

Social Media and Adolescent Health

OVERVIEW

Smartphones, access to the internet, and the growing prevalence of social media have transformed how people consume information and interact with the world and each other. Adolescents have grown up with these technologies and are ubiquitous users—95 percent of teenagers in the United States have a smartphone, and almost all of them access the internet every day. As these technologies have become more integrated into our everyday lives, mental health among young people has declined. Social media use is often cited as a reason for this concerning trend.

In response to a request from a coalition of sponsors, the National Academies assembled an expert committee to comment on the relative risks and benefits of various forms of online media and the consequences of their use in adolescence, recommend a strategy to maximize the benefits and minimize the harms associated with social media use, and set out a research agenda to help clarify how social media use influences physical and mental health.

The committee's report, *Social Media and Adolescent Health*, contains its analysis and recommendations. The committee's review of published literature did not support the conclusion that social media causes changes in adolescent health at the population level. The report also notes that the use of social media—rather than having purely negative or positive impacts—is likely a constantly shifting calculus of the risky, the beneficial, and the mundane that affects different people in different ways. Due to the lack of robust evidence on the relationship between social media use and health outcomes, the committee proposed a research agenda that will endeavor to answer these critical questions. The committee also proposed several steps to protect young people in the interim, including:



Definitions of Social Media and Health for This Consensus Study Report

Social Media: Interactive technologies that facilitate the creation and sharing of information, ideas, interests, and other forms of expression through virtual communities and networks, including social networking, gaming, virtual worlds, video sharing sites, and blogs (APA, 2023).

Health: A state of complete physical, mental, and social well-being and not merely the absence of disease (WHO, 2023).

- design features at the platform level to ensure greater transparency for users and government regulators,
- new and broader forms of education for young people and training for adults that will help ensure that young people understand their particular vulnerability to harmful content and misinformation online, and
- actions to reduce and mitigate online harassment and bullying.

POTENTIAL BENEFITS AND HARMS OF SOCIAL MEDIA

Available research that links social media to health shows small effects and weak associations, which may be influenced by a combination of good and bad experiences. Contrary to the current cultural narrative that social media is universally harmful to adolescents, the reality is more complicated.

Social media can connect adolescents with their friends and family and can serve as a place of safety and support for lesbian, gay, bisexual, trans, questioning, and other (LGBTQ+) teens, as well as those dealing with serious illness, bereavement, or mental health issues. Social media can also serve as an educational resource and help cultivate and expand hobbies, interests, and creative pursuits (see Figure 1).

Conversely, social media can encourage harmful comparisons; take the place of sleep, exercise, studying, or social activities; disturb adolescents' ability to sustain

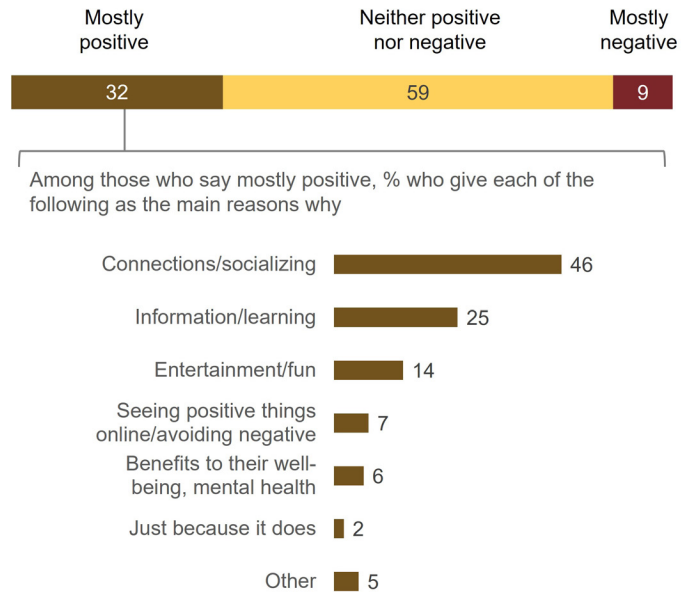


FIGURE 1 Percentage of U.S. teens ages 13–17 who say social media has had a mostly positive, neutral, or mostly negative effect on them personally. SOURCE: Anderson et al., 2022.

attention and suppress distraction during a particularly vulnerable biological stage; and can lead, in some cases, to dysfunctional behavior.

CHALLENGES IN UNDERSTANDING THE IMPACT OF SOCIAL MEDIA

Quantifying the relationship between social media and health is challenging for the following reasons:

- Pinpointing the direction of impact is complicated (i.e., social media use may influence health as often as health influences social media use);
- Current research approaches are not uniform;

- Understanding the relationship between an exposure (social media use) and a health outcome when the exposure is almost constant is challenging; and
- Perhaps most importantly, social media use is not the same for everyone.

These difficulties underlie the committee’s conclusion that, despite widespread concern about social media’s effects, it is hard to offer an overall summary of the relationship between social media and mental health beyond observing that the effects, both helpful and harmful, accrue differently to different users.

ACTIONS TO GROW THE EVIDENCE BASE AND PROTECT YOUNG PEOPLE

Research to Support Evidence-Based Decision Making

As the current evidence base does not allow for population-level conclusions, more research is necessary to inform current and future policy and decision making about social media use and health. The committee recommends a research agenda that prioritizes the investigation of:

- health consequences of social media use,
- epidemiology of problematic use,
- mechanisms through which social media use influences health,
- efforts to remediate harms associated with social media use,
- role of parents and other adults in influencing positive use,
- algorithmic audits,
- validated tools to measure exposure to social media affordances,
- data sharing,
- establishing long-term cohort studies, and

- study designs that attempt to understand causal directions.

Natural experiments—like the staggered rollout of Facebook on college campuses—should be leveraged as much as possible, as they may present easier avenues into investigating critical questions than establishing more formal experiments (see **Recommendation 8-1** in the report).

The critical research outlined above can only proceed so far without the explicit cooperation of social media platforms. **Recommendation 8-2** in the report calls for good faith efforts from social media companies in ensuring access to data that could support public-interest research but acknowledges that social media companies may not voluntarily cooperate with these requests or share in the broader research priorities. If such cooperation is lacking, Congress should act to ensure that this research agenda is possible, given the importance of the questions it could answer (see **Recommendation 8-3** in the report).

Educating and Training Young People to Protect Themselves Online

Ensuring that young people can navigate complex digital environments safely and effectively will help them grow into sophisticated consumers who can protect their health and well-being as they access news, media, and other information online.

Media literacy education currently suffers from scarce funding, uneven content, poorly qualified instructors, and a lack of reference standard. All four of these issues should be addressed in a comprehensive national media literacy education program prioritized for all children in grades K through 12 (see **Recommendation 6-1** in the report). Teachers are important ambassadors in educating and continually mentoring young people on how to address and remain aware of new technological trends, and as such, need to be educated themselves—initially and on an ongoing basis—on effective ways to teach media literacy (see **Recommendation 6-2** in the report). Clinicians who interact regularly with young people also need to be able to counsel their patients on

potentially problematic social media use, as their patients may not be able to see these warning signs themselves (see **Recommendation 6-3** in the report).

Mitigating Harassment and Bullying

Digital technologies provide individuals with anonymity that can embolden online harassment and bullying. Social media platforms have a central role to play in reducing the prevalence of online harassment and should develop easy-to-use and transparent systems for reporting, follow-up, and adjudication of such cases (see **Recommendation 7-1** in the report). These systems should be designed to balance competing requirements for privacy and child protection (see **Recommendation 7-2** in the report). Society should also provide confidential support for young people who have been harmed online (see **Recommendation 7-3** in the report).

Designing Apps, Games, and Websites for User Transparency

Standards for social media operations and platform design, developed through an iterative process that includes a range of stakeholders, would improve transparency and tracking social media's influence on young people's mental and physical health.

Recommendations 5-1 and 5-2 in the report recommend that the International Organization for Standardization develop these standards and that social media providers adopt them.

MOVING FORWARD

The committee emphasizes that the effects of social media—both positive and negative—vary from person to person. While some uses of the tool may be harmful and others helpful, no broader conclusions can be drawn at a population level. However, this does not mean that no action is needed. On the contrary, the report's recommendations are intended to move policy, research, and behavior toward a judicious action, while catalyzing research that can support evidence-based decision making in the future.

To learn more about this report, visit www.nationalacademies.org/social-media-adolescents.

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FOR MORE INFORMATION

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