

The Digital Wellness Lab's Pulse Survey

Adolescent Media Use: Attitudes, Effects, and Online Experiences

Date of Release: August 2022



Boston Children's
Digital Wellness Lab



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL



Boston Children's Hospital



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From Our Director

I am sure it's no surprise to you that teens across the country are almost universally connected. From laptops to smartphones to tablets and video game consoles, adolescents overwhelmingly have access to the world and all of humanity at their fingertips. Few parents, educators, or physicians of today's teens had a similar experience in their childhood. As kids are increasingly living their lives online, adults are scrambling to figure out how to support their healthy development in this new environment.

As parents and educators know, popular online activities can change overnight as new apps or games crop up. Whatever understanding we have about online behaviors and their impacts needs to be constantly revised and modernized. To address this swiftly shifting landscape, the Digital Wellness Lab began administering Pulse Surveys to parents of school-aged children and teens in 2020.

Pulse Surveys supplement our longer-term observational and clinical research on media use effects with nimble design, fast-turnaround results, and a large nationwide sample addressing real-time issues of digital wellness. Our previous surveys explored parental perceptions of trends, benefits, and physical and mental health effects of remote schooling, first cell phones, and online friendships.

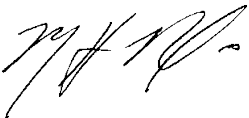
In this, our third full Pulse Survey and the first of 2022, we chose to ask adolescents (ages 13-17) about their connectivity and online activities. We explored their attitudes about interactive media and their perceptions of how use of these media affected their health and wellbeing. We asked about:

- Their media and technology use habits
- How they represent themselves in digital spaces
- How they perceive friendships online
- How their media use makes them feel

Parents and educators may find some of the results surprising: while kids are quite savvy about the potential risks of their online activities, they still have blind spots and report that they like to have boundaries and safety nets provided by the adults in their lives. They shared their perceptions, concerns, and needs in areas including connection, trust, and rules.

What we learned in this survey can help us to address questions about issues with safety, security, wellness, and connectedness in the digital ecosystem, and to offer guidance for a developing metaverse. I invite you to read through the results and to share with us what resonates, what surprises you, and what questions still linger for you. Our Pulse Surveys offer us a window into paths of deeper inquiry and we look forward to the further research we will conduct on behalf of children and the adults who raise them.

Be well and use your media wisely,



Michael Rich, MD, MPH



The Digital Wellness Lab's Pulse Survey

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Table of Contents

Introduction	5
Key Findings	7
Ownership and Use	
Regulation and Tracking	
Perceived Effects	
Social Connections and Online Interactions	
Online Safety	
Summary	20
Methodology	22
Appendix	25
References	
Survey Questions	
Supporters	

Introduction

The vast majority of adolescents in the United States have been engaging with media on a daily basis throughout their youth (Rideout et al., 2022), and many are all but constantly connected to the internet (Anderson & Jiang, 2018). This tool for social engagement affords ample opportunities for young people to interact with peers, learn new skills, pursue interests, and express themselves across multiple platforms. Interactive social media have been shown to bring people together and provide social support (Ceglarek and Ward, 2016; Charmaraman, Hodes and Richer, 2021; Clark, Algoe and Green, 2018; O'Reilly et al., 2022), and some research has reported the cognitive benefits of gaming (Bowen, 2014). Understandably, technology companies are eager to harness these positive elements of their products through continued innovation. Inevitably, however, there are also growing concerns about safety and privacy, as well as evidence supporting the negative impacts that extensive use of media (and especially social media) can have on adolescents' well-being (Harness et al., 2022; Riehm, Feder, & Tormohlen et al., 2019). These concerns surge with the release of every new product, and research on the topic has only scratched the surface in investigating these issues.

Given this level of connectedness and the speed of technological innovation, our understanding of young people's media use and the effects of that use on mental, physical, and social health needs regular updating.

As new online environments and technologies continue to emerge, it is essential that we check in with young people themselves about how they experience interactive media, and how they perceive the impacts of their use of these technologies, for better and worse.

Research Questions

Our previous pulse surveys asked parents about their perceptions of their children's media use. In this survey, we brought our questions to young people themselves, seeking to learn more about how adolescents (ages 13-17) understand their individual media use by asking:

1. How much do adolescents use screen media and how do they feel about this use?
2. What kinds of rules do their families have in place relating to their media use?
3. How do adolescents connect with each other using technology?
4. What are their perceptions of the positive and negative impacts of social media?
5. What types of media activities do they see as being more harmful and more beneficial?

We found, as others have before us, that the adolescents in our study are highly connected and frequent users of major social apps, including YouTube, TikTok, Instagram, and Snapchat. They are digital multitaskers and like to use text messaging and direct messaging functions to connect with their "real life" friends.

Additionally, we learned that the teens in our study are quite savvy about ways to stay safe and maintain privacy online and that they seem to appreciate having boundaries placed on their screen use.

How to Use These Findings

This report offers exciting insights into how adolescents make sense of their media use. It pulls back the curtain on how young people view their individual behaviors and the effects of media on their well-being, and tests the assumption that young people are reckless in their consumption and creation of media. The results of our survey can be used as a jumping off point for parents and caregivers to engage with their child about their media use, highlighting specific areas where more attention should be given. The privacy and safety design features most valued by our sample can also give tech companies an indication of what their users expect from their product. **These data add to the ongoing mission of the Digital Wellness Lab and other research organizations to further our knowledge of the digital world and promote healthier, safer, more meaningful use for young people.**

Note: For figures throughout the report, values may not add up exactly to 100% due to rounding, multiple response options, or skipped question or response choices.



The Digital Wellness Lab's Pulse Survey

Adolescent Media Use: Attitudes, Effects, and Online Experiences

Key Findings

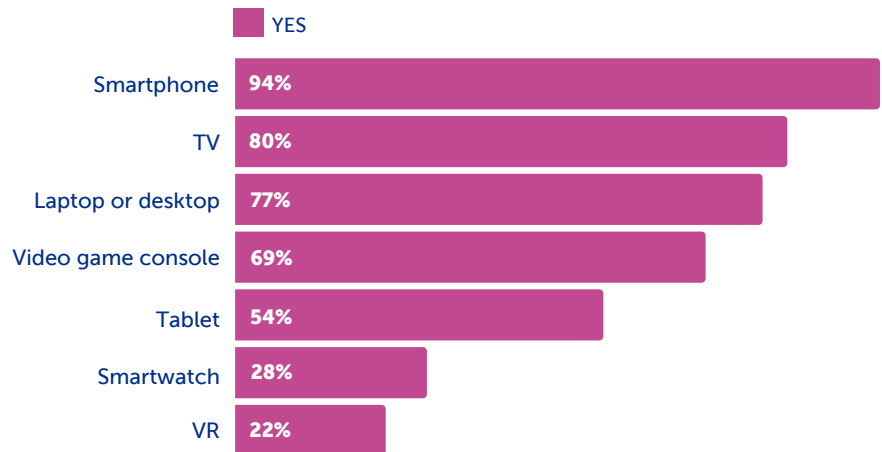


Key Findings: Ownership and Use

DEVICE OWNERSHIP

94% of adolescents reported that they own a smartphone. Perhaps more surprisingly, about 1 in 5 (22%) reported owning a virtual reality headset.

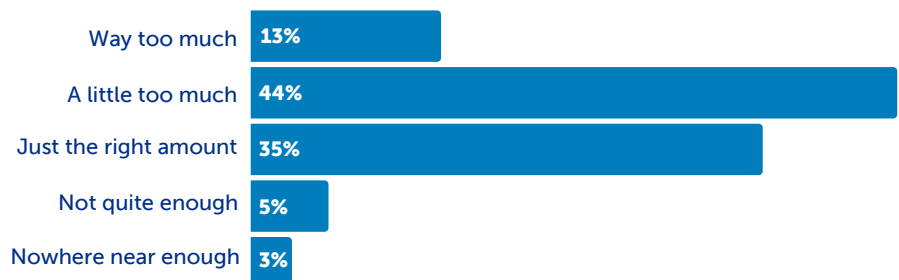
Do you have any of the following devices for your own personal use?



SCREEN TIME

Adolescents reported spending an average of 8.2 hours every day using screen media, and when we asked how they felt about the amount of time, a majority reported that it was a little (44.2%) or way too much time (12.8%). Even so, only 19.7% felt they used media more than their peers did. When we asked what time they stopped using media for the night on a typical weekday, 50.9% responded 11 pm or later.

How do you feel about the amount of time you spend using screen media?

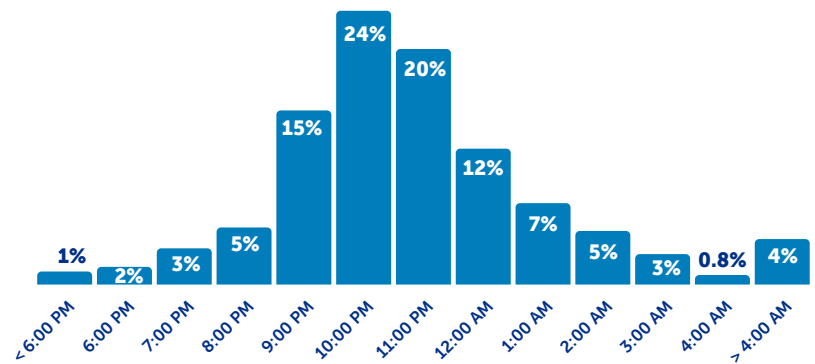


How do you think your screen media use compares to your peers?



SCREEN TIME (CONT.)

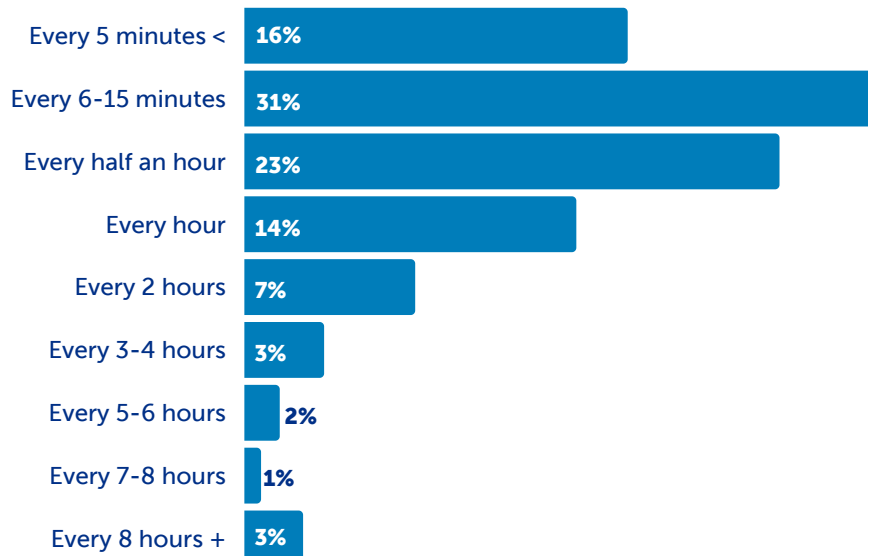
On a typical weekday, about what time do you stop using media for the night?



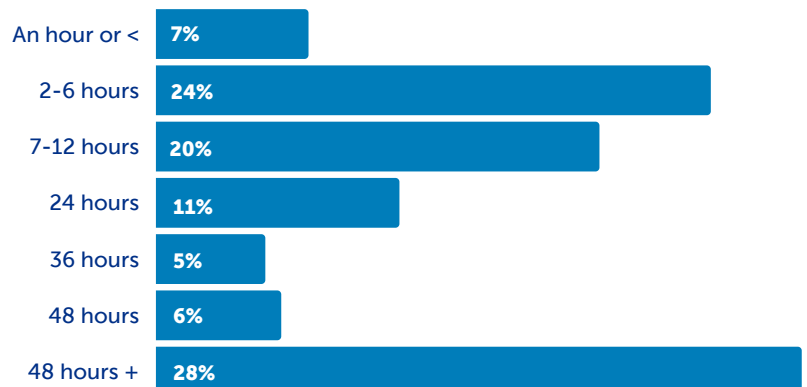
SMARTPHONE USE

To gauge the extent of young people's engagement with their devices, we asked how frequently they check their phone. 47.5% reported checking their phone at least every 15 minutes, with 16.4% saying "every 5 minutes or less." Youth are rarely away from screens for very long; 50% said they had not gone longer than 12 hours without using a screen in the past year. Most youth saw their use as somewhat uncontrolled. Only 17% reported feeling not at all "addicted" to screen media.

About how frequently do you check your phone (not counting when asleep or in school)?

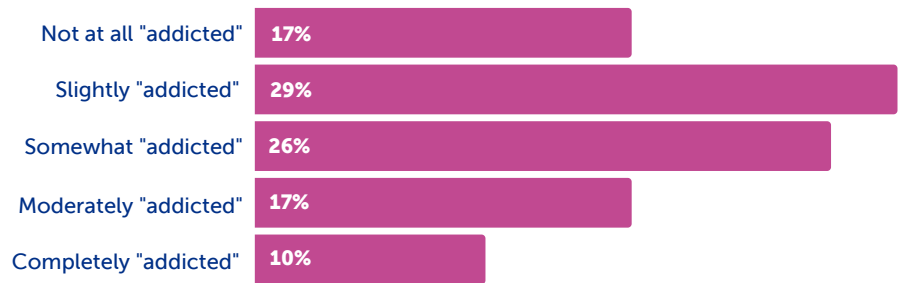


In the past year, what is the longest you have gone without using a screen (not counting when you are asleep)?



SMARTPHONE USE (CONT.)

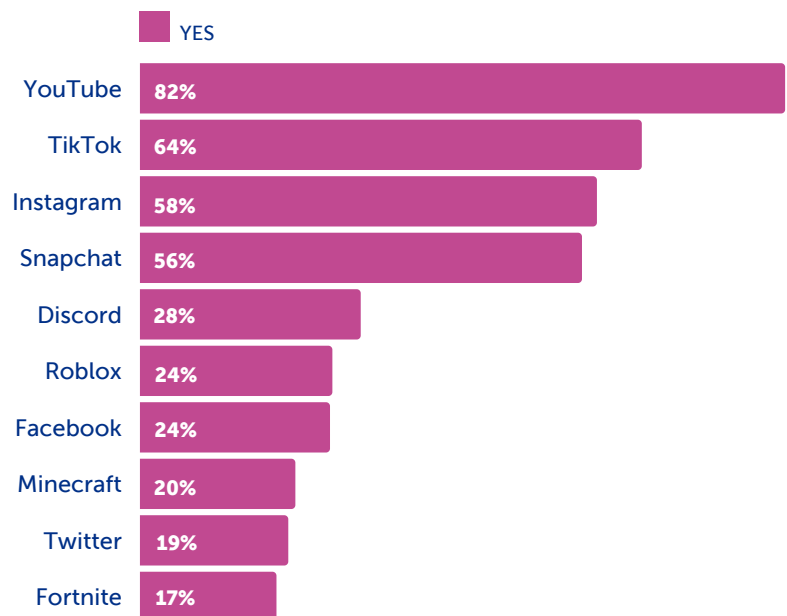
Do you feel like you are "addicted" to screen media?



APP USE

In order to better understand how young people were spending their time using their phone, we provided a list of popular apps and asked which ones they use at least once a day. Adolescents' top four were YouTube (82%), TikTok (64%), Instagram (58%), and Snapchat (56%).

Do you use any of the following at least once a day?

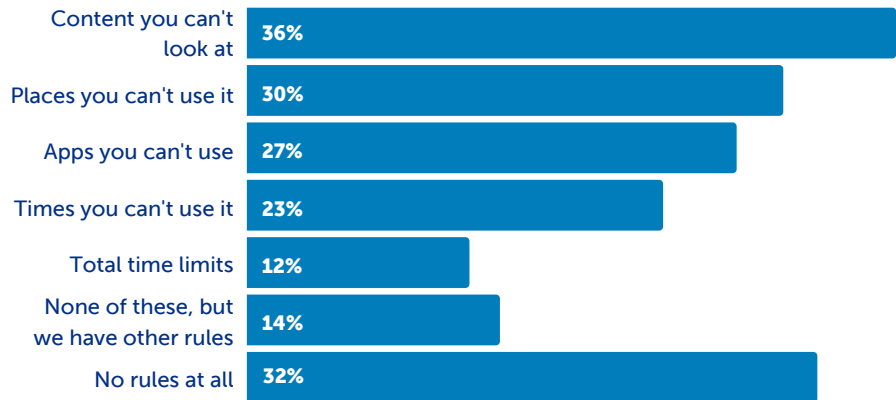


Key Findings: Regulation and Tracking

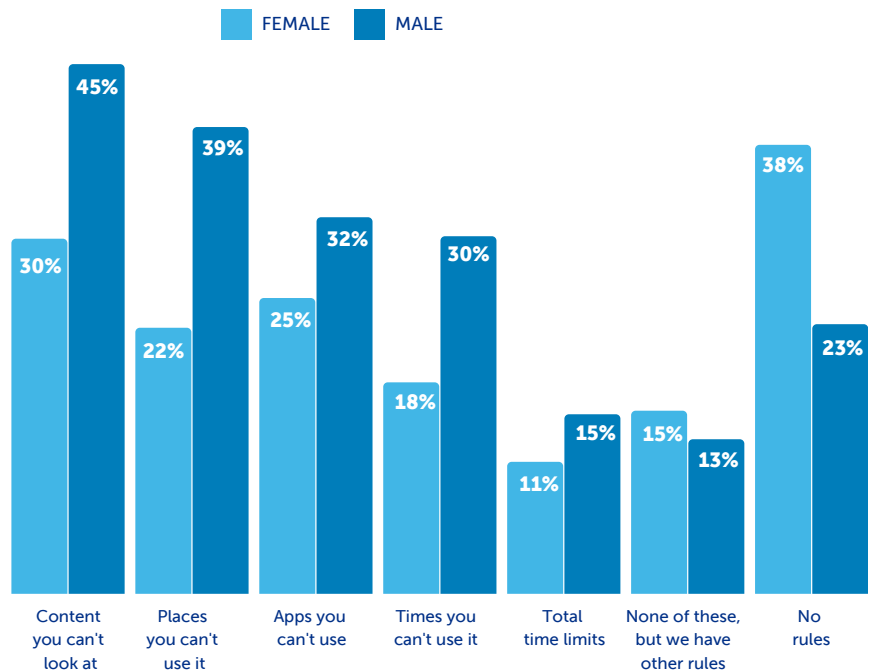
FAMILY RULES

We asked participants what kinds of rules their family has in place about media use. While 31.8% reported having “no rules at all,” the rules participants did have were more focused on limiting content (36.2%) than limiting time (12.4%). More than one-third of females had no rules at all compared to one-fourth of males. Of participants with rules, 49.3% said their parents enforce those rules often (29.4%) or always (19.9%). Those participants generally felt good about those rules. Over half (54.1%) felt that they were “just the right amount of restrictive.”

What rules does your family have about screen media use? (check all that apply)

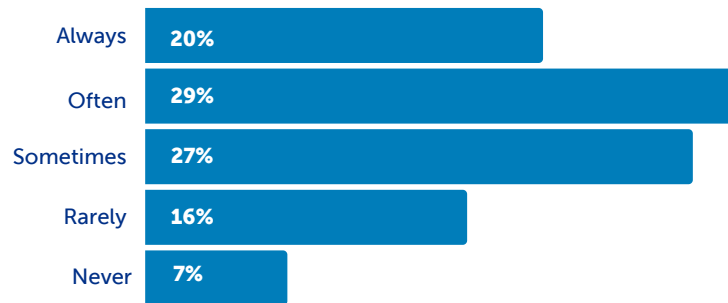


What rules does your family have about screen media use? (check all that apply)



FAMILY RULES (CONT.)

How often do your parents enforce rules about screen media use?



How do you feel about your family's rules about media use?



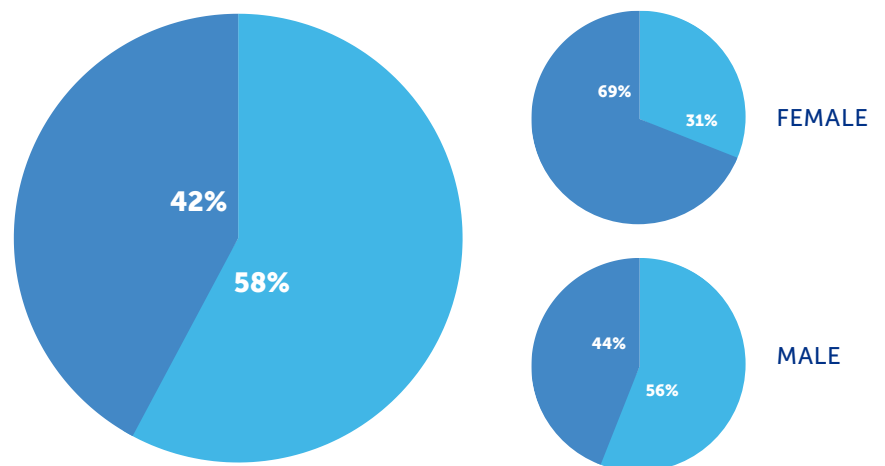
TRACKING USE

We asked participants if they used an app or tool to track how long they use their phone or tablet. 57.8% of participants said yes. App-based trackers were more common for girls (69%) than boys (44%)*.

**The number of respondents identifying as transgender or non-binary was below the reporting threshold.*

Do you use an app or tool on your phone or tablet that tracks how long you use it?

■ YES ■ NO



Key Findings: Perceived Effects of Media Use

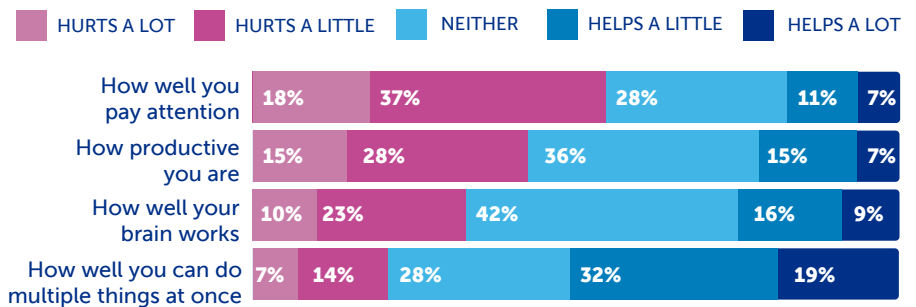
MEDIA MULTITASKING

We wanted to understand not only how adolescents were using media, but what they perceived to be the impacts of their use. Over two thirds of participants reported using multiple devices simultaneously sometimes (38.8%), often (33.2%), or always (7.9%), and said that multitasking with devices hurt productivity (42.5%) and how well they pay attention (54.6%).

When you are using a device, how often are you also using other devices at the same time (for example: watching TV and texting your friends)?



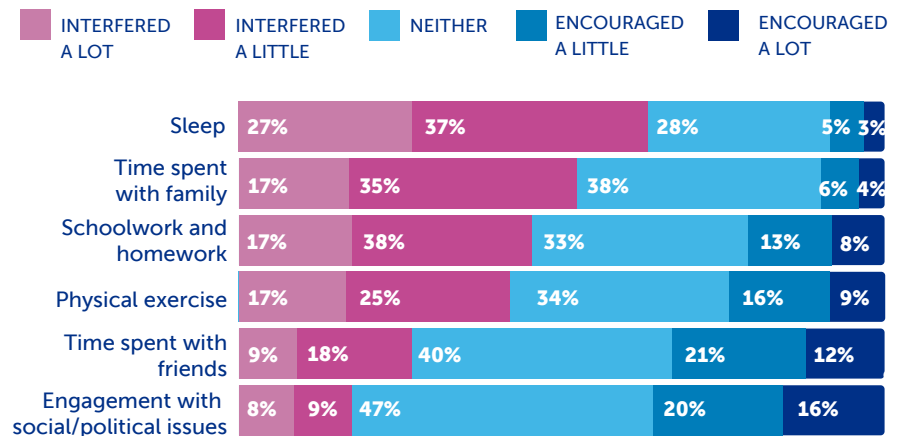
How much do you think using multiple devices at the same time helps/hurts the following?



SCREEN MEDIA AS INTERFERENCE

When asked if screen media use encouraged or interfered with other activities, 63.3% of participants said it interfered with sleep a little or a lot, 52% said it interfered with time spent with family a little or a lot, and 45% said it interfered with schoolwork/homework a little or a lot. Screen media was reported as encouraging time spent with friends (33%) a little or a lot, and engagement with social/political issues (36%) a little or a lot.

In your opinion, has your screen media use encouraged or interfered with the following?



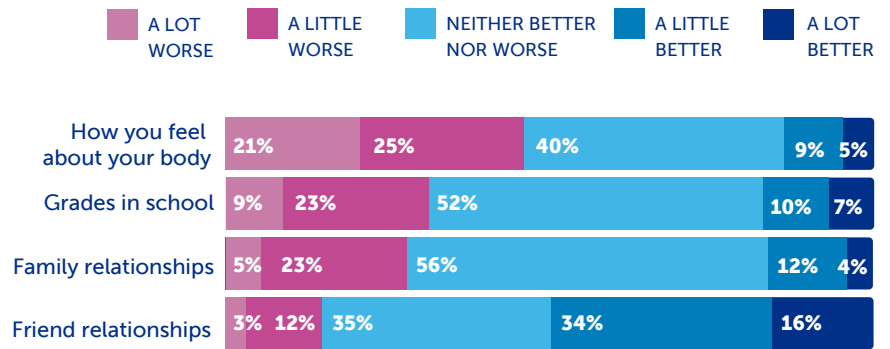
EFFECTS OF SOCIAL MEDIA

We asked participants about the impacts, both positive and negative, of social media. 49.9% reported that social media made friend relationships better, and the vast majority said social media made them feel socially connected (79.4%) and emotionally supported by peers (69%) sometimes, often, or always. Approximately half reported never or rarely feeling lonely or isolated (50%), sad or depressed (54.9%), or like their life is worse than other people's (48.6%). However, participants did think social media made some things worse, including grades in school (31.3%) and body image (46%).

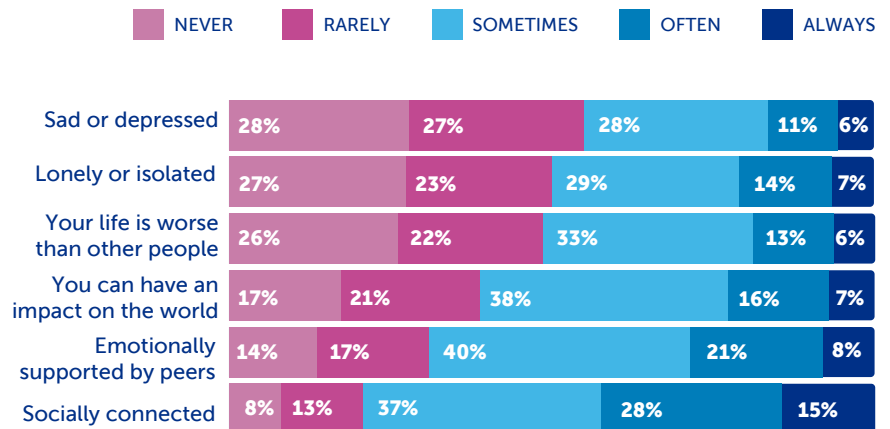
SCREEN USE AND WELL-BEING

Over half of participants reported that specific uses of screen media and specific screen activities were helpful to their overall well-being. This was most true for "using screen media to communicate with friends and peers," with 73% reported as being somewhat (22%) or very (51%) helpful. Even more passive uses of media such as watching movies and browsing social media were seen as beneficial by 50% or more of the participants.

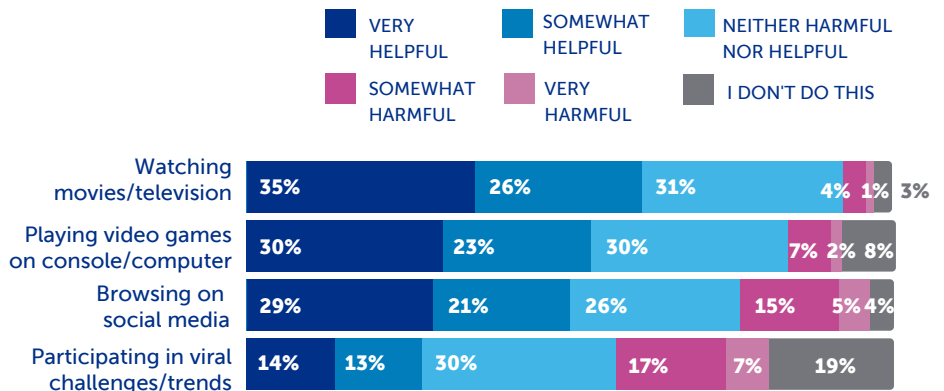
Do you think social media makes each of the following better or worse?



How often does social media make you feel any of the following ways?

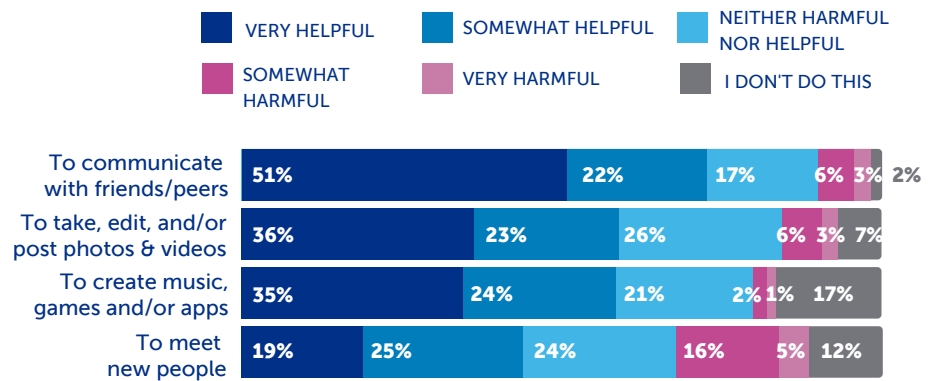


How helpful or harmful are the following activities to your overall well-being (feeling happy, healthy, and safe)?



SCREEN USE AND WELL-BEING (CONT.)

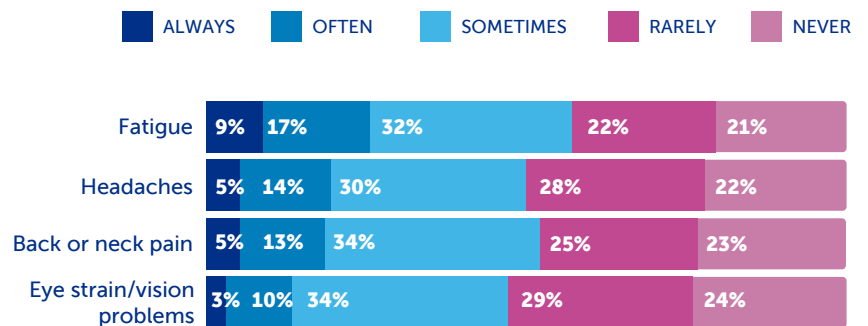
To what extent do you find the following uses of screen media helpful or harmful to your overall well-being (feeling happy, healthy, and safe)?



SCREEN USE AND PHYSICAL SYMPTOMS

We asked adolescents how often they experienced various physical symptoms after a day of media use. Our sample reported experiencing the following sometimes or more frequently: eye-strain or other sight-related problems (47%), headaches (49.9%), back or neck pain (52.1%), and fatigue (57.1%). When we asked respondents who had experienced physical problems if they felt that screen media use was the cause, 39.5% weren't sure ("maybe yes, maybe no"), but 41.8% reported yes, probably (31.3%) or yes, definitely (10.5%). 18.6% doubted that media was the cause.

After a typical day of screen media use, how often do you experience any of the following physical problems?



Do you think your screen media use causes these physical problems for you (eye strain, back/neck pain, headaches, fatigue)?

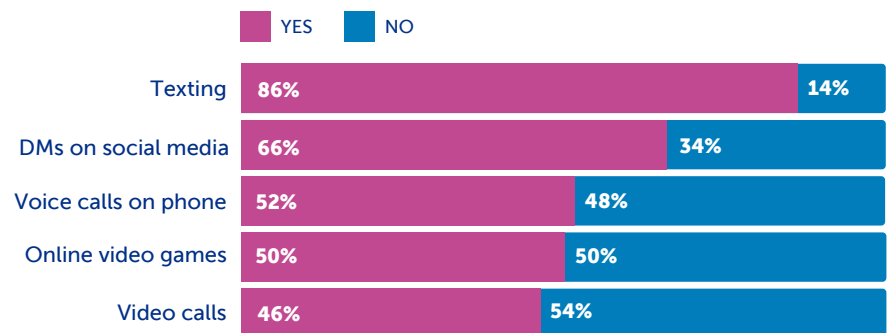


Social Connections and Online Interactions

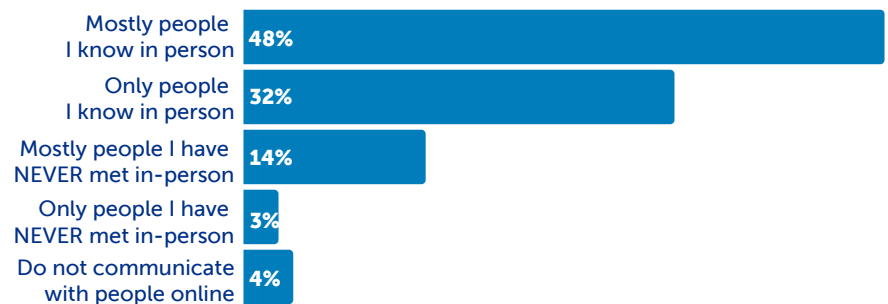
ONLINE CONNECTIONS

Participants reported connecting with their friends daily in a variety of ways, but texting (86%) and direct messaging on social media (66%) were the most popular means of communication. In terms of who they communicate with online, the majority of young people communicate only (32.2%) or mostly (47.9%) with people they know in person. Of the participants who do talk to people online that they've never met in person, most consider at least one or two of them friends. Just about half (49.8%) said they would get together in-person with the friends they met online. While 40% of our sample reported enjoying online and in-person interactions equally, 46.6% reported mostly (20.9%) or strongly (25.7%) preferring in-person interactions.

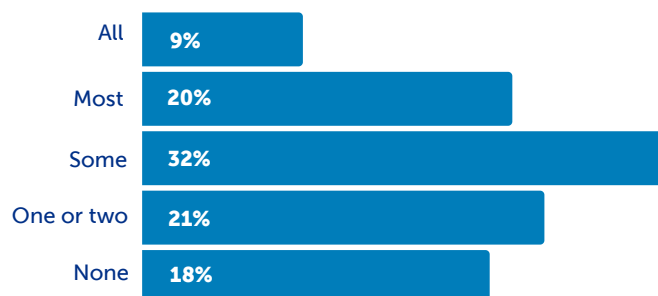
Do you chat, talk, or otherwise connect with friends in the following ways at least once a day?



Which of the following best describes who you communicate with online?

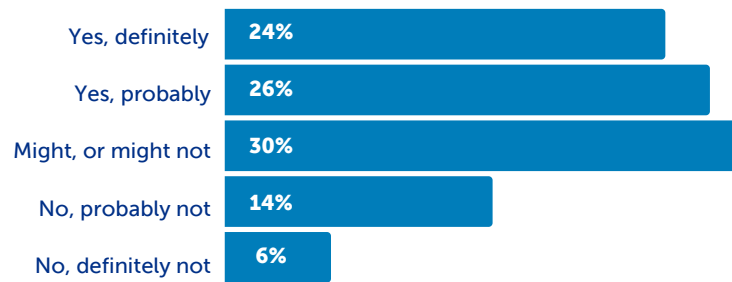


Of the people you talk to online but have never met in person, how many of these people do you think of as friends?

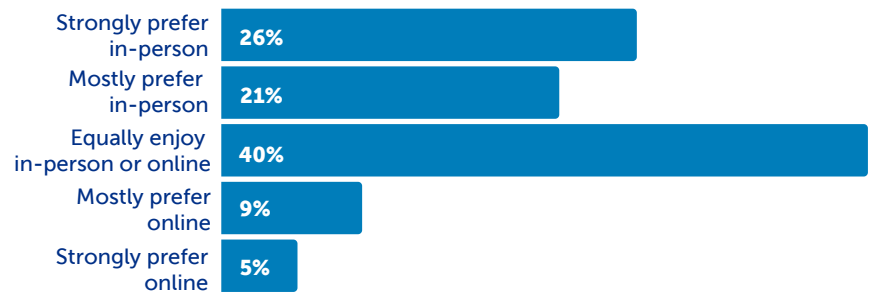


ONLINE CONNECTIONS (CONT.)

Would you ever get together in-person with the friends you met online?



Do you prefer in-person interactions or online interactions?

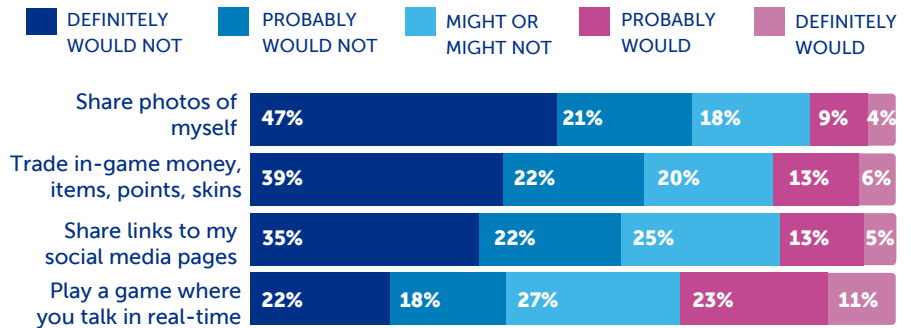


Key Findings: Online Safety

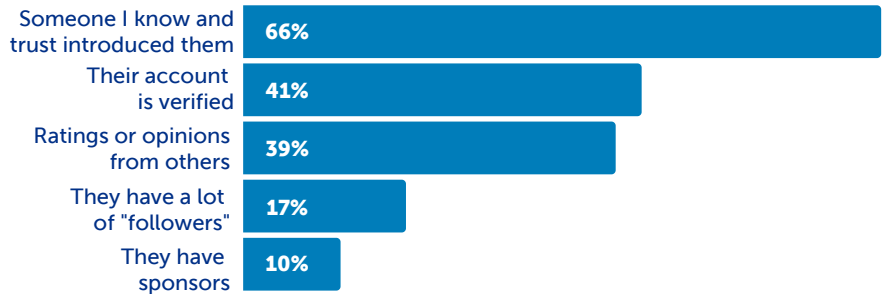
TRUST & SAFETY

Most adolescents in our sample were hesitant to share personal information with strangers online. 68.3% said they probably or definitely would not (20.8%, 47.5%) share photos of themselves with someone they just met online, and 61% said they probably or definitely would not (21.8%, 39.2%) trade in-game currency with a stranger. While 33.6% said they would probably or definitely (10.5%, 22.9%) play a game where they talk to a person they just met online, 39.5% said they wouldn't (18%, 21.5%), and over half (57.3%) said they probably or definitely would not share links to their social media with someone they just met online (22%, 35.3%). When asked what made them trust what someone was saying online, 66.3% said "someone I know and trust introduced me to them" and 41.4% valued account verification (e.g., the "blue badge").

Would you do each of the following with someone you just met online?



What makes you trust what someone is saying online? (check all that apply)



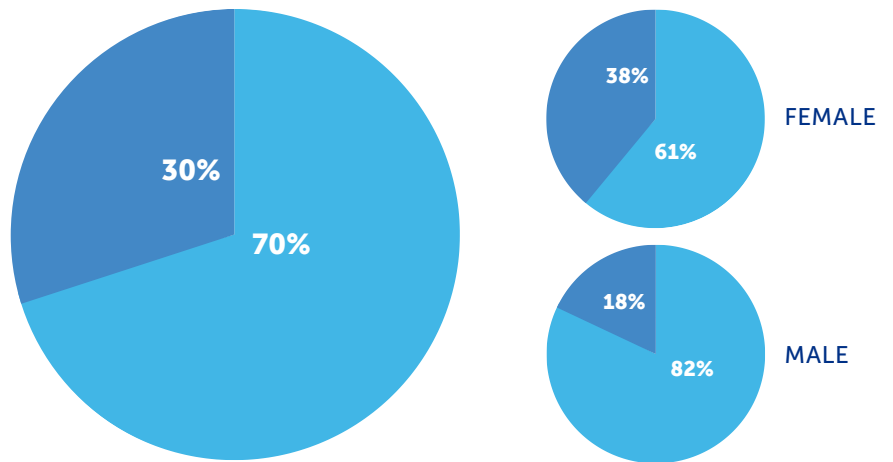
FAKE SOCIAL MEDIA ACCOUNTS

30% of participants reported having ever made a fake social media account. Of those who said yes, making a fake social media account was more common for girls (38%) than boys (18%).*

**The number of respondents identifying as transgender or non-binary was below the reporting threshold.*

Have you ever made a fake social media account (for example: a “finsta”)?

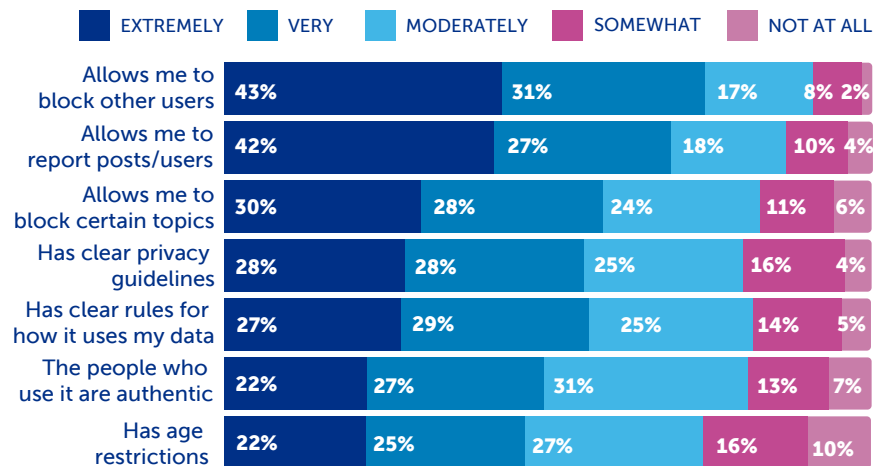
■ YES ■ NO



DESIGN FEATURES FOR ONLINE SAFETY

We asked how important various design features were to helping young people feel safe and secure in these digital contexts, and overwhelmingly the most important features related to exacting agency over who and what they see online and, to a slightly lesser degree, protecting their information. Participants reported the following as very or extremely important: being able to report posts/users (68.7%), block other users (74%), and block certain topics (58%). Clear rules for how a platform uses their data were also very or extremely important (56%).

How important are each of the following in making you feel safe and secure using a social media or gaming platform?





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Summary



Summary

This pulse survey of adolescents provides invaluable insights into how young people perceive their individual media use and its effects, as well as how they understand connecting socially in digital environments.

1. We found, as others have before us, that **youth are always connected**, from using screen media late into the evening to checking their phone multiple times in an hour. Some kids constantly check their phones every 5-15 mins and rarely go without screens.
 - Some think it's a little too much but most see it as similar to what their friends do
 - Daily video viewing (YouTube/TikTok) and connecting socially are most common
 - The use that parents reported was increasing during pandemic is not declining
2. The majority of adolescents seem **okay with the rules they have**. However, many families have no rules about screen time. Those who do, focus more on limiting content than limiting time.
 - Young people are using screen time tracking apps (especially girls)
 - Girls were more likely to have no rules than boys
 - Rules are based on content instead of time
 - Adolescents do not seem too opposed to rules or monitoring
3. Adolescents reported **both positive and negative impacts of media use**. The majority of use seems to be for social connection or entertainment, with their top apps being social media sites and video-viewing platforms. Generally, the youth in our sample feel pretty positive about the impact this use has on their well-being; however, many acknowledged that it interferes with sleep, time with family, and schoolwork, and social media was reported as contributing to worse body image.
 - Youth see their media use as mainly having a positive impact on their well being
 - Social media makes them feel connected but not lonely or sad
 - For many, social media does make them feel worse about their body and interferes with sleep, time with family and school work
 - More negative effects about time displacement than direct impact
4. Adolescents use the internet to **connect to both online and in-person friends**. Adolescents mainly connect with people they already know in-person in online settings, but many do have online friends they've never met face-to-face. Many consider these online connections to be friends, and would meet them in person. However, this does not indicate that young people are cavalier when interacting online with strangers: most would not share photos or links to their social media with a stranger, nor would they trade in-game currency. Youth value the ability to block and report posts and users, and tend to trust online individuals more if someone they already know and trust has introduced them, or they are verified.
 - Adolescents mainly connect with people they know online
 - Many adolescents have friends they have never met in person, and many would probably or definitely meet an online friend in person
 - Most wouldn't share photos or social media links with someone they just met online
 - Trusting someone online comes from having a mutual connection (but a blue check helps)
 - They value the ability to block people and content more than other options



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Methodology



Methodology

The reported findings come from a nationwide online survey of 1,480 adolescents between the ages of 13 and 17 years old. As with the Digital Wellness Lab's previous pulse surveys, participants were recruited through Alchemer, an online research service that partners with over 350 existing survey panels with a total reach of over 437 million users worldwide. Adolescents (13-17) in the United States who had pre-registered with one of these panels were invited to respond.

Quotas for age, gender identity, and race/ethnicity were used to obtain a broadly diverse sample with at least 1 participant from each of the 50 states. The breakdown was as follows:

- By age: 19.3% 13 year olds; 20.1% 14 year olds; 20.3% 15 year olds; 20.2% 16 year olds; and 20.1% 17 year olds
- By gender identity: 41.1% male; 51.4% female; 6.3% other
- By race/ethnicity*: 49.6% White/non-Hispanic; 14.9% Black/non-Hispanic; 5.2% Asian; 19.5% Hispanic/Latino; 2.8% American Indian or Alaskan Native; 0.7% Native Hawaiian or Other Pacific Islander; 0.5% Middle Eastern or North African; 4.5% multi-racial; and 2.3% other
- By grade: Adolescents in middle school (5-8, 27.7%); high school (9-12, 70.6%); and not in school (1.7%)
- By type of school: Public school, including charter schools (82.2%); private school, religious or secular (8.5%); and homeschool (9.3%).

During May and June 2022, participants completed a survey of up to 56 questions asking about their media use, online connections, family media rules and perceived impact of media on well-being, social relationships, how they spend their time, and physical problems. Most questions provided responses on a five-point scale with the mid-point being a neutral option (e.g. a lot worse, a little worse, neither better nor worse, a little better, a lot better). For ease of reporting, at points in this document we have combined the top two options (e.g. "yes, probably" and "yes, definitely") and the bottom two options into a single concept (e.g. "yes"). For questions that used the five-point scale "never, rarely, sometimes, often, always," we sometimes report a percentage that combines the results for "sometimes, often, and always."

The Boston Children's Hospital IRB reviewed and approved this study. Data were collected from April 29 to June 17, 2022. Wording for all the questions as well as associated descriptive statistics are available at <https://digitalwellnesslab.org/research/pulse-surveys>

Parent and Participant Consent. Because this was a fully anonymous survey and recruitment was done through Alchemer, parental consent was waived for this survey. All participants had opted in to the survey network allowing them to be contacted directly about survey opportunities, thus having already provided one layer of consent. Participant consent was obtained at the start of the survey. A passage outlined the details of the survey, risks, compensation information, details about the research team (including contact information), and other relevant information, followed by this language: "By selecting the "next button", you acknowledge that you have read the above statements, that you may withdraw from the study at any time, and that you consent to participate in this study."

Compensation. Participants were compensated by their respective survey company with accrued points based on length of the survey (the amount of points per length is determined by each respective survey company). These points can be “cashed in” for Amazon gift cards, PayPal deposits, upgrades to certain services that they use, or other ways established through the survey company agreement. Compensation systems vary slightly across companies.

Quality Control. “Attention check” questions were placed throughout the survey to ensure that participants were paying attention as they moved through the questions. If a participant answered an attention check question incorrectly, they were disqualified and redirected to an external webpage. Final data were reviewed and cleaned to remove any incomplete and low quality responses.

Rounding. Percentages may not always add up to 100 due to rounding, multiple response options, or because those who skipped a question were not included.

**Note: Respondents who selected multiple categories are counted multiple times. To adjust for this, any respondent who selected “Hispanic” was included in only the Hispanic category. Others who selected multiple choices are included in the “Mixed race” category. This approach results in the above listed mutually exclusive categories.*



Boston Children's
Digital Wellness Lab

The Digital Wellness Lab's Pulse Survey

Adolescent Media Use: Attitudes, Effects, and Online Experiences

Appendix

Appendix: References

- Anderson, M., & Jiang, J. (2018, May 31). Teens, social media and technology 2018. Pew Research Center. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- Bowen, L. (2014, February). Video game play may provide learning, health, social benefits, review finds. *Monitor on Psychology*, 45(2). <https://www.apa.org/monitor/2014/02/video-game>
- Ceglarek, P. J. D & Ward, L. M. (2016). A tool for help or harm? How associations between social networking use, social support, and mental health differ for sexual minority and heterosexual youth. *Computers in Human Behavior*, 65, 201–209. <https://doi.org/10.1016/j.chb.2016.07.051>
- Charmaraman L, Hodes R, Richer AM. (2021) Young Sexual Minority Adolescent Experiences of Self-expression and Isolation on Social Media: Cross-sectional Survey Study. *JMIR Ment Health*, 8(9), e26207. <https://doi.org/10.2196/26207>
- Clark JL, Algoe SB, Green MC. (2018). Social Network Sites and Well-Being: The Role of Social Connection. *Current Directions in Psychological Science*, 27(1), 32-37. <https://doi.org/10.1177/0963721417730833>
- Harness, J., Fitzgerald, K., Sullivan, H., & Selkie, E. (2022). Youth Insight About Social Media Effects on Well/ Ill-Being and Self-Modulating Efforts. *Journal of Adolescent Health*, 71(3), 324-333. <https://doi.org/10.1016/j.jadohealth.2022.04.011>
- O'Reilly, M., Levine, D., Donoso, V., Voice, L., Hughes, J., & Dogra, N. (2022). Exploring the potentially positive interaction between social media and mental health; the perspectives of adolescents. *Clin Child Psychol Psychiatry*, 13591045221106573. <https://doi.org/10.1177/13591045221106573>
- Rideout, V., Peebles, A., Mann, S., & Robb, M. B. (2022). *Common Sense census: Media use by tweens and teens, 2021*. San Francisco, CA: Common Sense.
- Riehm, K. E., Feder, K. A., Tormohlen, K. N., Crum, R. M., Young, A. S., Green, K. M., Pacek, L. R., La Flair, L. N., & Mojtabai, R. (2019). Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth. *JAMA psychiatry*, 76(12), 1266–1273. <https://doi.org/10.1001/jamapsychiatry.2019.2325>

Appendix: Survey Questions

P1. Are you an adolescent between the ages of 13-17 years?

Yes

No

P2. How old are you? (please only use numbers)

13

14

15

16

17

P3. What country do you currently live in?

United States

Outside the United States

P4. What state do you live in?

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

P5. What year were you born?

2004 2006 2008

2005 2007 2009

P6. What grade are you currently in?

5th grade 7th grade 9th grade 11th grade Not in school

6th grade 8th grade 10th grade 12th grade

P7. What kind of school do you attend?

Public school (including charter schools)

Private school (religious or secular)

Homeschool

P8. What is your gender identity?

- Male
- Female
- Other gender identity
- Prefer not to answer

P9. How do you identify? (If P8 is "Other gender identity")

- Non-binary/non-conforming
- Transgender female
- Transgender male
- Unsure/questioning
- Prefer to self-describe
- Prefer not to answer

P10. What is your race/ethnicity? (check all that apply)

- American Indian or Alaskan Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- Middle Eastern or North African
- White
- Other (write-in)
- Prefer not to answer

P11. What language do you primarily speak at home?

- English
- Spanish
- Portuguese
- Mandarin
- Other (write-in)

P12. What is the highest degree of education one of your parents has obtained?

- No degree
- High school degree or GED
- Associate's degree
- Bachelor's degree
- Master's degree
- PhD/MD/JD or other advanced degree
- I'm not sure

Q1. Do you have any of the following devices for your own personal use?

- Yes
- No
- Smartphone
- Tablet
- Video game console or handheld video game system
- Laptop or desktop computer
- Television
- Virtual reality (VR) headset
- Smartwatch

Q2. Which device do you use most often (not counting use for school)?

- Smartphone
- Tablet
- Video game console or handheld video game system
- Laptop or desktop computer
- Television
- Virtual reality (VR) headset
- Smartwatch
- I don't really use any of these device

Q3. Do you use an app or tool on your phone or tablet that tracks how long you use it (for example, Apple Screen Time)?

- Yes
- No

Q4. On a typical day, how many hours do you spend using screen media (for example: smartphone, tablet, tv, etc.)? Give us your best guess!

Less than one hour	5 hours	10 hours	15 hours	20 hours
1 hour	6 hours	11 hours	16 hours	21 hours
2 hours	7 hours	12 hours	17 hours	22 hours
3 hours	8 hours	13 hours	18 hours	23 hours
4 hours	9 hours	14 hours	19 hours	24 hours

Q5. How do you feel about the amount of time you spend using screen media?

- Nowhere near enough time
- Not quite enough time
- Just the right amount of time
- A little too much time
- Way too much time

Q6. How do you think your screen media use compares to your peers?

- I use media A LOT LESS often than my peers
- I use media A LITTLE LESS often than my peers
- I use media THE SAME amount as my peers
- I use media A LITTLE MORE often than my peers
- I use media A LOT MORE often than my peers

Q7. Which app do you use the most?

[write-in]

Q8. This is an attention check question. Please select C as the answer choice.

- A
- C
- D
- B

Q9. About what time do you usually wake up on a weekday?

- | | | | |
|-----------------|---------|----------|----------------|
| 4 am or earlier | 6:30 am | 9 am | 11:30 am |
| 4:30 am | 7 am | 9:30 am | 12 pm or later |
| 5 am | 7:30 am | 10 am | |
| 5:30 am | 8 am | 10:30 am | |
| 6 am | 8:30 am | 11 am | |

Q10. On a typical week day, about what time do you stop using media for the night?

- | | | | |
|-----------------|-------|------|------------|
| 7 pm or earlier | 10 pm | 1 am | 4 am |
| 8 pm | 11 pm | 2 am | After 4 am |
| 9 pm | 12 am | 3 am | |

Q11. Which time do you usually go to sleep (not just get in bed) on a weeknight?

- | | | | |
|-----------------|-------|------|------------|
| 7 pm or earlier | 10 pm | 1 am | 4 am |
| 8 pm | 11 pm | 2 am | After 4 am |
| 9 pm | 12 am | 3 am | |

Q12. Which rules does your family have about screen media use? (check all that apply)

- Rules about total time limits (for example: 1 hour of TV per day)
- Rules about times you can't use it (for example: no phones after 8 pm)
- Rules about places you can't use it (for example: no phones at the dinner table)
- Rules about content you can't look at
- Rules about apps you can't use
- None of these, but we have other rules
- No rules at all

Q13. How often do your parents/caregivers follow these rules themselves? (If Q12 is NOT “No rules at all”)

Always

Often

Sometimes

Rarely

Never

Q14. How often do your parents/caregivers enforce rules about screen media use? (If Q12 is NOT “No rules at all”)

Always

Often

Sometimes

Rarely

Never

Q15. How do you feel about your family’s rules about media use? (If Q12 is NOT “No rules at all”)

They are way too restrictive

They are a little too restrictive

They are just the right amount of restrictive

They are not restrictive enough

They are not at all restrictive enough

Q15. How do you feel about your family’s rules about media use? (If Q12 is NOT “No rules at all”)

They are way too restrictive

They are a little too restrictive

They are just the right amount of restrictive

They are not restrictive enough

They are not at all restrictive enough

Q16. How do you use your smartphone at school?

I don’t use my smartphone at school

I use it, but only for school work

I use it, but only for non-school-related activities

I use it for both schoolwork and non-school related activities

Q17. When you are using a device, how often are you using other devices at the same time (for example: watching TV and texting your friends)?

Never

Rarely

Sometimes

Often

Always

Q18. How much do you think using multiple devices at the same time helps or hurts the following?

	Hurts a lot	Hurts a little	Neither hurts nor helps	Helps a little	Helps a lot
How productive you are?					
How well you pay attention?					
How well your brain works?					
How well you can do multiple things at once?					

Q19. About how frequently do you check your phone (not counting when you are asleep or at school)?

- | | |
|-------------------------|-----------------------|
| Every 5 minutes or less | Every 3-4 hours |
| Every 6-15 minutes | Every 5-6 hours |
| Every half an hour | Every 7-8 hours |
| Every hour | Every 8 hours or more |
| Every 2 hours | |

Q20. In the past year, what is the longest you've gone without using a screen (not counting when you are asleep)?

- An hour or less
- 2-6 hours
- 7-12 hours
- 24 hours
- 36 hours
- 48 hours
- More than 48 hours

Q21. To what extent do you find the following uses of screen media helpful or harmful to your overall well-being (feeling happy, healthy, and safe)?

	Very harmful	Somewhat harmful	Neither harmful nor helpful	Somewhat helpful	Very helpful	I don't do this
Using screen media to communicate with friends/peers						
Using screen media to meet new people						
Using screen media to take, edit, and/or post photos/videos						
Using screen media to create music, games, and/or apps						

Q22. How helpful or harmful are the following activities to your overall well-being (feeling happy, healthy, and safe)? well-being (feeling happy, healthy, and safe)?

	Very harmful	Somewhat harmful	Neither harmful nor helpful	Somewhat helpful	Very helpful	I don't do this
Browsing on social media						
Playing video games on a console or computer						
Participating in viral challenges/ trends						
Watching movies/television						

Q23. Do you feel like you're "addicted" to screen media?

Not at all "addicted"

Slightly "addicted"

Somewhat "addicted"

Moderately "addicted"

Completely "addicted"

Q24. Do you use any of the following at least once a day?

	Yes	No
Roblox		
Minecraft		
TikTok		
Instagram		
Snapchat		
YouTube		
Twitter		
Facebook		
Discord		
Fortnite		

Q25. In your opinion, has your screen media use encouraged or interfered with the following?

	Screen media use has interfered a lot	Screen media use has interfered a little	Screen media use has neither interfered nor encouraged	Screen media use has encouraged a little	Screen media use has encouraged a lot
Physical exercise					
Sleep					
Time spent with family					
Time spent with friends					
Engagement with social/political issues					
Schoolwork/homework					

Q26. After a typical day of screen media use, how often do you experience any of the following physical problems?

	Never	Rarely	Sometimes	Often	Always
Eye strain or other other eye-sight related problems					
Back or neck pain or related problems					
Headaches					
Fatigue (tiredness)					

Q27. Do you think your screen media use causes these physical problems for you (eye strain, back/neck pain, headaches, fatigue)?

Yes, definitely

Yes, probably

Maybe yes, maybe no

No, probably not

No, definitely not

Q28. Do you think social media makes each of the following better or worse?

	A lot worse	A little worse	Neither better nor worse	A little better	A lot better
Family relationships					
Friend relationships					
How you feel about your body					
Grades in school					

Q29. How often do social media make you feel any of the following ways?

	Never	Rarely	Sometimes	Often	Always
Emotionally supported by peers					
Sad or depressed					
Like your life is worse than other peoples'					
Like you can have an impact on the world					
Socially connected					

Q30. This is an attention check question. Please select 7 as the answer choice.

One 4 7 Fifteen

Q31. How frequently do you have in-person get-togethers or dates (outside of school or other extracurricular activities) with friends?

More than once a day Less than once a week
 About once a day Less than once a month
 A few times a week Never

Q32. Do you chat, talk, or otherwise connect with friends in the following ways at least once a day?

	Yes	No
Playing video games online		
Video calls		
Texting		
Direct messaging on social media		
Voice calls over the phone		

Q33. Which of the following best describes who you communicate with online?

I only communicate with people I have NEVER meet in person
 I mostly communicate with people I have NEVER meet in person
 I mostly communicate with people I know in person
 I only communicate with people I know in person
 I do not communicate with people online

Q34. Of the people you talk to online but have never met in person, how many of these people do you think of as friends? (If Q33 is NOT "I only communicate with people I know in person" or I do not communicate with people online")

All of them
 Most of them
 Some of them
 One or two of them
 None of them

Q35. What makes them your friends? (check all that apply) (If Q34 is NOT “None of them”)

I can communicate freely/share secrets/be myself with them

We share common interests (playing video games, music)

They teach me things

They are cool/interesting

They’re a good person (kind, respectful, honest)

Other (write-in)

Q36. How do you typically connect with online friends you have never met in person? (If Q34 is NOT “None of them”)

Direct messages in social media

Texting (phone or app-based)

Phone calls

Video calls

Email

Discord

Reddit

Other (write-in)

Q37. Would you ever get together in-person with the friends you met online? (If Q34 is NOT “None of them”)

Yes, I definitely would

Yes, I probably would

I might or might not

No, I probably would not

No, I definitely would not

Q38. Would you do each of the following with someone you just met online?

	I definitely would	I probably would	I might or I might not	I probably would not	I definitely would not
I would share links to my social media pages with someone I just met online					
I would share photos of myself with someone I just met online					
I would play a game where you talk to the person in real-time with someone I just met online					
I would trade in-game money /items/points/skins with someone I just met online					

Q39. Would you do each of the following with someone you just met online?

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
It allows me to block other users					
It allows me to report posts/users					
It allows me to block certain topics					
It has clear privacy guidelines					
It has clear rules for how it uses my data					
The people who use it are authentic					
It has age restrictions (kids under a certain age can't use it)					

Q40. What makes you trust what someone is saying online? (check all that apply)

- They have sponsors
- They have a lot of "followers"
- Ratings or opinion from others
- Someone I know and trust introduced them to me
- Their account is verified (for example: has a blue badge)

Q41. Have you ever made a fake social media account (for example: a "finsta")?

Yes No

Q42. Do you prefer in-person interactions or online interactions?

- I strongly prefer in-person interactions
- I mostly prefer in-person interactions
- I enjoy online and in-person interactions equally
- I mostly prefer online interactions
- I strongly prefer online interactions

Q43. Do you think it's more important in online spaces to be truthful about who you are or how you feel?

- Who you are
- How you feel
- Both are equally important
- Neither are important

Q44. Regardless of your answers, did you answer the previous questions to the best of your ability?

- I've answered all questions to my best ability
- I'm not really paying attention
- I'm answering randomly
- None of the above

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Research at The Digital Wellness Lab is made possible through the generosity of individuals, foundations, and corporate supporters.

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Boston Children's Digital Wellness Lab

The Digital Wellness Lab at Boston Children's Hospital and Harvard Medical School seeks to help our children grow up healthy, smart, and kind in today's immersive digital environment.

The Digital Wellness Lab is made up of a dynamic and collaborative team of experts and thought leaders from health sciences, tech, academics and entertainment. We are ever-evolving and interested in others becoming part of our mission. See below for some opportunities on how you can get involved in the Lab's work.

BECOME A SUPPORTER

The Digital Wellness Lab convenes supporters from healthcare, technology, media, and entertainment to deepen our understanding and address the future of young people's healthy engagement with media and technology. Our supporters meet regularly to discuss shared issues of importance related to digital wellness. If your organization is interested in becoming involved as a financial supporter, please email us at dwl@childrens.harvard.edu

REQUEST FOR TALKS OR EXPERT PANELISTS

The Digital Wellness Lab has a wealth and breadth of knowledge about topics related to health, development, and interactive media use in the digital age. We would be happy to engage with your organization and stakeholders to present information of relevance to you through training, keynote speeches, and presentations. Please submit requests via our website. If you have questions, email dwl@childrens.harvard.edu

JOIN OUR TEAM

The Digital Wellness Lab at Boston Children's Hospital, the country's top pediatric hospital, is a mission-driven organization dedicated to understanding and promoting wellness in the digital age. We maintain a lean team but anticipate hiring for a number of roles in the coming year. If you are interested in joining the Lab, learn more at digitalwellnesslab.org/get-involved/#join.

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The Digital Wellness Lab can host graduate students and post-doctoral researchers who are interested in learning more about digital wellness topics while leveraging their academic expertise to strengthen our global impact. If you are interested in joining us as a visiting scholar or intern, please email your CV and area of academic interest to dwl@childrens.harvard.edu.

For more information about our work, please contact Cori Stott, Administrative Director, at dwl@childrens.harvard.edu