

2019

# THE COMMON SENSE CENSUS: MEDIA USE BY TWEENS AND TEENS

## COMMON SENSE IS GRATEFUL FOR THE GENEROUS SUPPORT AND UNDERWRITING THAT FUNDED THIS RESEARCH REPORT:

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## INTRODUCTION

THIS REPORT PRESENTS THE results of a nationally representative survey of more than 1,600 U.S. 8- to 18-year-olds, about their use of and relationship with media. The survey covers their enjoyment of various types of media activities, how frequently they engage in those activities, and how much time they spend doing so. The data are presented for two age groups: tweens (8- to 12-year-olds) and teens (13- to 18-year-olds). The survey addresses all types of media: from reading books in print and listening to the radio to using social media, watching online videos, and playing mobile games. And it covers young people's interactions with media technologies ranging from television sets and video game consoles to virtual reality headsets and smart speakers.

The report also tracks changes in tweens' and teens' media behaviors between 2015 and 2019, comparing the current results to those found in the first wave of the survey, conducted four years ago. Each survey used a separate sample of respondents, with the text and format of the current questionnaire staying as close as possible to the previous one (allowing for some modest changes to reflect the changing media environment). As far as we know, this is the only nationally representative survey tracking media use patterns among a truly random sample of U.S. 8- to 18-year-olds.

Among the topics covered are:

- The degree to which tweens and teens enjoy using different types of media, from watching TV to listening to music and playing video games.
- How often they do each of these media activities: daily, weekly, monthly, or less.
- In any given day, how much time they spend engaging in various media activities, with screen or non-screen media.
- To what extent young people or their parents monitor the amount of time spent using screen media.
- How media usage varies by age, gender, race/ethnicity, household income, or parent education.

- Which media technologies young people own or have access to at home, and how that varies based on age or socioeconomic status.
- To what degree young people use media technology to help with their homework, and which devices they use.
- The extent to which young people multitask with entertainment media while doing homework, and what impact they think that has on the quality of their work.

The purpose of this survey is to present a big-picture look at the large trends and patterns of media usage among young people in the U.S. Obviously there is tremendous diversity in how individual children engage with technology or other media; some are inveterate readers and others online gamers. Some spend their time coding or making digital music, while others are devoted to their social media accounts or to watching the latest YouTube videos.

What this study provides is the context in which to situate those disparate media-use patterns. It helps us understand whether the girl who uses her online time to "geek out" or the boy who spends 10 hours of his day playing video games are the norms or the exceptions. Just as the Dow Jones Industrial Average offers a big-picture look at how the stock market is doing on average, this tracking survey offers a big-picture look at how young people, on average, are engaging with media. It tells us whether social media use is up or down, whether video games are more or less popular, and whether disparities in home computer access still exist.

The goal is to provide reliable national data to help content creators, educators, policymakers, health providers, parents, and researchers understand the role of media in young people's lives, as they work to promote the health and well-being of tweens and teens.

## **KEY FINDINGS**

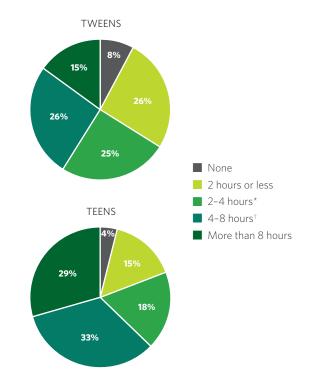
1. On average, 8- to 12-year-olds in this country use just under five hours' worth of entertainment screen media per day (4:44), and teens use an average of just under seven and a half hours' worth (7:22)—not including time spent using screens for school or homework.

Among tweens, the total amount of screen media used has stayed relatively steady over the past four years (an eight-minute increase from 4:36, not a statistically significant difference). Among teens, the amount of time devoted to several individual screen activities has ticked up slightly, leading to an overall difference of 42 minutes per day compared to 2015, when total screen use was 6:40 (this change is not statistically significant). Among teenagers, nearly two-thirds (62%) use more than four hours' worth of screen media, including nearly three in 10 (29%) who use more than eight hours of screen media in a day (see Figure A). Total average media time, including non-screen media activities such as reading books and listening to music, is 5:54 for tweens and 9:49 for teens.

2. Online video viewing is through the roof: More than twice as many young people watch videos every day than did in 2015, and the average time spent watching has roughly doubled.

The biggest change in young people's media habits over the past four years isn't something brand new like virtual reality; it's the amount of time they spend watching online videos like those found on YouTube. The percent of young people who say they watch online videos "every day" has more than doubled among both age groups, going from 24% to 56% among 8- to 12-year-olds, and from 34% to 69% among 13- to 18-year-olds (see Figure B, page 4). And the amount of time each age group spends watching online videos has gone from about a half hour a day to about an hour a day on average (from 25 to 56 minutes a day among tweens, and from 35 to 59 minutes a day among teens).

FIGURE A. Screen media: Percent who use for ... hours per day, by age, 2019



\*Includes from 2:01 up to and including 4 hours. †Includes from 4:01 up to and including 8 hours.

Note: Segments may not total 100% due to rounding.

YouTube clearly dominates the online video space among both tweens and teens. Despite the fact that YouTube says it is only for those age 13 or older, 76% of 8- to 12-year-olds say they use the site. By comparison, only 23% say they watch YouTube Kids. In fact, 53% of 8- to 12-year-olds say YouTube is the site they watch "the most," compared to just 7% for YouTube Kids.

Watching online videos has become so popular among tweens that it is now the media activity they enjoy the most, with 67% saying they enjoy it "a lot"; four years ago, watching online videos was fifth in enjoyment among tweens, after TV, music, video games, and mobile games. In fact, even among teenagers, watching videos now comes second in enjoyment (topped only by listening to music), beating out video games, TV, and even social media by quite a bit (58% enjoy watching online videos "a lot," compared to 43% for playing video games, 41% for using social media, and 33% for watching TV).

# 3. There has been a large drop in the amount of time both tweens and teens spend watching TV on a television set.

Despite a renaissance in television programming for adults, TV seems to be losing favor among young people: Among tweens, the percent who say they enjoy watching TV "a lot" has dropped from 61% to 50%, and among teens from 45% to 33%, over the past four years. Both tweens and teens watch about a half hour less of TV on a TV set today than they did four years ago (25 minutes less per day among tweens, and 24 minutes less among teens).

Even among shows watched on a television set, most viewing is now time-shifted (see Figure C). Today teens average 42 minutes a day watching time-shifted TV on a TV set (such as through a DVR, on demand, or a subscription service like Netflix), 38 minutes watching TV on other devices, and just 25 minutes watching programming on a TV set as it is aired (down from 54 minutes a day on average in 2015).

FIGURE B. Online video viewing: Frequency and enjoyment, by age, 2015 vs. 2019

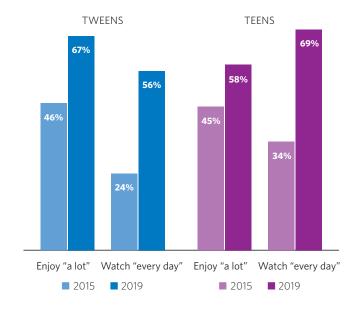
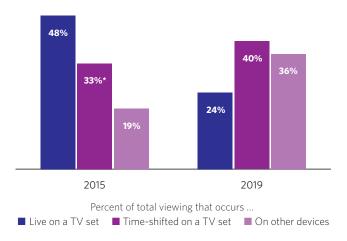


FIGURE C. Mode of television viewing among teens, 2015 vs. 2019



\*Finding differs from what was published in the 2015 report, which inadvertently excluded on-demand viewing.

# 4. By age 11, a majority (53%) of kids have their own smartphone, and by 12 more than two-thirds (69%) do.

Smartphone ownership has risen dramatically, even among the youngest tweens (see Figure D). In fact, nearly one in five 8-year-olds (19%) have their own smartphone, an increase from 11% in 2015. Smartphone ownership has grown substantially over the past four years among all ages, increasing from 24% of all 8- to 12-year-olds in 2015 to 41% today, and from 67% to 84% among 13- to 18-year-olds (see Figure E).

# 5. There are substantial differences in the amount of screen media young people use based on socioeconomic status.

Tweens from higher-income homes use an hour and 50 minutes less screen media per day than those from lower-income households (3:59 vs. 5:49, as shown in Figure F). The difference among teens is similar (an hour and 43 minutes a day, from 6:49 among higher-income households to 8:32 among lower-income homes). We can't say from the data in this report why this disparity occurs, or whether it has any effect on young people, either positive or negative. But we can affirm that this disparity does exist, and is fairly substantial.

FIGURE D. Smartphone ownership, by age, 2015 vs. 2019

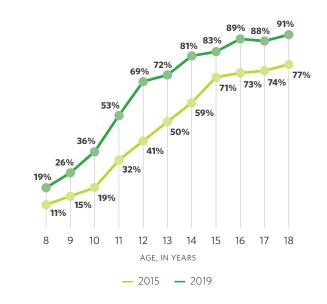


FIGURE E. Smartphone ownership among tweens and teens, 2015 vs. 2019

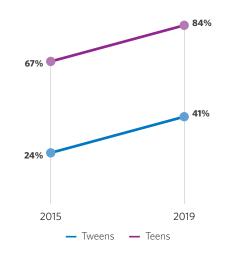


FIGURE F. Average daily screen media use among tweens and teens, by household income, 2019



Note: "Lower income" is <\$35,000; "higher income" is \$100,000+ per year.

# 6. The amount of time devoted to social media has remained steady, while the age at which young people first start using social media varies widely.

Among 16- to 18-year-olds who use social media, the median age of first use is 14; twenty-eight percent say they started before age 13, 43% at 13 or 14 years old, and 30% not until they were 15 or older. Overall, the average amount of time teens report spending with social media each day has remained nearly exactly the same: 1:11 a day in 2015 and 1:10 a day in 2019, although the proportion who say they use it "every day" has increased from 45% in 2015 to 63% in 2019.

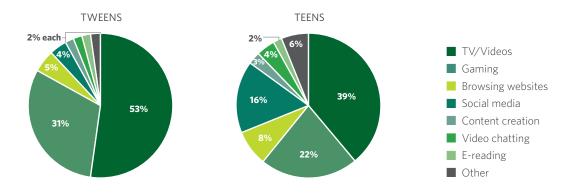
African American teens enjoy using social media more than White teens do (51% enjoy it "a lot," compared to 37% of Whites; Hispanics/Latinos are in between at 43%). And both African American and Hispanic/Latino teens spend more time using social media than their White peers do (among those who use it, Hispanics/Latinos devote an average of 2:23 a day, Blacks 2:15, and Whites 1:35).

# Despite the new affordances and promises of digital devices, young people devote very little time to creating their own content.

Screen media use continues to be dominated by watching TV and videos, playing games, and using social media; use of digital devices for reading, writing, video chatting, or creating content remains minimal. The vast majority of young people don't enjoy doing the types of activities that involve interacting with their devices to create their own content: No more than one in 10 in either age group say they enjoy "a lot" things like making digital art or graphics (10% of tweens and 9% of teens), creating digital music (4% of tweens and 5% of teens), coding (4% of tweens and 3% of teens), or designing or modifying their own video games (4% of tweens and 6% of teens). By comparison, 67% of tweens and 58% of teens enjoy watching online videos "a lot."

Among tweens, about half (53%) of all screen use is devoted to TV or videos, and 31% to gaming (see Figure G). Just 2% of tweens' screen use is spent video chatting (2%), e-reading (2%), or creating content (such as writing, or making digital art or music, also 2%). These proportions are virtually unchanged since 2015. Among teens, 39% of screen use is devoted to watching TV or videos, 22% to gaming, and 16% to social media. Four percent is spent video chatting, 3% creating their own writing, art, or music, and 2% e-reading. Again, these proportions are virtually unchanged since 2015.

FIGURE G. Proportion of screen time devoted to various media activities, by age, 2019



Notes: "Content creation" includes writing on digital devices, making art, or creating digital music. "Other" includes using GPS or other functional apps, doing email, shopping, and doing any other digital activities not specifically asked about in the survey.

## Boys and girls have vastly different tastes in media.

This difference is starkest when it comes to gaming (see Figure H). Boys enjoy all types of gaming more than girls do: mobile games, computer games, and especially console video games (the latter are shortened to "video games" here). Video gaming is boys' favorite media activity; for girls, it's one of their least favorite. Seventy percent of boys (age 8 to 18) say they enjoy playing video games "a lot," compared to 23% of girls. Forty-one percent of boys play video games "every day," compared to 9% of girls. And on average, boys spend 1:19 a day playing video games, compared to just 14 minutes a day among girls.

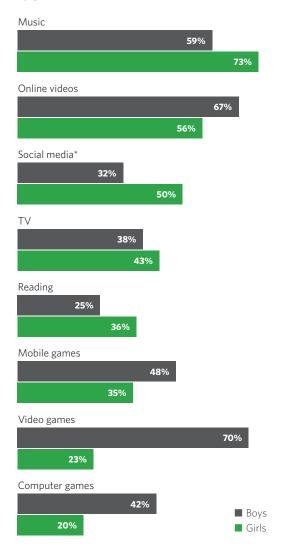
Girls' favorite media activity, by far, is listening to music: Seventy-three percent of girls (age 8 to 18) say they enjoy that "a lot," compared to 59% of boys. Overall, girls enjoy music (a 14-percentage-point gap), reading (11 points), and television (5 points) more than boys; and boys are more likely to enjoy video gaming (a 47-percentage-point difference), computer games (22 points), mobile games (13 points), and watching online videos (11 points).

There continues to be a big difference between boys and girls in terms of enjoyment and use of social media. Among teens, where social media use is most common, half (50%) of all girls say they enjoy using social media "a lot" compared to about a third (32%) of boys. Seventy percent of teen girls say they use social media "every day," compared to 56% of boys. Teen girls average an hour and a half (1:30) a day on social media, compared to 51 minutes a day among teen boys.

# 9. Young people are more than twice as likely as they were four years ago to say that they use computers for homework every day.

Twenty-seven percent of tweens use computers for homework every day, as do nearly six in 10 teens (59%). This is a substantial increase from just four years ago, when only 11% of tweens and 29% of teens said they used a computer for homework every day. On average, teens spend 41 minutes a day doing homework on computers, a 12-minute increase from 2015.

FIGURE H. Favorite media activities, 8- to 18-year-olds, by gender, 2019



\*Among 13- to 18-year-olds

## 10. The digital divide is still real.

Children from higher-income homes are far more likely than their peers from lower-income homes to have a computer at home or to have their own devices such as a personal laptop or smartphone (see Figures I, J, and K). But the differences are noticeably smaller than they were just four years ago. Among all 8- to 18-year-olds, there is a 21-percentage-point gap between children from lower- and higher-income homes' access to a computer in the home (73% vs. 94%). However, that's down from a gap of 28 percentage points in 2015.

Perhaps as a result of these gaps in device ownership, children from lower-income homes are much less likely than their peers with higher wealth to use a computer for homework. For example, 64% of teens in higher-income homes say they use a computer for homework every day, compared to 51% of teens in lower-income homes. Teens in lower-income homes also spend less time than their peers in higher-income homes using computers for homework (34 vs. 55 minutes a day on average), and more time using their phones for homework (21 minutes a day vs. 12 minutes a day) (See Figure L).

FIGURE J. Laptop ownership among teens, by household income, 2015 vs. 2019

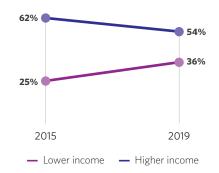


FIGURE K. Smartphone ownership among teens, by household income, 2015 vs. 2019

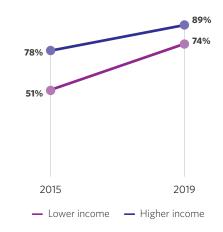
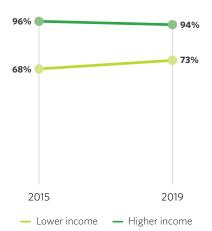


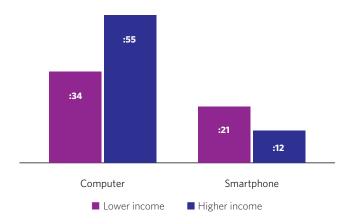
FIGURE I. Computer in the home, 8- to 18-year-olds, by household income, 2015 vs. 2019



FIGURES I-L:

Note: "Lower income" is <\$35,000; "higher income" is \$100,000+ per year.

FIGURE L. Average time teens spend using each device for homework per day, by household income, 2019



# 11. Nearly a third (32%) of all teens in this country say they read for pleasure less than once a month, if at all.

Most tweens (66%) and just over half of teens (51%) read for fun at least once a week (see Figure M), but 22% of tweens and nearly a third (32%) of teens say they do so less than once a month (17% of teens say less than once a month, and 15% say never). Young people's enjoyment of reading and their likelihood of doing it for their own pleasure drop substantially as they age: Thirty-eight percent of tweens enjoy reading "a lot," compared to 24% of teens, and 35% of tweens are daily readers, compared to 22% of teens. Children who have a parent with a college degree are more likely to enjoy reading (37% enjoy it "a lot," compared to 24% of those whose parent has no more than a high school education). They are also more likely to be daily readers (34% compared to 20%), and they spend about 11 minutes more per day reading (33 vs. 22 minutes a day on average). The average amount of time spent reading is about a half hour a day among both tweens and teens; this is almost exactly what was reported in 2015.

# 12. The vast majority of young people don't use tools to track their screen time—nor do their parents.

Among those with their own mobile device, just 15% of tweens and 12% of teens say they use an app or a tool to track their device time (see Figure N). Only about one in four tweens (28%) and even fewer teens (14%) with a phone or tablet say their parent uses such a tool to track the child's device time. When it comes to monitoring what young people are doing on their devices, however, parents seem to be more engaged: Among young people who own a mobile device, half (50%) of tweens and a quarter (26%) of teens say their parent uses some type of app or other tool to monitor what they do on those devices.

FIGURE M. Frequency of reading: Percent who say they read for pleasure ... , 2019

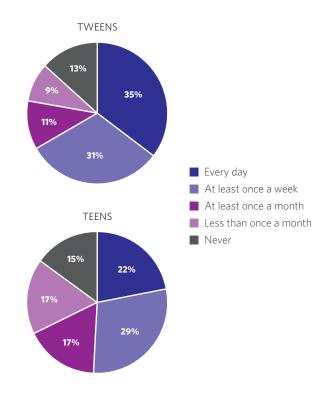
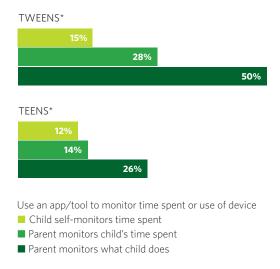


FIGURE N. Media monitoring: Percent who say they or their parent tracks the child's device use, by age, 2019



<sup>\*</sup>Among those with their own smartphone or tablet.

## **KEY TABLES**

TABLE A. Media use and average time spent with each activity per day among tweens, over time

	Percent who used		Average time	Average time among users		Average time among all	
Among 8- to 12-year-olds	2015	2019	2015	2019	2015	2019	
WATCHING TV/VIDEOS	86%	84%	2:53	2:59	2:29	2:30	
TV on TV set	<b>71</b> % <sup>a</sup>	<b>57</b> % <sup>b</sup>	2:05	1:52	1:29°	1:04 <sup>b</sup>	
• Live	_	_	_	_	_	_	
• Time-shifted	_	_	_	_	_	_	
• DVR	_	_	_	_	_	_	
• On demand	_	_	_	_	_	_	
<ul> <li>Subscription</li> </ul>	-	_	_	_	_	_	
TV on other devices	15%	18%	2:03	1:42	:18	:19	
<ul> <li>Computer</li> </ul>	4%	4%	1:49	#	:04	:03	
<ul> <li>Smartphone</li> </ul>	3%ª	6% <sup>b</sup>	#	1:56	:04	:07	
• Tablet	7%	9%	1:37	1:23	:07	:08	
• iPod Touch	2%ª	*b	#	#	:03ª	*b	
Online videos	35%ª	<b>54</b> % <sup>b</sup>	1:12°	1:44 <sup>b</sup>	:25ª	:56 <sup>b</sup>	
<ul> <li>Computer</li> </ul>	10%	10%	:58ª	1:18 <sup>b</sup>	:06	:08	
<ul> <li>Smartphone</li> </ul>	8%ª	27% <sup>b</sup>	1:02°	1:45 <sup>b</sup>	:05ª	:28 <sup>b</sup>	
• Tablet	16%ª	22% <sup>b</sup>	1:07ª	1:27 <sup>b</sup>	:11ª	:19 <sup>b</sup>	
• iPod Touch	4%ª	2% <sup>b</sup>	1:41	#	:04	:01	
Other							
• DVDs	14%ª	7% <sup>b</sup>	1:46	1:48	:14ª	:08 <sup>b</sup>	
<ul> <li>Movies (in theater)</li> </ul>	2%	3%	#	#	:02	:04	
GAMING	66%	64%	2:00°	2:18 <sup>b</sup>	1:19	1:28	
Video games <sup>†</sup>	33%	30%	1:46ª	2:24 <sup>b</sup>	:35	:44	
• Console	27%	N/A	1:44	N/A	:28	N/A	
• Hand-held	11%	N/A	1:07	N/A	:07	N/A	
Computer games	13%	11%	1:29	1:36	:11	:11	
Mobile games	45%	45%	1:13	1:17	:33	:34	
<ul> <li>Smartphone</li> </ul>	14%ª	22% <sup>b</sup>	1:05	1:15	:09ª	:16 <sup>b</sup>	
• Tablet	27%ª	22% <sup>b</sup>	1:12	1:13	:19	:16	
• iPod Touch	7%ª	2% <sup>b</sup>	1:02	#	:05ª	:02 <sup>b</sup>	

TABLE A. Media use and average time spent with each activity per day among tweens, over time, continued

	Percent v	vho used	Average tim	e among users	Average tin	ne among all
Among 8- to 12-year-olds	2015	2019	2015	2019	2015	2019
LISTENING TO MUSIC	<b>57</b> %	56%	1:29	1:16	:51	:43
<ul> <li>Computer</li> </ul>	3%	3%	#	#	:02	:02
<ul> <li>Smartphone</li> </ul>	12% <sup>a</sup>	18% <sup>b</sup>	1:25	1:05	:10	:12
• Tablet	10%	10%	:57	1:03	:06	:06
• Radio	34%ª	27% <sup>b</sup>	:58	:58	:20	:16
• CD	5%	N/A	1:13	N/A	:04	N/A
• iPod/MP3 player	12%ª	4% <sup>b</sup>	1:17	#	:09ª	:02 <sup>b</sup>
Smart speaker	N/A	9%	N/A	:53	N/A	:05
READING	43%	44%	1:07	1:06	:29	:29
Books (print)	36%	36%	1:07	:57	:24	:21
Books (electronic)	5%	7%	:49	#	:02ª	:05 <sup>b</sup>
<ul> <li>Magazines</li> </ul>	4%	2%	#	#	:01	:01
<ul> <li>Newspapers</li> </ul>	2%	*	#	#	*	*
<ul> <li>Computer</li> </ul>	1%	1%	#	#	*	*
<ul> <li>Smartphone</li> </ul>	∗a	1% <sup>b</sup>	#	#	∗a	*p
• Tablet	2%	1%	#	#	:01	*
• iPod Touch	*	*	#	#	*	*
BROWSING WEBSITES	19%	17%	1:05	1:23	:12	:14
<ul> <li>Computer</li> </ul>	7%	7%	:50	1:28	:04	:06
<ul> <li>Smartphone</li> </ul>	5%ª	8% <sup>b</sup>	#	:58	:03	:05
• Tablet	6%	6%	1:16	#	:04	:04
• iPod Touch	2%ª	*b	#	#	:01ª	*b
USING SOCIAL MEDIA	15%	13%	1:43	1:17	:16	:10
<ul> <li>Computer</li> </ul>	2%	1%	#	#	:01	*
<ul> <li>Smartphone</li> </ul>	9%	11%	1:56	1:21	:10	:09
• Tablet	4%	2%	#	#	:03	:01
• iPod Touch	2%ª	*b	#	#	:01ª	*b
MAKING ART/MUSIC	8%	10%	:55	1:14	:04	:07
<ul> <li>Computer</li> </ul>	2%	3%	#	#	:01	:02
<ul> <li>Smartphone</li> </ul>	2%ª	4% <sup>b</sup>	#	#	:01	:03
• Tablet	3%	4%	#	#	:01	:02
• iPod Touch	1%ª	0% <sup>b</sup>	#	#	*a	:00 <sup>b</sup>

TABLE A. Media use and average time spent with each activity per day among tweens, over time, continued

	Percent who used		Average time among users		Average time among all	
Among 8- to 12-year-olds	2015	2019	2015	2019	2015	2019
VIDEO-CHATTING	9%	10%	1:13	:55	:06	:05
• Computer	1%	1%	#	#	:01	:01
<ul> <li>Smartphone</li> </ul>	3%ª	6% <sup>b</sup>	#	#	:03	:03
• Tablet	2%	2%	#	#	:01	:02
• iPod Touch	2%	1%	#	#	:01	*
WRITING	<b>2</b> %ª	<b>1</b> % <sup>b</sup>	#	#	:01	*
<ul> <li>Computer</li> </ul>	1%	1%	#	#	*	*
<ul> <li>Smartphone</li> </ul>	*	0%	#	#	*	:00
• Tablet	1%ª	*p	#	#	*a	*p
• iPod Touch	*	N/A	#	N/A	*	N/A
ANYTHING ELSE	13%	11%	1:04	1:01	:08	:07
<ul> <li>Computer</li> </ul>	2%	3%	#	#	:01	:01
<ul> <li>Smartphone</li> </ul>	4%	7%	:57	:54	:03	:04
• Tablet	5%ª	3% <sup>b</sup>	:39	#	:02	:02
• iPod Touch	2%ª	0% <sup>b</sup>	#	#	:03	:00
Total screen media	94%	92%	4:53	5:07	4:36	4:44
Total media	98%	98%	6:03	6:02	5:55	5:54

<sup>\*</sup> Indicates more than 0 but less than one-half minute or one-half percent.

Notes: Superscripts (a,b) are used to denote whether differences over time are statistically significant ( $p \le .05$ ). Items with different superscripts differ significantly. All times are rounded to the nearest minute. Totals are rounded to the nearest minute after unrounded times are summed. As a result, totals shown in the table may differ slightly from the sum of rounded times shown in the table.

<sup>†</sup> In 2015, console and hand-held gaming were asked about in two separate questions; in 2019 they were asked about in a single combined question.

<sup>#</sup> Indicates that the sample size of users is too small for reliable results (n < 50).

<sup>—</sup> Indicates a question asked only of 13- to 18-year-olds.

<sup>&</sup>quot;N/A" indicates that the question was not asked that year.

TABLE B. Media use and average time spent with each activity per day among teens, over time

	Percent	who used	Average tim	e among users	Average tin	ne among all
Among 13- to 18-year-olds	2015	2019	2015	2019	2015	2019
WATCHING TV/VIDEOS	81%ª	86% <sup>b</sup>	3:18	3:21	2:41	2:52
TV on TV set	64% <sup>a</sup>	<b>50</b> % <sup>b</sup>	2:21	2:14	1:31ª	1:07 <sup>b</sup>
• Live	44%ª	20% <sup>b</sup>	2:03	2:07	:54ª	:25 <sup>b</sup>
• Time-shifted <sup>‡</sup>	34%	37%	1:50	1:54	:37	:42
• DVR	14%ª	7% <sup>b</sup>	1:23	1:18	:12ª	:06 <sup>b</sup>
On demand/Subscription	23%ª	33% <sup>b</sup>	1:47	1:52	:25ª	:36 <sup>b</sup>
<ul> <li>On demand<sup>§</sup></li> </ul>	N/A	10%	N/A	1:21	N/A	:08
<ul> <li>Subscription<sup>§</sup></li> </ul>	N/A	27%	N/A	1:46	N/A	:28
TV on other devices	<b>19</b> %ª	33% <sup>b</sup>	1:59	1:54	:22ª	:38 <sup>b</sup>
• Computer	9%	10%	1:37	1:47	:09	:10
<ul> <li>Smartphone</li> </ul>	6%ª	20% <sup>b</sup>	2:16	1:50	:08ª	:22 <sup>b</sup>
• Tablet	4%	5%	1:49	#	:04	:05
• iPod Touch	1%ª	*b	#	#	:02ª	*b
Online videos	45% <sup>a</sup>	<b>61</b> % <sup>b</sup>	1:18ª	1:37 <sup>b</sup>	:35ª	:59⁵
• Computer	17%ª	13%⁵	1:07ª	1:32 <sup>b</sup>	:11	:12
<ul> <li>Smartphone</li> </ul>	22%ª	46% <sup>b</sup>	1:08	1:26	:15ª	:39 <sup>b</sup>
• Tablet	8%	8%	1:10	1:35	:06	:07
• iPod Touch	3%ª	*b	#	#	:02ª	*b
Other						
• DVDs	9%ª	4% <sup>b</sup>	1:57	#	:11ª	:04 <sup>b</sup>
<ul><li>Movies (in theater)</li></ul>	3%	3%	#	#	:03	:04
LISTENING TO MUSIC	81%	83%	2:20	2:31	1:54	2:05
• Computer	12%ª	8% <sup>b</sup>	2:11	2:24	:16	:12
<ul> <li>Smartphone</li> </ul>	40%ª	62% <sup>b</sup>	1:41	1:53	:41ª	1:11 <sup>b</sup>
• Tablet	8%ª	4% <sup>b</sup>	1:36	#	:07	:06
• Radio	34%ª	28% <sup>b</sup>	1:20	1:27	:27	:24
• CD	6%	N/A	1:16	N/A	:05	N/A
• iPod/MP3 player	17%ª	4% <sup>b</sup>	1:46	#	:18ª	:04 <sup>b</sup>
Smart speaker	N/A	8%	N/A	1:39	N/A	:08

TABLE B. Media use and average time spent with each activity per day among teens, over time, continued

	Percent who used		Average tim	e among users	Average time among all	
Among 13- to 18-year-olds	2015	2019	2015	2019	2015	2019
GAMING	56%	56%	2:25ª	2:52 <sup>b</sup>	1:21ª	1:36 <sup>b</sup>
Video games <sup>†</sup>	28%	30%	2:13°	2:43 <sup>b</sup>	:37ª	:49 <sup>b</sup>
• Console	25%	N/A	2:09	N/A	:32	N/A
• Hand-held	6%	N/A	1:31	N/A	:05	N/A
Computer games	14%	13%	2:14	2:35	:19	:19
Mobile games	34%	35%	1:12	1:19	:25	:27
<ul> <li>Smartphone</li> </ul>	23%ª	30% <sup>b</sup>	1:04	1:10	:15ª	:21 <sup>b</sup>
• Tablet	9%ª	6% <sup>b</sup>	1:12	1:40	:07	:06
• iPod Touch	4%ª	*b	1:15	#	:03ª	*b
USING SOCIAL MEDIA	58%	61%	2:04	1:56	1:11	1:10
• Computer	14%ª	6% <sup>b</sup>	1:35	#	:13ª	:06 <sup>b</sup>
<ul> <li>Smartphone</li> </ul>	40%ª	56% <sup>b</sup>	1:52	1:48	:45ª	1:00 <sup>b</sup>
• Tablet	8%ª	2% <sup>b</sup>	1:43	#	:08ª	:04 <sup>b</sup>
• iPod Touch	4%ª	*b	2:21	#	:06ª	*b
BROWSING WEBSITES	47%	47%	1:15	1:18	:36	:37
<ul> <li>Computer</li> </ul>	21%ª	17% <sup>b</sup>	1:09	1:04	:14	:11
<ul> <li>Smartphone</li> </ul>	22%ª	34% <sup>b</sup>	1:06	1:10	:15ª	:24 <sup>b</sup>
• Tablet	9%ª	4% <sup>b</sup>	:54	#	:05ª	:02 <sup>b</sup>
• iPod Touch	2%ª	*p	#	#	:02ª	*p
READING	29%	30%	1:37	1:35	:28	:29
• Books (print)	17%	16%	1:28ª	1:11 <sup>b</sup>	:15	:12
<ul> <li>Books (electronic)</li> </ul>	4%ª	9% <sup>b</sup>	1:28	1:29	:03ª	:08 <sup>b</sup>
<ul> <li>Magazines</li> </ul>	5%ª	3% <sup>b</sup>	:56	#	:03	:02
<ul> <li>Newspapers</li> </ul>	3%ª	1% <sup>b</sup>	#	#	:02	:01
<ul> <li>Computer</li> </ul>	5%ª	2% <sup>b</sup>	:45	#	:02ª	:01 <sup>b</sup>
<ul> <li>Smartphone</li> </ul>	4%ª	7% <sup>b</sup>	:52	1:15	:02	:05
• Tablet	1%	1%	#	#	:01	:01
• iPod Touch	1%ª	*b	#	#	*a	*b
VIDEO-CHATTING	13%ª	<b>20</b> % <sup>b</sup>	1:38	1:33	:13ª	:19 <sup>b</sup>
• Computer	4%ª	2% <sup>b</sup>	1:54	#	:04ª	:01 <sup>b</sup>
<ul> <li>Smartphone</li> </ul>	7%ª	18%⁵	1:18	1:29	:06ª	:16 <sup>b</sup>
• Tablet	2%	1%	#	#	:02	:02
• iPod Touch	1%ª	*b	#	#	:01ª	*b

TABLE B. Media use and average time spent with each activity per day among teens, over time, continued

	Percent v	vho used	Average time	e among users	Average tin	ne among all
Among 13- to 18-year-olds	2015	2019	2015	2019	2015	2019
MAKING ART/MUSIC	5%ª	10% <sup>b</sup>	1:23	1:18	:05ª	:08 <sup>b</sup>
<ul> <li>Computer</li> </ul>	2%	4%	#	#	:02	:03
<ul> <li>Smartphone</li> </ul>	2%ª	5%⁵	#	1:15	:02ª	:04 <sup>b</sup>
• Tablet	1%ª	2% <sup>b</sup>	#	#	*	:01
• iPod Touch	1%	*	#	#	*	*
WRITING	4%	5%	1:37	#	:04	:04
<ul> <li>Computer</li> </ul>	3%	2%	#	#	:02	:01
<ul> <li>Smartphone</li> </ul>	1%	2%	#	#	*	:02
• Tablet	1%	1%	#	#	:02	*
• iPod Touch	*	N/A	#	N/A	*	N/A
ANYTHING ELSE	32%	30%	1:14	1:34	:23	:28
• Computer	8%	8%	:59	1:09	:04	:06
<ul> <li>Smartphone</li> </ul>	22%	22%	1:01ª	1:33 <sup>b</sup>	:13	:21
• Tablet	4%	3%	1:40	#	:04	:01
• iPod Touch	3%ª	*b	#	#	:02ª	*b
Total screen media	94%	96%	7:07	7:40	6:40	7:22
Total media	97%	98%	9:12	9:20	8:56	9:49

<sup>\*</sup> Indicates more than 0 but less than one-half minute or one-half percent.

Notes: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly. All times are rounded to the nearest minute. Totals are rounded to the nearest minute after unrounded times are summed. As a result, totals shown in the table may differ slightly from the sum of rounded times shown in the table.

<sup>†</sup> In 2015, console and hand-held gaming were asked about in two separate questions; in 2019 they were asked about in a single combined question.

<sup>‡</sup> Data listed here for 2015 differs from that published in the 2015 report because the 2015 report inadvertently excluded on-demand/subscription.

<sup>§</sup> In 2015, on-demand and subscription services were asked about in a single combined question; in 2019 they were asked about in two separate questions.

<sup>#</sup> Indicates that the sample size of users is too small for reliable results (n < 50).

<sup>&</sup>quot;N/A" indicates that the question was not asked that year.

TABLE C. Daily media activities, by age, over time

#### 2019

Tweens who "every day"		Teens who "every day"		
Watch TV	63%	Listen to music	82%	
Watch online videos	56%	Watch online videos	69%	
Listen to music	47%	Use social media	63%	
Play mobile games	46%	Watch TV	57%	
Read for pleasure	35%	Play mobile games	46%	
Play video games*	24%	Play video games*	27%	
Use a smart speaker	17%	Read for pleasure	22%	
Play computer games	15%	Play computer games	17%	
Use social media	13%	Shop online	15%	
Shop online	4%	Use a smart speaker	13%	
Use virtual reality	2%	Use virtual reality	4%	

#### 2015

Tweens who "every day"		Teens who "every day"		
Watch TV	62%	Listen to music	66%	
Listen to music	37%	Watch TV	58%	
Play mobile games	27%	Use social media	45%	
Read for pleasure	27%	Watch online videos	34%	
Watch online videos	24%	Play mobile games	27%	
Play computer games	14%	Read for pleasure	19%	
Play video games*	12%	Play computer games	17%	
Use social media	10%	Play video games*	15%	

<sup>\*</sup>On a console

#### TABLE D. Media enjoyment, by age, over time

#### 2019

Tweens who enjoy "a l	ot"	Teens who enjoy "a lot"		
Watching online videos	67%	Listening to music	74%	
Listening to music	55%	Watching online videos	58%	
Playing mobile games	55%	Playing video games*	43%	
Playing video games*	52%	Using social media	41%	
Watching TV	50%	Watching TV	33%	
Reading for pleasure	38%	Playing mobile games	30%	
Playing computer games	37%	Playing computer games	27%	
Writing for pleasure	11%	Reading for pleasure	24%	
Creating digital art	10%	Creating digital art	9%	
Using social media	8%	Writing for pleasure	8%	
Using virtual reality	6%	Modifying video games	6%	
Coding	4%	Creating digital music	5%	
Creating digital music	4%	Using virtual reality	5%	
Modifying video games	4%	Coding	3%	

#### 2015

Tweens who enjoy "a l	ot"	Teens who enjoy "a lot"		
Watching TV	61%	Listening to music	73%	
Listening to music	54%	Watching online videos	45%	
Playing video games*	52%	Watching TV	45%	
Playing mobile games	51%	Playing video games*	42%	
Watching online videos	46%	Using social media	36%	
Reading for pleasure	41%	Reading for pleasure	30%	
Playing computer games	39%	Playing mobile games	27%	
Using social media	13%	Playing computer games	26%	
Writing for pleasure	13%	Writing for pleasure	9%	
Creating digital art	11%	Creating digital art	7%	
Modifying video games	5%	Creating digital music	5%	
Coding	4%	Coding	3%	
Creating digital music	4%	Modifying video games	3%	

<sup>\*</sup>On a console

#### TABLE E. Media activities, by age, over time

#### 2019

Tweens who ever		Teens who ever	
Watch TV	96%	Listen to music	98%
Listen to music	94%	Watch online videos	98%
Watch online videos	94%	Watch TV	96%
Play mobile games	93%	Play mobile games	91%
Read for pleasure	86%	Shop online	86%
Play video games*	80%	Read for pleasure	85%
Play computer games	72%	Play video games*	84%
Shop online	50%	Use social media	82%
Use a smart speaker	45%	Play computer games	72%
Use social media	31%	Use a smart speaker	45%
Use virtual reality	22%	Use virtual reality	27%

#### 2015

Tweens who ever		Teens who ever	
Watch TV	98%	Listen to music	97%
Listen to music	93%	Watch TV	96%
Read for pleasure	88%	Watch online videos	93%
Play computer games	85%	Play video games*	85%
Play video games*	85%	Read for pleasure	84%
Watch online videos	85%	Use social media	83%
Play mobile games	84%	Play mobile games	82%
Use social media	34%	Play computer games	79%

<sup>\*</sup>On a console

## **METHODOLOGY**

THIS REPORT PRESENTS THE results of a nationally representative, probability-based online survey of 1,677 U.S. young people age 8 to 18 years old, conducted from March 11 to April 3, 2019. The current survey is the second in a series of cross-sectional surveys conducted by Common Sense Media among this age group, tracking the media activities of young people in the United States. Data from the first wave of the survey, conducted in 2015, are provided in this report and used to measure changes in media activities and attitudes over this period. To the extent possible, the current survey duplicates questions asked in the previous survey, updating as necessary to accommodate new technologies. A copy of the complete questionnaire is provided in the appendix to this report. In cases where the question wording or structure has changed since 2015, those changes are noted in the relevant tables.

The project was directed by Michael Robb, senior director of research at Common Sense Media, and Vicky Rideout, president of VJR Consulting. Data analyses were conducted by Ms. Rideout and Melissa Saphir of Saphir Research, and the report was written by Ms. Rideout. The survey was administered by Ipsos, using their KnowledgePanel®, a probability-based web panel designed to be representative of the United States. The survey was offered in English or Spanish.

#### Media Included in the Study

Media activities. The media activities covered in the survey include: watching television, movies, and videos; playing video, computer, and mobile games; listening to music; using social media; reading; browsing websites; video-chatting; writing on digital devices; creating digital art or music; and using digital devices for other purposes (such as emailing, shopping, coding, or using functional apps for tasks such as getting directions or weather). While there were questions about the number of texts sent per day, texting was not included in time estimates.

Media devices. The media devices covered in the survey include: television sets, computers, tablets, smartphones, e-readers, iPod Touches, books, newspapers, magazines, radios, video game consoles, hand-held video game players, virtual reality headsets, and smart speakers.

Entertainment media. The bulk of the study concerns the use of media for entertainment purposes; however, use of media for homework was also explored, and those results are reported separately. The term "entertainment media" is occasionally used in the report, to distinguish media used for school or homework from media used for other purposes.

#### Survey Sample

The survey was conducted online among a nationally representative, probability-based sample of 1,677 U.S. young people age 8 to 18 years old, using the Ipsos KnowledgePanel<sup>©</sup>. African American respondents were oversampled to ensure a total sample size of 250 respondents. Unlike the members of most other online survey panels, KnowledgePanel® members were recruited using probability-based methods such as addressbased sampling and random-digit-dial telephone calls. Households that were not already online were provided with a device and internet access for the purpose of participating in surveys. The use of a probability sample means the results are substantially more generalizable to the U.S. population than are results based on so-called "convenience" samples. Convenience samples include only respondents who are already online and who volunteer through word of mouth or advertising to participate in surveys.

Parental consent and respondent compensation. Parental permission was obtained for all respondents. Respondents received a cash equivalent of \$5 for their participation; African American respondents received an additional \$5 equivalent to improve response rates among this lower-incidence demographic group.

Weighting. The use of probability-based recruitment methods for the KnowledgePanel<sup>©</sup> is designed to ensure that the resulting sample properly represents the population of the U.S., including geographically, demographically (e.g., age, gender, race/ethnicity, income), and in terms of home internet access. Study-specific post-stratification weights were applied once the data was finalized, to adjust for any survey nonresponse and to ensure the proper distributions for the specific target population (in this case, 8- to 18-year-olds). For this study, the benchmark

distributions presented in the table below (from the U.S. Census Bureau's March 2018 Current Population Survey) were used for the raking adjustment of weights. Distributions for household internet access were obtained from the Census Bureau's October 2012 Supplement.

Outliers. One respondent reported time estimates that were not deemed credible or valid, and that respondent was removed as an outlier. A second respondent reported a time estimate for one activity that did not appear valid, but the remainder of their estimates appeared credible. In this case, the questionable estimate was replaced with the mean time spent in that activity among respondents of the same age and gender, but the rest of the respondent's answers were included in the data set as reported.

Imputation of data. Due to a programming error, data for time spent watching TV was not collected properly for a total of 76 respondents. The missing data were imputed based on the average for those respondents' age, gender, and race.

#### U.S. Benchmarks and Demographic Profile of Survey Sample

	Benchmark	Unweighted percent	Weighted percent	Unweighted n	Weighted n
Age					
• 8- to 12-year-olds	45%	46%	45%	767	754
• 13- to 18-year-olds	55%	54%	55%	910	924
Gender					
• Boys	51%	50%	51%	841	853
• Girls	49%	50%	49%	836	824
Race/Ethnicity					
• White	52%	54%	52%	907	867
Hispanic	25%	21%	25%	348	414
• Black	14%	15%	13%	250	226
• Other	6%	6%	6%	94	107
• Two or more races	4%	5%	4%	78	63
Income*					
• <\$25,000	13%	15%	13%	247	219
• \$25,000 to \$49,999	19%	18%	19%	299	319
• \$50,000 to \$74,999	16%	19%	16%	317	272
• \$75,000+	52%	49%	52%	814	867
Internet access <sup>†</sup>					
• Yes	83%	97%	97%	1,629	1627
• No	17%	3%	3%	48	50
Total sample				1,677	1,677

<sup>\*</sup>Income breaks used in data analysis were less than \$35,000, \$35,000-99,999, and \$100,000 or more.

<sup>†</sup>Other than the dial-up access provided by GfK/Ipsos for purposes of participating in KnowledgePanel® surveys.

Source of demographic benchmarks: March 2018 Current Population Survey, U.S. Census Bureau. Benchmarks for internet access are from the Census Bureau's October 2012 Supplement.

#### Descriptions of Demographic Groups

Income categories. For the purposes of this report, lower-income families are defined as those with incomes of less than \$35,000 a year; middle-income families are those earning from \$35,000 to \$99,999 a year; and higher-income families are those earning \$100,000 a year or more.

Age groups. The report uses the word "tweens" to describe the age group of 8- to 12-year-olds. The report also uses "teens" or, sometimes, "teenagers" to refer to the age group of 13- to 18-year-olds.

Parent education. Respondents are grouped into three categories based on the highest level of education attained by either parent. "High school" includes those whose parent(s) have no more than a high school diploma; "some college" includes those with at least one parent who attended college but did not receive a four-year degree; and "college degree" includes those respondents with at least one parent who has a bachelor's degree or higher.

Race/ethnicity. The terms "Black" and "African American" are used interchangeably in the report and refer to any respondents who self-identify as non-Hispanic and Black. Where findings are broken out by race/ethnicity, results are presented for White, Black, and Hispanic/Latino young people; respondents in the "other" category are included in the total sample but not in findings that are broken out by race (the cell sizes of each individual group in the "other" category are not large enough for us to examine differences between them).

#### Margin of Error

The margin of error for the full sample is +/-2.8%. The margin of error for subgroups is higher.

#### Presentation of Data in the Text

Statistical significance. Where relevant, differences among demographic groups or over time have been tested for statistical significance. Unless otherwise noted, findings are referred to in the text in a comparative manner (e.g., "more than," "less than") only if the differences are statistically significant at the level of p < .05. In tables where statistical significance has been tested, superscripts indicate whether results differ at p < .05. Items that share a common superscript or that do not have a superscript do not differ significantly.

Notation of hours and minutes. Throughout the report, time spent with media is presented in hours:minutes. For example, "two hours and 10 minutes" is sometimes presented as 2:10; "10 minutes" is sometimes presented as :10.

Rounding. Percentages will not always add up to 100 due to rounding or multiple response options, or because those who marked "don't know" or did not respond are not included. Times for individual activities are rounded to the nearest minute. Time estimates for categories that combine multiple activities (e.g., total gaming time, which includes video, mobile, and computer gaming) are summed from unrounded data; only the total is rounded.

#### Measuring Media Use

All data presented in this report are based on self-reports. Because of the range of media activities covered—including listening to music, watching television, playing console video games, and reading books and magazines—there is no passive data-collection method that could provide these data. There are various ways researchers can structure self-reports, such as by using diaries that ask respondents to look back at the end of their day and list all their daily activities in 10- to 15-minute increments, or by asking respondents how much time they spend doing various activities "in a typical day." This survey asks respondents to think about what they did on a specific day: the day before they took the survey. Responses were collected evenly over the seven days of the week. By asking about what respondents did the previous day, this method approaches the immediacy of a diary methodology, but without the respondent being burdened with documenting all activities or doing so in very short time increments. It also provides the specificity of having a particular day in mind, as diaries do.

One of the basic findings presented in the report is the average (mean) amount of time spent on each activity "among all" tweens or teens. The amount of time spent with any activity or device per day "among all" reflects both the percent who engaged in those activities and the length of time spent doing them. For example, in a typical day in this country, 61% of teens watch online videos, and those who watch spend an average of an hour and 37 minutes watching; therefore the average among all teens is 59 minutes per day. Obviously not all teens are sitting down and watching online videos for precisely 59 minutes each day. Many aren't watching at all, some are watching for 30 minutes, and some are watching for several hours. But this average "among all" gives us a quick way to assess where a particular media activity stands in relation to other activities.

The fact that young people spend a certain amount of time each day with media does not mean that they spend that time doing nothing else but using media. If a teen spends an hour watching TV, an hour listening to music, an hour reading, and an hour using social media, she will have a total of four hours of media use. But it is important to remember that for a portion of the time she is using media, she may be doing other activities at the same time. For example, she may be watching TV while getting dressed or cleaning her room, browsing social media while taking the bus to school, and listening to music while working out. This study documents the amount of time young people spend with media, but it does not determine whether the time was spent only with media.

In addition, many young people often use more than one medium at the same time. For example, a teen who spends an hour playing mobile games and an hour listening to music has a total of two hours of media use. But they may have done the activities simultaneously—listening to music while playing a mobile game. In other words, they may have used two hours' worth of media in one hour, due to simultaneous media use.

## **SCREEN MEDIA USE: OVERVIEW**

ON AVERAGE, 8- TO 12-year-olds in this country use just under five hours' worth of screen media per day (4:44; see Table 1), and 13- to 18-year-olds use just under seven and a half hours' worth (7:22). These figures do not mean that young people devote five to seven hours a day exclusively to using screen media. During some of this time they may be doing other things (getting dressed with the TV on, riding in a car while watching videos on a smartphone), and some of the time they may be doing more than one screen activity at a time (media multitasking, such as browsing social media on a smartphone while watching TV on a TV set).

Over the past four years, the total amount of screen media used by tweens has stayed relatively steady, rising slightly from 4:36 to 4:44, with the largest change coming in digital gaming (a nineminute increase that is not statistically significant). Among teens, the amount of time devoted to various screen activities has ticked up slightly, leading to an overall total of 7:22 minutes a day in 2019. While there is no single dramatic change in screen media usage among teens, the amount of time spent gaming is up 15 minutes, time spent watching TV or videos is up 11 minutes, and e-reading is up 5 minutes. These and other smaller changes contribute to a total of 42 more minutes a day of screen use than in

2015 (6:40 a day at that time; this overall difference is not statistically significant due to the wide variation in screen time use among teens).

Total average media time, including non-screen media activities such as reading books and listening to music, is 5:54 for tweens (5:55 in 2015) and 9:49 for teens (8:56 in 2015). Neither change in overall average media time is statistically significant (see Tables A and B, starting on page 11).

While there is no single dramatic change in screen media usage, the amount of time teens spend gaming is up 15 minutes, and watching TV or videos is up 11 minutes.

TABLE 1. Average daily screen media use, by activity and age, 2015 vs. 2019

Average daily use	Among 8- to	to 12-year-olds  Average daily use		Among 13- to	18-year-olds
devoted to	2015	2019	devoted to	2015	2019
TV/Videos	2:29	2:30	TV/Videos	2:41	2:52
Games	1:19	1:28	Games 1:21 <sup>a</sup>		1:36 <sup>b</sup>
Browsing websites	:12	:14	Social media	1:11	1:10
Social media	:16	:10	Browsing websites	:36	:37
Content creation*	:05	:08	Video-chatting	:13ª	:19 <sup>b</sup>
Video-chatting	:06	:05	E-reading	:03ª	:08 <sup>b</sup>
E-reading	:03ª	:05 <sup>b</sup>	Content creation*	:09	:12
Other <sup>†</sup>	:08	:07	Other <sup>†</sup>	:23	:28
Total screen use	4:36	4:44	Total screen use	6:40	7:22

<sup>\*</sup> Includes making digital art or music, or writing on a digital device.

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

<sup>†</sup>Includes using GPS or other functional apps, emailing, shopping, and doing any other digital activities not specifically asked about in the survey.

Of course, individual usage varies widely; the totals provided here are averages. Examining the data from another perspective, we are able to explore young people's screen usage by looking at the proportion who fall into different incremental categories of usage: for example, how many have two hours or less of screen use in a day, and how many have more than eight hours of use. Among 8- to 12-year-olds, in any given day about 8% don't use any screen media at all, and another 26% have two hours or less of screen time (see Table 2). Twenty-six percent use between four and eight hours of screen media, and 15% use more than eight hours' worth of screen activities. Among teenagers, nearly twothirds (62%) use more than four hours' worth of screen media, including nearly three in 10 (29%) who use more than eight hours' worth of screen media in a day.

TABLE 2. Screen media use, by age, 2015 vs. 2019

Percent who use	Twe	ens	Teens		
for per day	2015	2019	2015	2019	
None	6%	8%	6%	4%	
2 hours or less	28%	26%	16%	15%	
2-4 hours*	27%	25%	20%	18%	
4-8 hours <sup>†</sup>	26%	26%	31%	33%	
More than 8 hours	14%	15%	26%	29%	

<sup>\*</sup>Includes from 2:01 up to and including 4 hours. †Includes from 4:01 up to and including 8 hours.

Some experts on children's media usage are debating whether the term "screen time" means much anymore, given the wide variety of activities young people can engage in via their screens. For example, it is often noted that teens may be using their screens to Skype with grandparents, read poetry, or write code. In this report, we are able to document the proportion of screen use that is devoted to each of these various types of activities, so that when we refer to "screen time" or "screen media" we can have a common understanding of how most young people in the U.S. are engaging with screens. And what we find is that activities often cited to invalidate the use of the term "screen time" are, statistically speaking, quite rare. We also find that the amount and proportion of screen use devoted to these other activities have barely budged over the past four years.

Among teens, the vast majority of screen use is devoted to watching TV or videos, gaming, and using social media (see Table 3). Among tweens, about half (53%) of all screen use is devoted to TV or videos, and 31% to gaming. Just 2% of screen use among this age group is spent creating content (such as writing, or making digital art or music). Likewise, 2% of tween screen use is spent video-chatting, and 2% is devoted to e-reading. These proportions are virtually unchanged since 2015.

Among teens, 39% of screen use is devoted to watching TV or videos, 22% to gaming, and 16% to using social media. Four percent of screen time is spent video-chatting, 2% e-reading, and 3% writing or creating art or music. Again, these proportions are virtually unchanged since 2015.

TABLE 3. Proportion of screen use devoted to various activities, by age, 2015 vs. 2019

	Among 8- to	12-year-olds		Among 13- to	18-year-olds
Screen use devoted to	2015	2019	Screen use devoted to	2015	2019
TV/Videos	54%	53%	TV/Videos	40%	39%
Gaming	29%	31%	Gaming 20%		22%
Browsing websites	4%	5%	Social media	Social media 18%	
Social media	6%	4%	Browsing websites	9%	8%
Content creation*	2%	2%	Video-chatting	3%	4%
E-reading	1%	2%	Content creation*	2%	3%
Video-chatting	2%	2%	E-reading	2%	2%
Other <sup>†</sup>	3%	2%	Other <sup>†</sup>	6%	6%
Total screen use	4:36	4:44	Total screen use	6:40	7:22

<sup>\*</sup> Includes making digital art or music, or writing on a digital device.

<sup>†</sup>Includes using GPS or other functional apps, emailing, shopping, and doing any other digital activities not specifically asked about in the survey.

At the same time, while we know which types of screen activities young people are devoting their time to, what we don't know from this data is the quality of the content they are engaging with. There is a wide array of content available to them, and this particular study does not document which specific shows tweens and teens are watching, which games they're playing, or the quality of their interactions on social media. Six hours of makeup tutorial videos on YouTube is different from six hours of Planet Earth; the mere fact of the amount of time devoted to watching TV or videos certainly does not tell the whole story of young people's screen use.

There are substantial differences in the amount of screen media used by young people from different racial, ethnic, or socioeconomic groups (see Table 4). For example, teenagers from lower-income households spend more time with screen media than those from higher-income homes (1:43 more). In addition, African American and Hispanic/Latino teens use more screen media than White teens do (1:52 more among African Americans, and 1:34 more among Hispanics/Latinos). Among tweens, similar differences occur by household income and race/ethnicity, with additional variations by gender (8- to 12-year-old boys spend 1:06 more with screens than girls that age) and by parent education (tweens whose parents have a college degree spend almost two hours less per day [1:50] with screens than those whose parents have no more than a high school diploma).

There has been discussion among child and media experts as to whether the term "screen time" means much anymore, given the wide variety of activities young people can engage in via their screens. In this study, we find that activities often cited to invalidate the use of the term "screen time" are, statistically speaking, quite rare.

There are substantial differences in the amount of screen media used by young people from different racial, ethnic, or socioeconomic groups.

TABLE 4. Screen use, by age and demographic, 2019

Average daily Gender		Race/Ethnicity			Family income			Parent education			
total screen use among	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher	High school	Some college	College degree
8- to 12-year-olds	5:16ª	4:10 <sup>b</sup>	4:15ª	6:04 <sup>b</sup>	5:12 <sup>b</sup>	5:49ª	4:52ª	3:59⁵	5:42°	5:08ª	3:52 <sup>b</sup>
13- to 18-year-olds	7:36	7:07	6:40ª	8:32 <sup>b</sup>	8:14 <sup>b</sup>	8:32ª	7:17	6:49 <sup>b</sup>	8:03	7:02	7:02

Note: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b) are used to denote whether differences between groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## **MEDIA DEVICES:** ACCESS IN THE HOME AND PERSONAL OWNERSHIP

Media devices in the home. Not surprisingly, young people's homes are full of digital and other media technologies (see Table 5). About nine out of 10 young people live in a home with at least one smartphone (91%) and TV set (87%). At least threequarters have a laptop computer (79%), video game player (78%), and tablet (75%) in the home, and about half (52%) live in a household with a desktop computer.

There have been only modest changes since 2015: The proportion with smartphones has increased from 82% to 91%; the share with television sets has gone down from 95% to 87%; and the presence of desktop computers has dropped from 60% of young people's homes to 52%. And the iPod Touch is clearly on its way out, with the percent of families that own one going from 32% in 2015 down to 19% today.

Two new devices have begun to make an appearance in young people's homes: smart speakers and virtual reality headsets. Smart speakers such as Amazon's Echo and the Google Home have established a substantial presence in many young people's homes over a short period of time (the Echo was first released in 2017). Nearly one in three 8- to 18-year-olds (30%) now live in a home with such a device. Virtual reality headsets have been a bit slower to catch on: Fourteen percent of young people report having a VR headset in their homes.

Two new devices have begun to make an appearance in young people's homes: smart speakers and virtual reality headsets.

TABLE 5. Technology in the home, 2015 vs. 2019

Percent of 8- to 18-year-olds with in the home	2015	2019
Smartphone	82%ª	91%⁵
TV set	95%ª	87% <sup>b</sup>
Laptop	75%ª	79%⁵
Video game player*	85%ª	78% <sup>b</sup>
Tablet	76%	75%
Desktop computer	60%ª	52% <sup>b</sup>
Smart speaker	N/A	30%
E-reader	28%	27%
iPod Touch	32%ª	19%⁵
Virtual reality headset	N/A	14%

\*Console or hand-held

Notes: "N/A" indicates that the question was not asked that year. Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

Personal device ownership. In addition to having access to digital technology in the home, large numbers of young people have their own devices. Even among 8- to 12-year-olds, half (52%) have their own tablet, 41% have their own smartphone, and 23% have their own laptop (see Table 6). Smartphone ownership has expanded substantially among both tweens and teens over the past four years, increasing from 24% of tweens in 2015 to 41% today, and from 67% to 84% of teens (see Figure 1). By age 11, a majority (53%) of kids have their own smartphone; by 12, more than two-thirds (69%) do, and by 13, nearly three out of four (72%) do (see Figure 2). Smartwatches, which can display text messages and social media notifications, play music, and act as fitness trackers, have also made some inroads into the teen market, with 13% of teenagers saying they own one (see Table 6).

By age 11, a majority (53%) of kids have their own smartphone.

FIGURE 1. Smartphone ownership, tweens vs. teens, 2015 vs. 2019

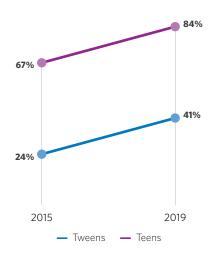


FIGURE 2. Smartphone ownership, by individual age, 2015 vs. 2019

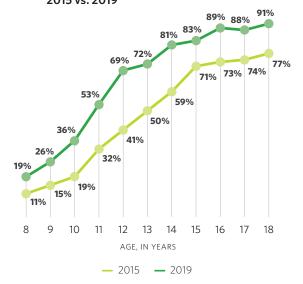


TABLE 6. Personal device ownership, by age, 2015 vs. 2019

Percent of 8- to 12-year-olds who own a(n)	2015	2019	Percent of 13- to 18-year-olds who own a(n)	2015	2019
Tablet	53%	52%	Smartphone	67%ª	84% <sup>b</sup>
Smartphone	24%ª	41% <sup>b</sup>	Laptop	45%	49%
Laptop	19%	23%	Tablet	37%	35%
iPod Touch	21%ª	12% <sup>b</sup>	Smartwatch	N/A	13%
E-reader	7%	9%	E-reader	9%	10%
Smartwatch	N/A	5%	iPod Touch	20%ª	9% <sup>b</sup>

Notes: "N/A" indicates that the question was not asked that year. Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

### **TELEVISION**

"WATCHING TV" IS A phrase that now encompasses many different things, including watching programming from a broadcast or cable network on a TV set as it is aired; watching shows that were recorded earlier on a DVR; streaming shows to a smart TV; or accessing shows on a smartphone or laptop, whether through a cable or broadcast app or a subscription service like Netflix or Hulu. In total, tweens spend an average of 1:23 a day watching

television programming, about an hour (1:04) of it watched on a TV set and 19 minutes watched on other devices (see Table 7). Teens spend a bit more time watching television content, averaging 1:45 a day; they spend about the same amount as tweens watching on a TV set (1:07) but about twice the time watching TV shows on other devices, averaging 38 minutes a day.

TABLE 7. Television: Enjoyment, frequency, time spent, and mode of viewing, by age, 2015 vs. 2019

,,,,,		S. 7 18 17 110 10	·	
	Among 8- to	Among 8- to 12-year-olds		18-year-olds
	2015	2019	2015	2019
injoyment: Percent who enjoy "a lot"	61%ª	50% <sup>b</sup>	45%ª	33% <sup>b</sup>
requency: Percent who watch "every day"	62%	63%	58%	57%
<b>Time spent</b> : Average daily TV time (among all)	1:47ª	1:23 <sup>b</sup>	1:53	1:45
TV on TV set	1:29ª	1:04 <sup>b</sup>	1:31ª	1:07 <sup>b</sup>
• Live	_	_	:54ª	:25 <sup>b</sup>
• Time-shifted <sup>†</sup>	_	_	:37	:42
• DVR	_	_	:12ª	:06 <sup>b</sup>
On demand/Subscription	_	_	:25ª	:36 <sup>b</sup>
• On demand <sup>‡</sup>	_	_	N/A	:08
• Subscription <sup>‡</sup>	_	_	N/A	:28
TV on other devices	:18	:19	:22ª	:38 <sup>b</sup>
• Computer	:04	:03	:09	:10
<ul> <li>Smartphone</li> </ul>	:04	:07	:08ª	:22 <sup>b</sup>
• Tablet	:07	:08	:04	:05
• iPod Touch	:03ª	*b	:02ª	*b

<sup>\*</sup> Indicates more than 0 but less than one-half minute or one-half percent.

Note: All times are rounded to the nearest minute. Totals are rounded to the nearest minute after summing unrounded times. As a result, totals shown in the table may differ slightly from the sum of rounded times shown in the table. Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

<sup>†</sup> Data listed here for 2015 differs from that published in the 2015 report, because the 2015 report inadvertently excluded on-demand and subscription viewing from the "time shifted" viewing total.

<sup>‡</sup> In 2015 on-demand and subscription services were asked about in a single combined question; in 2019 they were asked about in two separate questions.

<sup>-</sup> Indicates a question asked only of 13- to 18-year-olds.

<sup>&</sup>quot;N/A" indicates that the question was not asked that year.

The main change in TV viewing since 2015 is that there has been a pretty large drop in the amount of time either tweens or teens spend watching TV on a TV set. Tweens average 25 fewer minutes in front of a television set today than they did in 2015, and teens average 24 fewer minutes. In the case of tweens, this decline in TV viewing has been made up for by an increase in time spent watching online videos, such as content on YouTube or Twitch (see "Online Videos" section on pages 33-34). Teens have increased the time they spend watching online videos as well (by :24 a day), but they also now spend more time watching TV shows through their smartphones and other devices (an increase of :16 a day on average; see Table 7, previous page). The majority of tweens and teens still watch TV every day (63% of tweens and 57% of teens), but their enjoyment of TV seems to be declining. Among tweens, the percent who say they enjoy watching TV "a lot" has dropped from 61% to 50% and, among teens, from 45% to 33% over the past four years (see Figure 3). By comparison, young people are far more likely to say they enjoy watching online videos "a lot" (67% of tweens and 58% of teens).

The other big change in TV watching is that even among shows watched on a TV set, most viewing is now timeshifted. Today teens average just 25 minutes a day watching shows as they air, down from 54 minutes a day in 2015.

The other big change in TV watching is that even among shows watched on a TV set, most viewing is now time-shifted (see Figure 4). Today teens average 42 minutes a day watching time-shifted programming on a TV set (such as through a DVR, on demand, or a subscription service like Netflix), 38 minutes watching TV on other devices, and just 25 minutes watching programming on a TV set as it is aired (down from :54 a day on average in 2015). As seen in Table 8, a total of 71% of 8- to 18-year-olds live in a home with some type of video subscription service, such as Netflix (64%), Amazon Prime Video (44%), or Hulu (22%).

FIGURE 3. TV and online videos: Percent who enjoy viewing "a lot," by age, 2015 vs. 2019

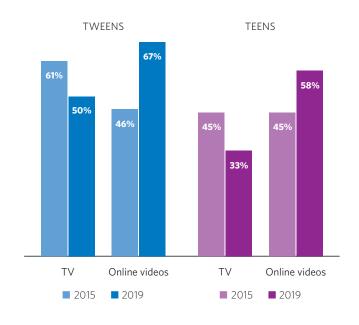
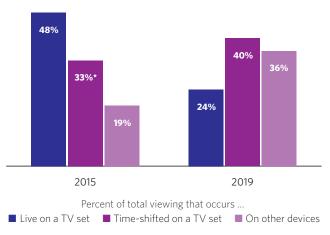


FIGURE 4. Mode of television viewing among teens, 2015 vs. 2019



\*Finding differs from what was published in the 2015 report, which inadvertently excluded on demand viewing.

TABLE 8. Subscription streaming services, 2019

8- to 18-year-olds in homes with subscriptions to						
Netflix	64%					
Amazon Prime Video	44%					
Hulu	22%					
Other	6%					
Any	71%					

TABLE 9. Television: Enjoyment, frequency, and time spent, by demographic, 2019

	Ger	Gender Race/Ethnicit			nicity Family income			ne
Among 8- to 18-year-olds	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher
<b>Enjoyment</b> : Percent who enjoy watching "a lot"	38%ª	43% <sup>b</sup>	40%ª	48% <sup>b</sup>	37%ª	39%	41%	41%
Frequency: Percent who watch "every day"	59%	61%	58%ª	72% <sup>b</sup>	62%ª	66%ª	65%ª	52% <sup>b</sup>
Time spent: Average daily time spent watching								
Among those who watch	2:23	2:22	2:11ª	3:07 <sup>b</sup>	2:27ª	2:56ª	2:21 <sup>b</sup>	2:05°
Among all	1:32	1:37	1:24°	2:04 <sup>b</sup>	1:43°	1:55°	1:36	1:23°

Watching TV is broadly popular across age group, gender, family income, and race and ethnicity, with majorities saying they do it "every day" (see Table 9) and with young people devoting more time to watching television programming, in some form or another, than to any other media activity besides listening to music (see Tables A and B, starting on page 11). And yet, it still isn't enjoyed by as many young people as might be expected. For example, tweens watch TV "every day" more than any other activity, but TV ranks fifth in terms of enjoyment in this age group (see Tables C and D, page 17). Teens devote an average of an hour and 45 minutes a day to watching television content (see Table 7), but only 33% say they enjoy it "a lot" (compared, for example, to 74% for listening to music or 58% for watching online videos, as seen in Table D).

As seen in Table 9, African American young people are more likely than their White or Hispanic/Latino peers to be daily TV watchers (72% vs. 58% for Whites and 62% for Hispanics/Latinos), averaging about 40 minutes more a day than Whites and about 21 minutes a day more than Hispanics/Latinos (2:04 vs. 1:24 for Whites and 1:43 for Hispanics/Latinos). Children in higher-income homes spend less time watching TV than other young people do, averaging under an hour and a half (1:23) compared to almost two hours (1:55) among young people in lower-income homes.

Interestingly, a divide has opened up between higher- and lowerincome families with regard to TV. About eight in 10 young people (79%) in higher-income homes have access to a subscription service for television and movie content, compared to just over half (58%) of young people in lower-income homes (see Table 10). More than two-thirds of young people in higher-income homes have a smart TV in the home, capable of connecting to the

internet to download or stream content, while less than half (46%) of lower-income households do. In fact, children in lower-income homes are less likely to have a TV set at all: Seventy-eight percent do, compared to 93% of young people in higher-income homes.

Teens devote an average of an hour and 45 minutes a day to watching television content, but only 33% say they enjoy it "a lot."

TABLE 10. Television devices and services in the home, among all and by income, 2019

Parents of 8- to 18-year-olds with in the home		Family income		
	All	Lower	Middle	Higher
TV set*	87%	78%ª	86% <sup>b</sup>	93% <sup>c</sup>
Subscription streaming service	72%	58%ª	73% <sup>b</sup>	79%°
Smart TV	58%	46%ª	57%⁵	67% <sup>c</sup>
Cable	41%	37%ª	40% <sup>b</sup>	45% <sup>b</sup>
DVR	37%	23%ª	32% <sup>b</sup>	49% <sup>c</sup>
HD antenna	21%	20%	20%	22%
Satellite	21%	21%	20%	21%

<sup>\*</sup>All questions were asked of parents except for TV set, which was asked of voung people

#### TABLES 9 AND 10:

Note: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## **ONLINE VIDEOS**

ONE OF THE BIGGEST changes in young people's media habits over the past four years has been the increase in time spent watching online videos on sites such as YouTube. Today both tweens and teens devote nearly an hour a day to watching such videos (:56 among tweens and :59 among teens; see Table 11). For tweens, this is more than double what they reported in 2015 (:25), and for teens it's an increase of 24 minutes a day. The percent who say they watch online videos "every day" has more than doubled among both tweens and teens (from 24% to 56% among tweens and from 34% to 69% among teens). In 2015, teens were far more likely to say they watched TV or used social media "every day" than to say they watched online videos that often; now, online videos are more likely than either TV or social media to be a daily activity for teens (see Table C, page 17).

Watching online videos has become so popular among tweens that it is now the media activity they enjoy the most, with 67% saying they enjoy it "a lot"; four years ago, it ranked fifth in enjoyment among tweens, after TV, music, video games, and mobile games (see Table D, page 17). In fact, even among teenagers, watching online videos now comes second in enjoyment, only topped by listening to music; among 13- to 18-year-olds, video watching beats out video games, TV, and even social media by quite a bit (58% enjoy watching online videos "a lot," compared to 43% for video games, 41% for social media, and 33% for watching TV).

Many young people watch videos to learn more about something they're personally interested in. Nearly two-thirds of tweens and teens (65% and 63%, respectively) watch videos about how to make, build, or do something they are interested in (see Table 11).

Watching online videos has become so popular among tweens that it is now the media activity they enjoy the most ... four years ago, it ranked fifth in enjoyment.

TABLE 11. Online videos: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to 12-year-olds		Among 13- to 18-year-olds		
	2015	2019	2015	2019	
<b>Enjoyment</b> : Percent who say they enjoy watching online videos "a lot"	46%ª	67% <sup>b</sup>	45%ª	58% <sup>b</sup>	
Frequency: Percent who watch online videos "every day"	24%ª	56% <sup>b</sup>	34%ª	69% <sup>b</sup>	
Time spent: Average daily time spent watching online videos					
Among those who watch	1:12ª	1:44 <sup>b</sup>	1:18ª	1:37⁵	
Among all	:25ª	:56 <sup>b</sup>	:35ª	:59 <sup>b</sup>	
<b>Types watched</b> : Percent who "often" or "sometimes" watch videos about how to build, make, or do something they are interested in	50%ª	65% <sup>b</sup>	47%ª	63% <sup>b</sup>	

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

YouTube clearly dominates the online video space. Despite the fact that YouTube's official policy is that it is for children age 13 or older, 76% of tweens say they use the site, and more than half (53%) say it's the site they use most often (see Table 12). By comparison, only about one in four 8- to 12-year-olds (23%) say they watch YouTube Kids, and just 7% say YouTube Kids is the site they watch the most. Teens are even more likely to watch videos on YouTube: Eighty-eight percent do so, and 59% say YouTube is the site they watch the most. (The survey asked about viewing on YouTube, YouTube Kids, Netflix, Amazon Prime Video, Hulu, Twitch, and "other" sites.)

While watching online videos is popular across age, gender, income level, and racial and ethnic group, there is some variation. As seen in Table 13, boys enjoy watching online videos more than girls (67% vs. 56%) and are more likely to watch "every day" (66% vs. 60%). On average, they spend about 10 minutes more per day than girls watching videos (1:03 vs. :52), and they are slightly more likely than girls to say they "often" or "sometimes" watch videos about how to build, make, or do something they are interested in (67% vs. 61%). In addition, African American and Hispanic/Latino young people are more likely than their White peers to say they enjoy watching online videos "a lot" (71% and 65%, respectively, compared to 57% among Whites) and to watch "every day" (69% and 67% respectively, vs. 60% of Whites). Black, Hispanic/Latino, and young people in lowerincome homes also spend about 12 to 16 minutes more a day watching videos than other young people their age.

TABLE 12. Online video or subscription platforms watched, tweens vs. teens, 2019

Percent who	Ever watch		Watch "t	he most"	
watch	Tweens	Tweens Teens		Teens	
YouTube	76%ª	88% <sup>b</sup>	53%ª	59% <sup>b</sup>	
YouTube Kids	23%ª	4% <sup>b</sup>	7%ª	1% <sup>b</sup>	
Netflix	71%	73%	27%	31%	
Amazon Prime Video	28%	28%	3%	2%	
Hulu	18%	22%	2%	3%	
Twitch	3%ª	8% <sup>b</sup>	*a	1% <sup>b</sup>	
Other video sites	8%ª	11% <sup>b</sup>	1%	1%	

Notes: Superscripts (a,b) are used to denote whether differences between age groups are statistically significant (p < .05). Items with different superscripts differ significantly.

YouTube clearly dominates the online video space ... 76% of tweens say they use the site, and more than half say it's the video site they use most often.

TABLE 13. Online videos: Enjoyment, frequency, time spent, and types watched, by demographic, 2019

	Gender		Race/Ethnicity			Family income		
Among 8- to 18-year-olds	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher
<b>Enjoyment</b> : Percent who enjoy watching "a lot"	67%ª	56% <sup>b</sup>	57%ª	71% <sup>b</sup>	65% <sup>b</sup>	65%	63%	59%
Frequency: Percent who watch "every day"	66%ª	60% <sup>b</sup>	60%ª	69% <sup>b</sup>	67% <sup>b</sup>	67%	64%	60%
<b>Time spent</b> : Average daily time spent watching, among all	1:03ª	:52 <sup>b</sup>	:53ª	1:05	1:06 <sup>b</sup>	1:06ª	1:01ª	:50 <sup>b</sup>
<b>Types watched</b> : Percent who "often" or "sometimes" watch videos about how to build, make, or do something they are interested in	67%ª	61% <sup>b</sup>	63%	68%	61%	65%	61%	65%

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

## **GAMING**

DIGITAL GAMING CONTINUES TO be one of the most popular media activities among both tweens and teens. For purposes of this report, "video gaming" refers to console gaming on handheld and box platforms (i.e., games played on a gaming-centered device such as a PlayStation, Xbox, Wii, Switch, Game Boy, or Nintendo DS); "mobile gaming" refers to casual games played on a smartphone or tablet; and "computer gaming" refers to games such as World of Warcraft played on a computer. Video, mobile, and computer gaming together account for nearly a third (31%) of all screen time among tweens and 22% of all screen time among teens. More tweens and teens say they enjoy playing console video games "a lot" than those who say the same about watching TV, and among tweens, mobile gaming beats TV

watching as well (see Table D, page 17). Just under half of all young people say they play mobile games "every day" (46% of both tweens and teens), and about one in four say they play console video games "every day" (24% of tweens and 27% of teens). Computer gaming attracts a smaller group of devotees: Fifteen percent of tweens and 17% of teens play on a daily basis.

On average, both tweens and teens spend about an hour and a half per day gaming (1:28 and 1:36, respectively; see Table 14). Console gaming captures the largest amount of young people's gaming time (:44 among tweens and :50 among teens) and computer gaming the least (:11 among tweens and :19 among teens).

TABLE 14. Digital gaming: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to	12-year-olds	Among 13- to 18-year-				
	2015	2019	2015	2019			
<b>Enjoyment</b> : Percent who enjoy each type of gaming "a lot"							
• Video (console)	52%	52%	42%	43%			
• Mobile	51%	55%	27%	30%			
• Computer	39%	37%	26%	27%			
<b>Frequency</b> : Percent who engage in each type of gaming "every day"							
• Video (console)*	16%ª	24% <sup>b</sup>	17%ª	27% <sup>b</sup>			
• Mobile	27%ª	46% <sup>b</sup>	27%ª	46% <sup>b</sup>			
• Computer	14%	15%	17%	17%			
Time spent: Average daily time spent gaming (among all)	1:19	1:28	1:21ª	1:36 <sup>b</sup>			
• Video (console)*	:35	:44	:37ª	:50 <sup>b</sup>			
• Mobile	:33	:34	:25	:27			
• Computer	:11	:11	:19	:19			

<sup>\*</sup>In 2015 respondents were asked separate questions about console and hand-held video game playing (e.g., Switch, Game Boy, Nintendo DS). The data presented for 2015 represents the proportion who play either type of game "every day," and the time spent playing is a sum of time spent playing on console and hand-held players. In 2019 the two types of gaming were combined into one question, and the term "console" is used to refer to both types.

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

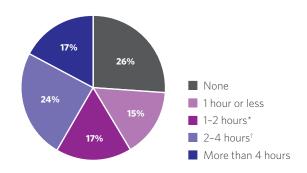
The amount of time young people spend gaming has crept up somewhat over the past four years: nine minutes a day on average among tweens (not statistically significant) and about 15 minutes a day among teens (significant). The increase comes from console video gaming rather than mobile or computer gaming. Computer gaming has always been more of a niche activity, so the lack of change is perhaps not surprising. But it's somewhat surprising that the time spent playing mobile games hasn't increased since 2015. The proportion of young people who say they play mobile games "every day" has increased substantially (from 27% to 46% in both age groups), but the total time respondents report playing has not.

However, these statistics all obscure one crucial thing about gaming: that there continues to be a huge gender gap in all types of gaming. Gaming is far more popular among boys and far less popular among girls than the averages reveal (see Table 15, page 37). The biggest difference is in console video gaming: Forty-one percent of all boys say they play video games "every day," compared to just 9% of girls. There are girls who enjoy gaming a lot, ranging from 20% for computer games up to 35% for mobile games, but they seem to play them far less often than boys do. All told, 41% of teen boys spend more than two hours a day playing digital games (see Figure 5).

Video gaming is enjoyed by young people across racial and ethnic groups and in households of different income levels (see Table 15). But it is engaged in more frequently by young people in lower-income households (34% say they play console games daily, compared to 20% of those in higher-income homes) and by African American and Hispanic/Latino young people (31% and 29% say they play "every day," respectively, compared to 23% of Whites). On average, young people from lower-income homes devote a little more than an hour a day to playing console games (1:07) and just over two hours on all types of gaming combined (2:02), compared to 37 minutes of console video game playing and a total of 1:17 for all types of gaming among children in higherincome households.

These averages obscure one crucial thing about gaming: that there continues to be a huge gender gap in all types of gaming.

FIGURE 5. Digital gaming: Percent of teen boys who play for... per day, 2019



<sup>\*</sup>Includes from 1:01 up to and including 2 hours.

Note: Includes computer, mobile, and console video games.

<sup>†</sup>Includes from 2:01 up to and including 4 hours.

TABLE 15. Digital gaming: Enjoyment, frequency, and time spent, by demographic, 2019

	Ger	Gender		Race/Ethnicity			Family income		
Among 8- to 18-year-olds	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher	
<b>Enjoyment</b> : Percent who enjoy each type of gaming "a lot"									
• Video (console)	70%ª	23% <sup>b</sup>	46%	48%	47%	46%	46%	49%	
• Mobile	48%ª	35% <sup>b</sup>	38%ª	49% <sup>b</sup>	43%	46%ª	41%	39% <sup>b</sup>	
• Computer	42% <sup>a</sup>	20% <sup>b</sup>	31%	34%ª	27% <sup>b</sup>	29%	29%ª	35%⁵	
<b>Frequency</b> : Percent who engage in each type of gaming "every day"									
• Video (console)*	41%ª	9% <sup>b</sup>	23%ª	31% <sup>b</sup>	29% <sup>b</sup>	34%ª	26% <sup>b</sup>	20% <sup>c</sup>	
Mobile	52%ª	40% <sup>b</sup>	43%ª	53% <sup>b</sup>	50% <sup>b</sup>	49%	46%	44%	
• Computer	22%ª	11% <sup>b</sup>	16%ª	22% <sup>b</sup>	15%ª	16%	16%	18%	
<b>Time spent</b> : Average daily time spent gaming, among all									
• Video (console)*	1:19ª	:14 <sup>b</sup>	:45	:53	:55	1:07ª	:46 <sup>b</sup>	:37°	
• Mobile	:35ª	:26 <sup>b</sup>	:28ª	:35	:36 <sup>b</sup>	:46ª	:31 <sup>b</sup>	:21 <sup>c</sup>	
• Computer	:23ª	:07 <sup>b</sup>	:17	:11	:12	:10ª	:15	:20 <sup>b</sup>	
Total gaming	2:17ª	:47 <sup>b</sup>	1:30	1:39	1:43	2:02ª	1:32 <sup>b</sup>	1:17°	

<sup>\*</sup>In 2015 respondents were asked separate questions about console and hand-held video game playing (e.g., Switch, Game Boy, Nintendo DS). The data presented for 2015 represents the proportion who play either type of game "every day," and the time spent playing is a sum of time spent playing on console and hand-held players. In 2019 the two types of gaming were combined into one question, and the term "console" is used to refer to both types.

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences in the contract of the contractbetween demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

## **SOCIAL MEDIA AND TEXTING**

ONE OF THE INTERESTING findings in this wave of the survey is that the amount of time young people devote to social media such as Snapchat, Instagram, or Facebook—appears to have stabilized. The average amount of time 13- to 18-year-olds spend using social media each day has remained nearly exactly the same: 1:11 a day in 2015, and 1:10 a day in 2019 (see Table 16). On the other hand, the frequency of social media use has increased: The percent of teens who say they use it "every day" has grown from 45% in 2015 to 63% in 2019. The proportion of teens who say they enjoy using social media "a lot" has nudged up a bit, from 36% of teens who said they enjoyed using it "a lot" in 2015, to 41% who say the same today (a difference that is not statistically significant).

Clearly some young people start using social media at early ages, but its use does not appear to have expanded among the younger age group in recent years. In 2015, 10% of tweens said they used it "every day," and 64% said they "never" used it (see Table 16). In 2019, 13% say they use it "every day," and 68% say they "never" do. The average amount of time spent using social media among all tweens is 10 minutes a day, down from 16 minutes a day in 2015 (this change is not statistically significant). Among 16- to 18-year-olds who use social media, the median age of first use is 14; twenty-eight percent say they started before age 13, 43% say 13 or 14 years old, and 30% say they didn't start until age 15 or older (see Table 17).

Clearly some young people start using social media at early ages, but its use does not appear to have expanded among the younger age group in recent years.

TABLE 17. Social media: Age of first use among 16- to 18year-olds who use it, 2019

Percent who started using social media at					
• Under 13 years old	28%				
• 13 to 14 years old	43%				
• 15 to 18 years old	30%				
Median age of first use	14 years old				

TABLE 16. Social media: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to 12-year-olds		Among 13- to	18-year-olds
	2015	2019	2015	2019
<b>Enjoyment</b> : Percent who enjoy social media "a lot"	13%ª	8% <sup>b</sup>	36%	41%
Frequency: Percent who use social media				
Every day	10%	13%	45%ª	63% <sup>b</sup>
• Never	64%	68%	16%	17%
Time spent: Average daily time spent using social media, among all	:16	:10	1:11	1:10

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

TABLE 18. Social media: Enjoyment, frequency, and time spent among teens, by demographic, 2019

	Gender		Race/Ethnicity			Family income		
Among 13- to 18-year-olds	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher
<b>Enjoyment</b> : Percent who enjoy it "a lot"	32%ª	50% <sup>b</sup>	37%ª	51% <sup>b</sup>	43%	37%	39%	45%
Frequency: Percent who use "every day"	56%ª	70% <sup>b</sup>	62%	64%	63%	54%ª	60%ª	70% <sup>b</sup>
Time spent: Average daily time spent								
Among those who use	1:31ª	2:17 <sup>b</sup>	1:35°	2:15 <sup>b</sup>	2:23 <sup>b</sup>	2:23ª	2:06	1:36 <sup>b</sup>
Among all	:51ª	1:30 <sup>b</sup>	:58ª	1:18	1:27⁵	1:15	1:13	1:05

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

As in the past, there continues to be a big difference between boys and girls in terms of enjoyment and use of social media (see Table 18). Among teens, half of all girls say they enjoy using social media "a lot" compared to about a third (32%) of boys. Seventy percent of teen girls say they use social media "every day" compared to 56% of boys. Overall, teen boys average 51 minutes a day on social media, compared to an hour and a half (1:30) among teen girls.

Hispanic/Latino and African American teens also seem to have more enthusiasm for social media than their White peers, and to spend more time using it. For example, 51% of African American teens say they enjoy using social media "a lot" compared to 37% of Whites their age; and White teens who do use social media spend less time doing so than either their African American or Hispanic/Latino peers (:40 fewer and :48 fewer, respectively). When it comes to household income, teens in higher-income homes are more likely to say they use social media "every day" (70% vs. 54% of teens in lower-income homes and 60% of teens in middle income homes); there are no statistically significant differences by income in young people's enjoyment of social media.

Interestingly, the average number of texts teens send per day has dropped.

Texting. In this report, texting is not included in any estimates of the amount of time young people spend using screen devices. However, the survey does include data about the proportion of young people who text in any given day and the number of texts they send. Questions about texting were asked only of 13- to 18-year-old respondents.

Given the increase in the proportion of teens who have their own smartphone, from 67% to 84%, it isn't surprising that the percent of teens who text on any given day has also increased, from 53% of all teens in 2015 to 78% in 2019 (see Table 19). But interestingly, the average number of texts teens send per day has dropped, perhaps due to the availability of other communication tools such as Snapchat or direct messaging. Among texters, 40% send 10 or fewer texts, compared to 28% who sent that few texts in 2015. The average number of texts sent per day among texters is 39, down from 55 per day in 2015.

TABLE 19. Texting: Daily amount among teens, 2015 vs. 2019

Among 13- to 18-year-olds	2015	2019
On any given day, percent who text	53%ª	78% <sup>b</sup>
Among texters, percent who send		
• 1-10 texts	28%	40%
• 11-30 texts	35%	34%
• 31-50 texts	16%	12%
• 51+ texts	21%	14%
Average number of texts sent daily, among those who text	55°	39 <sup>b</sup>

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

# **EMERGING TECHNOLOGIES:** SMART SPEAKERS AND VIRTUAL REALITY

Smart speakers. One of the new devices in young people's homes in this wave of the survey is the so-called "smart speaker," such as Amazon's Echo or the Google Home. These devices can respond to verbal inquiries by playing music, sending emails, or answering factual questions, among other things. Although such products only came onto the market a couple of years ago, about three in 10 young people's homes now have one (31% of tweens and 29% of teens; see Table 20).

Forty-five percent of all young people say they have ever interacted with a smart speaker; among tweens, 17% say they ask questions or give commands to such a device "every day," and a total of 31% say they do so at least weekly (see Table 21). Among teens, 13% interact with a smart speaker every day and 28% at least weekly. Young people from higher-income households are much more likely than those in lower-income families to have a smart speaker in the home (43% vs. 14% of young people in lower-income homes.

## Seventeen percent of tweens say they interact with a smart speaker device every day.

Virtual reality. Virtual reality (VR) headsets are touted by some as the next big thing in media and technology for young people. The headsets immerse the user in a three-dimensional environment in which the user's movements change the point of view and the user can move through and in some cases interact with the "virtual" world. VR headsets are used for films (both documentary and fictional) and for gaming. The primary application among young people thus far has been gaming. Facebook bet big on VR when it released the Oculus Rift headset in 2016; Sony has released a VR headset for the PlayStation, and many others are on the market as well

TABLE 20. Smart speakers in the home, by age and household income, 2019

A	ge	Family income				
Tweens	Teens	Lower	Middle	Higher		
31%	29%	14%ª	25% <sup>b</sup>	43%°		

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

TABLE 21. Smart speakers: Frequency of use, by age, 2019

Use a smart speaker	Tweens	Teens
Ever	45%	45%
Daily	17%	13%
Weekly	14%	15%
Monthly	7%	7%
Less than monthly	8%	10%

Even those who have tried VR don't seem sold on it yet; in fact, many don't like it at all.

To date, one in four 8- to 18-year-olds (25%) have ever tried a VR headset, and most of those who have, have done so only infrequently (see Figure 6). Slightly more teens (27%) than tweens (22%) have done so (see Table 22). Even those who have tried VR don't seem sold on it yet; in fact, many don't like it at all (see Figure 7). Forty-three percent of tweens and half (50%) of teens who have tried VR say they enjoy using it either "only a little" or "not at all." Only 25% of tweens and 18% of teens who have tried VR (which represents just 6% of all tweens and 5% of all teens) enjoy using it "a lot." By comparison, 52% of all tweens and 43% of all teens say they enjoy playing video games "a lot" (see Table D, page 17).

FIGURE 6. Virtual reality: Frequency of use among 8- to 18-year olds, 2019

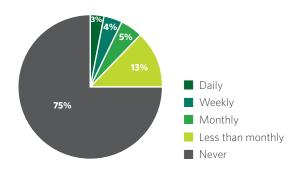
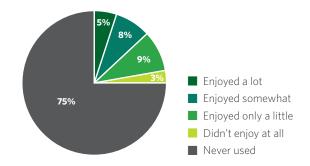


TABLE 22. Virtual reality: Frequency of use, by age, 2019

	Tweens	Teens
Percent who have ever used virtual reality headsets	22%	27%
Among those who have used virtual rethey enjoyed it	ality, percent	who say
• A lot	25%	18%
• Somewhat	31%	32%
Only a little	38%	33%
• Not at all	5%	17%

FIGURE 7. Virtual reality: Enjoyment level among 8- to 18-year-olds, 2019



## READING AND WRITING

Reading. The survey explored young people's reading habits, outside of reading done for school. We asked young people how often they read "for your own enjoyment (not for school or homework), such as books, ebooks, magazines, online articles," as well as how much time they spent the previous day doing so. We also explored how young people read: whether in print or online; in books or shorter formats such as articles or blogs; and on which devices, such as smartphones, ebooks, or computers. And we asked how much they enjoy reading.

Nearly four in 10 tweens (38%) and one in four teens (24%) say they enjoy reading "a lot," roughly the same proportion who report reading for pleasure "every day" (35% of tweens and 22% of teens; see Table 23). Most tweens and teens read for their own pleasure at least once a week (66% of tweens and 51% of teens).

But at the same time, 22% of tweens and nearly a third (32%) of teens say they read for pleasure less than once a month, if that (17% of teens say less than once a month, 15% never). The average amount of time spent reading is about a half hour a day among both tweens and teens; this is almost exactly what was reported in 2015.

Both the rate and the amount of reading among young people have been remarkably steady over the past four years.

TABLE 23. Reading for pleasure: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to	Among 8- to 12-year-olds		18-year-olds
	2015	2019	2015	2019
<b>Enjoyment</b> : Percent who say they enjoy reading "a lot"	41%	38%	30%ª	24% <sup>b</sup>
Frequency: Percent who read for pleasure				
• Daily	27%	35%	19%	22%
• Weekly*	37%	31%	34%	29%
• Monthly <sup>†</sup>	16%	11%	19%	17%
Less than monthly	8%	9%	12%	17%
• Never	12%	13%	16%	15%
<b>Time spent</b> : Average daily time spent reading , among all	:29	:29	:28	:29
Print books	:24	:21	:15	:12
• Ebooks <sup>‡</sup>	:02ª	:05 <sup>b</sup>	:03ª	:08 <sup>b</sup>
• Online <sup>§</sup>	:01	:01	:05	:07
Magazines or newspapers	:01	:02	:05ª	:02 <sup>b</sup>

<sup>\*</sup>Weekly figures from 2015 include "several times a week" and "once a week;" in 2019 these were combined into one option of "at least once a week."

Note: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

<sup>†</sup>Monthly figures from 2015 include "several times a month" and "once a month;" in 2019 these were combined into one option of "at least once a month." ‡Includes reading books on an e-reader, a phone, or a tablet.

Sincludes reading online articles, stories, poems, news, or blogs on a computer, tablet, or smartphone.

In sum, both the rate and the amount of reading among young people have been remarkably steady over the past four years. Even the "platforms" young people read on haven't changed: Time spent reading ebooks has nudged up by just a couple of minutes a day, in essence replacing a slight (but not statistically significant) decline in reading print books. But surprisingly, time spent reading online—reading blogs or articles on a smartphone or computer, for example—hasn't budged over the past four years.

Surprisingly, time spent reading online—such as reading blogs or articles on a smartphone hasn't budged.

There are some differences by age in terms of how young people read. Tweens devote more of their reading time to print books (21 out of 29 minutes, compared to 12 out of 29 among teens), while teens spend more time reading on their devices (15 out of 29 minutes, compared to six out of 29 minutes among tweens).

There are also some demographic differences in how much young people enjoy reading, how often they do it, and how much time they devote to it (see Table 24). The biggest differences are by parent education, followed by gender: Children who have a parent with a college degree are more likely to enjoy reading (71% enjoy it "a lot" or "somewhat," compared to 54% of those whose parent has no more than a high school diploma); they are also more likely to be daily readers (34% compared to 20%) and spend about 11 more minutes per day reading, on average, than their peers whose parents have less education.

The differences between girls and boys are similar in scope: Seventy percent of girls say they enjoy reading "a lot" or "somewhat," compared to 55% of boys. Thirty percent of girls say they read "every day," compared to 25% of boys. And girls average about six more minutes per day of reading than boys.

TABLE 24. Reading for pleasure: Enjoyment, frequency, and time spent, by demographic, 2019

	Ger	ıder	R	ace/Eth	nicity	Fa	mily incom	ne	Par	ent educa	tion
Among 8- to 18-year-olds	Boys	Girls	White	Black	Hispanic/ Latino	Lower	Middle	Higher	High school	Some college	College degree
<b>Enjoyment*</b> : Percent who say t	hey enjo	y reading	g								
<ul> <li>A lot/somewhat</li> </ul>	55%ª	70% <sup>b</sup>	61%	64%	61%	56%ª	61%ª	68% <sup>b</sup>	54%ª	58%ª	71% <sup>b</sup>
• A lot	25%ª	36% <sup>b</sup>	29%	34%	30%	25%ª	31%	33% <sup>b</sup>	24%ª	28%ª	37% <sup>b</sup>
<ul> <li>Somewhat</li> </ul>	30%	34%	32%	31%	31%	31%	30%	34%	30%	31%	34%
• Only a little/not at all	29%ª	17% <sup>b</sup>	24%	24%	20%	22%	25%ª	21% <sup>b</sup>	25%ª	24%	20% <sup>b</sup>
• Only a little	23%°	14% <sup>b</sup>	19%	21%	16%	18%	21%	17%	20%	20%	17%
• Not at all	6%ª	3% <sup>b</sup>	5%	4%	4%	4%	5%	4%	5%	4%	3%
Frequency: Percent who read for	or pleası	ıre									
• Every day	25%ª	30% <sup>b</sup>	28%ª	28%	22% <sup>b</sup>	23%ª	26%ª	32% <sup>b</sup>	20%ª	26% <sup>b</sup>	34%°
<ul> <li>Less than monthly</li> </ul>	31%	24%	29%	23%ª	30% <sup>b</sup>	33%ª	28%	23% <sup>b</sup>	34%ª	30%ª	21% <sup>b</sup>
Time spent: Average daily time	e spent re	eading fo	or pleasur	e							
Among those who read	1:17	1:21	1:16ª	1:38 <sup>b</sup>	1:23	1:48ª	1:15 <sup>b</sup>	1:12 <sup>b</sup>	1:22	1:27	1:15
Among all	:26ª	:32 <sup>b</sup>	:29	:35	:24	:33	:27	:28	:22ª	:30	:33 <sup>b</sup>

<sup>\*</sup>Doesn't total 100% because it excludes those who say they "never" read.

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

TABLE 25. Writing for pleasure: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to 12-year-olds		Among 13- to	18-year-olds
	2015	2019	2015	2019
<b>Enjoyment</b> : Percent who enjoy writing	29%	34%	22%	27%
• A lot	13%	11%	9%	8%
• Somewhat	16%	23%	13%	19%
Frequency: Percent who write for pleasure	34%	38%	28%	32%
• Often	8%	10%	7%	7%
• Sometimes	26%	28%	21%	24%
Time spent: Average daily time spent writing via digital devices, among all	:01	*	:04	:04

<sup>\*</sup>Indicates less than 30 seconds, but more than 0.

Notes: Excludes writing done for school or homework. No differences over time are statistically significant.

Writing. The survey also tracks young people's interest in writing, such as stories, blogs, poems, or articles. Sometimes this writing is done using digital devices such as computers, tablets, or smartphones, and other times it's done by hand. About a third of tweens (34%) and a quarter of teens (27%) say they enjoy writing "somewhat" or "a lot" (see Table 25). Slightly more (38% of tweens and 32% of teens) say they "often" or "sometimes" write things for their own pleasure, such as stories, articles, poems, or blogs. In both cases we see small upticks from 2015, with young people about five percentage points more likely to say they enjoy writing at least somewhat and four percentage points more likely to say they do it for their own pleasure at least sometimes. Interestingly, those who do write for pleasure are as likely to do so the old-fashioned way—with pencil or pen—as they are to use their digital devices: In 2019, on any given day, 5% of all 8- to 18-year-olds say they wrote something for their own pleasure by hand, 2% on a computer, 2% on a smartphone, and 1% on a tablet (see Table 26).

TABLE 26. Writing for pleasure, by method, 2019

Among all 8- to 18-year-olds, on any given day, percent who spend any time writing					
By hand	5%				
• On a computer	2%				
<ul> <li>On a smartphone</li> </ul>	2%				
• On a tablet	1%				

LISTENING TO MUSIC CONTINUES to be one of the most popular media activities among both tweens and teens. Among tweens, it is second only to watching online videos, with 55% saying they enjoy music "a lot" (see Table D, page 17). Among teens, music is the favorite activity: Nearly three out of four (74%) say they enjoy listening "a lot," far above the next most popular activity (watching online videos, at 58%). Even such seemingly popular activities as using social media or watching TV don't compare (41% of teens enjoy using social media "a lot," and 33% enjoy watching TV that much).

Among teens, 82% say they listen to music "every day," again far higher than other media activities, such as watching online videos (69%) or using social media (63%), the next closest activities in terms of frequency (see Table C, page 17). Finally, teens spend more time listening to music per day (2:05) than doing any other activity (unless watching TV and watching online videos are added together; see Table B, page 14). By comparison, they spend about an hour and a half (1:36) on all types of gaming combined and an hour and 10 minutes a day, on average, using social media. In sum, music is the most enjoyed type of media activity among American teenagers, it is the thing they do most frequently, and they devote more time to it than to any other type of media.

In sum, music is the most enjoyed type of media activity among American teenagers, it is the thing they do most frequently, and they devote more time to it than to any other type of media.

The amount of time tweens and teens devote to music each day hasn't changed much since 2015 (see Table 27; for tweens, it's down slightly and for teens up slightly, though neither change is statistically significant). On average, tweens spend about 43 minutes a day listening to music and teens just over two hours a day (2:05). While the time they spend listening to music hasn't changed substantially, the way young people listen is certainly evolving. Over the last four years, iPods have faded (from an

TABLE 27. Music: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to 12-year-olds		Among 13- to	18-year-olds
	2015	2019	2015	2019
<b>Enjoyment</b> : Percent who enjoy listening to music "a lot"	54%	55%	73%	74%
Frequency: Percent who listen to music "every day"	37%ª	47% <sup>b</sup>	66%ª	82% <sup>b</sup>
<b>Time spent</b> : Average daily time spent listening to music on , among all	:51	:43	1:54	2:05
Smartphone	:10	:12	:41ª	1:11 <sup>b</sup>
• Radio	:20	:16	:27	:24
• Computer	:02	:02	:16	:12
Smart speaker	N/A	:05	N/A	:08
• Tablet	:06	:06	:07	:06
• CD	:04	N/A	:05	N/A
• iPod/MP3 player	:09ª	:02 <sup>b</sup>	:18ª	:04 <sup>b</sup>

Notes: "N/A" indicates that the question was not asked in that year. Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

average of :18 a day down to just four among teens); on the other hand, teens are listening to music through their phones for 30 more minutes each day than they were in 2015 (from :41 up to 1:11). At this point, smart speakers only account for a tiny bit of young people's music time (:05 a day among tweens and :08 among teens). Perhaps surprisingly to some, teens still listen to the radio, for an average of 24 minutes a day. Looked at another way, among all teens in this survey who listened to music the previous day, 75% listened through a smartphone, 32% through the radio, and 9% through a smart speaker (see Table 28).

Listening to music is equally popular across racial and ethnic groups as well as among young people in lower- and higherincome homes. But it is most popular among girls (see Table 29): Seventy-three percent of all 8- to 18-year-old girls enjoy listening to music "a lot" compared to 59% of boys, and 71% of girls say they listen "every day" compared to 62% of boys.

TABLE 28. Devices used to listen to music, among teens, 2019

Among 13- to 18-year-olds who listened to music the previous day, percent who listened through					
Smartphone	75%				
Radio	32%				
Computer	11%				
Smart speaker	9%				
Tablet	6%				
iPod	4%				
Other	6%				

TABLE 29. Music: Enjoyment, frequency, and time spent, by gender, 2015 vs. 2019

Among 8- to 18-year-olds	Boys	Girls
<b>Enjoyment</b> : Percent who enjoy listening to music "a lot"	59%²	73% <sup>b</sup>
<b>Frequency</b> : Percent who listen to music "every day"	62%ª	71% <sup>b</sup>
<b>Time spent</b> : Average daily time spent listening to music, among all	1:21ª	1:35 <sup>b</sup>

Note: Superscripts (a,b) are used to denote whether differences between groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## **CONTENT CREATION**

ONE OF THE UNIQUE affordances of digital media over "traditional" screens such as television is that digital devices allow users to create their own content. As noted above, not all "screen time" consists of watching TV or playing games; some teens are spending time writing blogs, coding, building their own video games, or creating art or music on their computers, tablets, or smartphones. In order to try to quantify that type of screen activity, the survey included a series of questions about such content creation. Of course, young people may engage in other types of content creation that were not asked about in this survey (which should be captured in the time they spend doing "other" things on their

devices); and some readers may feel that other activities such as posting to social media should be counted as content creation.

The bottom line is that none of the content-creation activities asked about in this survey are things that very many young people enjoy "a lot" or do "often" (see Table 30). Even for the most popular of these activities—creating digital art or graphics —no more than 6% of teens say they do this "often." There has been no big change in young people's use of technology for these purposes since 2015. On average, tweens spend about seven minutes a day in content creation, and teens about 12 minutes.

TABLE 30. Content creation: Enjoyment, frequency, and time spent, by age, 2015 vs. 2019

	Among 8- to	Among 8- to 12-year-olds		18-year-olds
	2015	2019	2015	2019
Percent who enjoy "a lot"				
g digital art or graphics	11%	10%	7%	9%
igital music	4%	4%	5%	5%
	4%	4%	3%	3%
odifying games	5%	4%	3%ª	6% <sup>b</sup>
ent who "often" spend time				
art or graphics	3%ª	5% <sup>b</sup>	4%ª	6% <sup>b</sup>
usic	2%	2%	4%	4%
	1%ª	3% <sup>b</sup>	2%	2%
ring games	3%	3%	4%	4%
given day):				
tal art or music				
do	8%	10%	5%ª	10% <sup>b</sup>
ne among those who do	:55	1:14	1:23	1:18
among all	:04	:07	:05ª	:08 <sup>b</sup>
al devices				
do	2%ª	1%⁵	4%	5%
time among those who do	#	#	1:37	1:18
ne among all	:01	*	:04	:04

<sup>\*</sup> Indicates more than 0 but less than one-half minute.

Note: Superscripts (a,b) are used to denote whether differences for that age group over time are statistically significant (p < .05). Different superscripts differ significantly.

<sup>#</sup> Indicates sample size of users is too small (n < 50) for reliable results.

## THE DIGITAL DIVIDE

DESPITE THE PROGRESS MADE in addressing the digital divide, there are still substantial inequities in even the most basic measures, such as access to computers and mobile devices in the home. Children from higher-income homes are far more likely than their peers in lower-income homes to have a desktop or laptop computer at home or to have their own device such as a personal laptop or smartphone. But the differences are noticeably smaller than they were just four years ago.

Device ownership. Today 89% of 8- to 18-year-olds live in a home with at least one computer, but that ranges from 73% of those in lower-income households to 94% of those in higher-income ones (see Table 31). Similarly, about a third (36%) of teens in lower-income homes have their own laptop, compared to about half (54%) of their peers in higher-income homes. But laptop ownership has grown among young people in lower-income homes since 2015, so that the gap between higher- and lowerincome has fallen from a 37-percentage-point difference in 2015 to an 18-percentage-point difference in 2019 (see Table 32).

TABLE 31. Device ownership, among all and by family income, 2019

Percent of 8- to 18-year-		Fa	ne			
olds who have	All	Lower	Middle	Higher		
Computers in the home						
<ul> <li>Desktop</li> </ul>	52%	39%ª	52% <sup>b</sup>	60%°		
<ul><li>Laptop</li></ul>	79%	65%ª	80% <sup>b</sup>	86%°		
• Either	89%	73%ª	92% <sup>b</sup>	94% <sup>b</sup>		
Mobile devices in the hom	Mobile devices in the home					
<ul> <li>Smartphone</li> </ul>	91%	87%ª	92%ª	93% <sup>b</sup>		
• Tablet	75%	63%ª	74% <sup>b</sup>	83% <sup>c</sup>		
• Either	95%	92%ª	96%	97% <sup>b</sup>		
Personal device ownershi	р					
• Laptop (teens)	49%	36%ª	52% <sup>b</sup>	54% <sup>b</sup>		
• Smartphone (teens)	84%	74%ª	85% <sup>b</sup>	89% <sup>b</sup>		
• Tablet (tweens)	52%	54%	47%ª	56%⁵		

TABLE 32. Device ownership among 8- to 18-year-olds in lower-income families, 2015 vs. 2019

Percent of 8- to 18-year-olds	Among those in lov	Among those in lower-income families		nt difference between young and higher- income families	
who have	2015	2019	2015	2019	
Computers in the home					
<ul> <li>Desktop</li> </ul>	39%	39%	-34	-21	
• Laptop	54%ª	65% <sup>b</sup>	-36	-21	
• Either	68%	73%	-28	-21	
Mobile devices in the home					
<ul> <li>Smartphone</li> </ul>	65%ª	87% <sup>b</sup>	-28	-6	
• Tablet	62%	63%	-25	-20	
• Either	79%ª	92% <sup>b</sup>	-19	-5	
Personal device ownership					
• Laptop (teens)	25%ª	36% <sup>b</sup>	-37	-18	
Smartphone (teens)	51%ª	74% <sup>b</sup>	-27	-15	
• Tablet (tweens)	48%	54%	-8	-2	

Notes (Tables 31 and 32): "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences between groups or over time are statistically significant (p < .05). Items with different superscripts differ significantly. Items that do not have a superscript, or that share a common superscript, do not differ significantly.

Children in lower-income homes are also less likely to have their own smartphone: Seventy-four percent of teens in lower-income homes have their own smartphone, compared to 89% of their peers in higher-income homes (see Table 31). Just four years ago, only 51% of teens in lower-income homes had their own smartphone; the gap between kids in lower-income and higher-income homes has gone from 27 percentage points in 2015 to 15 percentage points today (see Table 32).

Use of computers and other devices for homework. Whether due to differences in home computer access or for some other reason, young people from lower-income homes are less likely than those from higher-income homes to use computers for homework. One in five teens in lower-income homes (22%) say they use a computer for homework only once a month or less, compared to 8% of teens in higher-income homes (see Figure 8). As seen in Table 33, young people from higher-income households spend more time than their peers in lower-income homes using computers for homework (:55 a day on average among higher-income teens, vs. :34 a day among lower-income teens), and those in lower-income homes spend more time using their phones for homework (:21 a day vs. :12 a day).

**Teens from higher-income** homes spend more time using computers for homework, while those from lower-income homes spend more time doing homework on a smartphone.

FIGURE 8. Frequency of computer use for homework, among teens, by household income, 2019

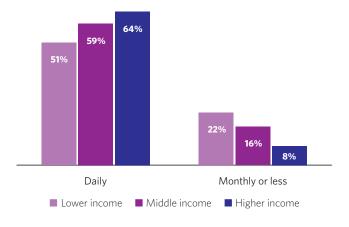


TABLE 33. Use of devices for homework, among teens, by household income, 2019

	Family income				
Among 13- to 18-year-olds	Lower	Middle	Higher		
Average amount of time spent using for homework	1:00	:49ª	1:12 <sup>b</sup>		
• Computer	:34ª	:32ª	:55⁵		
<ul> <li>Smartphone</li> </ul>	:21ª	:09 <sup>b</sup>	:12 <sup>b</sup>		
• Tablet	:05	:07	:05		

#### FIGURE 8 AND TABLE 33:

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b) are used to denote whether differences between groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## MEDIA AND HOMEWORK

WHILE THE BULK OF this report concerns the use of media for entertainment, the survey included two sets of data related to homework: first, the extent to which young people use media technologies to do homework, and second, how often they multitask with entertainment media while doing their homework.

Using computers and mobile devices for homework. Both tweens and teens frequently use computers for homework; as seen in Table 34, 27% of tweens do so on a daily basis, as do nearly six in 10 teens (59%). This is a substantial increase from just four years ago, when only 11% of tweens and 29% of teens said they used a computer for homework every day. By comparison, far fewer young people use their mobile devices for homework, and the proportion that does hasn't budged since 2015: On any given day, about one in five teens (20%) use a smartphone for some purpose related to their homework, nearly identical to the proportion that did so in 2015 (22%).

On average, teens spend an hour a day doing homework on computers and mobile devices (:41 on computers and :19 on mobile devices; see Table 35). This is up 14 minutes from four years ago, with virtually all of the increase coming from additional time spent using a computer for schoolwork (a 12-minute increase). In 2015 we reported that "use of computers is commonplace (at least among teens), but use of mobile digital devices for homework (tablets, smartphones) is far less common." This continues to be the case.

One way some young people use computers and other devices for homework is by watching online videos related to their assignments. For example, among teens, 21% "often" and 47% "sometimes" watch online videos for school (see Table 36). Use of videos for school has increased substantially over the past four years; in 2015, less than half (48%) of teens said they "often" or "sometimes" watched videos related to their schoolwork; today more than two-thirds do (69%).

Among teens, 21% "often" and 47% "sometimes" watch online videos for school.

TABLE 34. Use of computers for homework, by age, 2015 vs. 2019

Percent who use a computer	Twe	ens	Teens		
for homework	2015	2019	2015	2019	
Every day	11%ª	27% <sup>b</sup>	29%ª	59%⁵	
Every week	32%	31%	44%ª	26% <sup>b</sup>	
Every month	21%ª	9% <sup>b</sup>	14%ª	5%⁵	
Less than monthly	16%ª	11% <sup>b</sup>	5%	4%	
Never	21%	21%	7%	6%	

TABLE 35. Time spent using digital devices for homework, by age, 2015 vs. 2019

Average daily time spent	Twe	ens	Teens	
using for homework	2015	2019	2015	2019
Computer	:08ª	:15 <sup>b</sup>	:29ª	:41 <sup>b</sup>
Smartphone	:03	:03	:11	:13
Tablet	:04	:04	:06	:06
Total	:15ª	:22 <sup>b</sup>	:46ª	1:00 <sup>b</sup>

TABLE 36. Frequency of watching videos related to schoolwork, by age, 2015 vs. 2019

Percent who watch videos	Twe	ens	Teens	
related to schoolwork	2015	2019	2015	2019
Often/Sometimes	37%ª	52% <sup>b</sup>	48%ª	69% <sup>b</sup>
• Often	5%ª	12% <sup>b</sup>	10%ª	21% <sup>b</sup>
<ul> <li>Sometimes</li> </ul>	31%ª	40% <sup>b</sup>	37%ª	47% <sup>b</sup>

Notes: Superscripts (a,b) are used to denote whether differences over time are statistically significant (p < .05). Items with different superscripts differ significantly.

Multitasking with media during homework. About half (47%) of all teens say they "often" listen to music while doing their homework, about one in four (24%) say they "often" text, and about one in five say they "often" use social media (19%) or have the TV on (19%) while they're doing homework (Table 37). The proportion of teens that multitask with media during homework has remained virtually unchanged since 2015.

In the survey, those who do multitask with media either "often" or "sometimes" while doing homework were asked whether they think this practice mainly helps or hurts the quality of their work (see Table 37). When it comes to having music on while working, teens overwhelmingly think it helps: Sixty percent say it helps compared to just 6% who say it hurts and 34% who say it makes no difference to the quality of their work. But those who use social media, text, or keep the TV on while doing homework are less sure: A majority thinks such multitasking doesn't affect the quality of their work, but anywhere from a quarter to a third of those who do it say they think it hurts their work (24% of those who have the TV on, 25% of those who text, and 35% of those who use social media while studying).

TABLE 37. Media multitasking during homework, among teens, 2019

Among 13- to 18-year-olds	Have TV on	Listen to music	Text	Use social media
Percent who engage in each	activity v	vhile doir	g home	work
• Often	19%	47%	24%	19%
<ul> <li>Sometimes</li> </ul>	26%	33%	38%	32%
Among those who multitask homework, percent who say		•	U	
• Helps	17%	60%	16%	13%
• Hurts	24%	6%	25%	35%
Makes no difference to	59%	34%	58%	52%

## MEDIA MONITORING

IN RECENT YEARS, THERE has been an increasing number of tools available for consumers to track the amount of time they spend on their digital devices. In this wave of the survey, young people who have their own smartphone or tablet were asked whether they use any kind of app or tool to help track how much time they spend on their devices and whether, as far as they know, their parent uses any such tool to track their amount of mobile screen time.

Among those with their own mobile device, 15% of tweens and 12% of teens say they do use an app or tool to track their device time (see Table 38). More than one in four tweens (28%) with a phone or tablet say their parent uses such a tool to track the child's device time, as do 14% of teens. And fully half (50%) of all tweens and a quarter (26%) of teens say their parent uses some type of app or other tool to monitor what they do on their digital devices.

There are some modest demographic differences in media monitoring, with African American children reporting the highest levels of self- and parental monitoring, and children with highereducated parents also more likely to report monitoring. There were no differences by income.

Half of all tweens and a quarter of teens with a smartphone or tablet say their parent uses some type of app or other tool to monitor what they do on their digital devices.

TABLE 38. Self- or parental monitoring of digital device time or content, by demographic, 2019

	A	Age		Race/Ethnicity			Parent education		
Among 8- to 18-year-olds with their own mobile device, percent who say	Tween	Teen	White	Black	Hispanic/ Latino	High school	Some college	College degree	
They use an app or other tool to track their device time.	15%	12%	11%ª	17% <sup>b</sup>	16% <sup>b</sup>	10%ª	12%ª	17% <sup>b</sup>	
heir parent uses an app or other tool to track ne child's device time.	28%ª	14% <sup>b</sup>	17%ª	28% <sup>b</sup>	20%ª	16%ª	19%	22% <sup>b</sup>	
Their parent uses an app or other tool to monitor what the child does on the device.	50%ª	26% <sup>b</sup>	34%ª	48% <sup>b</sup>	33%ª	30%ª	37% <sup>b</sup>	38% <sup>b</sup>	

Notes: Superscripts (a,b) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## **SHOPPING ONLINE**

IN THIS WAVE OF the survey, we explored how common online shopping is for young people, whether they're browsing for products online, comparing prices or options, or actually making online purchases.

Nearly half (47%) of teens say they shop online at least once a week.

Eighty-six percent of teenagers say they ever shop or browse for things they want to buy online (see Table 39); in fact, nearly half (47%) say they do so at least weekly. Even among 8- to 12-yearolds, about half (49%) say they have shopped online, and 16% say they do so at least weekly. Girls are more likely than boys to shop online, but the practice is common among boys as well (39% of teen boys do it at least weekly, compared to 54% of teen girls). Teens from higher-income households are more likely than others their age to shop online: More than nine in 10 (93%) have done so, compared to three-quarters (76%) of teens from lower-income households. Forty percent of teens from lowerincome homes shop online at least once a week, while 52% of teens from higher-income homes shop online that frequently.

TABLE 39. Frequency of online shopping, by demographic, 2019

Percent who shop or browse for things	Age		Gender (among teens)		Family income (among teens)		
they want to buy online	Tween	Teen	Boys	Girls	Lower	Middle	Higher
Ever	49%	86%	82%	89%	<b>76</b> % <sup>a</sup>	84% <sup>b</sup>	<b>93</b> %°
• Daily	4%ª	15%⁵	10%ª	19% <sup>b</sup>	15%	15%	14%
• Weekly	12%ª	32% <sup>b</sup>	29%	35%	25%ª	30%ª	38% <sup>b</sup>
<ul> <li>Monthly</li> </ul>	14%ª	21% <sup>b</sup>	23%	19%	20%	21%	21%
<ul> <li>Less than monthly</li> </ul>	20%	18%	20%	16%	16%	18%	19%

Notes: "Lower" income is <\$35,000; "middle" is \$35,000-99,999; and "higher" is \$100,000 or more. Superscripts (a,b,c) are used to denote whether differences between demographic groups are statistically significant (p < .05). Items with different superscripts differ significantly.

## CONCLUSION

THE DATA PRESENTED IN this report is a unique resource with which to examine the broad national trends in young people's use of entertainment media in the United States over the past four years. It offers critical insights that validate some popular assumptions and challenge others.

For example, one popular assumption is that children from wealthier and more-educated families spend less time with screen media than other children do, and the data in this report validates that claim: In the tween and teen years, those in lowerincome homes or with parents with no more than a high school diploma spend nearly two hours more than their peers with screen media each day, on average. We can't say from this report whether that is a good or a bad thing; we can't say why it is so; but we can validate that these differences exist and should be acknowledged and examined.

Another assumption many people make is that the digital divide has closed, at least as far as access to devices such as computers in the home. But the tracking data presented here indicates that although this divide is definitely closing, it hasn't been eliminated yet. Among 8- to 18-year-olds, there is a 21-percentage-point gap between those in lower- vs. higher-income families in access to a home computer, and a 13-point gap in daily use of computers for homework. Again, the progress in access should not be discounted, but policymakers and educators also need to acknowledge and understand the continuing divide.

There is also a growing assumption that screen "time" doesn't matter anymore, because of the wide variety of activities young people can engage in via screens. But the data presented here allows us to understand how most young people are actually using screens, and that data indicates that certain activities very clearly dominate their screen use: watching video content produced and served to them by others; playing games; and using social media. Despite the new affordances and promises of digital devices, how young people use screens hasn't changed much at all over the past four years; there's just a slow increase in the amount of time spent with screens and a shift from television to online videos. The video content young people watch may not be coming from the television broadcast networks anymore, but

they're still watching TV and videos; their social media platforms may have changed from MySpace and Facebook to Instagram and Snapchat, but they are still devoting about the same amount of time each day to social media; the devices they use may well be capable of allowing young people to produce and share their own content, but only a small portion of their screen time is spent doing so; and the time they spend in content creation is not growing. The basic outlines of young people's screen activities are clear and should be acknowledged as such.

The importance of content and context in children's media use is widely accepted, and some of the findings in this survey reinforce that message. The shift from television to online viewing documented here has important implications for both content and context. Online video viewing is a more individualized activity, with fewer opportunities for co-viewing with parents and other family members. This has implications not just for the impact of media on the child, but also for family time: It is much easier to share a viewing experience on a larger, communal screen than it is on a small, personal device. For those who worry that parents and their kids may be occupying the same physical space but not actually sharing the same experiences, this shift could be a concern. What is lost when shared media time goes away? And how does the shift from watching TV shows with family members to watching online videos by oneself affect the possible impact of media messages on the child?

The shift to online viewing also has important implications for researchers interested in studying the specific content accessed by tweens and teens. If tracking and evaluating the content young people watched on television was difficult, doing so with online videos is even more of a challenge. There is such a wide array of content to select from, both high and low quality, from celebrity influencer videos to do-it-yourself maker videos to violent or sexual content and everything in between. By documenting the nature of young people's screen activities and the amount of time devoted to those activities, this survey makes it clear that understanding the content of their video exposure is more important than ever and will likely be even more challenging for researchers than ever before.

Finally, we have all gotten used to a constantly accelerating pace of change in young people's media lives; but, for the first time, this wave of the survey indicates that the pace of change in young people's media lives may have slowed. The survey has revealed some interesting and important changes over the past four years: increasing connectivity among tweens, rising screen media usage among teens, an explosion in online video viewing at the expense of television. But given the revolutionary pace at which young people's media environments have been changing over the past 20 years, it is also noteworthy that for the first time in quite a while, the pace of change appears to have slowed.

Previous surveys have documented the introduction and rapidpaced adoption of game-changing new devices (touchscreens, tablets, smartphones) or activities (social media). But for the past four years, there has been relative stability. There are new devices such as smart speakers and smartwatches, and new activities such as virtual reality, but none of them appears to be capturing young people's attention and time in a big way—at least for now. Social media has clearly become part of the fabric of teenagers' lives, yet the time they spend using it has remained virtually unchanged since 2015. Mobile gaming has also remained steady. How young people access TV shows has certainly changed, with live TV down and subscription and other online viewing up, and that may have important implications for young people's commercial exposure and, as discussed above, for co-viewing and content choices. But in the big picture, it seems clear that after a period of rapid and revolutionary change in the media landscape of tweens and teens, we are now in the midst of a (perhaps temporary) period of relative stability.

And that may give researchers, parents, and educators a chance to catch up.

# **APPENDIX: QUESTIONNAIRE**

#### Parent

#### Which of the following, if any, do you have in your home?

(Randomize)

1	Cable TV
2	Satellite TV
3	A way to connect your TV to the Internet so you can stream shows or movies (such as a "smart TV", a Roku, or a FireStick)
4	An HD Antenna so you can watch TV networks over the air without cable
5	A digital video recorder (DVR) so you can record shows and watch them later
6	A subscription to a streaming service like Netflix, Amazon Prime, or Hulu

BASE: IF P1=6 (has subscription service)

### P2. Which of the following video subscription services do you have?

1	Netflix
2	Amazon Prime
3	Hulu
4	Other subscription video streaming service [anchor]

## P3. What type of internet service, if any, do you have at your home? Only think about internet service other than the data plan you might have on a phone or mobile device.

1	No home internet service
2	High speed internet (cable, satellite, DSL, fiber optic, etc)
3	Dial-up telephone connection (connect computer or laptop to home phone line)
4	Other type of internet connection
5	Don't know

### Child

### Q1. Which of the following items do you or someone else in your family have in your home?

(Randomize)

1	Television set
2	Tablet (such as iPad, Galaxy Tab, Microsoft Surface, Kindle Fire, or similar)
3	Smartphone (such as iPhone, Galaxy, or other phone that connects to the Internet)
4	Video game player (such as X-Box, Wii, Switch, or Playstation)
5	iPod Touch (can take pictures, play games, use apps)
6	e-reader (such as Kindle or Nook)
7	Desktop computer
8	Laptop computer
9	A voice-activated smart speaker (such as an Amazon Echo, Apple HomePod, or Google Home)
10	A Virtual Reality (VR) headset (such as Oculus Rift, Google Cardboard, or PlayStation VR)
11	None of the above

BASE: IF Q1=2 or 3 or 5 or 6 or 8

### Q2. Which of the following items do YOU PERSONALLY have?

(Not one that belongs to someone else in your house.) (Hold order from Q1)

1	[IF Q1=2] Tablet
2	[IF Q1=3] Smartphone
3	[IF Q1=5] iPod Touch (can take pictures, play games, use apps)
4	[IF Q1=6] e-reader (such as Kindle or Nook)
5	[IF Q1=8] Laptop
6	A smart watch (a watch that you can get texts on)
7	None of the above

BASE: IF Q1 NE 2 or 3 or 5 or 6 or 8

### Q2A. Do you personally have a smart watch (a watch that you can get texts on)?

1	Yes
2	No

BASE: IF Q2=2 (have own smartphone)

### Q3. How old were you when you got your first smartphone?

### Q4. How often do you do each of the following activities?

(Randomize; keep d, e, and f together and show in order f, e, d; keep g and h together).

#### Responses:

#### Items:

1	Every day	а	Use a computer for homework (laptop or desktop) [anchor]
2	At least once a week	b	Use a computer for something other than school or homework (laptop or desktop) [anchor]
3	At least once a month	С	Use social media (such as Snapchat, Instagram, or Facebook)
4	Less than once a month	d	Play computer games
5	Never	е	Play video games (such as on an X-Box, Switch, DS, Wii, or Playstation)
		f	Play mobile games (on a phone or tablet)
		g	Watch TV
		h	Watch videos online (such as on YouTube or Twitch)
		i	Listen to music
		j	Read for your own enjoyment (not for school or homework) (such as books, e-books, magazines, online articles)
		k	Use a Virtual Reality headset
		I	Ask questions or give commands to a voice activated smart speaker (such as Amazon Echo, Apple HomePod, or Google Home)
		m	Shop or browse for things you want to buy online

BASE: IF Q4c=1-4; if ever use social media

### Q5. How old were you when you first starting using social media (such as Snapchat, Instagram, or Facebook)?

### Q6. Which of the following do you use?

(Randomize; always keep item 1 before item 2)

1	YouTube			
2	YouTube Kids			
3	Twitch			
4	Netflix			
5	Amazon Prime Video			
6	Hulu			
7	Other video sites [anchor]			
8	None of the above [anchor]			

#### **Q7.** Which do you use the most? (Show in same order as Q6)

-1	
l	[IF Q6=1] YouTube
2	[IF Q6=2] YouTube Kids
3	[IF Q6=3] Twitch
4	[IF Q6=4] Netflix
5	[IF Q6=5] Amazon Prime Video
6	[IF Q6=6] Hulu
7	[IF Q6=7] Other video sites

## Q8. This next question is about what you did YESTERDAY. We want to know whether you did any of the following activities yesterday. Which of the following activities, if any, did you do YESTERDAY?

(Randomize; always show items 1–4 first and keep together in a group)

1	[IF Q4b=1-4] Use a computer for something other than school or homework
2	Use a tablet
3	Use a smartphone
4	Use an iPod Touch
5	[IF Q4e=1-4] Play video games on a console or portable player (such as X-Box, Wii, Switch, DS, Playstation)
6	Watch DVDs
7	[IF Q4g=1-4] Watch TV on a TV set
8	Go to the movies in a movie theater
9	Write something, such as a story, article, poem or blog (just for fun, not for school or homework)
10	None of the above [anchor]

BASE: IF Q8=9 (write something)

## Q9. When you wrote a story, article, poem, blog, or similar item yesterday (not for school or homework), what did you use to write it?

1	[IF Q8=1] Computer
2	[IF Q8=2] Tablet
3	[IF Q8=3] Smartphone
4	Wrote it by hand
5	Other

BASE: IF Q4j=1-4

## Q10. Did you spend any time reading for your own enjoyment yesterday, not for school or homework? (Such as books, magazines, online articles, poems, newspapers or e-books)

1	Yes
2	No

### Q11. Which of the following did you read for your own enjoyment yesterday? Do not include anything you read for school or homework.

(Randomize; keep items 1, 2, together in a group and always show in order 1, 2)

1	Print books
2	Electronic books, on an e-reader, tablet, or smartphone
3	Online articles, stories, poems, news, or blogs (on a computer, tablet, or smartphone)
4	Magazines (in print)
5	Newspapers (in print)

BASE: If Q4i= 1-4 (ever listen to music)

#### Q12. Did you listen to music yesterday?

1	Yes	
2	No	

BASE: IF Q12=1 (yes)

Responses:

#### **Q13.** Which of the following ways did you listen to music yesterday: (Randomize)

1	[IF Q8=1] On a computer
2	[IF Q8=2] On a tablet
3	[IF Q8=3] On a smartphone
4	On an iPod or other MP3 player
5	On the radio (including while riding in a car)
6	Through a voice-activated device such as Amazon Echo, Apple HomePod or Google Home
7	Other [anchor]

BASE: IF any items selected among the following: Q8=1, 2, 3, 4

## Q14. Which of the following activities did you do for fun yesterday (not for school or homework)? Select all the devices on which you did each activity. If you didn't do an activity, select "Didn't do."

(Randomize and record response order; always show e and f together)

Items:

1	[IF Q8=1] On a computer	а	[IF Q4C=1-4] Use social media (such as SnapChat, Instagram, or Facebook)
2	[IF Q8=2] On a tablet	b	[IF Q4D OR Q4F=1-4] Play games
3	[IF Q8=3] On a smart-phone	С	Browse websites
4	[IF Q8=4] On an iPod Touch	d	Video chat (such as Skype or Face Time)
5	Didn't do	е	[IF Q4H=1-4] Watch videos online, such as on YouTube or Twitch
		f	Watch TV shows or movies online (such as on Hulu, Netflix, or Amazon Prime Video)
		g	Make your own art or music (such as painting, graphics, photo or video editing, making digital music)
		h	[IF 011=3] Read online (such as articles, stories, news, or blogs)

email, coding, or using other apps) [anchor]

Anything else (don't count texting, but do count anything else such as shopping,

## Q15. Now we'd like to know how much TIME you spent doing each activity YESTERDAY. Thinking JUST ABOUT YESTERDAY, how much time did you spend doing each of the following:

(Randomize; prompt: "If you did not spend any time yesterday on the activities listed, please enter 0 in the number boxes;" hard prompt if they enter more than 24 hours per item.)

а	[IF Q8=7] Watching TV on a TV set
b	[IF Q8=6] Watching DVDs
С	[IF Q8=5] Playing video games on a console or portable player (such as a Wii, X-Box, Twitch, DS, or Playstation)
d	[IF Q13=4] Listening to an iPod or other MP3 player (besides a phone or tablet)
е	[IF Q13=5] Listening to the radio
f	[IF Q13=6] Listening to music through a voice-activated device such as an Amazon Echo, Apple HomePod, or Google Home
g	[IF Q11=1] Reading books in print (for something other than school or homework)
h	[IF Q11=2] Reading e-books, on an e-reader, tablet, or phone (for something other than school or homework)
i	[IF Q11=4] Reading print magazines (for something other than school or homework)
j	[IF Q11=5] Reading print newspapers (for something other than school or homework)

BASE: IF Q8=1 and (any of Q14a to Q14i=1 or Q13=1 or Q9=1)

## Q16. Still thinking just about what you did yesterday, how much time did you spend USING A COMPUTER for something other than school or homework:

(Randomize; prompt: "If you did not spend any time yesterday on the activities listed, please enter 0 in the number boxes;" hard prompt if they enter more than 24 hours per item.)

а	[IF Q14 a = 1] Using social media on a computer (such as SnapChat, Instagram, or Facebook)
b	[IF Q14 b=1] Playing computer games
С	[IF Q14 c=1] Browsing websites on a computer
d	[IF Q14 d =1] Video chatting on a computer (such as Skype or Face Time)
е	[IF Q14e=1] Watching videos on a computer, such as on YouTube or Twitch
f	[IF Q14 f=1] Watching TV shows or movies on a computer (such as on Hulu or Netflix)
g	[IF Q13=1] Listening to music on a computer (such as through Spotify, iTunes, or Amazon Music)
h	[IF Q14 g =1] Making your own art or music (such as painting, graphics, photo or video editing, making digital music)
i	[IF Q14 h = 1] Reading articles, stories, news, or blogs on a computer (not for school)
j	[IF Q9=1] Writing something on a computer like a story, diary, blog, poem, or article (not for school)
k	[IF Q14_i=1] Doing anything else on the computer (such as shopping, email, coding)

### Q17. Continuing to think just about what you did yesterday, how much time did you spend using A TABLET for something other than school or homework:

(Randomize; prompt: "If you did not spend any time yesterday on the activities listed, please enter 0 in the number boxes;" hard prompt if they enter more than 24 hours per item.)

а	[IF Q14 a = 2] Using social media on a tablet (such as SnapChat, Instagram, or Facebook)
b	[IF Q14 b=2] Playing games on a tablet
С	[IF Q14 c=2] Browsing websites on a tablet
d	[IF Q14 d =2] Video chatting on a tablet (such as Skype or Face Time)
е	[IF Q14e=2] Watching videos on a tablet, such as on YouTube or Twitch
f	[IF Q14f=2] Watching TV shows or movies on a tablet (such as on Hulu or Netflix)
g	[IF Q13=2] Listening to music on a tablet (such as through Spotify, iTunes, or Amazon Music)
h	[IF Q14g =2] Making your own art or music on a tablet (such as painting, graphics, photo or video editing, making digital music)
i	[IF Q14h = 2] Reading articles, stories, news, or blogs on a tablet (not for school)
j	[IF Q9=2] Writing something on a tablet like a story, diary, blog, poem, or article (not for school)
k	[IF Q14i=2] Doing anything else on a tablet (such as shopping, using other apps, email, etc.)

BASE: IF Q8=4 and (Q14a-i=4)

#### Q18. Still thinking about yesterday, how much time did you spend using AN IPOD TOUCH:

(Randomize; prompt: "If you did not spend any time yesterday on the activities listed, please enter 0 in the number boxes;" hard prompt if they enter more than 24 hours per item.)

а	[IF Q14 a = 4] Using social media on an iPod Touch (such as SnapChat, Instagram, or Facebook)						
b	[IF Q14 b=4] Playing games on an iPod Touch						
С	[IF Q14 c=4] Browsing websites on an iPod Touch						
d	[IF Q14 d =4] Video chatting (such as on Skype or Face Time)						
е	[IF Q14e=4] Watching videos, such as on YouTube or Twitch						
f	[IF Q14 f=4] Watching TV shows or movies (such as on Hulu or Netflix)						
g	[IF Q14 g =4] Making your own art or music (such as painting, graphics, photo or video editing, making digital music)						
h	[IF Q14 h = 4] Reading articles, stories, news, or blogs (not for school)						
i	[IF Q14_i=4] Doing anything else (such as using other apps, etc.)						

#### Q19. Finally, how much time did you spend using A SMARTPHONE yesterday:

(Randomize; prompt: "If you did not spend any time yesterday on the activities listed, please enter 0 in the number boxes;" hard prompt if they enter more than 24 hours per item.)

а	[IF Q14a = 3] Using social media on a smartphone (such as SnapChat, Instagram, or Facebook)							
b	Q14b=3] Playing games on a smartphone							
С	[IF Q14c=3] Browsing websites on a smartphone							
d	F Q14d =3] Video chatting on a smartphone (such as Skype or Face Time)							
е	[IF Q14e=3] Watching videos on a smartphone, such as on YouTube or Twitch							
f	[IF Q14f=3] Watching TV shows or movies on a smartphone (such as on Hulu or Netflix)							
g	[IF Q13=3] Listening to music on a smartphone (such as through Spotify, iTunes, or Amazon Music)							
h	[IF Q14g =3] Making your own art or music (such as painting, graphics, photo or video editing, making digital music)							
i	[IF Q14h = 3] Reading articles, stories, news, or blogs on a smartphone (not for school)							
j	[IF Q9=3] Writing something on a smartphone like a story, diary, blog, poem, or article (not for school)							
k	[IF Q14i=3] Doing anything else on a smartphone (don't count texting, but do count time spent on other activities such as shopping, email, getting directions, or using other apps)							

BASE: IF age 11- to 18 and Q15a>0 (Q15 provided a response, not missing and not refused)

## Q20. You said you spent about [INSERT TIME FROM Q15a] watching TV or movies on a television set yesterday. About how much of that time, if any, did you spend watching:

(Randomize; hard prompt if they enter more than 24 hours per item)

а	Programs that were recorded earlier on a DVR
b	Programs you watched through On Demand (on a cable or satellite system)
С	Programs you watched on a TV through a subscription service such as Netflix, Amazon Prime, or Hulu (not on a laptop, computer, smartphone, or tablet)

## Q21. Still thinking just about yesterday, about how many text messages, if any, did you send? Your best guess is fine. If you did not send any text messages yesterday, please enter 0.

BASE: IF Q4a=1-4 or Q8=2 or Q8=3

#### **Q22.** Thinking just about yesterday, did you do any of the following? (Randomize)

1	4a=1-4] Use a computer for homework						
2	[IF Q8 = 2] Use a tablet for homework						
3	[IF Q8=3] Use a smartphone to do homework (for something other than texting or talking about homework)						
4	None of the above [anchor]						

#### BASE IF Q22=1-3

#### Q23. Thinking just about yesterday, how much TIME did you spend doing each activity?

а	[IF Q22=1] Using a computer for homework					
b	b [IF Q22=2] Using a tablet for homework					
С	[IF Q22=3] Using a smartphone for homework					

## Q24. How often, if ever, do you:

Responses: Items: (Randomize)

1	Often	а	Q4A OR B = 1-4] Write computer programs (code)			
2	Sometimes	b	Create digital art or graphics on a computer, tablet, or smartphone			
3	Hardly ever	С	ake digital music on a computer, tablet, or smartphone (don't count times you just listen to music)			
4	Never	d	Write things for your own pleasure, such as stories, articles, poems, or blogs			
		е	[IF Q4H = 1-4] Watch videos about how to do something you need to know for school			
		f	[IF Q4H = 1-4] Watch videos about how to make, build, or do something you are interested in			
g [IF Q4D, E, OR F = 1-4] Create or modify ("mod") video or computer games		[IF Q4D, E, OR F = 1-4] Create or modify ("mod") video or computer games				

BASE: Q4c-i=1-4 OR Q24a-g=1-3

### Q25. How much do you ENJOY doing each of the following activities?

Responses:	Items: (Randomize)

The state of the s					
1	A lot	а	FQ4j=1-4] Reading		
2	Somewhat	b	FQ4g=1-4] Watching TV		
3	Only a little	С	[IF Q4h=1-4] Watching videos online (such as on YouTube or Twitch)		
4	Not at all	d	[IF Q4c=1-4] Using social media (such as SnapChat, Instagram, or Facebook)		
		е	[IF Q4i=1-4] Listening to music		
		f	[IF Q4e=1-4] Playing video games		
		g	[IF Q4d=1-4] Playing computer games		
		h	[IF Q4f=1-4] Playing mobile games (on a tablet or smartphone)		
		i	[IF Q4K=1-4] Using a VR headset		
		j	[IF Q24a=1-3] Writing computer programs (coding)		
k [		k	[IF Q24c=1-3] Making digital music on a computer, tablet, or smartphone		
[IF Q24d=1-3] Writing t		I	[IF Q24d=1-3] Writing things such as articles, stories, papers, or blogs		
m [IF			[IF Q24g=1-3] Creating or modifying ("modding") games		
n [IF Q24b=1-3] Creating art or graphics on a computer, tablet or smartphone					

### Q26. When you do homework at home how often do you:

Items: (Randomize) Responses:

1	Often	а	IF Q4g=1-4] Have TV on while doing homework				
2	Sometimes	b	Q4c=1-4] Use social media while doing homework				
3	Hardly ever	С	IF Q4i=1-4] Listen to music while doing homework				
4	Never	d	Text while doing homework				
		е	Video chat with friends while doing homework				

## Q27. Do you think doing these activities while you do your homework mainly helps, hurts, or doesn't make a difference to the quality of your work?

Responses:		Items:		
1	Helps	а	[IF Q26a=1 or 2] Having the TV on while doing homework	
2	Hurts	b	[IF qQ26b=1 or 2] Using social media while doing homework	
3	Doesn't make a difference	С	[IF Qq26c=1 or 2] Listening to music while doing homework	
		d	[IF Q26d=1 or 2] Texting while doing homework	
		е	[IF Q26e=1 or 2] Video chatting with friends while doing homework	

BASE: IF Q2=1 or 2 (if have a tablet or smartphone)

### Q28. Do you use an app or other tool to help track the time you spend on your smartphone or tablet?

1	Yes
2	No

BASE: IF Q2=1 or 2 (if have a tablet or smartphone)

#### Q29. As far as you know, do your parents use an app or other tool to:

Responses:		items:		
1	Yes	а	Track how much time you spend on your phone or tablet	
2	No	b	Monitor what you do on your digital devices	

### **About Common Sense**

Common Sense is the nation's leading nonprofit organization dedicated to improving the lives of kids and families by providing the trustworthy information, education, and independent voice they need to thrive in the 21st century. Our independent research is designed to provide parents, educators, health organizations, and policymakers with reliable, independent data on children's use of media and technology and the impact it has on their physical, emotional, social, and intellectual development. For more information, visit www.commonsense.org/research.

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