b>	2:21	<b>1:48</b>	92	<b>82</b>	2:29	<b>2:09</b>	2:17	<b>1:47</b>
Age 4	89	<b>85</b>	2:44	<b>2:08</b>	2:25	<b>1:49</b>	89	<b>88</b>	2:37	<b>2:26</b>	2:20	<b>2:08</b>
Age 5	94	<b>81</b>	2:26	<b>1:58</b>	2:17	<b>1:36</b>	92	<b>84</b>	2:37	<b>2:20</b>	2:24	<b>1:57</b>
Age 6	89	<b>77</b>	2:23	<b>1:57</b>	2:07	<b>1:30</b>	88	<b>88</b>	2:49	<b>2:31</b>	2:30	<b>2:13</b>
Children at kindergarten	92	<b>85</b>	2:27	<b>2:03</b>	2:15	<b>1:44</b>	91	<b>86</b>	2:36	<b>2:19</b>	2:21	<b>1:59</b>
Children at daycare center	85	<b>70</b>	2:04	<b>1:41</b>	1:45	<b>1:10</b>	88	<b>79</b>	2:38	<b>2:27</b>	2:20	<b>1:56</b>
Children not at pre-school	86	<b>75</b>	2:47	<b>2:35</b>	2:23	<b>1:56</b>	77	<b>69</b>	2:15	<b>2:19</b>	1:44	<b>1:36</b>

The decline in TV viewing hours can also be confirmed by the changes in time allocation. In order to examine this, the results of the 1979 Children’s Time Use Survey<sup>5)</sup> were added and a long-term comparison was performed (Figure 4). In 1979, over half of young children watched TV for periods of “two to three hours” or longer. However, this declined in 2003 and 2013, and this group is currently in the minority, at around 30%. In

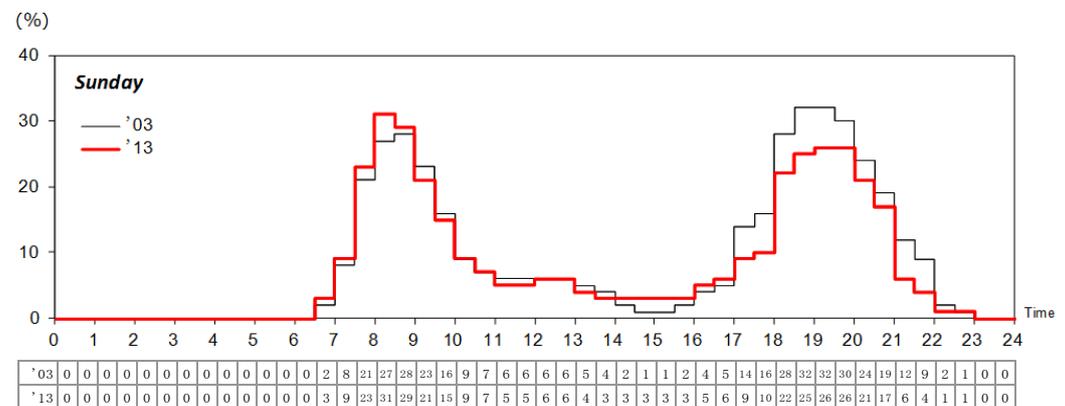
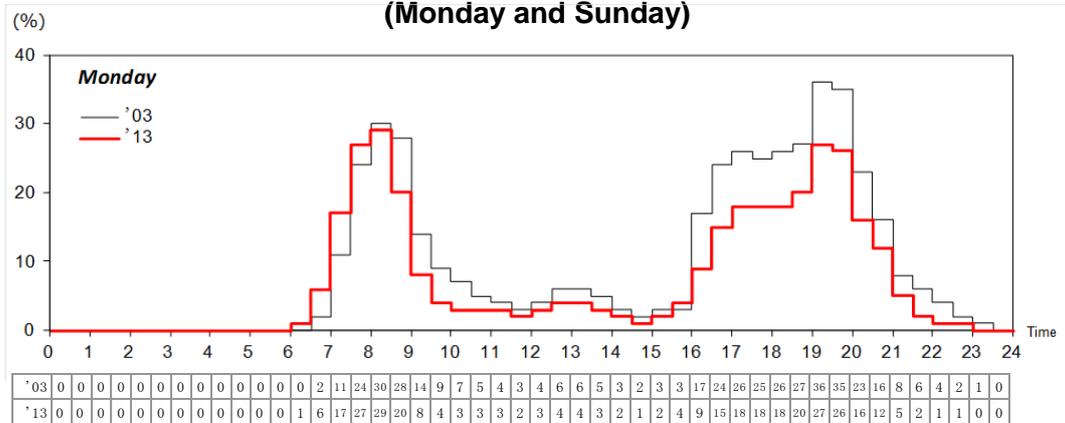
contrast, not only did the percentage of young children who watched no TV at all in a day (“zero minutes”) increase from 10% in 1979 and 2003 to 23% in 2013, but the percentage of young children who watched “less than one hour” of TV also progressively increased.

**Figure 4. Changes in the Distribution of TV Viewing Time (Young Children Overall, Monday)**



Note: “Less than one hour of viewing” includes viewing times of “15 minutes or longer” and “less than one hour,” while “1-2 hours” includes viewing times of “1 hour 15 minutes or longer” and “less than 2 hours.” The same applies for “2-3 hours,” etc.

**Figure 5. Changes in Overall TV Doer Rates in 30-Minute Intervals (Monday and Sunday)**



Next, we can examine the doer rates (30-minute average) for each time slot in order to see at what times of day young children tend to watch TV (Figure 5). Two peaks in young children's TV viewing can be seen: one in the morning, and the other in the late afternoon and into the evening. On Mondays over 20% watched TV in the morning between 7:30 am and 9:00 am; in the late afternoon and evening, the viewing rate started to increase from 4:00 pm onward, with over 20% viewing from 6:30 pm to 8:00 pm. On Sundays, the doer rate reached around 30% in the morning between 8:00 am and 9:00 am, making this the most popular watching time of the day. Again, in the late afternoon and evening, over 20% watched TV between 6:00 pm and 8:30 pm.

Compared to 10 years ago, there has been an increase in TV viewing in some of the morning time slots, namely between 6:00 am and 7:30 am on Mondays, and between 8:00 am and 8:30 am on Sundays. In contrast, TV viewing has fallen between 8:30 am and 11:00 am on Mondays, and there has been a shift to slightly earlier morning viewing times. From late afternoon into the evening, TV viewing decreased across a broad range of time slots from 4:00 pm to 11:00 pm on Mondays and from 5:00 pm to 7:30 pm and 9:00 pm to 10:00 pm on Sundays. The decline in young children's TV viewing hours is mainly due to the fact that they are no longer able to watch TV from late afternoon into the evening.

#### **4. Changes in Daily Life Behind the Decline in TV Viewing Hours – Shift to “Early to Bed, Early to Rise” and Longer Hours at Pre-School**

##### **(1) Increasing trend of “getting up earlier” in the morning**

In this section, we will use the data to examine how young children spend their time in the course of a day, focusing on Mondays, as the decline in TV viewing hours in this survey is greatly related to the increase in obligatory activities such as attending kindergarten or daycare. As young children's time use differs on Mondays depending on whether or not they attend pre-school, we will separately look at the results for children attending kindergarten, those in daycare, and those not attending pre-school.

Morning TV viewing by young children has shifted to a slightly earlier time slot than a decade ago, so has there been a change in the way young children use their time on Monday mornings? Table 5 shows Monday morning sleep doer rates by time slot (15 minute intervals); the time at which young children are waking up can be determined from the declining sleep doer rates. The time at which young children's sleep rate fell under 50%—in other words, the time at which over half of young children have awakened—is referred to as the “standard waking time.” While this was 7:00 am for children attending kindergarten and daycare, it was 7:30 am for children not attending pre-school. The change in doer rates from a decade ago—6:00 am to 8:00 am for children attending kindergarten, 6:00 am to 7:30 am for children attending daycare centers, and 6:00 am to 9:00 am for children not attending pre-school—all show fewer children asleep and demonstrate an increasing trend of “getting up earlier” in the morning. As a result, the “standard waking time” is 30 minutes earlier amongst children attending kindergarten and daycare than it was a decade ago.

Why are young children waking up earlier? According to the long-term shifts revealed in the National Time Use Survey, between 2000 and 2010, there was an increasing trend toward getting up earlier in a broad range of age groups, from elementary school children and junior high school students to men in their 40s and 50s. The mothers of young children demographic (women with pre-school aged children) also showed a declining trend in the

sleep doer rate, which fell between 6:00 am and 7:00 am in the period 2000-2010 (Table 5). It can be envisaged that these changes in parental lifestyles have also affected the lives of young children.

**Table 5. Shifts in Sleep Times (Pre-School Attendance, Monday)**

(%)

	<Children at kindergarten>		<Children at da care>		<Children not at pre-school>		<Elementary school children>*		<Mother>*	
	2003	2013	2003	2013	2003	2013	2000	2010	2000	2010
5:30-5:45	99	<b>100</b>	99	<b>97</b>	98	<b>95</b>	98	<b>97</b>	86	<b>84</b>
5:45-6:00	99	<b>99</b>	99	<b>96</b>	97	<b>96</b>	98	<b>97</b>	82	<b>81</b>
6:00-6:15	99	<b>96</b>	97	<b>90</b>	94	<b>89</b>	90	<b>86</b>	68	<b>58</b>
6:15-6:30	98	<b>92</b>	95	<b>88</b>	95	<b>89</b>	83	<b>79</b>	59	<b>54</b>
6:30-6:45	90	<b>80</b>	82	<b>69</b>	92	<b>84</b>	71	<b>57</b>	35	<b>31</b>
6:45-7:00	85	<b>74</b>	74	<b>59</b>	90	<b>81</b>	57	<b>44</b>	30	<b>25</b>
7:00-7:15	65	<b>46</b>	43	<b>31</b>	81	<b>66</b>	22	<b>12</b>	14	<b>12</b>
7:15-7:30	55	<b>41</b>	36	<b>25</b>	78	<b>62</b>	8	<b>7</b>	13	<b>10</b>
7:30-7:45	28	<b>20</b>	15	<b>12</b>	63	<b>42</b>	1	<b>2</b>	8	<b>6</b>
7:45-8:00	25	<b>15</b>	12	<b>9</b>	57	<b>39</b>	0	<b>2</b>	7	<b>6</b>
8:00-8:15	8	<b>7</b>	6	<b>3</b>	41	<b>24</b>	0	<b>1</b>	5	<b>4</b>
8:15-8:30	4	<b>4</b>	3	<b>3</b>	38	<b>23</b>	0	<b>1</b>	5	<b>4</b>
8:30-8:45	1	<b>2</b>	2	<b>1</b>	29	<b>13</b>	0	<b>1</b>	5	<b>2</b>
8:45-9:00	1	<b>2</b>	2	<b>1</b>	26	<b>14</b>	0	<b>1</b>	5	<b>2</b>

Notes: The values of “elementary school children” and “mothers” are from the National Time Use Survey results (aged 10 years or older) (same below). The shaded area is the time at which the percentage of those sleeping fell below 50%.

Additionally, when we look at the doer rates for kindergarten and daycare centers (Table 6) we can see that, in comparison with 10 years ago, there has been an increase in the doer rate from 7:00 am onwards for children attending daycare centers and from 8:30 to 8:45 am for children attending kindergarten. We can also see that young children are increasingly arriving at pre-school early in the morning.

In other words, it can be said that young children’s overall morning time use is shifting to earlier time slots, and it can be envisaged that this is also having an impact on TV viewing time slots. In 2011, NHK began broadcasting programs designed for young children in the hour between 6:00 am and 7:00 am, in which there has been an increase in young children who are awake, leading to an increase in TV viewing by young children. In contrast, after 8:30 am, the number of young children who have already left the house to attend kindergarten or daycare has increased. Even young children not attending pre-school have generally stopped watching TV and moved on to other activities, such as playing indoors, after the 9:00

am turning point (8:30 am to 9:00 am average doer rates are TV 29% and playing indoors 17%; from 9:00 am to 9:30 am for the same activities, the rates are 14% and 29%, respectively). The timing of this switch is occurring 30 minutes earlier than it did a decade ago. From this information, it can be deduced that a declining number of young children are watching TV after 8:30 am.

**Table 6. Shifts in Pre-school Times (Pre-School Attendance, Monday)**

(%)

	<Children at Kindergarten>		<Children at Daycare>	
	2003	2013	2003	2013
7:00-7:15	0	0	2	5
7:15-7:30	0	1	3	10
7:30-7:45	1	2	11	22
7:45-8:00	3	4	19	28
8:00-8:15	13	13	35	46
8:15-8:30	18	19	43	53
8:30-8:45	37	45	62	73
8:45-9:00	54	58	71	81

Note: (Shaded area) is the time at which the percentage of young children at kindergarten or daycare centers reaches 50% or more.

**(2) Trend of getting home later and going to bed earlier**

Next, I would like to look at young children’s time use during the period from late afternoon into evening, when their TV viewing rates are declining.

There is a dramatic difference between young children attending kindergarten and daycares in terms of the amount of time spent at the childcare center. While the “standard childcare center departure time,” at which the rate of young children still at kindergarten or daycare falls below 50%, is 2:30 pm for young children attending kindergarten, it is 5:45 pm for young children at daycare centers (Table 7). Consequently, the time spent at pre-school (average kindergarten/daycare center doer time) is 6 hours 7 minutes for young children attending kindergarten and 9 hours 24 minutes for young children at daycare centers—a difference of over three hours.

Young children who have left kindergarten for the day and young children not attending pre-school spend their afternoons and early evenings eating snacks, playing, taking private lessons, and watching TV or videos, while many young children not attending pre-school tend to have a nap. The ways in which this time is spent have not changed greatly over the past 10 years. However, because the Tokyo area had good weather on the day in which the survey was conducted (March 4, 2013)<sup>6</sup>, there was an increase in the number of young children attending kindergarten and not attending pre-school who played outside or went out between 2:00 pm and 6:00 pm; thus, the awake-and-at-home rate fell. In addition, there was an increase in the doer rate for personal care between 5:00 pm and 7:00 pm, perhaps due to an increase in children taking baths at early hours, not long after returning home.

It is possible that the number of young children watching TV in the late afternoon has declined because children attending daycare centers arrive home later, and the at-home rate has also declined for both young children attending kindergarten and those not attending pre-

school. In particular, the tendency for young children attending daycare centers to spend longer hours in childcare is due to the lasting changes in extended childcare services, which has accompanied the increase in female labor-force participation rates and working hours. This situation suggests that the number of young children able to watch TV in the late afternoon and early evening cannot be expected to increase much in the future.

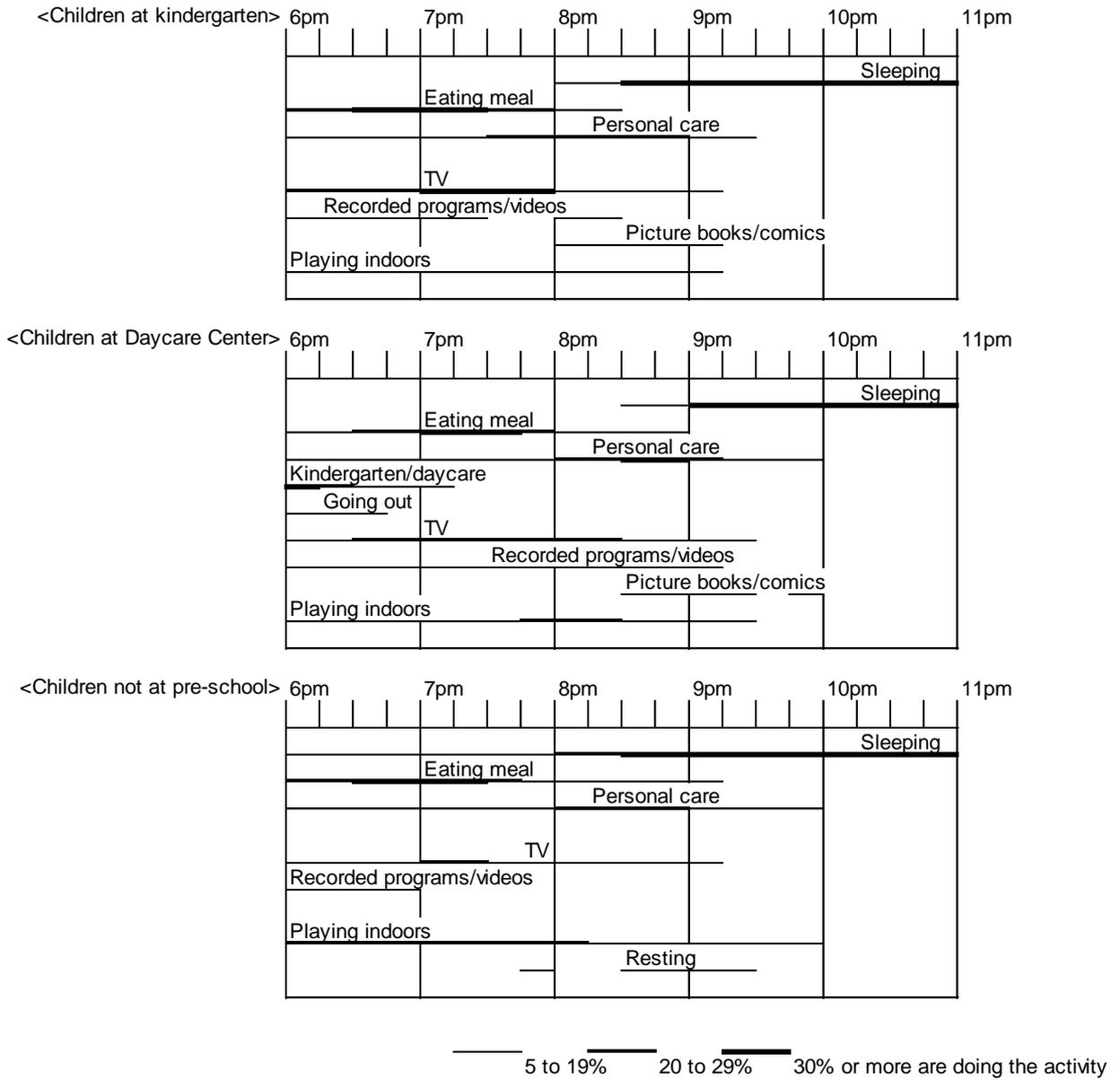
**Table 7. Shifts in Time Spent at Kindergarten, Daycare Centers, or Awake and at Home (Pre-School Attendance, Monday)**

	<Kindergarten/Daycare Center>				<Awake and at Home> (%)					
	<Children at kindergarten>		<Children at Day Care>		<Children at kindergarten>		<Children at Day Care>		<Children not at pre-school>	
	2003	2013	2003	2013	2003	2013	2003	2013	2003	2013
14:00 - 14:15	75	<b>72</b>	92	<b>94</b>	9	<b>11</b>	2	<b>3</b>	44	<b>40</b>
14:15 - 14:30	65	<b>64</b>	92	<b>94</b>	17	<b>16</b>	2	<b>3</b>	43	<b>40</b>
14:30 - 14:45	41	<b>47</b>	92	<b>94</b>	36	<b>26</b>	1	<b>2</b>	44	<b>38</b>
14:45 - 15:00	37	<b>43</b>	91	<b>94</b>	38	<b>29</b>	2	<b>2</b>	44	<b>38</b>
15:00 - 15:15	26	<b>28</b>	91	<b>92</b>	44	<b>36</b>	1	<b>3</b>	46	<b>41</b>
15:15 - 15:30	20	<b>25</b>	91	<b>92</b>	46	<b>38</b>	2	<b>3</b>	47	<b>42</b>
15:30 - 15:45	12	<b>16</b>	90	<b>92</b>	51	<b>44</b>	2	<b>3</b>	49	<b>46</b>
15:45 - 16:00	10	<b>14</b>	90	<b>92</b>	53	<b>46</b>	2	<b>3</b>	50	<b>47</b>
16:00 - 16:15	7	<b>9</b>	84	<b>87</b>	54	<b>49</b>	6	<b>6</b>	59	<b>50</b>
16:15 - 16:30	6	<b>9</b>	83	<b>86</b>	54	<b>50</b>	7	<b>6</b>	60	<b>51</b>
16:30 - 16:45	5	<b>6</b>	70	<b>79</b>	61	<b>54</b>	14	<b>10</b>	65	<b>57</b>
16:45 - 17:00	5	<b>6</b>	65	<b>78</b>	62	<b>56</b>	18	<b>12</b>	66	<b>58</b>
17:00 - 17:15	3	<b>4</b>	53	<b>63</b>	69	<b>64</b>	30	<b>23</b>	69	<b>68</b>
17:15 - 17:30	3	<b>4</b>	51	<b>62</b>	71	<b>66</b>	34	<b>24</b>	70	<b>70</b>
17:30 - 17:45	2	<b>3</b>	41	<b>52</b>	77	<b>71</b>	44	<b>32</b>	72	<b>74</b>
17:45 - 18:00	1	<b>3</b>	38	<b>47</b>	79	<b>73</b>	46	<b>35</b>	72	<b>75</b>

Note: (Shaded area) is the time at which the percentage of young children in kindergarten or daycare centers falls under 50%.

Next, let us examine time use at night (Figure 6). Young children attending kindergarten and those not attending pre-school tend to eat dinner between 6:30 pm and 7:30 pm and to be engaged in personal care, such as taking a bath, between 8:00 pm and 8:30 pm. In terms of media use, in addition to the hour between 7:00 pm and 8:00 pm being the peak time for TV watching, a certain proportion of young children attending kindergarten were found to be reading picture books or comics between 8:00 pm and 9:00 pm. This may be because their parents are reading picture books to them before bedtime. For young children attending daycare centers, who arrive home later, the peak time for each activity is around 30 minutes later, and the doer rates during those peak times are high and tend to be concentrated.

**Figure 6. Nighttime Schedule (Pre-School Attendance, Monday)**



Regarding bedtimes, the “standard bedtime,” when the sleep doer rate is 50% or higher, is 9:00 pm for young children attending kindergarten and those not attending pre-school, and 9:30 pm for those attending daycare centers. Sleep doer rates on a time slot basis have increased compared to a decade ago, from 8:00 pm to 10:00 pm for young children attending kindergarten, 9:00 pm to 10:00 pm for those attending daycare centers, and 8:00 pm to 11:30 pm for those not attending pre-school, thereby demonstrating an overall trend toward going to bed earlier (Table 8). This increase in sleep doer rates after 8:00 pm is thought to be related to finishing watching TV earlier in the evenings. In particular, young children attending daycare centers are not only leaving childcare centers and arriving home later; because of the increase in early bedtimes, the hours that they spend performing nighttime activities at home are also fewer, and there can be said to be a trend toward squeezing the hours they have to spend watching TV or playing.

**Table 8. Shifts in Sleep Times (Pre-School Attendance, Monday)**

(%)

	<Children at kindergarten>		<Children at daycare>		<Children not at pre-school>		<Elementary school children>*		<Mother>*	
	2003	2013	2003	2013	2003	2013	2000	2010	2000	2010
19:30-19:45	4	<b>3</b>	0	<b>1</b>	8	<b>9</b>	1	<b>1</b>	0	<b>0</b>
19:45-20:00	4	<b>3</b>	0	<b>1</b>	8	<b>9</b>	1	<b>1</b>	0	<b>0</b>
20:00-20:15	8	<b>15</b>	3	<b>3</b>	11	<b>20</b>	1	<b>2</b>	0	<b>0</b>
20:15-20:30	11	<b>18</b>	4	<b>4</b>	14	<b>23</b>	1	<b>3</b>	0	<b>0</b>
20:30-20:45	19	<b>33</b>	8	<b>12</b>	18	<b>30</b>	1	<b>3</b>	0	<b>2</b>
20:45-21:00	23	<b>38</b>	12	<b>13</b>	20	<b>34</b>	1	<b>4</b>	1	<b>2</b>
21:00-21:15	55	<b>65</b>	32	<b>40</b>	34	<b>53</b>	15	<b>20</b>	3	<b>5</b>
21:15-21:30	62	<b>69</b>	36	<b>46</b>	36	<b>57</b>	20	<b>24</b>	2	<b>5</b>
21:30-21:45	75	<b>83</b>	54	<b>63</b>	47	<b>72</b>	34	<b>40</b>	3	<b>12</b>
21:45-22:00	79	<b>87</b>	58	<b>69</b>	50	<b>73</b>	37	<b>40</b>	4	<b>12</b>
22:00-22:15	90	<b>92</b>	79	<b>83</b>	64	<b>83</b>	64	<b>65</b>	14	<b>24</b>
22:15-22:30	92	<b>92</b>	81	<b>87</b>	68	<b>84</b>	66	<b>68</b>	14	<b>25</b>
22:30-22:45	96	<b>93</b>	89	<b>94</b>	75	<b>88</b>	80	<b>78</b>	20	<b>30</b>
22:45-23:00	96	<b>93</b>	90	<b>95</b>	77	<b>89</b>	83	<b>78</b>	23	<b>32</b>
23:00-23:15	96	<b>94</b>	92	<b>96</b>	84	<b>91</b>	93	<b>89</b>	42	<b>50</b>
23:15-23:30	96	<b>94</b>	93	<b>96</b>	86	<b>91</b>	94	<b>90</b>	44	<b>52</b>

Note: (Shaded area) is the time at which the percentage of those who are asleep reaches 50% or more.

**Table 9. Doer Rates and Amount of Time for Recorded Programs and TV  
(Gender, Age, Pre-School Attendance)**

	Monday				Sunday			
	Doer rate		Average amount of time for all children		Doer rate		Average amount of time for all children	
	%		Hours: Mins		%		Hours: Mins	
	2003	2013	2003	2013	2003	2013	2003	2013
Children overall	39	<b>39</b>	0:29	<b>0:31</b>	41	<b>46</b>	0:33	<b>0:40</b>
Boys	40	<b>43</b>	0:31	<b>0:36</b>	40	<b>49</b>	0:33	<b>0:44</b>
Girls	37	<b>34</b>	0:28	<b>0:26</b>	42	<b>43</b>	0:33	<b>0:36</b>
0 years	18	<b>14</b>	0:12	<b>0:09</b>	13	<b>17</b>	0:09	<b>0:09</b>
Age 1	40	<b>41</b>	0:29	<b>0:34</b>	44	<b>43</b>	0:35	<b>0:34</b>
Age 2	54	<b>50</b>	0:45	<b>0:40</b>	55	<b>55</b>	0:45	<b>0:56</b>
Age 3	49	<b>47</b>	0:42	<b>0:39</b>	45	<b>46</b>	0:35	<b>0:41</b>
Age 4	40	<b>39</b>	0:29	<b>0:34</b>	43	<b>51</b>	0:35	<b>0:44</b>
Age 5	32	<b>39</b>	0:21	<b>0:29</b>	41	<b>50</b>	0:32	<b>0:46</b>
Age 6	31	<b>31</b>	0:19	<b>0:25</b>	34	<b>44</b>	0:28	<b>0:36</b>
Children at kindergarten	34	<b>38</b>	0:23	<b>0:30</b>	39	<b>47</b>	0:30	<b>0:39</b>
Children at daycare center	28	<b>35</b>	0:18	<b>0:24</b>	40	<b>50</b>	0:35	<b>0:45</b>
Children not at pre-school	46	<b>42</b>	0:38	<b>0:37</b>	43	<b>41</b>	0:33	<b>0:38</b>
Elementary school children*	6	<b>17</b>	0:03	<b>0:16</b>	12	<b>21</b>	0:09	<b>0:21</b>

Note: The Monday values of “elementary school children” are the “weekday” values.

## 5. Changes in the Use of Media Other than TV

### (1) Increased watching of recorded programs and videos at night

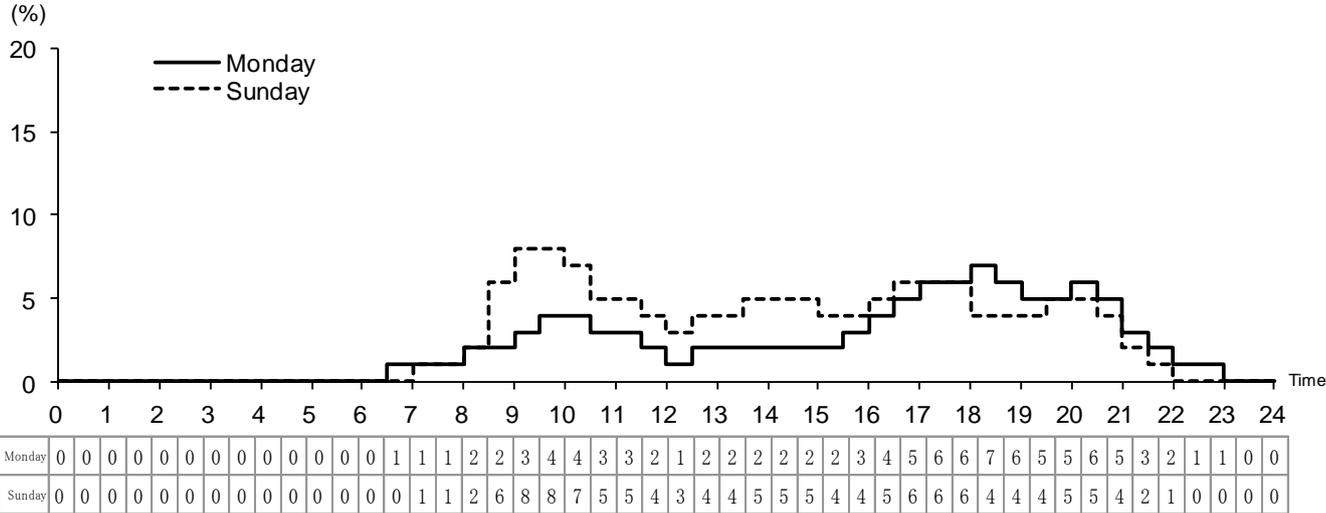
In order to explore the reasons behind the decrease in TV viewing hours, I would like to look at another matter: the relationship between changes in the use of media other than TV—such as videos, video games, and handheld games—and changes in TV viewing.

Firstly, let us take a look at recorded program and video viewing (Table 9). The doer rates for a single day amongst young children overall were 39% on Monday and 46% on Sunday; the doer average time was 1 hour 20 minutes on Monday and 1 hour 28 minutes on Sunday; and the average time for all young children was 31 minutes on Monday and 40 minutes on Sunday, thus indicating longer viewing times on Sundays. On an age basis, on Monday the rate was high for children aged two to three, with a doer rate of about half, while on Sunday the doer rate for children aged four to five rose to about half. Compared to a decade ago, although Monday’s statistics remained unchanged, on Sunday there was an increase in doer rates and amount of time for young children overall. There was an upward trend in doer rates for older children compared to younger children, and when looked at on a pre-school attendance basis, there was an increase in doer rates amongst young children attending kindergarten and daycare centers. It can be envisaged that no increase was seen on Monday due to the increase in obligatory time.

Next, when we look at doer rates by time slot (30-minute average), those rates were 5% or more between 4:30 pm and 9:00 pm on Monday, indicating that recorded programs and

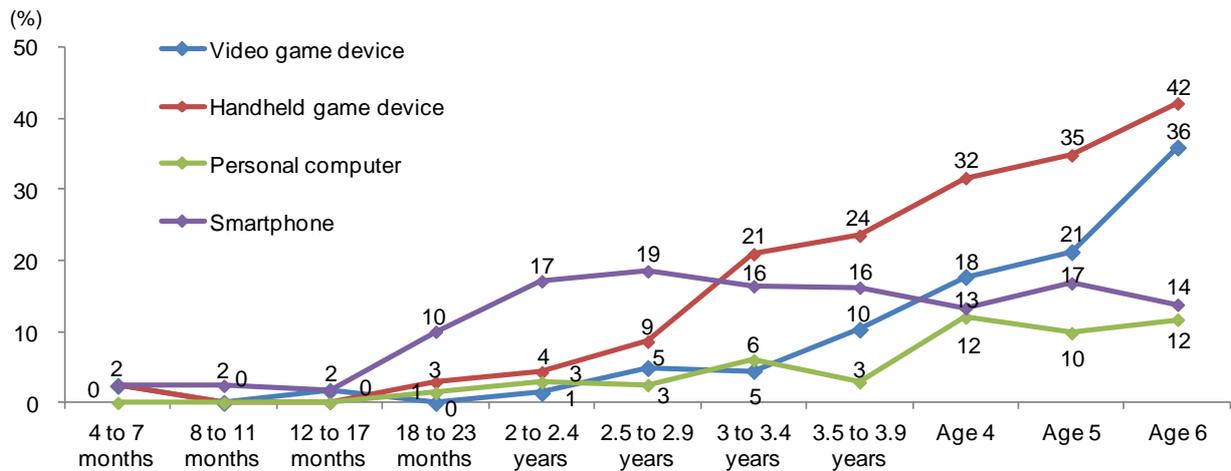
videos are often watched from late afternoon into the evening. However, on Sunday, except for around lunchtime, doer rates were 5% or higher for virtually the whole day; in particular, the figure (8%) was slightly high between 9:00 am and 10:00 am (Figure 7). On Sunday, TV was most frequently watched between 8:00 am and 9:00 am, so there may be a switch from TV to video around 9:00 am. Compared to a decade ago, the video doer rates by time slot have increased on Monday between 6:00 pm and 9:00 pm, and on Sunday between 5:00 pm and 6:30 pm and between 7:30 pm and 8:00 pm. Thus, it can be said that young children are increasingly likely to watch videos from the late afternoon into the evening. In particular, the time slot in which recorded programs and videos are increasingly being watched is expanding on Mondays, suggesting that nighttime TV viewing is in part being replaced by watching videos.

**Figure 7. Overall Average Doer Rates for Recorded Programs and Videos in 30-Minute Intervals (Monday and Sunday)**



Let us also take a look at the situation regarding the usage of video games, handheld games and the Internet. Figure 8 shows the percentage of main digital devices that young children use by themselves on an age basis, which was a supplementary question asked in the survey. The point in time at which the percentage of children able to use the device on their own increases differs between devices. The percentage of young children using smartphones starts to increase after the age of one, with around 20% using smartphones by the age of two and a half to three. Use of handheld game devices starts to rise from around the age of three to three and a half, and video game device use rises from around the age three and a half to four both have usage rates of around 40% by the age of six.

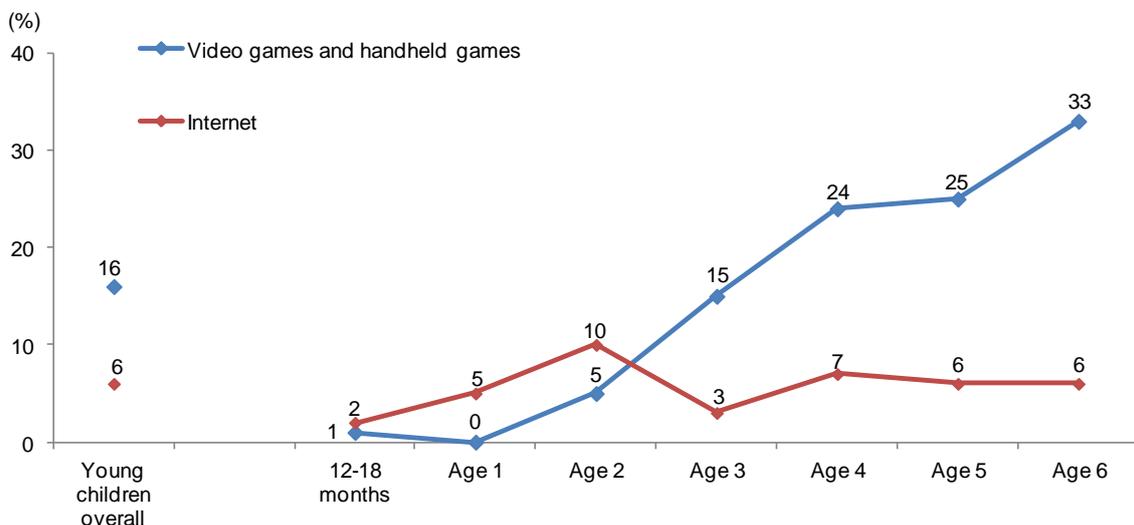
**Figure 8. Percentage of Young Children Using Digital Devices by Themselves**



In light of this situation, when we examined the time use data, the video game and handheld game doer rates for the day were found to be, for children overall, 10% on Monday and 16% on Sunday, with an average time for all young children of six minutes on Monday and 12 minutes on Sunday. Compared to a decade ago, Sunday doer rates and amount of time increased (2003: 13%, nine minutes). When we look at doer rates on an age basis (Figure 9), they are seen to rise with age, reaching 20% or higher for children aged four to five and 33% for six-year-olds.

Additionally, the Internet doer rates—a new category added to the 2013 survey—were 4% on Monday and 6% on Sunday, with an average time for young children overall of two minutes on Monday and three minutes on Sunday—lower figures than that of video games and handheld games. Two-year-olds comprised the highest age group (10%) and doer rates did not increase with age. The doer rates for watching recorded programs and videos were also highest for two-year-olds, and because the age group trends were similar, it can be inferred that young children are mainly watching videos while on the Internet. The rate of young children using smartphones also increases between the ages of one and two, and it can be imagined that smartphones are mainly being used for watching Internet videos.

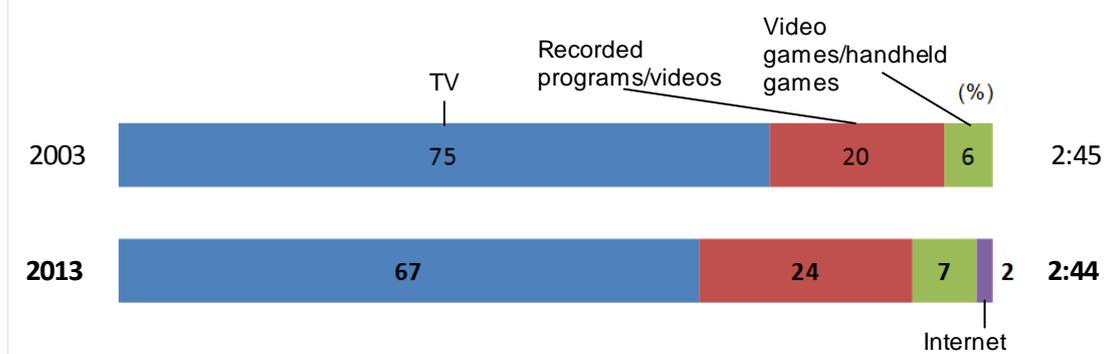
**Figure 9. Doer Rates for Video Games, Handheld Games, and the Internet (Age, Sunday)**



**(3) Increasing the diversification of visual media use**

While TV doer rates and amount of time on both Sunday and Monday have decreased since a decade ago, the use of videos and video games has, if anything, increased on Sundays. “Visual media” is the combined term used to collectively refer to TV, recorded programs and videos, video games and handheld games, and the Internet (included only in the 2013 survey). Thus, let us look at the degree to which young children are overall in contact with visual media, and the percentage for which each type of media accounts. The amount of time for which each type of media was used in the data from Sunday—in which the amount of free time was greater—was added up and the percentage was calculated (Figure 10). The total amount of time spent on visual media in 2013 was shown to be virtually unchanged from 2003. However, the percentage accounted for by TV dropped from 75% in 2003 to 67% in 2013, while the percentage of recorded programs and videos rose from 20% to 24%, with the use of video games and handheld games also slightly up from 6% to 7%. Young children’s media use is also diversifying, with TV’s share decreasing within the limited amount of visual media usage time.

**Figure 10. Overall Percentage Distribution of Visual Media\* Contact Time (Sunday)**

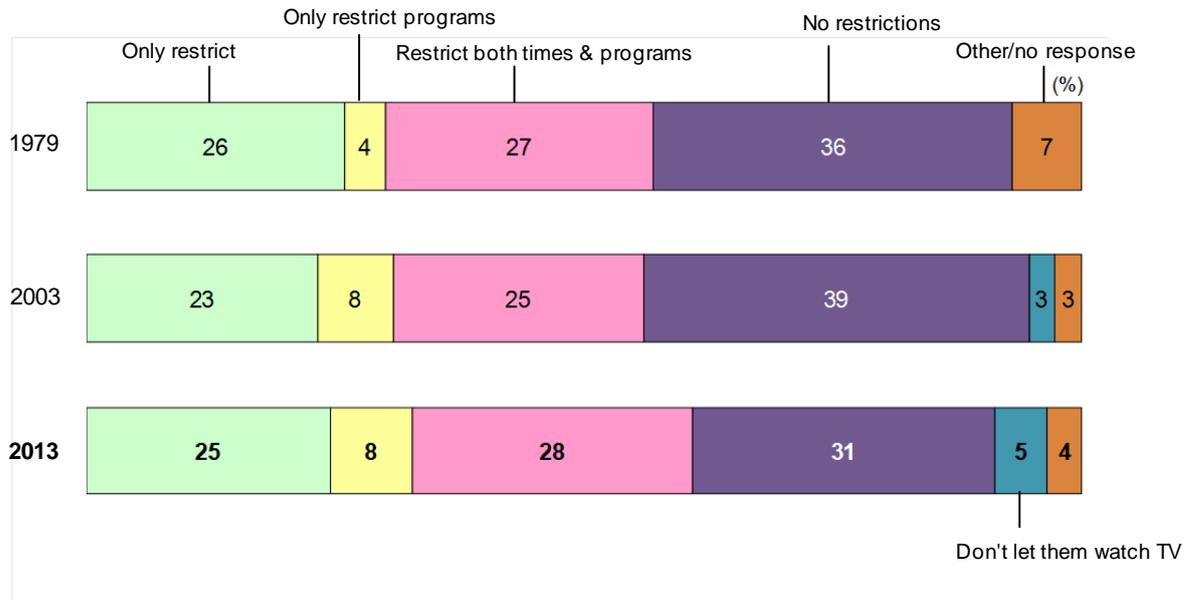


Note: \* The percentage for which each type of media accounts within the category of TV + recorded programs and videos + video games/handheld games + Internet. (In the 2003 survey, “recorded programs and videos” was known as “videos,” “video games and handheld games” was “video games,” and the “Internet” was not included.)

**6. Relationship with Parents’ TV Viewing – Decreases in Parents’ TV Viewing Time**

Lastly, I would like to touch briefly on the relationship between the parents’ TV viewing and young children’s TV viewing, which were both surveyed along with young children’s time use. Firstly, I would like to introduce the results of the supplementary question that asked whether parents impose any sort of viewing restrictions when they allow their children to watch TV (Figure 11). While 31% responded that they “freely allow their child to watch (without any restrictions),” the parents who impose some sort of viewing restrictions were in the majority, at 61%. When compared chronologically with the results of the 1979 and 2003 surveys, the percentage of parents who responded that they “freely allow their child to watch (without any restrictions)” has fallen since 2003, and the percentage of parents who impose some sort of viewing restrictions has risen (56% → 61%). There can therefore be said to have been an increase in parents’ control of young children’s TV viewing.

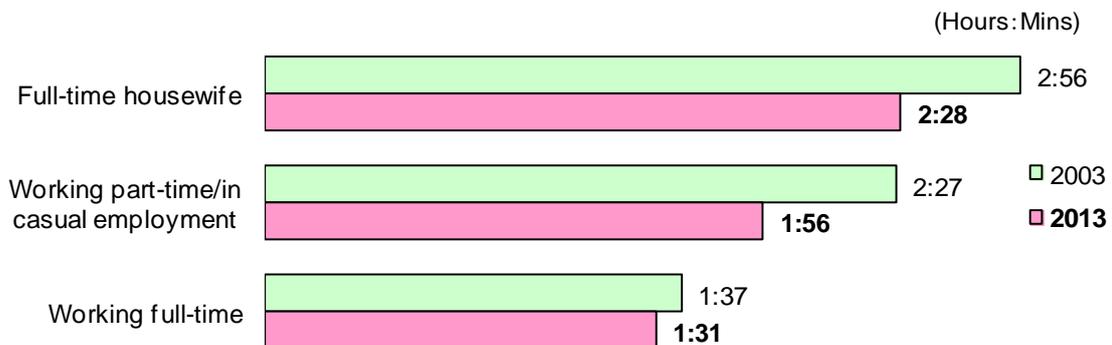
**Figure 11. Restrictions on TV Viewing**



In addition, when the average amount of time for all parents' TV viewing was compared with that of 10 years ago, it was found to have declined on both Monday and Sunday (Monday: 2 hours 40 minutes in 2003 → 2 hours 9 minutes in 2013; Sunday: 2 hours 34 minutes in 2003 → 2 hours 11 minutes in 2013). When we look only at the mothers' TV viewing time on the basis of their employment status (Figure 12), full-time housewives had the most TV viewing time, followed by those working part-time/in casual employment and those working full-time, in decreasing order. However, the viewing time for full-time housewives and mothers working part-time/in casual employment have fallen since 2003. Furthermore, as seen in Section 1, the percentage of mothers working full-time, who have fewer TV viewing hours, has increased, adding momentum to the decline in viewing times for mothers overall.

In contrast, parents' overall average viewing time for recorded programs and videos increased (Monday: 15 minutes → 23 minutes; Sunday: 17 minutes → 29 minutes over the same period). There has therefore been a major change in parents' media use, and it is highly likely that this is strongly influencing young children's TV viewing habits.

**Figure 12. Overall Average Amount of Mothers' TV Viewing Time (Employment Type, Monday)**



## Conclusion

The Children's Time Use Survey, conducted for the first time in a decade, confirmed that there has been a decrease in young children's TV viewing hours. We reviewed the changes in young children's time use over the past decade, mainly focusing on changes in TV viewing, and found that the series of activities in young children's lives from when they wake up until they go to sleep each day has not changed greatly. However, three main changes did occur. The first was observed within the overall structure of young children's lives, as the percentage of young children attending daycare centers increases in line with the increase in the number of older mothers and the increase in mothers who work full-time. The second change was observed in young children's actual lifestyles, characterized by a shift toward going to bed early and waking up early, and to spending longer hours at daycare centers. The third change occurred with regard to media use, including the increasing allocation of limited free time to watching videos and playing video games. It is possible that these developments have all had an impact in the direction of curbing young children's TV viewing. The first and second changes can mainly be considered to have had an impact on Monday TV viewing; however, the third change, regarding media use, has the potential to shift the ways in which young children spend their free time overall, irrespective of the day of the week. Furthermore, in the case of young children who do not spend all of their time autonomously, the influence exerted on young children's TV viewing by changes in their parents' TV viewing and thoughts regarding TV cannot be ignored.

## Notes

- 1) In addition, the following activity names have been changed in line with changes in the media environment. Moreover, a chronological comparison has been performed.  
2003 "Videos" → 2013 "Recorded programs and videos"  
2003 "Video games" → 2013 "Video games and handheld games"
- 2) The average amount of time for all young children surveyed is the averaged value of the figure obtained by multiplying the number of young children who performed an activity by the amount of time for which they performed it, divided by the total number of young children. For activities with low doer rates, this often becomes a figure that is not in line with actual societal experience.
- 3) The doer rates per day and the doer rates in 15-minute intervals for all activities for young children overall, as well as the average amount of time for all young children surveyed, have been posted on the Broadcasting Culture Research Institute's website:  
<http://www.nhk.or.jp/bunkenn/yoron/lifetime/index.html>
- 4) 91% of the parents who responded to the survey were "mothers."
- 5) As the 1979 survey differs greatly from the surveys from 2003 onward in terms of activity classifications, the figures for doer rates and amount of time cannot be directly compared. I therefore endeavored to compare the time distribution instead.
- 6) The weather in the Tokyo area on the day in which the 2003 survey was conducted (March 3, 2003) was initially cloudy and was followed by rain.

**Children's Time Use Survey Supplementary Questions  
(Results of 2003 Survey Also Listed)**

1	Survey Aim	To obtain basic data that would reveal the time use, including media use, of infants and young children aged from four months to pre-school age.	
2	Survey Dates	2003 Sunday and Monday, March 2 and 3 2013 Sunday and Monday, March 3 and 4	
3	Survey Method	Pre-coded method involving distribution and collection	
4	Survey Subjects	Young children aged from four months to pre-school age living in the Tokyo metropolitan area (within 50 kilometers of Tokyo)	
5	Survey Respondents	1,500 people selected from the Basic Resident Register using two-stage random stratified sampling (10 people x 150 locations)	
6	No. of Valid Survey Respondents (Percentage)	2003	1,144 people (76.3%)
		2013	985 people (65.7%)

**Questions 1 and 2 have been omitted, as they pertain to basic attributes.**

**Question 3: Siblings**

Any siblings? (Circle one)

		2003	2013
1.	Older brother/older sister only	44.1	40.9%
2.	Older brother/sister and younger brother/sister	6.3	10.5
3.	Younger brother/younger sister only	19.0	18.7
4.	No siblings	30.5	29.8
5.	No response	0.2	0.1

**Question 4: Living with grandparents**

Does your child live in the same house with his/her grandparents? (Circle one)

		2003	2013
1.	Yes	19.8	14.7%
2.	No	80.2	85.1
3.	No response	0.1	0.2

**Question 5: Childcare Type**

Does your child attend a kindergarten or daycare center? (Circle one)

		2003	2013
1.	Goes to kindergarten	29.4	32.2%
2.	Goes to a daycare center	21.0	28.3

3.	Doesn't go anywhere	49.0	37.6
4.	Other (specifically)	0.6	1.8
5.	No response	0.1	0.1

### Question 6: Frequent play activities (children aged two or over only)

How does your child usually play? (Circle up to three)

		2003	2013
a.	Riding a bicycle or tricycle	18.5	15.0%
b.	Playing on the playground equipment at a park	12.5	17.5
c.	Playing in a sandpit	9.4	6.3
d.	Ball games	8.0	9.6
e.	Playing house or make-believe	29.0	33.5
f.	Drawing, origami (paper folding), color-by-numbers, play dough	35.2	35.0
g.	Games, cards, puzzles	9.0	9.3
h.	Building bricks, blocks	13.4	13.3
i.	Mini cars, building plastic models	13.1	13.3
j.	Reading (listening to) picture books	19.2	15.9
k.	Reading comics or books	1.7	1.9
l.	Watching TV	19.4	19.8
m.	Watching videos or DVDs	24.7	23.9
n.	Playing video games and handheld games	8.2	10.8
o.	Using the Internet	---	1.6
p.	Other (specifically)	3.9	2.8
q.	No response	0.3	0.5
r.	Not applicable	24.0	21.5
		n=870	773

### Question 7: Private lessons

Does your child currently take any lessons or classes? (Circle as many as are applicable)

		2003	2013
a.	Music lessons such as piano or electric organ	7.2	7.8%
b.	Swimming or exercise classes, sports clubs	18.1	20.9
c.	Ballet school or rhythmic exercise classes	3.8	6.1
d.	Painting or calligraphy classes	2.9	1.4
e.	Language classes, such as English	6.2	5.5
f.	Cram school or early childhood learning center	7.0	6.4
g.	Self-study materials that are sent out regularly	11.5	12.7
h.	Other (specifically)	0.9	1.1

i.	Nothing in particular	60.6	56.0
j.	No response	1.5	2.0

**Question 8: TV on or off**

Do you normally tend to leave the TV on all the time at your house? (Circle one)

		2003	2013
1.	Tend to	51.2	51.5%
2.	Don't tend to	48.6	47.7
3.	No response	0.2	0.8

**Question 9: Initial age of TV watching**

About how old was your child when you started allowing him/her to watch TV? (Circle one)

		2003	2013
1.	Between birth and 6 months	27.9	22.0%
2.	Between 7 months and 1 year	37.7	39.0
3.	Between 13 months and 18 months	18.5	19.2
4.	Between 19 months and 24 months	4.3	5.0
5.	25 months or older	1.8	4.2
6.	Don't allow him/her to watch TV yet	1.7	3.7
7.	Don't remember/don't know	7.5	5.9
8.	No response	0.5	1.1

**Question 10: Developmental changes in the way TV is watched (Children under four years old only)**

We have divided the developmental changes in the way TV is watched from when children are babies to around three years old into the following stages. Which of these is closest to what your child is doing now? (circle one)

		2003	2013
1.	Still doesn't show any interest at all in TV	0.4	0.8%
2.	Starting to show an interest only in the sound of the TV	1.4	0.8
3.	Starting to show an interest in the TV screen	12.8	9.9
4.	Starting to have some sort of understanding of the content on TV	15.1	12.1
5.	Basically knows what programs he/she wants to watch	22.2	23.9
6.	Don't know	0.3	0.6
7.	Don't let them watch TV yet	0.8	1.7
8.	No response	1.4	0.7
9.	Not applicable	45.5	49.4
		n=623	498

**Question 11: Viewing response movements (children under 4 years old only)**

Does your child make the following movements when they watch TV? (Circle as many as applicable)

		2003	2013
a.	Still doesn't show any interest at all in TV	1.4	2.5%
b.	Sees clapping and claps	31.8	26.9
c.	Sees exercising and moves arms and legs in the same way	38.5	33.7
d.	Tries to sing along with the songs	33.8	28.6
e.	Tries to imitate short words	29.2	23.8
f.	Watches TV but doesn't try to imitate	6.1	5.8
g.	No response	1.3	1.1
h.	Not applicable	45.5	49.4
		n=623	498

**Question 12: TV as babysitter**

Do you use the TV as a babysitter? (Circle one)

		2003	2013
1.	Frequently	21.8	25.5%
2.	Sometimes	49.1	46.9
3.	Not much	21.1	16.2
4.	Never	7.9	10.9
5.	No response	0.2	0.5

**Question 13: Viewing restrictions**

Do you restrict the TV programs that you allow your child to watch or their TV viewing times? (Circle one)

		2003	2013
1.	Only restrict viewing times	23.3	24.5%
2.	Restrict certain programs that they are not allowed to watch	7.5	8.3
3.	Restrict both times and programs	25.1	28.0
4.	Allow unrestricted viewing	38.8	30.5
5.	Other (specifically)	2.4	3.0
6.	Don't allow them to watch TV	2.5	5.2
7.	No response	0.4	0.5

**Question 14: Recorded program watching (2013 survey only)**

On an everyday basis, excluding weekends and holidays, for how long in a given day does your child watch recorded TV programs? (Circle one)x

1.	Hardly any, doesn't watch any	39.9%
2.	Less than 15 minutes	2.5
3.	More than 15 minutes and less than 30 minutes	13.6
4.	More than 30 minutes and less than 1 hour	24.2
5.	More than 1 hour and less than 2 hours	13.1
6.	More than 2 hours	6.2
7.	No response	0.5

**Question 15: Video watching (2013 survey only)**

On an everyday basis, excluding weekends and holidays, for how long in a given day does your child watch commercially available videos or DVDs? (Circle one)

1.	Hardly any, doesn't watch any	54.6%
2.	Less than 15 minutes	4.6
3.	More than 15 minutes and less than 30 minutes	12.3
4.	More than 30 minutes and less than 1 hour	16.0
5.	More than 1 hour and less than 2 hours	9.9
6.	More than 2 hours	2.3
7.	No response	0.2

**Question 16: Devices owned (2013 survey only)**

Please indicate which of these devices you have at home. (Circle as many as are applicable)

a.	HDD (hard disk recorder)	79.5%
b.	Video game machine	52.8
c.	Handheld game device (Nintendo DS, PSP, etc.)	52.3
d.	Personal computer	85.8
e.	Cable TV, TV capable of receiving communications satellite (CS) broadcasts	30.9
f.	Mobile phone, Personal Handyphone System (PHS)	65.4
g.	Smartphone	73.4
h.	Tablet (iPad, etc.)	21.5
i.	No response	0.2

**Question 17: Devices used by children (2013 survey only)**

Please indicate which of these devices your child uses by him/herself. (Circle as many as applicable)

a.	HDD (hard disk recorder)	28.1%
b.	TV game machine	13.8
c.	Handheld game device (Nintendo DS, PSP, etc.)	22.1
d.	Personal computer	6.6

e.	Cable TV, TV capable of receiving CS broadcasts	7.5
f.	Mobile phone, PHS	3.6
g.	Smartphone	13.3
h.	Tablet (iPad, etc.)	8.4
i.	No response	47.0

### Question 18: Identity of the Respondent

Is the child's mother answering these questions? Or is another parent or guardian answering them?

		2003	2013
1.	Mother	95.8	91.3%
2.	Parent or guardian other than mother	3.9	8.3
3.	No response	0.3	0.4

### Question 19: Mothers' employment status

Is the child's mother employed? (Circle one)

		2003	2013
1.	Full-time housewife	63.6	55.1%
2.	Working part-time/in casual employment	16.8	18.5
3.	Working full-time	11.5	19.7
4.	Engaged in farming, family business, self-employed, etc.	4.8	2.6
5.	Other (specifically)	3.1	3.8
6.	No response	0.3	0.3

### Question 20: Respondents' Internet usage (2013 survey only)

Do you normally do any of the following on the Internet? (Circle as many as applicable)

a.	Watch videos	39.4%
b.	Play online games	8.4
c.	Listen to Internet radio	4.8
d.	Participate in Internet-based communities or electronic bulletin boards	8.4
e.	Browse social media (Social Networking Services (SNS), LINE, Twitter, Facebook, etc.)	37.8
f.	Create personal webpage or blog, upload photographs, comment, or do track-back	12.2
g.	Correspond with family and friends through Skype, etc.	9.1
h.	None of these	33.0
i.	No response	1.3

### Question 21: Respondents' Age

Which of the following age groups are you in? (Circle one)

		2003	2013
1.	19 or under	0.4	0.0%
2.	20 to 24 years old	1.9	2.3
3.	25 to 29 years old	15.4	10.9
4.	30 to 34 years old	39.2	27.5
5.	35 to 39 years old	31.7	36.0
6.	40 to 44 years old	9.3	19.9
7.	45 or older	2.0	3.1
8.	No response	0.1	0.2

### Sample Composition

#### 2003

	Young children overall	Boys	Girls	Under 1	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Kindergarten	Daycare center	Not at pre-school
Actual no. (people)	1,144	563	581	102	172	176	173	180	182	159	336	240	560
Percentage distribution (%)	100%	49.2	50.8	8.9	15.0	15.4	15.1	15.7	15.9	13.9	29.4	21.0	49.0

	Sibling Configuration				Mother's Age					Mother's Employment Status				
	Older brother/sister only	Older brother/sister & younger brother/sister	Younger brother/sister only	No siblings	Under 24	25-29	30-34	35-40	Over 40	FT housewife	PT/casual work	FT work	Farming, family business, self-employed	Other
Actual no. (people)	504	72	217	349	26	175	440	352	103	728	192	131	55	35
Percentage distribution (%)	44.1	6.3	19.0	30.5	2.3	15.3	38.5	30.8	9.0	63.6	16.8	11.5	4.8	3.1

**2013**

	Young children overall	Boys	Girls	Under 1	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Kindergarten	Daycare center	Not at pre-school
Actual no. (people)	985	504	481	84	128	151	135	158	184	145	317	279	370
Percentage distribution (%)	100%	51.2	48.8	8.5	13.0	15.3	13.7	16.0	18.7	14.7	32.2	28.3	37.6

	Sibling Configuration				Mother's Age					Mother's Employment Status				
	Older brother/sister only	Older brother/sister & younger brother/sister	Younger brother/sister only	No siblings	Under 24	25-29	30-34	35-40	Over 40	FT house wife	PT/casual work	FT work	Farming, family business, self-employed	Other
Actual no. (people)	403	103	184	294	22	100	253	335	188	543	182	194	26	37
Percentage distribution (%)	40.9	10.5	18.7	29.8	2.2	10.2	25.7	34.0	19.1	55.1	18.5	19.7	2.6	3.8