


IRIS
Internet Research
Information
Series



National Kids Survey
Part I: How Much Time Do Kids Spend
Outdoors?

A RECREATION Research Report in the IRIS Series¹

June, 2009

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¹ The Internet Research Information Series (IRIS) is an internet accessible science report series covering outdoor recreation statistics (RECSTATS), the National Kids survey (NKSSTATS), natural lands research (NATLAND), and other human-dimension and demographics research (DEMOSTATS) related to natural resources. This research is a collaborative effort between the USDA Forest Service's Southern Research Station and its Forestry Sciences Laboratory in Athens, Georgia; the University of Georgia in Athens; and the University of Tennessee in Knoxville, Tennessee.

<http://warnell.forestry.uga.edu/nrrt/nsre/IrisReports.html>

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Introduction

Much has been said and written about what kids are doing, or not doing outdoors. The concern is both for health related physical activity and for connectivity with nature. But very little actual scientific study has been done, especially concerning time kids spend outdoors. An example of one of the few studies that have been done is a recent study by the Outdoor Foundation. This is a panel survey which reported that participation in outdoor activities for youth age 6-17 dropped 11% between 2006 and 2007. An eleven percent drop in participation in just one year is a large drop. The Outdoor Foundation survey did not, however, specifically ask about time spent outdoors. The emphasis was on whether or not there was participation in the outdoor sports activities they asked about.

Evidence is abundant that communications and entertainment media occupy a lot of kids' discretionary time. This has led many to conclude, often without any direct research to back their assertions, that media time is competing directly with time for outdoor activities. One survey in 2003 on youth time use found that since 1981 children and teens were spending almost two hours less a week, on average, on sports and outdoor activities, while spending more time on sedentary activities, including television, home computers, reading and just doing nothing (CHANGING TIMES OF AMERICAN YOUTH: 1981-2003, Juster, Ono and Stafford Institute for Social Research, University of Michigan, Ann Arbor, Michigan, November 2004). But the 1981 data were from a pilot survey of only 322 children and the items in the questions asked then were not completely comparable to their early 2000s follow-up survey. Thus, that University of Michigan study was a bit inconclusive.

Nonetheless, most people seem to believe there is a definite trend of kids spending more time indoors, and less time outdoors. This belief is widespread, even though thus far there seems to be very little scientific evidence. There is especially a paucity of scientific evidence indicating kids are spending less time outdoors *because* they are spending more time indoors. A Kaiser Foundation sponsored study found that most Silicon Valley youth use the Internet, but that survey respondents indicated they do not spend large amounts of time online each week (survey can be found at <http://www.kff.org/entmedia/20030518a-index.cfm>). This Kaiser survey also found that most young people say time online is not detracting from other activities, such as spending time with friends and family. For example, that survey indicated that only 6 percent of kids 6 to 17 say their online use has caused them to spend less time hanging out with friends, and only 9 percent say it has caused them to spend less time with their family. In a survey in Alameda and Contra Costa Counties in California, it was reported by 51 percent of sampled parents of kids 3 to 17 years old that their kids spent 3 or more hours per day in physically active activities and that 72 percent spent less than 1 hour playing video games (kidsdata.org 2006). In the Gallup Teen Panel Survey, about half of teens say they play sports or spend time outside after they get home from school. This study also found that 53 percent of teens reported spending 20 or more minutes on 4 or more days per week in vigorous exercise and outdoor activity (Gallup Teen Panel Survey, 2006 The Gallup Organization, Princeton, NJ).

A survey in the UK found that parents are lessening the time their children spend with remote controls in favour of them spending more time outdoors together as a family. “Being outside is not only fun, it provides an atmosphere in which kids are encouraged to question and to think,” said the reporting scientists (Parents now spending more time outdoors with their children, The Kinder Survey, 2008, <http://www.femalefirst.co.uk/parenting.html>). Safety, lack of nearby parks, lack of unstructured time, and a number of other barriers have been cited as reasons kids don’t spend more time outdoors, or don’t spend as much time outdoors as their parents did (Miracle-Gro’s Nature Nurture Survey, 2008, conducted by StrategyOne). “When George Thomas was eight he walked everywhere. It was 1926 and his parents were unable to afford the fare for a tram, let alone the cost of a bike, and he regularly walked six miles to his favourite fishing haunt without adult supervision. Fast forward to 2007 and Mr Thomas’s eight-year-old great-grandson Edward enjoys none of that freedom”, (How children lost the right to roam in four generations, the Daily Mail, UK – June 16, 2007, David Derbyshire).

Thus, to us it appears that the actual trend in kid’s activities and time spent outdoors is unclear. In 2007, when we started our kids study, and still in 2009 as we continue it, we found very little reliable research on time kids spend outdoors. We certainly have found little to back widespread speculations and generally accepted common wisdom that kids are spending less time outdoors. We do not interpret not finding such research as an indication kids are not spending less time outdoors. We do interpret not finding it as an indication that such research is needed. Thus, in September 2007 we launched the **National Kids Survey**, which continues today. Our intention was and is to build a national baseline of data about kid’s time and activities outdoors so we could take a more rigorous look at trends. As we all know, without a baseline, one cannot measure change, i.e., trends.

National Kids Survey

The **National Kids Survey** is conducted as a companion survey with the National Survey on Recreation and the Environment (NSRE). The NSRE is a general population, random-digit-dialed household telephone survey. Telephoning is accomplished by calling a random, cross-sectional sample of non-institutionalized residents of the United States, 16 years of age or older. The Human Dimensions Research Laboratory at the University of Tennessee-Knoxville, an on-going NSRE cooperator, conducts NSRE household interviews almost daily. The system is computer-assisted (CATI) so the trained interviewers work from a computer monitor and the data are automatically entered as telephone interviews are conducted and responses coded. The average length of an overall interview is restricted to 14 minutes. A proxy household member 20 or older (parent, guardian, grandparent, older sibling, etc.) is interviewed to speak for kids 6 to 15 years old in answering the **National Kids Survey** questions. Teens 16 to 19 are interviewed directly. If there is more than one child in the household, the child with the last birthday is selected for interviewing (directly or through proxy). The sample size as of April 2009 was 1,201. Data continues to be collected. In this report, Part I of a 3-part

report, responses to the following three questions are the primary focus. Other questions to be reported in subsequent reports will focus on activities outdoors and reasons for not spending more time outdoors.

1. *To the best of your knowledge, how much time did the young person in your household spend outdoors on a typical **week day** this past week?* (Asked directly if the respondent was 16 – 19 years old.)
(None, less than 1/2 hour, about 1/2 hour, about 1 hour, 2 - 3 hours, 4 or more hours, Don't know, Refused)
2. *To the best of your knowledge, how much time did the young person in your household spend outdoors on a typical **weekend day** this past week?* (Asked directly if the respondent was 16-19 years old.)
(None, less than 1/2 hour, about 1/2 hour, about 1 hour, 2 - 3 hours, 4 or more hours, Don't know, Refused)
3. *In your opinion, does the young person you are referring to spend **less, about the same or more** time outdoors now than they did this time last year?*
(Less, About the same, More, Don't Know, Refused)

Results---Time Kids Spend Outdoors

The focus of this Part I **IRIS** research report is on *time* kids spend outdoors, regardless of activity (such as hanging out with friends, outdoor sports, nature-based recreation, or reading outside).

Hours per day.—Percentages of kids spending various amounts of time outdoors on weekdays and weekends are shown in **Table 1**. Also shown are 95% confidence intervals for all percentages. (A confidence interval shows the range of estimated percentages of kids spending various amounts of time outdoors. Interpreted as a statistician would see it, there is a 95 percent probability that the true percentage for the total population of kids is within the range shown.) As with the majority of children's surveys, a caveat applies here that the estimates shown represent reported, not directly observed time spent.

A total of 61 percent of kids 6 – 19 reported spending two or more hours outdoors on a typical weekday during the week preceding the household interview (Table 1). Over three-fourths (approximately 77 percent) spent two or more hours outdoors on a typical weekend day the preceding week. One half of kids spent 4 or more hours outdoors on a typical weekend day. Less than five percent spent no time outdoors on either weekdays or weekend days. Twenty-three and 12 percent spent about 1 hour outdoors on weekdays and weekend days, respectively. The pattern of spending time outdoors and a difference between weekdays and weekends is clear. As one might expect, school and other activities compete for kids time more during weekdays than on weekends.

Table 1. Percent (with confidence intervals) of kids spending different amounts of time outdoors on typical weekdays and weekend days during the week just preceding the interview (2007-2009)

Amount of time	Weekday (n=1,191)			Weekend day (n=1,189)		
	95% lower	(%)	95% c.i. upper	95% c.i. lower	(%)	95% c.i. upper
None	1.7	2.6	3.5	3.3	4.5	5.7
Less than 1/2 hour a day	3.7	4.9	6.1	1.4	2.2	3.1
About 1/2 hour a day	7.0	8.6	10.2	3.0	4.2	5.3
About 1 hour	20.5	22.9	25.3	10.4	12.3	14.1
2-3 hours	28.7	31.4	34.0	24.5	27.1	29.6
4 or more hours	27.0	29.6	32.2	46.9	49.7	52.6

Trend in hours per day.--The short-term trend in reported time spent outdoors is shown in **Table 2**. For *weekdays*, there was a decline in percentage of kids spending 1/2 hour or less outdoors (19.4 fall-summer 07/08 to 13.7 summer-spring 08-09). The two 10-month periods compared are roughly equivalent in that they both include weeks within all four seasons of the year. Mainly, this decrease in percentages spending 1/2 hour or less outdoors “moved” to spending 1 hour per weekday (18.9 up to 25.8 percent). Percentages spending 2-3 and 4 hours outside on weekdays remained pretty much the same from the 07-08 period to the 08-09 period.

The short-term trend in reported time spent outdoors for weekend days indicated a modest decline in percentage of kids spending no time outdoors (6.2 down to 3.3 percent, which is statistically significant), but slight increase in percentages spending 1/2 hour or less outdoors (not statistically significant). Percentages spending 1 hour and percentages spending 2-3 hours outside declined slightly, while percentages spending 4 or more hours outdoors increased almost 5 percent. This increase was from 47 percent in 07-08 to 51.7 in 08-09. For both weekdays and weekend days, the short-term trend appears to be fewer kids spending no time or 1/2 hour or less time outdoors, *and* moderately higher percentages of kids spending 4 or more hours outdoors on weekend days. These trends can, of course, be affected by weather patterns and other influences such as security concerns.

Table 2. Twenty-month trend in percentages (with confidence intervals) of kids reporting time spent outdoors by hours and date of interview (2007-2009).

(Percentages sum down to 100)

Period of Interview>	Weekdays						Weekend days					
	9/1/07-7/15/08 (n=498)			7/16/08-4/27/09 (n=693)			9/1/07-7/15/08 (n=499)			7/16/08-4/27/09 (n=690)		
	95% lower	%	95% upper	95% lower	%	95% upper	95% lower	%	95% upper	95% lower	%	95% upper
None	2.8	4.6	6.5	0.3	1.1	1.9	4.1	6.2	8.4	2.0	3.3	4.6
Less than 1/2 hour a day	3.4	5.4	7.4	2.9	4.5	6.0	0.8	2.0	3.2	1.3	2.4	3.5
About 1/2 hour a day	6.9	9.4	12.0	6.0	8.1	10.1	2.3	4.0	5.8	2.8	4.3	5.8
About 1 hour	15.5	18.9	22.4	22.6	25.8	29.1	10.1	13.0	16.0	9.3	11.7	14.2
2-3 hours	28.9	33.0	37.1	26.7	30.2	33.6	23.8	27.7	31.7	23.3	26.6	29.9
4 or more hours	24.7	28.6	32.6	26.9	30.4	33.8	42.6	47.0	51.4	48.0	51.7	55.4

Hours per day compared to last year.--As a final step in the analysis for this Part 1 of the report on the National Kids Survey, percentages of kids indicating spending less, the same or more time outdoors than a year ago were examined. Across the entire sample of both boys and girls (top row of numbers), only 15 percent reported spending less time, 45 percent reported spending the same time, and nearly 40 percent estimated spending more time outdoors this year than last (**Table 3**). The data were further examined to determine whether there was a discernable short-term trend between the two periods during which interviews took place—September 2007-mid-July 2008 and mid-July 2008-April 2009. The most obvious trend was a decrease of percentage of kids indicating spending about the same amount of time as a year ago (from 49 to 42 percent) and an increase in percentage indicating spending more time (from 35 to 43 percent). These changes in percentages are both statistically significant.

Table 3. A comparison of percentages (with confidence intervals) of kids 6 to 19 reporting spending less, the same or more time outdoors this year than last by time period, 2007-2009.

Time Period	n=	Less time			About the same			More time		
		95% lower	%	95% upper	95% lower	%	95% upper	95% lower	%	95% upper
Both period respondents	1176	13.0	15.0	17.1	42.6	45.4	48.3	36.7	39.5	42.3
Respondents 9/07-7/08	491	12.9	16.2	19.4	44.8	49.2	53.6	30.5	34.7	38.9
Respondents 7/08-4/09	685	11.6	14.2	16.9	39.0	42.7	46.4	39.3	43.0	46.8

Discussion

Sixty-one percent of kids 6 to 19 reported spending two or more hours outdoors on a typical weekday and over three-fourths reported two or more hours outdoors on typical weekend days (fall 2007 to spring 2009). One half of kids spent as much as 4 or more hours outdoors on a typical weekend day. Less than five percent spent no time outdoors on either weekdays or weekend days.

The short-term trend in reported time spent outdoors showed a decline in percentage of kids spending ½ hour or less outdoors on weekdays (19.4 percent fall-summer 07/08 to 13.7 percent summer-spring 08-09), but no change for weekends. The percentages spending about 1 hour on weekdays moved up from 18.9 to 25.8 percent, but remained about the same for weekends. Percentages spending 2-3 and 4 hours outside on weekdays remained pretty much the same from the 07-08 period to the 08-09 period, but there was a modest increase in percentage spending 4 or more hours outside on weekend days.

Across the entire sample of both boys and girls, only 15 percent reported spending less time, 45 percent reported spending about the same time, and nearly 40 percent estimated spending more time outdoors this year than last. The most obvious short-term trend between the two periods was a decrease in percentage of kids indicating spending about the same amount of time as a year ago (from 49 to 42 percent) and an increase in percentage indicating spending more time (from 35 to 43 percent).

In subsequent reports on results of the **National Kids Survey**, we will provide updated data on the activities kids undertake outdoors, reasons they do not spend more time outdoors, and demographic comparisons of in time and activities outdoors. The results reported here seem to call into question the widely held notion most writers and people have had, that is, that kids are spending significantly less time outdoors now than in their past. Obviously research needs to continue on this critical question concerning how much time children spend outdoors.

As the U.S. and global recessions continue, it is unclear what role, if any, it has played in changing people's lifestyles, including kids. Increased unemployment and decreased incomes across many of the households in this country has had to have some effect. Perhaps increased adult unemployment has meant a greater presence of adults in the home, thus more time to spend with kids outdoors. Perhaps slumping incomes in some households has meant less money to spend on electronic devices, games, and social networking services. Many other factors also could be at play, which is why further research is needed and will be pursued.