

QUESTIONS THAT WE NEED INFORMATION/STATISTICS ON

- . Any statistics on the amount of time kids spend in school versus other activities, such as watching TV, working, or learning at home. Any comparisons with kids in Asia and Europe?
- . Any data on whether there has been a decline in after-school, weekend, and summer school organized sports, development, recreation, or cultural programs (either a decline in funding or in participation rates)?
- . Any data on what times of day youth and young adults commit crimes?

Cliff Johnson, Children's Defense Fund

National Crime Prevention Council (Jean O'Neil or Terry Modglin) 466-6272

John Wilson, Dept, of Justice, OJJDP

University of Michigan, Institute for Social Research (chart or any other studies), Ann Arbor, Michigan (313-555-1212 is information in Ann Arbor I think)

DATE: May 25, 1994
TO: Paul Dimond
FROM: Mike Schmidt, Jeremy Ben-Ami
RE: Statistics on Youth and Learning

We are still in the process of collecting the information that you requested on Monday. However, in an effort to get you some feedback by the end of today as requested, we have attached some of the more interesting statistics that we have collected so far. Why don't you take a look at what we have in so far, then we can sit down and decide where you want us to direct our efforts to fill in the gaps. Let Mike know when you are available to discuss this.

Some points of information:

- . So far, we have not found anyone that knows of any good compilation of data on the status of afterschool/extracurricular programs for youth. The best we can do is to try and get some local data from a city (Detroit has been suggested -- they may have stats on the growth/decline in afterschool activities in the city over the past few decades).
- . The Crime data that we have collected is still thin -- we are waiting for callbacks from several crime prevention organizations.
- . In terms of the times of day that youth commit crimes -- Jose didn't know of any statistics that addressed this area, nor did he have any idea where to look for it, since he doesn't think it exists.

We will provide you with analysis of our findings in our next memo -- which will come as soon as all of the info we have requested comes in. In the meantime, we hope these stats will help inform the discussion on this issue.

ATTACHMENT A: CRIME STATISTICS

In the five years between 1988 and 1992, juvenile arrests for violent crimes jumped 47% -- two and a half times faster than for adults 18 and older.

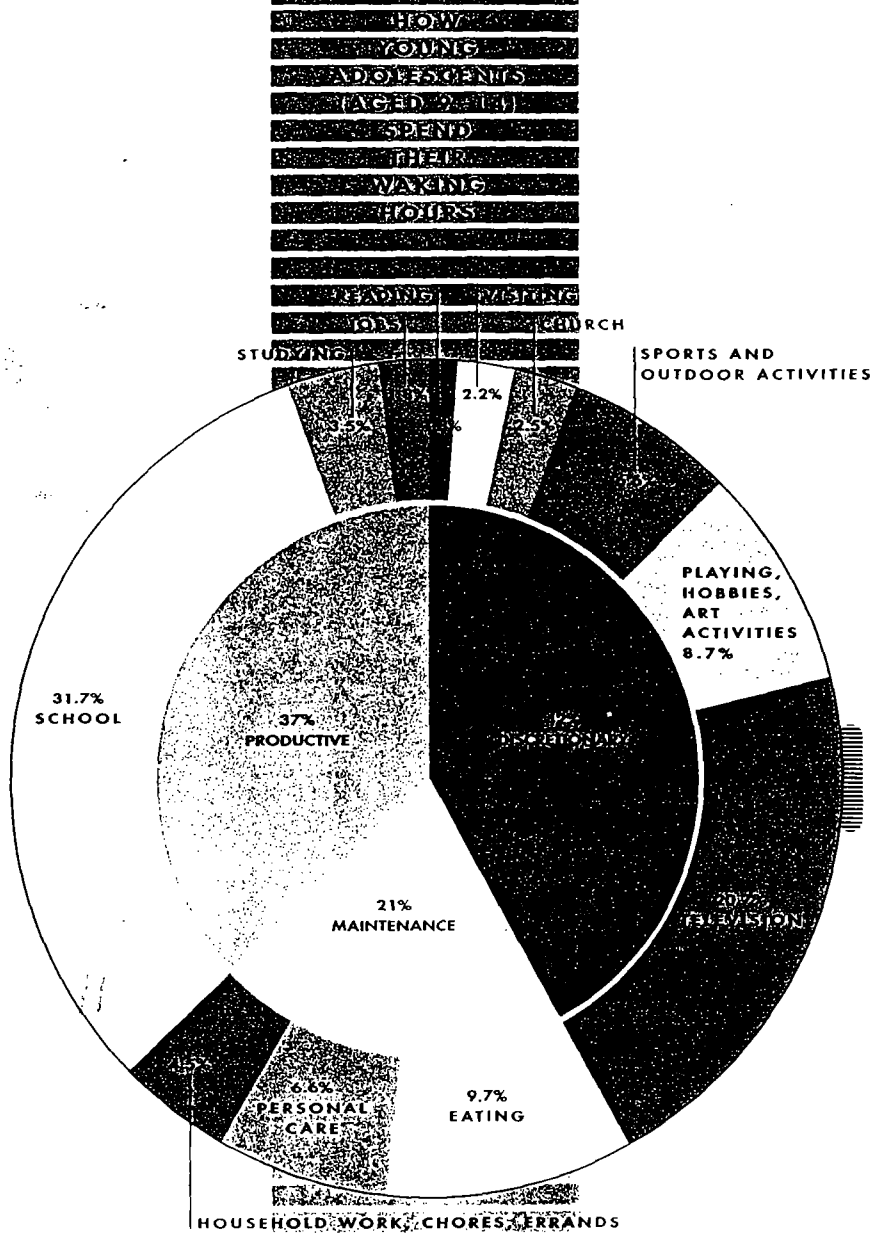
Although they comprise only 11% of the population, juveniles aged 10-17 committed nearly twice their share of violent crimes, accounting for 18% of all violent crime arrests in 1992.

Children are more likely than adults to be victims of violent crime, and these days, a child's attacker is more likely than not another child -- between 1985 and 1988, 81% of child victims of violent crimes aged 12-15 reported that their attackers were younger than 21. Only 16% of adult victims of violent crime reported the same.

Every five seconds of every school day, a student drops out of public school. And once out of school, crime often fills the time void:

- Only 9.2% of chronic juvenile offenders graduate from high school, compared to 74% of non-offenders;
- Only 2% of inmates in long-term juvenile facilities are high school graduates, and only 41% have completed eighth grade;

ATTACHMENT B: OTHER STATISTICS



Source: "How Children Use Time" by S. G. Timmer, J. Eccles, and I. O'Brien (1985). In F. T. Juster and F. B. Stafford (Eds.), *Time, Goods and Well-Being*. Ann Arbor: University of Michigan, Institute for Social Research. Adapted by permission of the Institute for Social Research.

Note: This chart represents 52 percent of hours during a week. Young adolescents spend 37 percent sleeping and 11 percent in miscellaneous activities.

Indicator **35. International Mathematics and Science Comparison**

Average percent correct on international mathematics and science assessments of 13-year-olds in selected countries: 1991

Mathematics		Science	
Country	Percent correct	Country	Percent correct
Korea	73	Korea	78
Taiwan	73	Taiwan	76
Switzerland ¹	71	Switzerland ¹	74
Soviet Union, ² former	70	Hungary	73
Hungary	68	Soviet Union, ² former	71
France	64	Slovenia	70
Israel ³	63	Israel ³	70
Canada	62	Canada	69
Scotland	61	France	69
Ireland	61	Scotland	68
Slovenia	57	Spain ⁴	68
Spain ⁴	55	United States	67
United States	55	Ireland	63
Jordan	40	Jordan	57

¹ 15 cantons

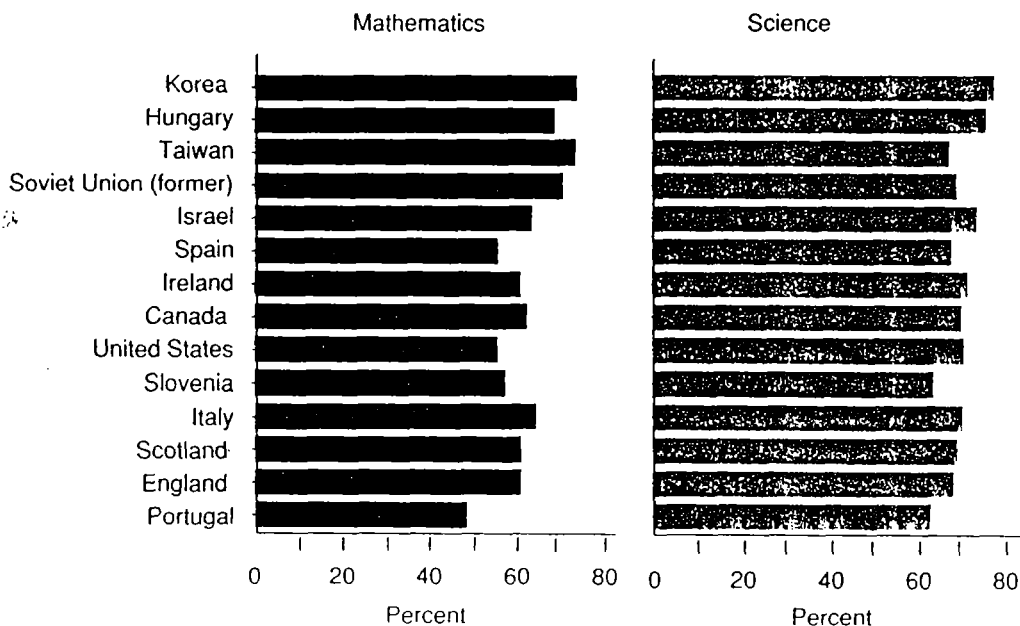
² Schools in 14 republics, where instruction is in Russian

³ Schools where instruction is in Hebrew

⁴ Except Cataluna and in Spanish-speaking schools

SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *Learning Mathematics and Learning Science*, prepared by Educational Testing Service, February

Average percent correct on international mathematics and science assessments of 13-year-olds in selected countries: 1991

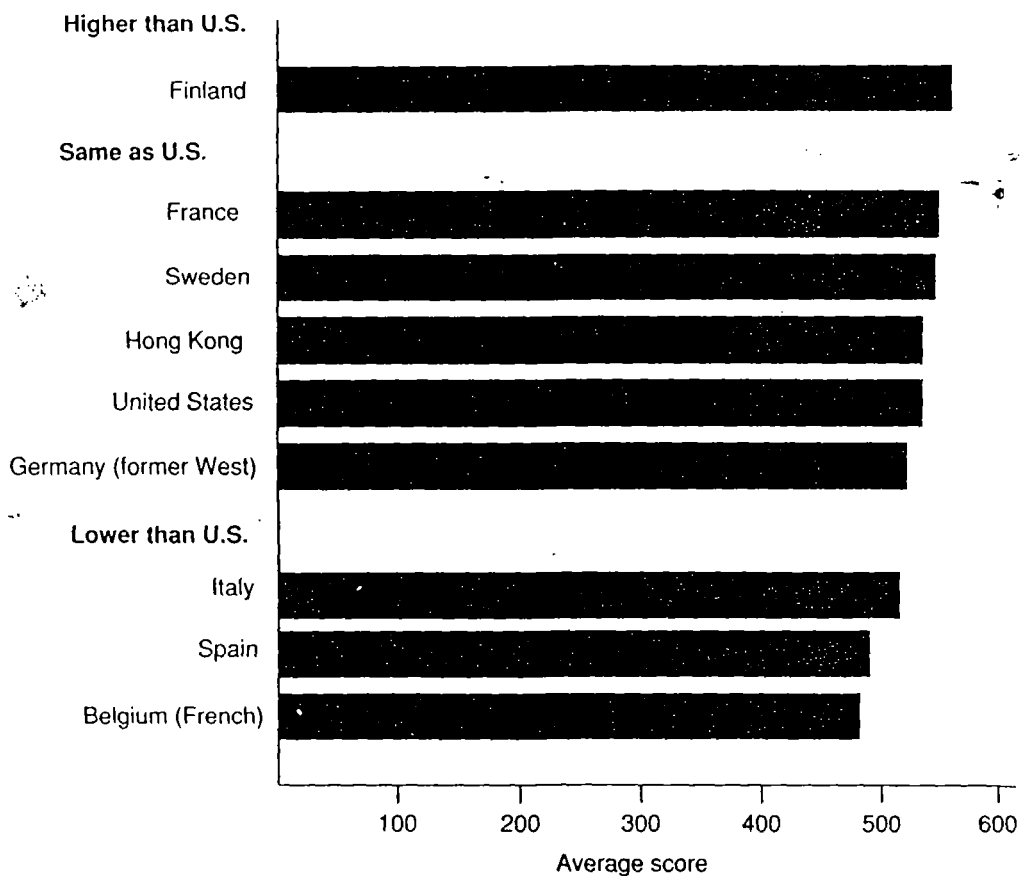


SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *Learning Mathematics*; and *Learning Science*, prepared by Educational Testing Service.

In a 1991 International Assessment of Educational Progress (IAEP) in mathematics and science, 13-year-old U.S. students performed at or near the IAEP average in science, and below the average in mathematics. U.S. students were not among the highest performing group in either subject.

Indicator 36. International Reading Comparison

Average reading assessment score of 14-year-olds in selected countries: 1990



SOURCE: The International Association for the Evaluation of Educational Achievement, *How in the World Do Students Read?*

In a 1990 international reading assessment, the United States was in the second cluster for both 9- and 14-year-olds. At both age levels only Finland outperformed U.S. students. Countries ranking about equal to the U.S. for 14-year-olds were France, Sweden, New Zealand, Hungary, Iceland, Switzerland, Hong Kong, Singapore, Slovenia, Germany (former East and West), Denmark, Portugal, Canada (British Columbia), and the Netherlands.

Average score on an international reading assessment of 14-year-olds in selected countries and provinces: 1990

Country	Mean score	Below the U.S. ¹	About the same as the U.S. ¹	Higher than the U.S. ¹	Mean age	Grade tested
Finland	560			X	14.7	8
France	549		X		15.4	9
Sweden	546		X		14.8	8
New Zealand	545		X		15.0	10
Hungary	536		X		14.1	8
Iceland	536		X		14.8	8
Switzerland	536		X		14.9	8
Hong Kong	535		X		15.2	9
United States	535		X		15.0	9
Singapore	534		X		14.4	8
Slovenia	532		X		14.7	8
Germany, former East	526		X		14.4	8
Denmark	525		X		14.8	8
Portugal	523		X		15.6	9
Canada, British Columbia	522		X		13.9	8
Germany, former West	522		X		14.6	8
Norway	516	X			14.8	8
Italy	515	X			14.1	8
Netherlands	514		X		14.3	8
Ireland	511	X			14.5	9
Greece	509	X			14.4	9
Cyprus	497	X			14.8	9
Spain	490	X			14.2	8
Belgium, French	481	X			14.3	8
Trinidad/Tobago	479	X			14.4	9
Thailand ²	477	X			15.2	9
Philippines	430	X			14.5	8
Venezuela	417	X			15.5	9
Nigeria ²	401	X			15.3	9
Zimbabwe ²	372	X			15.5	9
Botswana	330	X			14.7	9

¹ Significance test at the 95 percent confidence level.

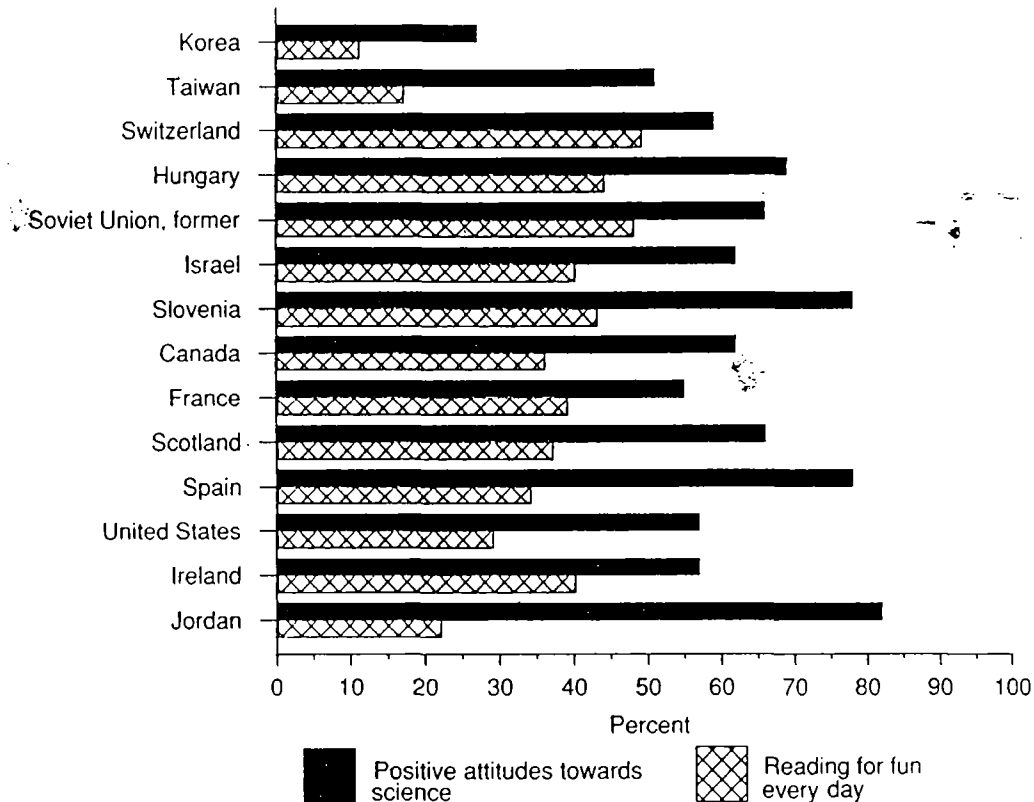
² Sampling response rate of schools was below 80 percent.

NOTE: Score distributions are based on a mean of 500 and a standard deviation of 100.

SOURCE: The International Association for the Evaluation of Educational Achievement, *How in the World Do Students Read?*

Indicator 37. Science Scores and Home Activities

Percent of 13-year-olds with positive attitudes toward science and who read for fun every day in selected countries: 1991



SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *Learning Science*, prepared by Educational Testing Service.

International comparisons provide useful information about education variables that relate to learning across countries. Sometimes, however, these factors do not correlate across countries, but are relevant within countries. For example, among U.S. students, the amount of leisure reading and students' attitudes toward science were positively related to their science scores, while the amount of TV watching was negatively correlated with science scores. Moreover, U.S. students spent more time watching television than students in most of the other countries participating in a 1991 study. On the other hand, Korean students do not appear to read for fun or have positive attitudes toward science, yet they scored at the top of the 1991 assessment.

Science scores and home activities of 13-year-olds in selected countries: 1991

Country	Average percent correct on science test	Percent of students who read for fun every day	Percent of students with 2 or more hours homework daily	Percent of students who watch TV 5 or more hours daily	Percent of students with positive attitudes towards science
Korea	78	11	38	10	27
Taiwan	76	17	44	7	51
Switzerland ¹	74	49	21	7	59
Hungary	73	44	61	16	69
Soviet Union, ² former	71	48	52	19	66
Israel ³	70	40	49	20	62
Slovenia	70	43	27	5	78
Canada	69	36	26	15	62
France	69	39	55	4	55
Scotland	68	37	15	23	66
Spain ⁴	68	34	62	11	78
United States	67	29	31	22	57
Ireland	63	40	66	9	57
Jordan	57	22	54	10	82

¹ 15 cantons.

² Schools in 14 republics, where instruction is in Russian.

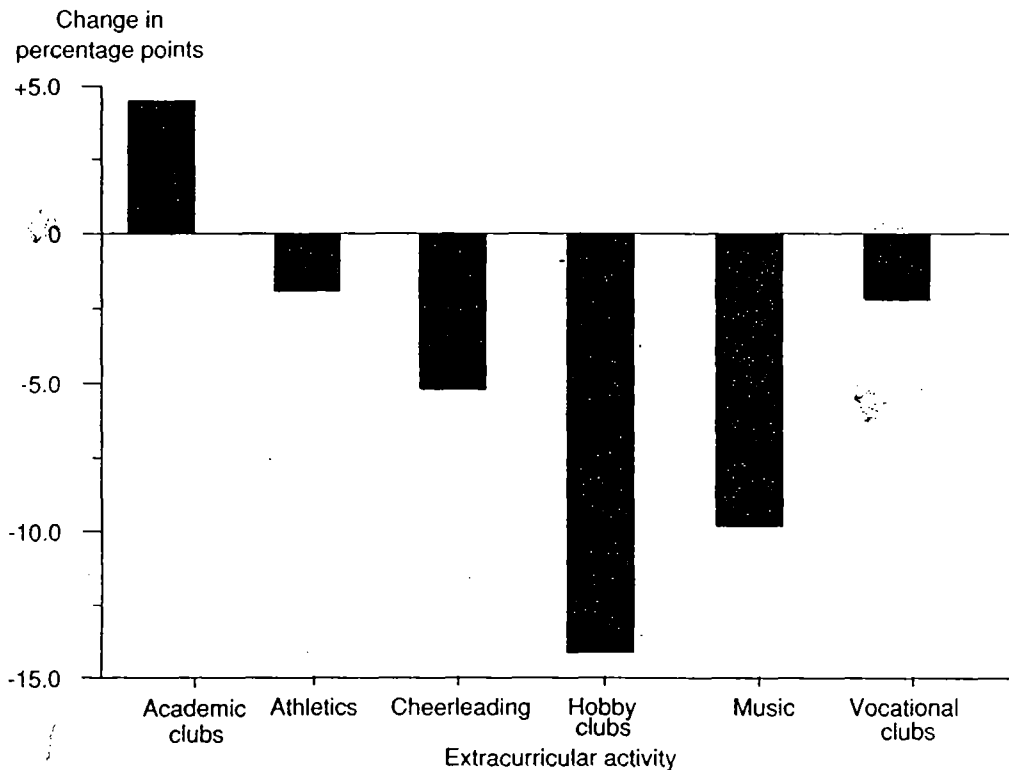
³ Schools where instruction is in Hebrew.

⁴ Except Cataluna, Spanish-speaking schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, International Assessment of Educational Progress, *Learning Science*, prepared by Educational Testing Service.

Indicator 38. Extracurricular Activities

Change in participation of high school sophomores in school-sponsored extracurricular activities: 1980 and 1990



SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, Base Year Survey, "1980 Sophomore Cohort;" and National Education Longitudinal Study of 1988, "First Followup" survey.

Since 1980, the proportion of sophomores participating in academic clubs has increased nearly 5 percentage points. However, participation in other extracurricular activities has decreased. There has been a significant decline in the percent of students participating in hobby clubs and musical activities. Athletics remains the most popular activity, with more than half of students participating in both 1980 and 1990.

Percent of sophomores who participate in selected school-sponsored extracurricular activities: 1980 and 1990

Student and school characteristics	Academic clubs		Athletics		Cheerleading		Hobby clubs		Music		Vocational clubs	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
All sophomores	26.2	30.7	54.1	52.2	14.3	9.1	21.4	7.3	31.3	21.5	13.9	11.7
Male	22.7	27.4	63.4	63.0	13.3	2.1	25.5	7.9	21.5	15.6	11.5	11.0
Female	29.1	34.0	45.9	41.4	24.7	15.8	17.6	6.7	41.0	27.3	15.7	12.3
Race/ethnicity												
White	25.3	31.7	54.4	53.5	14.1	8.3	21.0	7.5	30.5	22.3	13.5	12.2
Black	28.9	26.2	57.1	51.4	17.1	15.7	21.7	5.2	37.9	23.0	17.5	13.7
Hispanic	27.6	27.2	48.3	43.9	13.2	8.3	22.7	6.7	28.4	14.8	13.2	7.4
Asian	31.8	36.7	46.3	54.9	7.0	5.2	25.5	11.8	28.4	20.6	5.3	5.1
American Indian	29.5	31.9	56.8	44.2	12.9	11.3	26.5	8.4	33.7	17.3	20.0	16.9
Test performance quartile												
Lowest	27.5	22.5	47.0	47.4	15.0	9.5	22.9	6.5	29.6	16.0	20.6	17.3
Second	25.7	29.9	53.3	50.8	14.8	8.6	22.7	6.1	29.7	20.5	16.2	13.2
Third	24.4	30.3	56.4	51.8	15.1	9.2	21.1	7.6	31.2	22.1	12.6	11.4
Highest	27.9	40.0	60.5	59.0	13.4	9.0	18.6	8.7	35.8	26.9	7.7	6.7
Socioeconomic status *												
Low	25.2	26.3	43.7	42.0	13.2	8.2	19.6	5.8	27.6	18.3	18.0	17.1
Middle	26.3	31.5	55.1	52.7	15.1	9.6	22.3	7.1	31.5	22.1	14.8	11.4
High	26.9	34.9	64.4	63.2	14.4	9.3	21.4	9.4	35.2	24.4	7.9	6.5
Control of school												
Public	26.0	31.0	53.1	50.8	14.2	9.2	21.3	6.7	31.3	22.1	14.9	12.6
Catholic	27.7	28.6	61.8	66.5	15.9	7.1	21.2	12.3	28.4	12.6	3.6	2.8
Other private	27.3	29.1	68.8	68.0	13.1	9.9	24.4	13.1	35.9	25.7	6.5	5.5

* Socioeconomic status was measured by a composite score on parental education and occupations, and family income. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, Base Year Survey, "1980 Sophomore Cohort;" and National Education Longitudinal Study of 1988, "First Followup" survey.

Indicator 39. After School Activities

Percent of sophomores who say they engage in various activities at least once or twice a week: 1980 and 1990

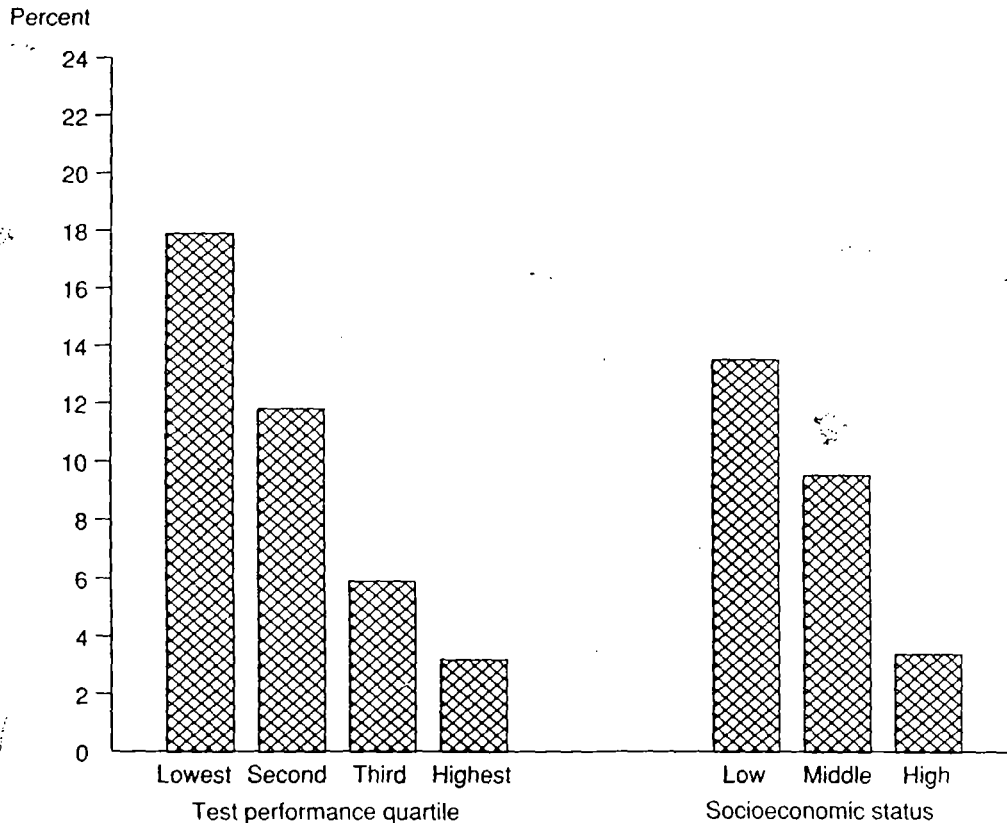
Student and school characteristics	Just driving or riding around		Visiting with friends at a local hangout		Talking with friends on the telephone		Reading for pleasure		Hours of television on school nights	
	1980	1990	1980	1990	1980	1990	1980	1990	5 or more hours, 1980	More than 5 hours, 1990
All sophomores	47.1	56.1	67.2	66.3	76.6	80.1	41.1	41.0	27.3	9.1
Male	51.0	57.9	69.4	69.5	66.5	72.5	34.3	33.8	29.1	10.2
Female	43.3	54.3	65.2	63.1	86.2	87.7	47.9	48.2	24.9	8.0
Race/ethnicity										
White	49.0	58.9	68.7	68.7	78.4	81.7	40.4	41.5	25.1	6.7
Black	38.0	50.1	64.8	59.1	73.3	79.6	46.6	41.2	39.8	23.0
Hispanic	46.6	47.6	60.2	59.3	68.6	72.4	36.3	38.2	27.3	10.2
Asian	31.5	44.0	55.3	57.1	67.7	78.3	50.4	40.2	23.5	6.9
American Indian	51.6	53.3	62.2	70.4	59.4	65.1	41.8	39.5	26.5	15.8
Test performance quartile										
Lowest	48.9	59.6	65.0	66.1	72.3	74.8	30.7	27.7	35.3	17.9
Second	51.1	62.0	69.1	69.0	77.3	80.9	34.3	36.3	31.7	11.8
Third	47.9	57.8	69.7	68.5	78.9	83.9	40.3	42.4	25.6	5.9
Highest	39.7	45.8	64.8	61.1	78.2	80.4	57.8	55.8	18.1	3.2
Socioeconomic status *										
Low	43.1	55.1	61.2	62.6	68.6	72.2	37.0	37.4	34.4	13.5
Middle	49.5	58.3	68.7	68.0	78.2	81.9	40.7	40.4	27.4	9.5
High	47.2	52.0	70.8	66.2	83.0	83.5	46.7	46.1	19.1	3.4
Control of school										
Public	47.7	57.1	66.9	65.9	76.1	79.9	40.9	40.9	28.1	9.6
Catholic	40.3	51.6	71.4	75.8	81.7	86.8	41.4	41.0	21.2	5.8
Other private	43.9	39.6	65.3	58.7	79.2	77.6	43.8	45.6	18.7	1.8

* Socioeconomic status was measured by a composite score on parental education and occupations, and family income. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond, Base Year Survey, "1980 Sophomore Cohort;" and National Education Longitudinal Study of 1988, "First Followup" survey.

Indicator **39. After School Activities**

Percent of high school sophomores who watch more than 5 hours of television on school nights, by test performance and socioeconomic status: 1990

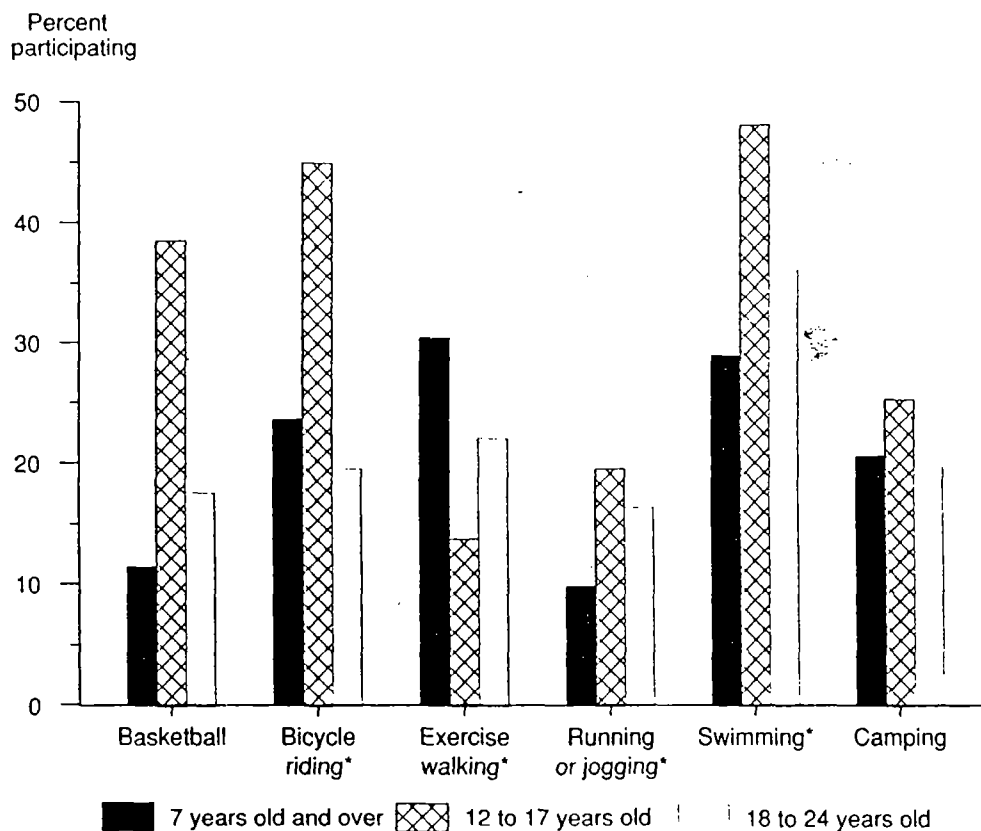


SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, "First Followup" survey.

Although there appears to be a negative relationship between television watching and performance on achievement tests, other variables such as socioeconomic characteristics are also negatively related with achievement. Higher SES students were less likely to watch five or more hours of TV on school nights and more likely to have high test scores than low SES students.

Indicator 40. Sports Participation

Participation in sports activities, by age: 1991



*Participated in activity at least six times in the year.

SOURCE: National Sporting Goods Association, *Sports Participation in 1988-91*, Series 1.

Teenagers and young adults are more likely to participate in many types of sporting activities than other age groups. Compared with 12- to 17-year-olds, 18- to 24-year-olds are less likely to participate in most organized group sports, bicycle riding, and swimming, but more likely to participate in aerobics, exercise walking, or exercising with equipment.

Percent of population 7 years old and over participating in sports activities in the past year, by age: 1986 to 1991

Activity	1986			1990			1991		
	7 years old and over	12- to 17-year-olds	18- to 24-year-olds	7 years old and over	12- to 17-year-olds	18- to 24-year-olds	7 years old and over	12- to 17-year-olds	18- to 24-year-olds
Aerobic exercising *	10.2	11.5	16.4	10.4	9.4	17.6	11.3	7.4	20.7
Backpacking	3.7	7.6	5.8	4.8	6.2	6.3	4.5	7.7	6.9
Baseball	6.5	23.8	9.4	6.9	22.9	9.4	7.2	23.3	8.6
Basketball	9.9	35.4	16.8	11.7	41.4	17.2	11.4	38.6	17.6
Bicycle riding *	23.1	47.5	23.9	24.6	45.0	24.5	23.6	45.0	19.6
Calisthenics *	6.7	14.1	8.8	5.9	10.7	7.0	5.4	8.6	7.2
Camping	19.2	26.0	20.9	20.6	27.3	20.7	20.6	25.3	19.7
Exercise walking *	24.9	13.4	22.4	31.8	16.9	25.2	30.4	13.8	22.1
Exercising with equipment *	14.9	20.8	26.8	15.7	16.2	25.0	17.1	13.6	27.6
Fishing-fresh water	19.0	24.2	20.7	18.5	21.8	20.0	18.3	19.6	19.0
Fishing-salt water	5.7	5.8	5.5	5.5	6.6	6.4	5.2	4.2	5.4
Football	5.6	23.4	10.8	6.4	25.5	12.4	5.8	21.5	10.9
Golf	9.3	8.8	11.8	10.2	7.9	11.2	10.8	8.2	12.3
Hiking	7.9	10.7	9.9	9.8	9.5	8.6	9.9	12.4	10.0
Hunting/shooting firearms	9.6	12.4	13.4	8.2	10.6	11.3	7.5	6.4	9.7
Racquetball	3.6	5.0	8.3	3.6	3.1	9.0	2.7	2.2	7.4
Running/jogging *	10.8	23.2	18.8	10.6	22.8	17.2	9.8	19.6	16.4
Skiing-alpine/downhill	4.5	9.0	9.8	5.1	10.2	10.4	4.6	7.8	9.2
Skiing-cross country	2.2	2.9	1.9	2.3	2.5	2.2	1.9	2.1	2.8
Soccer	3.8	16.3	2.9	4.9	18.7	4.1	4.4	17.3	4.6
Softball	9.7	22.1	15.9	8.9	19.3	13.5	8.6	20.7	14.5
Swimming *	33.8	56.0	41.8	30.0	52.8	38.1	28.9	48.1	36.2
Tennis	8.4	19.1	16.9	8.2	18.4	15.3	7.3	14.4	14.0
Volleyball	9.7	24.5	18.5	10.3	28.5	18.4	9.9	24.6	18.3

* Participant engaged in activity at least six times in the year.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, 1990*; National Sporting Goods Association, *Sports Participation in 1986*, Series I; and *Sports Participation in 1988-1991*, Series I.

Other stats

- o Thirteen-year-olds in the U.S. spend more time watching TV than those in any other country participating in the International Assessment of Education Progress -- Canada, Ireland, Korea, Spain or the United Kingdom. In 1988, almost one-third of American 13-year-olds watched 5 or more hours of TV daily, followed by the United Kingdom with 27%. Thirteen-year-olds in Korea watch the least TV, with seven percent watching 5 or more hours daily.

The greater amount of time spent watching TV, the poorer the performance in science and mathematics.

- o East Asian countries have a wide variety of after-school activities, often supplementing what occurs during the regular school day.

Extracurricular activities are usually organized by the school and taught by regular teachers, sometimes for extra compensation. Fees for students are nominal and activities are open to all students.

- o In Japan, 42% of elementary schools, 99% of middle schools and 100% of high schools offer after-school and summer activities such as academics, arts and culture, hobbies and sports. One-fourth of elementary school students and three-fourth of middle school and high school students participate in these activities. Also in Japan, large numbers of students (two-thirds of all students in Tokyo; nationally about 15% in grade four rising to nearly 50% by grade nine) attend private tutorial services that enrich instruction, provide remedial help and prepare students for university examinations.
- o In Germany, up to 50% of students remain at school after the academic day to participate in clubs, sports, and additional classes. Also in Germany, 50% of students spend two or more hours on daily homework -- as opposed to only 29% of American students.