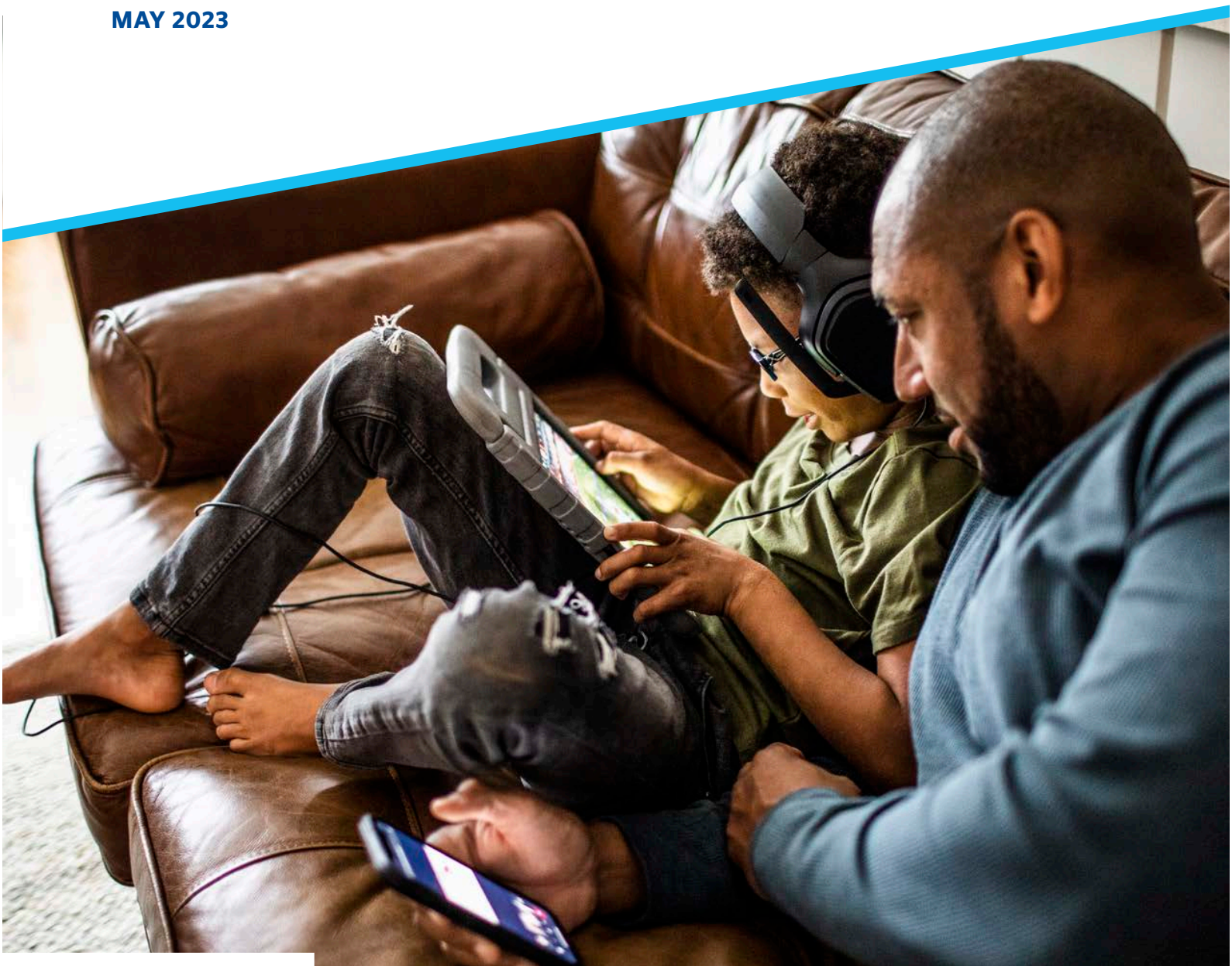
Tennessee v. Meta
Case No. 23-1364-IV
PX-07006

AMERICAN PSYCHOLOGICAL ASSOCIATION

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Health Advisory on Social Media Use in Adolescence

MAY 2023



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Psychological scientists examine potential beneficial and harmful effects of social media[a] use on adolescents' social, educational, psychological, and neurological development. This is a rapidly evolving and growing area of research with implications for many stakeholders (e.g., youth, parents, caregivers, educators, policymakers, practitioners, and members of the tech industry) who share responsibility to ensure adolescents' well-being.[b] Officials and policymakers including the U.S. Surgeon General Dr. Vivek Murthy have documented the importance of this issue and are actively seeking science-informed input.[c] The recommendations below are based on the scientific evidence to date, and the following considerations.

A. Using social media is not inherently beneficial or harmful to young people. Adolescents' lives online both reflect and impact their offline lives. In most cases, the effects of social media are dependent on adolescents' own personal and psychological characteristics and social circumstances—intersecting with the specific content, features, or functions that are afforded within many social media platforms. In other words, the effects of social media likely depend on what teens can do and see online, teens' pre-existing strengths or vulnerabilities, and the contexts in which they grow up.[3]

B. Adolescents' experiences online are affected by both 1) how they shape their own social media experiences (e.g., they choose whom to like and follow); and 2) both visible and unknown features built into social media platforms.

C. Not all findings apply equally to all youth. Scientific findings offer one piece of information that can be used along with knowledge of specific youths' strengths, weaknesses, and context to make decisions that are tailored for each teen, family, and community.[4]

D. Adolescent development is gradual and continuous, beginning with biological and neurological changes occurring before puberty is observable (i.e., approximately beginning at 10 years of age), and lasting at least until dramatic changes in youths' social environment (e.g., peer, family, and school context) and neurological changes have completed (i.e., until approximately 25 years of age).[5] Age-appropriate use of social media should be based on each adolescent's level of maturity (e.g., self-regulation skills, intellectual development, comprehension of risks) and home environment.[6] Because adolescents mature at different rates, and because there are no data available to indicate that children become unaffected by the potential risks and opportunities posed by social media usage at a specific age, research is in development to specify a single time or age point for many of these recommendations. In general, potential risks are likely to be greater in early adolescence—a period of greater biological, social, and psychological transitions, than in late adolescence and early adulthood.[7,8]

E. As researchers have found with the internet more broadly, racism (i.e., often reflecting perspectives of those building technology) is built into social media platforms. For example, algorithms (i.e., a set of mathematical instructions that direct users' everyday experiences down to the posts that they see) can often have centuries of racist policy and discrimination encoded.[9] Social media can become an incubator, providing community and training that fuel racist hate.[10] The resulting potential impact is far reaching, including physical violence offline, as well as threats to well-being.[11]

F. These recommendations are based on psychological science and related disciplines at the time of this writing (April 2023). Collectively, these studies were conducted with thousands of adolescents who completed standardized assessments of social, behavioral, psychological, and/or neurological functioning, and also reported (or were observed) engaging with specific social media functions or content. However, these studies do have limitations. First, findings suggesting causal associations are rare, as the data required to make cause-and-effect conclusions are challenging to collect and/or may be available within technology companies, but have not been made accessible to independent scientists. Second, *long-term* (i.e., multi-year) longitudinal research often is unavailable; thus, the associations between adolescents' social media use and long-term outcomes (i.e., into adulthood) are largely unknown. Third, relatively few studies have been conducted with marginalized populations of youth, including those from marginalized racial, ethnic, sexual, gender, socioeconomic backgrounds, those who are differently abled, and/or youth with chronic developmental or health conditions.

a These recommendations do not address the use of all technology among youth, including educationally-based platforms or digital interventions that use evidence-based approaches to promote adaptive health outcomes. Rather, these recommendations reflect the literature on social media specifically, which is defined as technologically-based applications, platforms, or communication systems using online architecture that promotes asynchronous, unilateral, permanent, public, continually-accessible, social cue-restricted, quantifiable, visually-based, or algorithmic-based social interactions.[1,2]

b These recommendations enact policies and resolutions approved by the APA Council of Representatives including the **APA Resolution on Child and Adolescent Mental and Behavioral Health** and the **APA Resolution on Dismantling Systemic Racism** in contexts including social media. These are not professional practice guidelines but are intended to provide information based on psychological science.

c The U.S. Surgeon General released an **Advisory** in 2021 focused on Protecting Youth Mental Health that recognizes the importance of examining the impacts of social media on children.

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RECOMMENDATIONS



Youth using social media should be encouraged to use functions that create opportunities for social support, online companionship, and emotional intimacy that can promote healthy socialization.

- Data suggest that youths' psychological development may benefit from this type of online social interaction, particularly during periods of social isolation, when experiencing stress, when seeking connection to peers with similar developmental and/or health conditions, and perhaps especially for youth who experience adversity or isolation in offline environments.[12,13,14,15]
- Youth with symptoms of mental illness, such as adolescents with social anxiety, depression, or loneliness, for instance, may benefit from interactions on social media that allow for greater control, practice, and review of social interactions.[16] Unfortunately, these populations may also be at higher risk for some of the negative facets of social media use as discussed below.[17]
- Social media offers a powerful opportunity for socialization of specific attitudes and behaviors, encouraging adolescents to follow the opinions and prosocial acts of others.[18] The discussion of healthy behaviors online can promote or reinforce positive offline activity and healthy outcomes.
- Social media may be psychologically beneficial particularly among those experiencing mental health crises,[19] or members of marginalized groups that have been disproportionately harmed in online contexts. For instance, access to peers that allows LGBTQIA+ and questioning adolescents to provide support to and share accurate health information with one another is beneficial to psychological development, and can protect youth from negative psychological outcomes when experiencing stress.[20] This may be especially important for topics that adolescents feel reluctant to or are unable to discuss with a parent or caregiver.

Access to peers that allows LGBTQIA+ and questioning adolescents to provide support to and share accurate health information with one another can protect youth from negative psychological outcomes when experiencing stress

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Social media use, functionality, and permissions/consenting should be tailored to youths' developmental capabilities; designs created for adults may not be appropriate for children.

- Specific features (e.g., the "like" button, recommended content, unrestricted time limits, endless scrolling) and notices/alerts (e.g., regarding changes to privacy policies) should be tailored to the social and cognitive abilities and comprehension of adolescent users.[21] As one example, adolescents should be informed explicitly and repeatedly, in age-appropriate ways, about the manner in which their behaviors on social media may yield data that can be used, stored, or shared with others, for instance, for commercial (and other) purposes.

In early adolescence (i.e., typically 10-14 years), adult monitoring (i.e., ongoing review, discussion, and coaching around social media content) is advised for most youths' social media use; autonomy may increase gradually as kids age and if they gain digital literacy skills. However, monitoring should be balanced with youths' appropriate needs for privacy.

- Brain regions associated with a desire for attention, feedback, and reinforcement from peers become increasingly sensitive beginning in early adolescence, and regions associated with mature self-control are not fully developed until adulthood.[5] Parental monitoring (i.e., coaching and discussion) and developmentally appropriate limit-setting thus is critical, especially in early adolescence.
- Adults' own use of social media in youths' presence should also be carefully considered. Science demonstrates that adults' (e.g., caregivers') orientation and attitudes toward social media (e.g., using during interactions with their children, being distracted from in-person interactions by social media use) may affect adolescents' own use of social media.
- Preliminary research suggests that *a combination of* 1) social media limits and boundaries, and 2) adult–child discussion and coaching around social media use, leads to the best outcomes for youth.[22]

Adolescents should be informed explicitly and repeatedly, in age-appropriate ways, about the manner in which their behaviors on social media may yield data that can be used, stored, or shared with others



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RECOMMENDATIONS *(continued)*

To reduce the risks of psychological harm, adolescents' exposure to content on social media that depicts illegal or psychologically maladaptive behavior, including content that instructs or encourages youth to engage in health-risk behaviors, such as self-harm (e.g., cutting, suicide), harm to others, or those that encourage eating-disordered behavior (e.g., restrictive eating, purging, excessive exercise) should be minimized, reported, and removed[23]; moreover, technology should not drive users to this content.

- Evidence suggests that exposure to maladaptive behavior may promote similar behavior among vulnerable youth, and online social reinforcement of these behaviors may be related to increased risk for serious psychological symptoms, even after controlling for offline influences.[24]
- Reporting structures should be created to easily identify harmful content, and ensure it is deprioritized or removed.

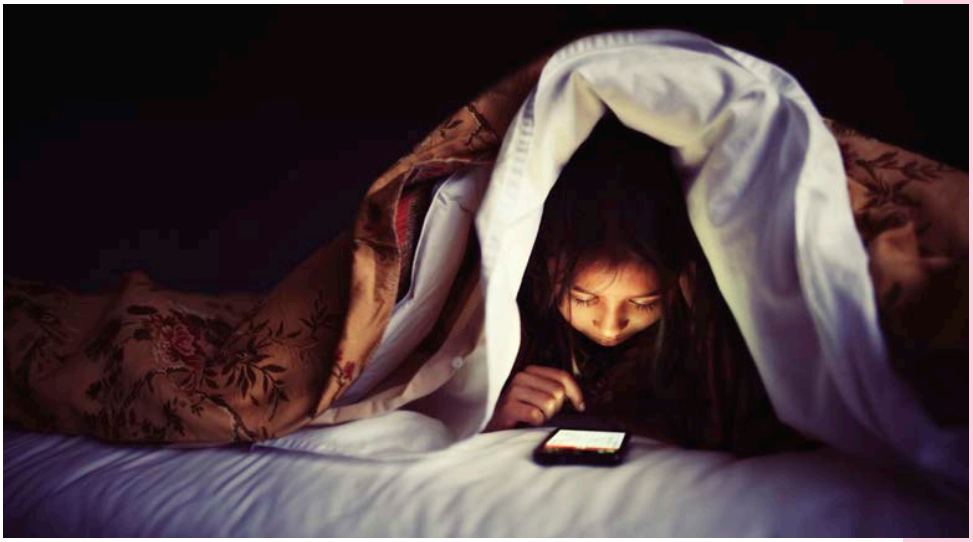


To minimize psychological harm, adolescents' exposure to "cyberhate" including online discrimination, prejudice, hate, or cyberbullying especially directed toward a marginalized group (e.g., racial, ethnic, gender, sexual, religious, ability status),[22] or toward an individual because of their identity or allyship with a marginalized group should be minimized.

- Research demonstrates that adolescents' exposure to online discrimination and hate predicts increases in anxiety and depressive symptoms, even after controlling for how much adolescents are exposed to similar experiences offline.[25] Similarly, research indicates that as compared to offline bullying, online bullying and harassment can be more severe, and thus damaging to psychological development.[26,27,28] In other words, both online cyberhate and offline bullying can increase risk for adolescent mental health problems. Research suggests elevated risks both for the perpetrators and victims of cyberhate.[29,30]
- Adolescents should be trained to recognize online structural racism and critique racist messages. Research shows that young people who are able to critique racism experience less psychological distress when they witness race-related traumatic events online.[25] As noted above, adults' monitoring and active discussion of online content can also reduce the effects of exposure to cyberhate on adolescents' psychological adjustment.[22]

Research demonstrates that adolescents' exposure to online discrimination and hate predicts increases in anxiety and depressive symptoms.

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Adolescents should be routinely screened for signs of "problematic social media use" that can impair their ability to engage in daily roles and routines, and may present risk for more serious psychological harms over time.

- Indicators of problematic social media use include a) a tendency to use social media even when adolescents want to stop, or realize it is interfering with necessary tasks; b) spending excessive effort to ensure continuous access to social media; c) strong cravings to use social media, or disruptions in other activities from missing social media use too much; d) repeatedly spending more time on social media than intended; e) lying or deceptive behavior to retain access to social media use; f) loss or disruption of significant relationships or educational opportunities because of media use.[31]
- Social media use should not restrict opportunities to practice in-person reciprocal social interactions, and should not contribute to psychological avoidance of in-person social interactions.

The use of social media should be limited so as to not interfere with adolescents' sleep and physical activity.

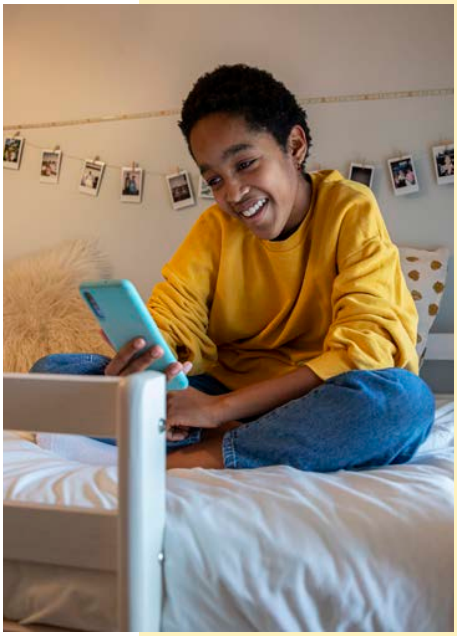
- Research recommends adolescents get at least 8 hours of sleep each night and maintain regular sleep-wake schedules.[32] Data indicate that technology use particularly within 1 hour of bedtime, and social media use in particular, is associated with sleep disruptions.[33,34] Insufficient sleep is associated with disruptions to neurological development in adolescent brains, teens' emotional functioning,[35,36] and risk for suicide.[37,38]
- Adolescents' social media use also should not interfere with or reduce adolescents' opportunities for physical activity and exercise.[39] Research demonstrates that physical activity is essential for both physical and psychological health (i.e., lower rates of depression).[40]

Insufficient sleep is associated with disruptions to neurological development in adolescent brains, teens' emotional functioning, and risk for suicide

RECOMMENDATIONS *(continued)*

Adolescents should limit use of social media for social comparison, particularly around beauty- or appearance-related content.

- Research suggests that using social media for social comparisons related to physical appearance, as well as excessive attention to and behaviors related to one's own photos and feedback on those photos, are related to poorer body image, disordered eating, and depressive symptoms, particularly among girls.[41,42,43,44,45,46]



Adolescents' social media use should be preceded by training in *social media literacy* to ensure that users have developed psychologically-informed competencies and skills that will maximize the chances for balanced, safe, and meaningful social media use.

- Emerging science offers preliminary support for the efficacy of Digital Citizenship and Digital Literacy to increase the frequency of positive interactions online[47]; however, more research is needed in this area.[48]
- Additional competencies could also include: 1) questioning the accuracy and representativeness of social media content; 2) understanding the tactics used to spread mis- and disinformation; 3) limiting "overgeneralization" and "misestimation" errors that lead users to incorrectly estimate others' behaviors or attitudes based on social media content (or reactions to content); 4) signs of problematic social media use; 5) how to build and nourish healthy online relationships; 6) how to solve conflicts that can emerge on social media platforms; 7) how to refrain from excessive social comparisons online and/or better understand how images and content can be manipulated; 8) as noted above, how to recognize online structural racism and critique racist messages; and 9) how to safely communicate about mental health online.[49]

Substantial resources should be provided for continued scientific examination of the positive and negative effects of social media on adolescent development.

- A substantial investment in research funding is needed, including long-term longitudinal research, studies of younger children, and research on marginalized populations.
- Access to data among independent scientists (including data from tech companies) to more thoroughly examine the associations between social media use and adolescent development is needed.

A substantial investment in research funding is needed, including long-term longitudinal research, studies of younger children, and research on marginalized populations.

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