

# The Impacts of Social Media on Behavioral Health in Adolescents: An Assessment of Mental Health and Substance Misuse

Indiana State Epidemiological Outcomes  
Workgroup



June 24, 2025

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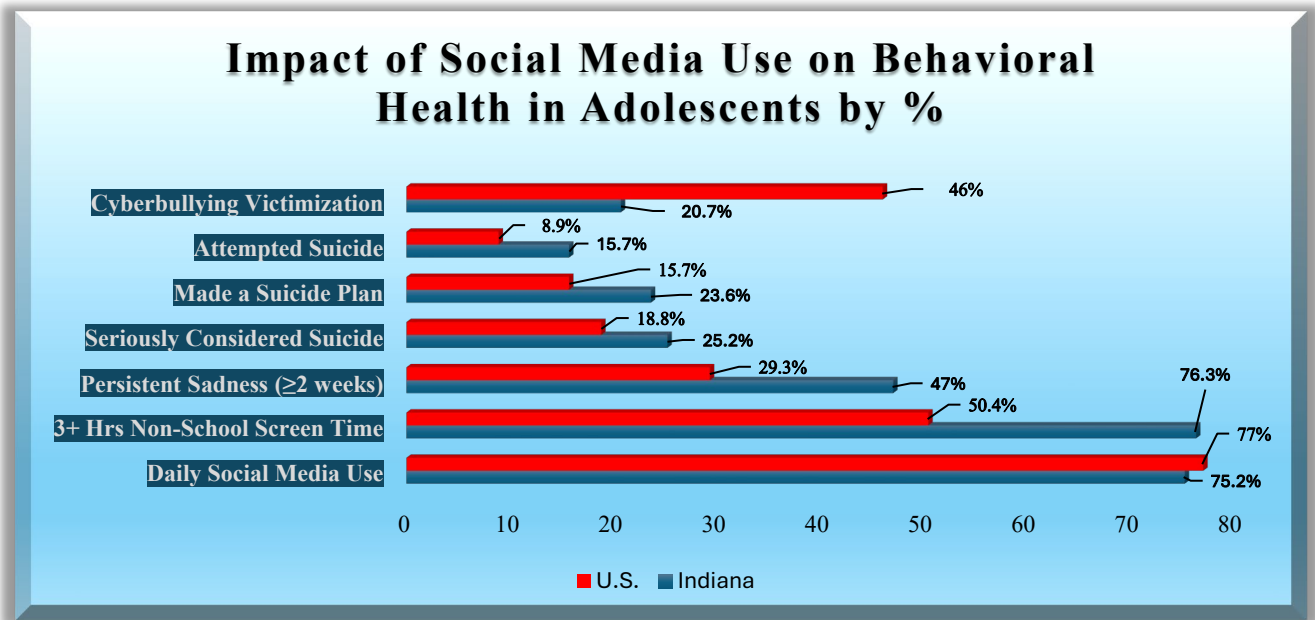
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# Introduction

This report evaluates the impact of social media use on adolescent behavioral health from 2008 to 2023, comparing national trends with data specific to Indiana. It synthesizes findings from peer-reviewed journals, government surveillance reports, and youth risk behavior surveys. Its goals are to first assess the relationship between social media use and mental health substance misuse outcomes. Second, we will explore patterns within underrepresented and high-risk groups; lastly, we will provide recommendations aligned with Indiana's public health priorities in tandem with the guidelines developed by the United States Centers for Disease Control and Prevention (USCDC, 2023).

Social media has become a permanent fixture in modern society, particularly among adolescents. Many children and teenagers in the United States create social media profiles before graduating high school. With this widespread adoption, concerns have emerged regarding its impact on behavioral health, specifically mental health and substance use. As depicted in Figure 1, the 2023 Youth Risk Behavior Survey (YRBS) developed by the USCDC found approximately 77.0% of high school students use social media multiple times per day (Young et al., 2024). Given its pervasive presence, there is a critical need to understand how social media affects adolescent mental health, substance use, and overall well-being. In the early 2000s, behavioral health issues among children and adolescents have sharply increased (Keyes et al., 2020). Many experts suggest that social media is a contributing factor, with research indicating that excessive use may exacerbate ongoing negative mental health symptoms, such as anxiety, depression, and social withdrawal. While some studies acknowledge the potential benefits of moderate social media use such as maintaining social ties or accessing support groups, a growing body of evidence links frequent and prolonged engagement with negative psychological outcomes (Boniel-Nissim et al., 2022; McCrae et al., 2017; Prasad et al., 2023). Social media platforms encourage users to create, share, and exchange content in virtual spaces (Carr and Hayes, 2015). Adolescents primarily use platforms like YouTube, TikTok, Snapchat, Instagram, and Facebook to socialize and express themselves. These platforms now play a central role in shaping adolescent identity development, thereby influencing behavioral health, peer dynamics, and emotional regulation (Pew Research Center, 2021). As *digital natives*, adolescents engage in near-constant connection, making social media a critical lens through which public and population health researchers examine youth behavioral patterns (Boyd and Ellison, 2007).

Figure 1



## Prevalence of Social Media Use Among Adolescents in the United States

The integration of digital technologies into everyday life has significantly increased the amount of time adolescents spend on screens. A 2024 report by the USCDC's, National Center for Health Statistics (NCHS) found that 91.0% of U.S. teenagers spend at least two hours per day using digital screens, while 50.4% exceed four hours daily of screen time (Zablotsky et al., 2024); in addition, 37.0% of teens report using social media for five or more hours per day (DeAngelis et al., 2024). While some screen time is associated with schoolwork, a large portion is dedicated to recreational activities, especially social media use. Among the most commonly used platforms are YouTube, TikTok, and Instagram, which collectively account for 87.0% of adolescent's social media screen time (DeAngelis et al., 2024). The Pew Research Center (2021) further reports that nearly 95.0% of U.S. teens regularly engage with at least one social media platform, and nearly half describe themselves as being *almost constantly* online. The ubiquity of smartphones has enabled this persistent connectivity, fundamentally transforming the way adolescents socialize, seek validation, and consume information (Rideout and Robb, 2019).

Social media has increasingly become central to the development of adolescent self-identity, peer dynamics, and community involvement. While digital platforms can support social connectedness and creativity, excessive or unstructured use has raised concerns about emotional regulation, sleep quality, and exposure to harmful content (Kelly et al., 2019; Khalaf et al., 2023). Given these widespread patterns of use and the known rise in behavioral health challenges among youth, it is critical that public health surveillance and prevention programs consider the impact of social media as both a risk factor for poor health outcomes and an opportunity for targeted intervention. Efforts to mitigate harm must consider how, when, where, and why adolescents use these platforms, particularly among youth from under-resourced environments or those experiencing high social pressure.

# Prevalence of Social Media Use Among Adolescents in Indiana

While national data provides a broad understanding of adolescent digital habits, state-level insights are essential for tailoring public health responses. In Indiana, social media usage among high school students closely mirrors national trends. According to the 2023 YRBS, 75.2% of Indiana high school students reported using social media several times a day (IDOH, 2024). This aligns closely with the national average of 77.0% (Young et al., 2024), reinforcing the widespread and routine nature of digital platform engagement among adolescents in the state.

The YRBS also found that 76.3% of Indiana students reported spending three or more hours per day on screen time not related to schoolwork (IDOH, 2024). This indicates that beyond academic requirements, a significant portion of Hoosier adolescents daily routines involve discretionary screen use. While the nature of this usage varies, much of it is associated with social media, video streaming, gaming, and other interactive platforms that influence emotional and behavioral development.

These behaviors reflect patterns of online vulnerability that can heighten stress, impact emotional well-being, and increase the risk of social isolation. Although the survey captures a broad range of technology-related behaviors, the prominence of social media within these interactions points to its growing role in shaping adolescent decision-making and peer dynamics. Indiana's youth face risks tied not only to the volume of digital engagement but also to the social pressures embedded within these platforms. The presence of cyberbullying, sexting (sexual content and or sexually revealing images), and risky online exposure reinforces the need for comprehensive digital literacy and mental health support efforts at both school and community levels. Understanding state-specific usage patterns allows educators, health professionals, and policymakers in Indiana to design localized strategies that address mental health and behavioral outcomes tied to social media use. By focusing on underrepresented and high-risk youth populations, the state can better protect adolescents from harmful digital experiences while promoting healthy online habits.

## Prevalence of Mental Health Conditions Among Adolescents in the United States

Concerns regarding adolescent mental health in the United States have intensified over the past two decades. A sharp increase in rates of depression, anxiety, and suicidality has been documented, and experts increasingly recognize the role of environmental and digital factors, including social media. These behavioral health issues are impacting millions of adolescents nationwide and pose significant challenges for schools, families, and healthcare systems. Depression is one of the most frequently reported mental health conditions among U.S. adolescents. Data from the National Survey on Drug Use and Health (NSDUH) found the prevalence of major depressive episodes among youth aged 12 to 17 rose from 8.1% in 2009 to 15.1% by 2019 (Daly, 2022). The increase was more pronounced among female adolescents, whose rates nearly doubled from 11.4% to 23.4%. Male adolescents also experienced an increase, though to a lesser extent, rising from 5.0% to 8.6% during the same period (Daly, 2022).

Ethnic disparities were also evident in national trends. The prevalence of depression among adolescents increased across all demographic groups between 2009 and 2019. Specifically, prevalence rates rose by 4.7% among Black youth, 9.7% among Hispanic youth, 7.5% among white youth, and 9.2% among youth identifying as other races or ethnicities (Daly, 2022). These increases signal widespread vulnerability to depressive symptoms across diverse adolescent populations. According to the Substance Misuse and

Mental Health Services Administration (SAMHSA), 2021 data showed that 20.1% of all U.S. adolescents had experienced a major depressive episode in the past year (SAMHSA, 2022). The rate was significantly higher among females, with 29.2% reporting depressive episodes compared to only 11.5% of males. These findings further reinforce that adolescent girls face disproportionately high mental health risks during this stage of development.

Suicidality is another major concern that continues to escalate. National data show consistent increases in suicidal ideation, planning, and attempts among adolescents over the last decade. Mental health professionals cite several contributing factors including social isolation, exposure to negative online content, academic stress, and diminished access to supportive services (Hinduja and Patchin, 2018; Memon et al., 2018).

Researchers have also linked the rise in adolescent mental health concerns to major societal shifts, including but not limited to the introduction of smartphones, 24/7 digital access, and the COVID-19 pandemic, which disrupted school routines and peer interactions globally. While these factors do not act in isolation, social media is often identified as a significant risk factor that intensifies existing vulnerabilities and stressors among youth (Xiang et al., 2024).

Overall, the national landscape reveals a worsening mental health crisis among adolescents, marked by increases in depression, anxiety, and suicidality across gender, racial, and socioeconomic lines. These trends underscore the urgent need to address digital health behaviors, particularly social media use as part of comprehensive prevention and intervention strategies.

## Prevalence of Mental Health Conditions Among Adolescents in Indiana

In Indiana, youth mental health indicators mirror national trends and highlight significant emotional distress among high school students. The Indiana Department of Health (IDOH) reported alarming statistics in the 2023 Youth Risk Behavior Survey (YRBS), confirming that a substantial percentage of adolescents experience persistent sadness, suicidal ideation, and other signs of psychological strain (IDOH, 2024).

These figures demonstrate widespread emotional challenges among Indiana adolescents. The high prevalence of persistent sadness and suicidal thoughts indicates an urgent need for targeted mental health services in schools and communities. Mental health challenges in adolescence, if unaddressed, are known to increase the risk of school dropout, substance use, and long-term emotional impairment.

When stratified by gender, the data show that female students consistently report higher rates of mental health concerns than their male peers. For example, 60.1% of female students felt sad or hopeless almost every day for two or more weeks in a row, compared to 33.5% of male students (IDOH, 2024). This suggests that adolescent girls may either experience more psychological distress or be more likely to report these experiences in surveys. Regardless, gender disparity highlights the importance of tailored prevention efforts that recognize different risk profiles.

In addition to gender, differences are evident across racial and ethnic groups. The percentage of students who reported poor mental health was highest among multiracial youth (48.3%), followed by white students (35.3%), Black students (29.7%), and Hispanic students (28.0%) (IDOH, 2024). These differences may reflect variations in exposure to stress, community support, access to mental health care, or experiences of discrimination and marginalization. Importantly, youth who come from underrepresented or vulnerable family systems—including those with limited access to healthcare, inconsistent adult supervision, or socioeconomic hardship—are at even greater risk. A lack of family support or peer belonging can exacerbate feelings of isolation, particularly when adolescents turn to digital platforms for validation or



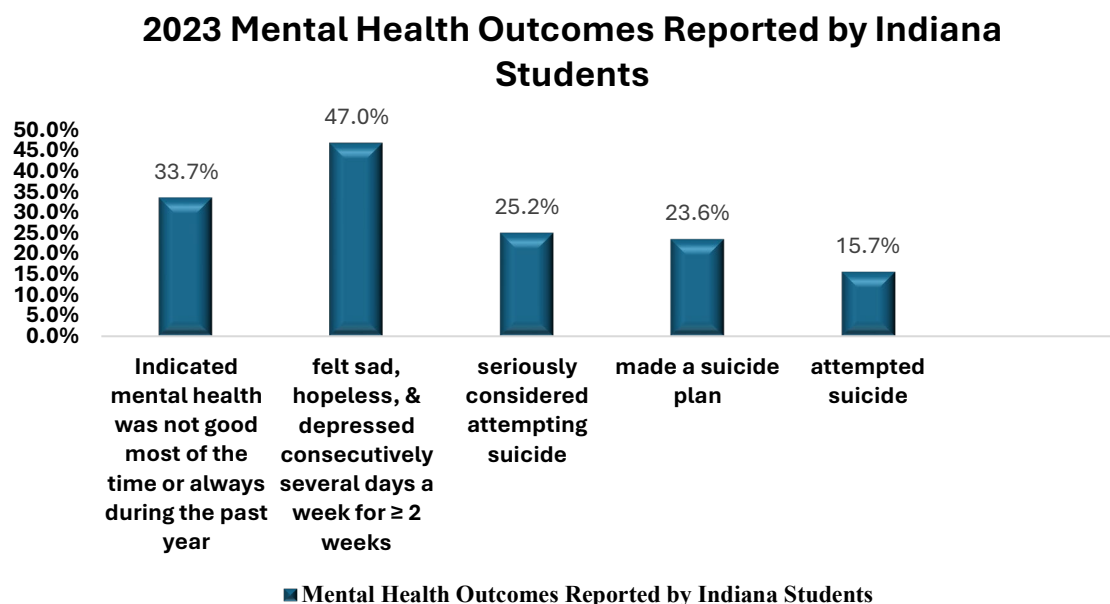
connection and instead experience cyberbullying, exclusion, or harmful comparisons(YRBS, 2023).The data from Indiana's 2023 YRBS present a clear picture of elevated mental health risk among adolescents, especially among female students, youth from multiracial backgrounds, and those lacking supportive environments. These findings emphasize the importance of school-based screening, access to culturally responsive mental health services, and family-focused interventions to reduce emotional suffering and prevent suicide.

## The Relationship Between Social Media and Adolescent Mental Health

Since the widespread adoption of social media in the early 2000s, researchers, educators, and health professionals have investigated its influence on adolescent mental health. Adolescents are developmentally more vulnerable to peer pressure, social comparison, and reward-seeking behavior, all of which are amplified in digital environments. Social media platforms are intentionally designed to capture and retain user attention, often activating the same neural pathways associated with behavioral addictions such as gambling (Bickham, 2021).

Problematic social media use typically arises when adolescents exhibit behaviors such as compulsive checking, fear of missing out, or emotional dependence on feedback and online engagement (Shannon et al., 2022). These behaviors can erode self-esteem, increase stress, and contribute to anxiety or depressive symptoms. Many youths use social media to fulfill emotional needs or escape real-life stressors, but in doing so may reinforce unhealthy coping mechanisms, especially when exposed to harmful content or online conflict (Memon et al., 2018). A central concern is the emotional toll of online interactions. Adolescents who rely heavily on social media to engage with peers may find themselves in digital spaces that reinforce unrealistic social expectations or filter out emotional authenticity. Research shows that adolescents who use social media for comparison or feedback-seeking are at higher risk of developing depressive symptoms, especially when they perceive themselves as falling short in physical appearance, popularity, or achievement (Nesi and Prinstein, 2015). According to the 2023 YRBS, the following mental health outcomes were reported in Indiana high school students (IDOH, 2024).

*Figure 2*



As displayed in Figure 2, nearly half (47.0%) of students reported feeling persistently sad or hopeless, and one in four seriously considered suicide (IDOH, 2024). These symptoms are consistent with the psychological effects associated with problematic social media use, including emotional dysregulation, low self-worth, and increased isolation. Adolescents without strong family support systems or those who experience social exclusion are particularly susceptible to these outcomes, often turning to social media for a sense of belonging.

Another factor influencing mental health is the emotional intensity of online environments. Adolescents are often exposed to extreme viewpoints, peer drama, or exclusionary behaviors that increase stress and reduce self-confidence. Additionally, social media often blurs the boundaries between public and private spaces, making it more difficult for youth to disengage from distressing experiences or peer conflict (Vidal et al., 2020).

While moderate and mindful social media use may provide adolescents with opportunities for connection and creative expression, heavy use and negative interactions are consistently associated with declines in mental health. Understanding the specific behaviors and usage patterns that elevate risk is essential to developing effective prevention and intervention strategies, particularly for underrepresented youth or those navigating complex family and peer dynamics.

## When Does Social Media Use Become Problematic?

Social media use becomes problematic when it begins to interfere with an adolescent's emotional stability, daily responsibilities, and ability to engage in offline relationships. While social media use is common among teenagers, problematic use is defined by behaviors such as compulsive checking, emotional dependency on notifications or feedback, and withdrawal symptoms when unable to access digital platforms (Shannon et al., 2022). These patterns resemble behavioral addictions and have been linked to negative mental health outcomes including depression, anxiety, and poor academic performance.

Time spent on social media is a critical factor. One large-scale study published in *JAMA Psychiatry* found that adolescents who used social media for more than three hours per day were significantly more likely to experience mental health challenges including anxiety, sleep disruption, and emotional dysregulation (Riehm et al., 2019). This threshold is often used to define "heavy social media use" and has been associated with greater vulnerability to internalizing symptoms.

Beyond the number of hours, how adolescents engage with social media also determines its impact. Behaviors such as social comparison and feedback-seeking, where users evaluate themselves against idealized portrayals of peers or influencers, have been shown to contribute to depressive symptoms and low self-esteem (Nesi and Prinstein, 2015). These interactions may reinforce negative self-perceptions, particularly among adolescents facing challenges in peer relationships or lacking affirming environments at home. Additional behaviors associated with problematic use include habitual checking, nighttime use, and exposure to inappropriate or emotionally disturbing content. Research shows that late-night social media engagement impairs sleep quality and increases the risk of depressive symptoms the next day (Alonzo et al., 2021). Adolescents who use social media to cope with stress or avoid real-life problems may become emotionally reliant on these platforms, leading to further isolation and emotional instability over time (Maza et al., 2023).

Cyberbullying also plays a critical role in escalating social media use from typical to problematic. Adolescents who are harassed online often feel the need to monitor their accounts compulsively to defend themselves or to see what others are saying, creating cycles of hypervigilance and psychological exhaustion



(Marengo et al., 2021). This cycle intensifies distress and may increase the likelihood of depression or suicidal ideation, especially among youth who lack trusted adults or peer advocates.

A growing body of research confirms that problematic social media use is not just a byproduct of high screen time but rather a pattern of engagement shaped by emotional needs, peer pressures, and digital design features. As adolescents rely more on online environments to shape their identity and receive social validation, they become more susceptible to the psychological harms associated with excessive or emotionally unhealthy use.

## Can Positive Social Media Use Protect Against Social Isolation?

Social isolation is a known risk factor for mental health issues among adolescents, and its prevalence has risen alongside increased digital media consumption. However, emerging research indicates that not all social media use contributes to isolation. In fact, when used actively and with intention, social media can offer adolescents meaningful social connection and reduce emotional distance. During the COVID-19 pandemic, adolescents who used social media to maintain relationships and participate in peer support networks reported lower levels of loneliness and depressive symptoms compared to those who used social platforms passively or disengaged entirely. These findings suggest that active engagement, such as chatting with friends, sharing experiences, and contributing to digital communities, can buffer against social disconnection (Cauberghe et al., 2021).

For youth who experience barriers to connection in offline settings, including adolescents from underrepresented racial, economic, or geographic backgrounds, digital communities can offer a much-needed sense of validation and safety. When adolescents engage in supportive online groups where they are free to express emotions, explore interests, or build peer networks, they are more likely to report a sense of belonging and self-worth (Winstone et al., 2021). Furthermore, positive social media use can facilitate in-person social bonding. Adolescents who use digital tools to coordinate activities, share personal milestones, or stay in touch with distant peers often report feeling more socially integrated. These online interactions do not always replace in-person contact but can complement and strengthen it, particularly when adolescents are empowered to use digital spaces for meaningful communication. However, the benefits of social media in this regard depend largely on how the platforms are used. Youth who passively scroll, engage in comparison, or seek validation through metrics such as likes and shares may still experience emotional depletion. In contrast, adolescents who participate in content creation, positive feedback loops, and authentic conversations tend to report improved emotional outcomes and reduced social alienation (Godard and Holtzman, 2024).

## Impact of Social Media Use on Anxiety, Depression, and Suicidality

The rise in adolescent social media use over the past decade has coincided with a marked increase in mental health disorders, particularly anxiety, depression, and suicidal thoughts or behaviors. Researchers have established a strong correlation between heavy social media use and emotional distress, with multiple longitudinal studies and systematic reviews identifying this relationship as both statistically significant and clinically concerning (Khalaf et al., 2023; McCrae et al., 2017; Shannon et al., 2022).

Between 2009 and 2019, the prevalence of major depressive episodes among adolescents in the United States rose from 8.1% to 15.2% (Daly, 2022). During this same period, the use of smartphones and social media platforms surged, fundamentally altering how young people communicate and seek validation. One dose-response meta-analysis found that each additional hour spent on social media was associated with

a 13% increase in the risk of developing depressive symptoms (Liu et al., 2022). This suggests that duration of use is not just a correlating factor, but a measurable contributor to emotional decline.

Sleep disruption also plays a mediating role in the connection between social media and mental health. Adolescents who use social media late at night report poorer sleep quality, which in turn increases symptoms of anxiety and depression (Vidal et al., 2020). Lack of adequate rest impairs emotional regulation and executive functioning, both of which are crucial during adolescence. This cyclical relationship between digital engagement, sleep loss, and mental distress contributes to a broader pattern of psychological vulnerability.

Social media use has also been linked to increased exposure to self-harm content and suicide-related discussions. While some adolescents use these platforms to seek support or express distress, others may be exposed to harmful messages that normalize or encourage self-injurious behavior (Memon et al., 2018). Adolescents in emotionally vulnerable states may interpret such content in ways that reinforce feelings of hopelessness, especially if they lack stable support systems in their home or school environments.

According to the 2023 Indiana Youth Risk Behavior Survey, 25.2% of high school students reported seriously considering suicide, 23.6% made a plan, and 15.7% attempted suicide within the previous year (IDOH, 2024). These rates are among the highest reported in the past decade and reflect a mental health emergency among Indiana youth. The combination of online stressors, peer harassment, emotional dysregulation, and social isolation creates a heightened risk environment for suicidal ideation and behavior. It is important to note that the relationship between social media use and mental health is complex and influenced by a variety of moderating factors including family support, peer networks, and individual coping mechanisms. However, the consistent association between heavy use and internalizing problems such as depression and anxiety underscores the urgent need for preventative measures and educational efforts targeted at healthier digital engagement.

## Impact of Social Media Use on Attention Disorders

Concerns about the relationship between digital media use and attention problems among adolescents have been growing for decades. Early research on television viewing found associations between extended screen time and increased risks of attention problems, especially among youth. For example, a 2007 longitudinal study of 678 families found that adolescents who watched three or more hours of television per day experienced more attention difficulties and lower academic performance than their peers who watched less than one hour daily (Johnson et al., 2007). These concerns have only intensified with the widespread adoption of smartphones and social media platforms.

Recent studies suggest that high-frequency social media use may be linked to behaviors resembling attention-deficit/hyperactivity disorder (ADHD), including inattention, hyperactivity, and impulsivity. A 2022 narrative review identified that adolescents who heavily use social media are more likely to report ADHD symptoms, even when not formally diagnosed with the condition (Dekkers and van Hoorn, 2022). These symptoms include difficulty focusing, increased distractibility, and behavioral impulsiveness, particularly in digital environments that are fast-paced and reward constant engagement.

Among adolescents already diagnosed with ADHD, excessive social media use may worsen existing symptoms. Instant feedback loops, constant notifications, and algorithmically curated content can heighten stimulation and reduce the ability to regulate attention (Dekkers and van Hoorn, 2022). This can interfere with school performance, sleep patterns, and social interactions. Furthermore, adolescents with attention challenges may be more vulnerable to the addictive features of social media, increasing the risk

of problematic use over time. A large-scale public health study involving over 21,000 adolescents found that heavy or problematic use of social media is associated with higher levels of hyperactivity and inattention (Merelle et al., 2017). These findings suggest that social media may not only reflect existing attention difficulties but also contribute to their development or exacerbation. While the direction of causality remains complex, the correlation between screen time and executive functioning problems is well documented.

The dynamic and constantly updating nature of social media platforms may condition users to expect immediate gratification and rapid content shifts, which can make sustained attention in non-digital environments more difficult. This is particularly concerning during adolescence, a critical period for brain development related to attention, emotional regulation, and long-term decision-making. While not all adolescents who use social media will experience attention difficulties, those with preexisting vulnerabilities or reduced family supervision may be more susceptible to adverse outcomes. As public health initiatives seek to address the cognitive and emotional challenges facing today's youth, digital behavior must be considered a central factor in adolescent development.

## Impact of Social Media Use on Body Image and Cyberbullying

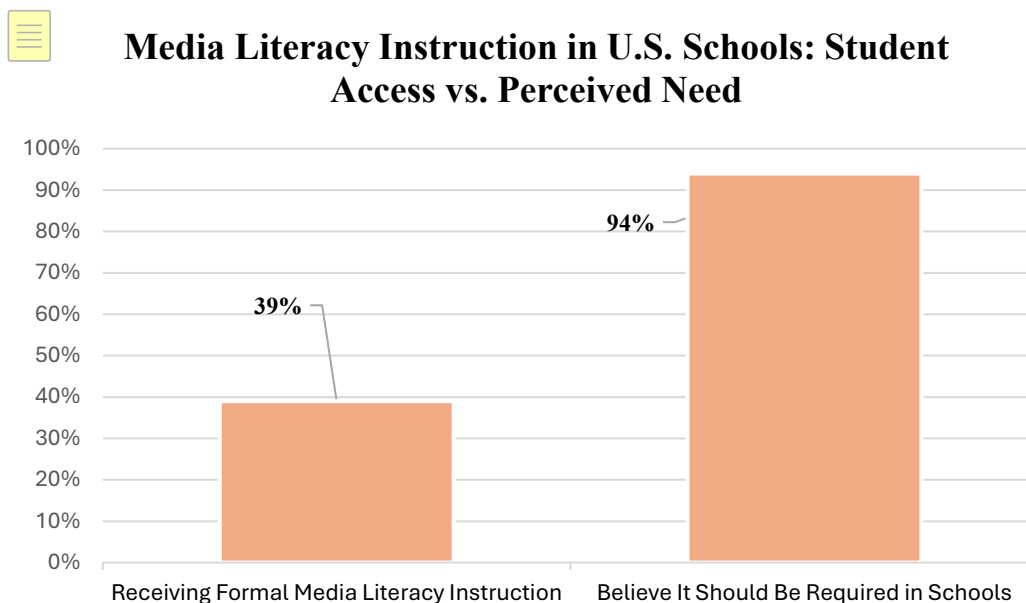
Social media has introduced new avenues for connection and expression, but it has also intensified pressures related to body image and peer perception. Adolescents, particularly females, are vulnerable to negative self-evaluation due to frequent exposure to idealized images and appearance-based content. This dynamic has been strongly associated with dissatisfaction with body image, which can lead to lowered self-esteem, disordered eating behaviors, and symptoms of depression and anxiety (Kelly et al., 2019). One longitudinal study found that adolescents who spent more than five hours per day on social media were 30% more likely to report body dissatisfaction and 26% to 31% more likely to report low self-esteem compared to their peers with minimal usage (Kelly et al., 2019). A separate 2021 study confirmed that social media use significantly increases the desire to attain thinness and correlates with the development of body image-related disorders. This was especially true for platforms like Instagram and Facebook, which emphasize visual presentation and image comparison (Jiotsa et al., 2021).

The causes of these issues include exposure to unrealistic beauty standards, filtered and edited photos, and peer reinforcement of specific appearance norms. Adolescents often compare their own bodies to curated images online, which may lead to distorted perceptions of health and attractiveness. The lack of media literacy skills among adolescents further complicates their ability to critically evaluate the authenticity of the content they consume. In addition to body image issues, cyberbullying is a significant and growing concern. As more social interaction shifts online, digital harassment has become a common source of emotional harm. High-frequency social media users are more likely to both experience and witness cyberbullying. These incidents can include name-calling, exclusion, rumor spreading, and even the sharing of private or explicit images without consent (Peebles, 2014; Marengo et al., 2021). According to a 2023 Pew Research Center report, 46% of teens in the United States report experiencing at least one form of cyberbullying (Schaeffer, 2023). Specific behaviors include:

- 32% experienced offensive name-calling
- 22% had false rumors spread about them
- 17% received explicit images they did not ask for
- 15% were constantly monitored or asked where they were by someone other than a parent
- 10% received physical threats
- 7% had explicit images of themselves shared without their consent

Cyberbullying has been directly linked to increased anxiety, depressive symptoms, and suicidal ideation in adolescents (Hinduja and Patchin, 2018). Victims often feel isolated and powerless, particularly when bullying occurs across multiple platforms or is reinforced by peers. Those who lack strong peer or family support systems are at even greater risk of emotional withdrawal and long-term psychological distress. As adolescents increasingly rely on digital spaces to form their identities and social circles, addressing both body image concerns and cyberbullying becomes essential. Preventative measures should include education on media literacy, promotion of body diversity, and support systems to address online harassment effectively and compassionately.

Figure 3



Despite growing consensus about the importance of media literacy, many adolescents across the United States still lack consistent access to formal instruction. A recent study by the News Literacy Project found that only 39% (as depicted in Figure 3) of U.S. students received any media or news literacy education during the most recent academic year, even though 94% believe such instruction should be a standard part of the school curriculum (Sheinerman, 2024). Indiana currently has no statewide requirement for media literacy in K–12 schools, distinguishing it from states like Illinois and New Jersey that have implemented formal policies (Valparaiso University, 2024).

This disparity is concerning, particularly given the rising influence of social media on adolescent decision-making and mental health. To address this gap, educators and public health professionals are encouraged to advocate for evidence-based, culturally inclusive media literacy education throughout Indiana.

## Impact of Social Media Use on Sleep

Sleep is critical to healthy development during adolescence, yet increasing evidence suggests that social media use can significantly disrupt sleep quality and patterns. Adolescents are particularly vulnerable to poor sleep outcomes due to nighttime engagement with digital devices, delayed bedtimes, and constant exposure to emotionally stimulating content.

A systematic review conducted by Alonzo et al. (2021) found that frequent social media use is associated with reduced sleep duration, poorer sleep quality, and increased sleep latency. These sleep disruptions, in turn, have been directly linked to heightened risk for depression, anxiety, and reduced cognitive functioning. Adolescents who sleep less than the recommended 8 to 10 hours per night often experience irritability, fatigue, difficulty concentrating, and diminished academic performance. Late-night social media use is one of the strongest predictors of sleep impairment. Adolescents who check their devices or engage with social media before or during bedtime often report difficulty falling or staying asleep (Vidal et al., 2020). Notifications, blue light exposure from screens, and emotional reactivity to content or peer interactions can prolong wakefulness and interfere with the natural sleep-wake cycle. The result is chronic sleep deprivation, which exacerbates emotional dysregulation and intensifies symptoms of anxiety or depressive mood.

In addition, adolescents who experience cyberbullying or emotionally intense online interactions may become preoccupied with their devices at night, replaying conversations or feeling compelled to respond to digital conflicts in real-time. This emotional arousal undermines the body's ability to relax, further delaying sleep onset and diminishing sleep quality over time.

Poor sleep linked to social media use has also been shown to contribute to riskier behaviors during the daytime, such as impaired decision-making, increased impulsivity, and academic disengagement. These downstream effects compound the already significant mental health challenges faced by adolescents in the digital age. Efforts to mitigate sleep disruption should include limiting social media use during evening hours, educating families on the importance of digital curfews, and encouraging device-free zones at bedtime. By promoting healthier sleep habits and reducing exposure to stimulating digital content at night, schools, families, and healthcare providers can help adolescents protect one of the most fundamental pillars of their well-being.

## Differential Impacts Based on Gender, Race, Socioeconomic Status, and Family Systems

Although social media use is widespread among adolescents, its mental health impacts are not experienced uniformly. Risk factors and health outcomes vary significantly based on gender, race and ethnicity, socioeconomic status, and the presence or absence of supportive family and peer systems. Understanding these differences is essential for developing targeted public health interventions. Gender is one of the most well-established factors influencing how social media affects adolescent mental health. Female adolescents are more likely than males to use social media for feedback-seeking, appearance-based comparisons, and peer validation (Nesi and Prinstein, 2015). These behaviors have been strongly associated with increased vulnerability to anxiety, depression, and poor self-esteem (Kelly et al., 2019). Studies show that females also experience higher rates of cyberbullying and are more likely to internalize the emotional consequences of negative online interactions, including body dissatisfaction and social withdrawal.

Racial and ethnic minority adolescents often face additional stressors in online spaces. One study found that 96% of Asian and 97% of Black adolescents had been exposed to racial discrimination on social media, with 79% of Asian and 81% of Black youth reporting being directly targeted (Tao and Fisher, 2022). Higher levels of social media use were correlated with increased exposure to online discrimination and elevated depressive symptoms. These experiences may amplify existing societal inequities and exacerbate psychological stress, particularly for youth from historically marginalized communities.

Socioeconomic status (SES) also shapes the relationship between social media use and mental health. Adolescents from lower-income families may have less access to parental monitoring, digital

literacy education, or mental health resources (Sun et al., 2021). Parents in these households may work long hours or have fewer technological tools to guide their children's online behavior, leading to increased unsupervised screen time. This reduced oversight can elevate the risk of exposure to harmful content, cyberbullying, or social isolation. Conversely, youth from higher-SES backgrounds may benefit from more active parenting, structured screen time rules, and better access to supportive services. Family systems play a critical role in moderating the emotional impact of social media use. Adolescents who have affirming relationships at home and regular open communication with caregivers are more likely to report healthier digital habits and stronger coping skills. In contrast, those from fragmented or less supportive home environments may use social media as a substitute for emotional connection. This substitution can be particularly harmful when digital interactions involve comparison, rejection, or exposure to distressing content.

In Indiana, 2023 YRBS data revealed that female high school students were significantly more likely than male students to report persistent sadness or hopelessness, with 60.1% of females affected compared to 33.5% of males (IDOH, 2024). Multiracial students also reported the highest levels of poor mental health (48.3%) compared to white (35.3%), Black (29.7%), and Hispanic (28.0%) students. Additionally, students who identified as belonging to underrepresented or diverse backgrounds reported higher rates of emotional distress when compared to their peers (IDOH, 2024). These disparities suggest that social media's influence is deeply interconnected with broader social and environmental factors. Prevention strategies must consider how gendered expectations, racial identity, economic hardship, and family stability shape the ways adolescents experience and internalize digital interactions.

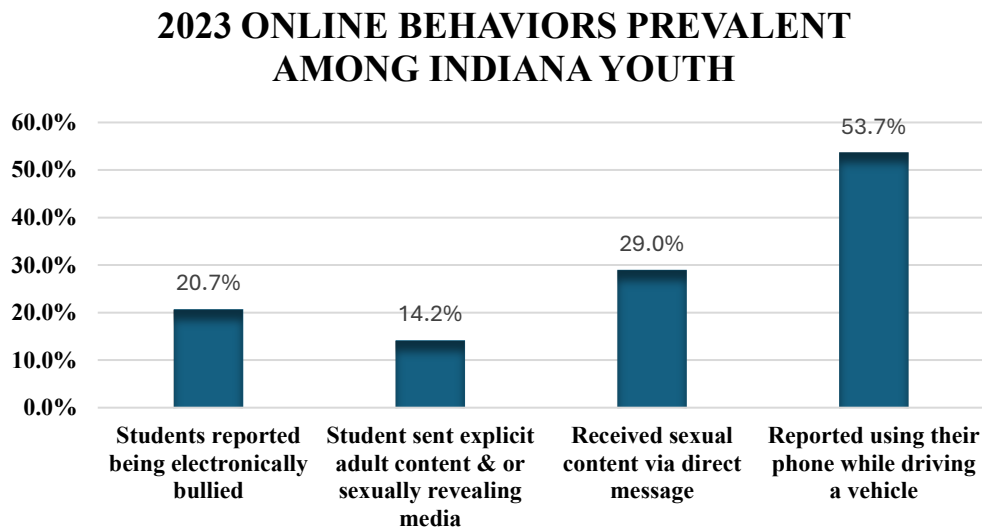
## Bullying as a Mediator Between Social Media and Behavioral Health

Bullying, particularly in digital spaces, plays a critical mediating role in the relationship between social media use and adolescent behavioral health outcomes. Unlike traditional bullying, cyberbullying can occur at any time of day, be widely disseminated, and leave lasting digital footprints that increase the emotional toll on victims. The constant connectivity afforded by smartphones and social platforms allows negative peer interactions to follow adolescents beyond school hours, deeply impacting mental and emotional well-being. Social media platforms often serve as environments where peer aggression, exclusion, and harassment are amplified. Cyberbullying can include a wide range of behaviors, such as name-calling, rumor spreading, threats, humiliation, and the non-consensual sharing of images. The visibility and permanence of such interactions on digital platforms intensify their effects. Adolescents who are targeted frequently report increased levels of anxiety, depression, loneliness, and low self-worth (Fisher et al., 2016).

According to the 2023 Indiana Youth Risk Behavior Survey, 20.7% of high school students reported being electronically bullied, either through text messaging, apps, or social media (IDOH, 2024). This prevalence underscores the significant emotional risks associated with online peer conflict, especially for adolescents who may not have strong family or peer support systems to buffer these effects. Nationally, the Pew Research Center found that 46% of U.S. teens have experienced at least one form of cyberbullying, with 32% subjected to offensive name-calling and 22% targeted by false rumors (Schaeffer, 2023). Adolescents who experience bullying online are more likely to engage in avoidance behaviors, skip school, withdraw from peers, and experience academic decline (Hinduja and Patchin, 2018). These behaviors can further isolate victims and compound their mental health challenges. Concerns extend beyond the quantity of screen time to how adolescents are using digital tools. Inappropriate or risky online behaviors are prevalent among Indiana youth. According to the 2023 YRBS as depicted in figure 4 (IDOH, 2024):



Figure 4



bullying has also been shown to mediate the relationship between social media use and problematic behaviors, such as substance use and self-harm. For instance, youth exposed to bullying may turn to digital platforms more frequently for escape or validation, reinforcing unhealthy coping mechanisms and increasing their risk of emotional dysregulation. This cycle of distress-driven use can escalate into patterns of compulsive behavior and worsen psychological symptoms over time (Marengo et al., 2021).

Importantly, adolescents who lack strong support from caregivers or positive peer relationships are more likely to internalize the impacts of cyberbullying. These youth may struggle to seek help or may fear retaliation, further delaying access to mental health services or trusted adults. The role of family systems is therefore crucial in recognizing the signs of cyberbullying and intervening early to reduce harm. Given the persistent nature of bullying in digital spaces, public health interventions must address the social environments where these interactions occur. Preventative strategies should include teaching adolescents conflict resolution skills, promoting bystander intervention, training families and educators to recognize signs of emotional distress, and improving digital platform accountability for harmful behaviors.

## Social Media and Substance Use Among Adolescents

Social media plays a powerful role in shaping adolescent behavior, including attitudes toward substance use. As adolescents spend more time on platforms that expose them to peer-generated content, advertising, and influencer culture, they are more likely to encounter posts that depict or glorify alcohol and drug use. This exposure can normalize risky behaviors and increase the likelihood of experimentation or early initiation.

A growing body of evidence suggests that social media contributes to the uptake of substance use among adolescents by creating perceived social norms around these behaviors. For example, a 2022 systematic review found that 76.3% of substance-related content viewed by youth on social media portrayed substance use positively, while only 20.2% depicted it negatively (Rutherford et al., 2022). This imbalance can significantly distort adolescents' understanding of the real-world consequences associated with substance use.

Peer influence is a major factor in this relationship. Social media allows adolescents to observe and engage with peer behaviors in real time. Content featuring parties, drinking, or drug use often receives high engagement, reinforcing the idea that these behaviors are common and socially accepted. Adolescents who perceive their peers as approving of or engaging in substance use are more likely to do the same, particularly when they lack strong parental guidance or clear behavioral boundaries (Moreno and Whitehill, 2014). The architecture of social media platforms can also make substance-related content more accessible. Algorithms prioritize popular or highly shared content, often without distinguishing between safe and unsafe messaging. Hashtags, trending challenges, and location-based features can inadvertently promote access to substance-related posts, exposing adolescents to content that might otherwise be difficult to access offline.

Social media also amplifies the influence of celebrities and influencers who often showcase alcohol or marijuana use in ways that appear glamorous or without consequence. These portrayals contribute to the shaping of adolescent attitudes toward substances, particularly when adolescents identify with or aspire to emulate these online personas. Without adequate critical media literacy skills, youth may interpret these behaviors as aspirational rather than cautionary. While the causal relationship between social media exposure and substance use is complex and influenced by individual, familial, and community-level factors, the evidence clearly suggests that digital content can serve as a gateway for risky behavior. Adolescents from under-resourced families or those lacking supervision may be especially vulnerable to these influences, underscoring the need for parental monitoring tools, media education, and early intervention programs.

Substance use among adolescents poses serious risks, including impaired brain development, academic failure, and increased likelihood of addiction later in life. Understanding how social media contributes to these outcomes is critical for public health professionals tasked with designing prevention strategies that meet the needs of diverse and at-risk youth populations.

## Impact on Alcohol Use

Alcohol is the most commonly used substance among adolescents in the United States, and social media has increasingly become a channel through which young people are exposed to alcohol-related content. Posts that depict alcohol use in social or celebratory settings often present it in a favorable light, contributing to a shift in perceived norms and reducing perceived risks. These portrayals are especially influential during adolescence, a developmental stage characterized by heightened sensitivity to peer influence and social status.

A key study by Sampasa-Kanyinga and Chaput (2016) found that adolescents who used social media for more than two hours per day were significantly more likely to engage in binge drinking compared to those who used social media less frequently. The study revealed that among male adolescents, 26.5% of daily social media users reported binge drinking compared to just 7.2% of those with low usage. Among female adolescents, the difference was even more pronounced: 25.5% of high social media users engaged in binge drinking compared to only 3.2% of low users.

The mechanisms linking social media to adolescent alcohol use are multifaceted. One of the most prominent is exposure to peer content involving alcohol, which can normalize drinking behavior and increase the likelihood of emulation. Social reinforcement mechanisms such as likes, comments, and shares further elevate the social value of these posts. Adolescents who observe peers or influencers consuming alcohol in fun or glamorous settings may perceive such behavior as normative and without consequence. In addition to peer influence, commercial alcohol marketing is also a factor. Alcohol brands increasingly use social media platforms to advertise to broad audiences, including underage users. Even when direct

targeting is restricted, adolescents may still be exposed to this content through peer reposts, influencer sponsorships, and algorithmically promoted ads (Moreno and Whitehill, 2014).

Research indicates that adolescents exposed to alcohol-related content on social media are not only more likely to try alcohol but are also more likely to do so at a younger age. Early initiation of alcohol use is associated with a higher risk of alcohol dependence, risky sexual behavior, and academic decline. These outcomes highlight the urgency of addressing the role of social media in shaping adolescent attitudes toward alcohol. Preventive strategies may include educating adolescents about the persuasive nature of alcohol marketing, encouraging critical consumption of online content, and promoting parental controls that limit exposure to substance-related posts. Schools and public health agencies can also play a role by integrating media literacy into health curricula and providing support resources for families and students.

## Impact on Other Substance Use

In addition to alcohol, social media contributes to adolescents' exposure to and attitudes toward other substances, including tobacco, marijuana, and various illicit drugs. These substances are frequently depicted in online content, especially within peer and influencer networks that normalize or glamorize use. This exposure can influence beliefs, increase curiosity, and in some cases, a gateway into what could lead to habitual use. Research indicates that marijuana use among adolescents is often shaped by online visibility and perceived peer acceptance. According to a study by Kim et al. (2022), adolescents who are exposed to cannabis-related posts on social media are more likely to initiate use, especially in regions where marijuana is legal. The effect was most pronounced among youth who reported frequent engagement with cannabis-themed content and identified with digital communities that portrayed marijuana use positively.

Illicit substances such as opiates, methamphetamines, and/or cocaine are less frequently shown on mainstream social media platforms due to content restrictions. However, when they are discussed or depicted, framing is often concerning. A 2022 review found that while most social media content about drug use depicted alcohol, cannabis, and other recreational substances in a positive light, content involving opiates was more likely to portray addiction and overdose, often in sensationalized or distressing terms (Rutherford et al., 2022). Though this may not always encourage use, repeated exposure to such narratives can lead to desensitization and altered risk perception. Digital spaces also facilitate access to drug-related communities and information about substances, including methods of use, procurement, and harm reduction techniques. While some of this content is informative and aimed at safety, adolescents may encounter misinformation or content that minimizes the risks associated with drug use. This is especially dangerous for youth who lack trusted adults or accurate health education resources. Adolescents from under-resourced families may be at greater risk of exposure to drug-related content due to limited parental monitoring or digital literacy. Without structured guidance, they are more likely to explore substance-related material online and form attitudes based on peer behavior rather than science-based information.

Although direct causal pathways remain difficult to establish, there is compelling evidence that social media contributes to shaping behaviors related to substance misuse for adolescents. The visibility, normalization, and reinforcement of drug-related behavior online demand proactive responses from families, educators, and policymakers. Efforts to mitigate these risks should include media literacy campaigns, stronger platform regulation, and educational initiatives that teach adolescents to critically assess online content related to drug use. By creating safer digital environments and promoting informed decision-making, public health systems can help reduce the influence of online content on youth substance use.

## Positive Uses of Social Media and Potential Links to Substance Use Prevention

Although much attention has been paid to the risks associated with adolescent social media use, there is also growing interest in how these platforms may promote protective behaviors, particularly when used with purpose and guidance. One emerging area is the role of social media in supporting adolescents' rejection of substance use and the promotion of wellness-centered values. Some adolescents engage with social media communities that model healthy behaviors and share content that discourages drug and alcohol use. For example, youth-focused wellness influencers and substance-free content creators use platforms like TikTok and Instagram to promote sober lifestyles, discuss the harms of substance misuse, and encourage healthy alternatives such as exercise, art, or advocacy. These positive narratives can challenge the normalization of substance use online and provide adolescents with value-aligned content that reflects their goals and beliefs (Rutherford et al., 2022).

Additionally, adolescents who engage with social media content related to social causes or creative collaboration often report higher self-efficacy and reduced interest in risk-taking behaviors, including substance use. Digital platforms offer avenues for civic engagement and identity formation, which can bolster adolescents' sense of purpose and reduce the need to seek social capital through drug or alcohol experimentation (Winstone et al., 2021). Public health agencies and prevention programs are also increasingly using social media to engage youth audiences in meaningful ways. Peer-led or peer-endorsed digital prevention campaigns have been shown to improve health literacy and decrease favorable attitudes toward substance use, especially when messaging is culturally relevant and distributed through trusted platforms (Moreno and Whitehill, 2014). While more longitudinal data is needed, early findings indicate that positive social media engagement may help reinforce protective factors, including self-regulation, identity development, and peer influence aligned with healthy decision-making.

## Summary of Impacts of Social Media Use on Mental Health and Substance Misuse

The growing body of evidence surrounding adolescent social media use paints a clear picture: excessive or unstructured engagement with social media is associated with a broad range of behavioral health risks. While digital platforms can offer opportunities for self-expression, connection, and learning, their overuse or misuse has been consistently linked to increases in depression, anxiety, suicidality, body dissatisfaction, substance use, and sleep disruption. Mental health is perhaps the most well-documented area of concern. Numerous studies have found strong correlations between heavy social media use and increased rates of anxiety and depression among adolescents (Daly, 2022; Khalaf et al., 2023). Social comparison, peer feedback-seeking, and exposure to cyberbullying all contribute to emotional dysregulation and low self-esteem. Additionally, poor sleep quality, often a consequence of late-night social media use, further exacerbates these symptoms and contributes to chronic emotional fatigue (Alonzo et al., 2021). Suicide risk has also increased among adolescents in parallel with rising digital engagement. National and Indiana-specific data show elevated rates of suicidal ideation, planning, and attempts, particularly among female students and youth from underrepresented or vulnerable backgrounds (IDOH, 2024). Social media can heighten risk by exposing adolescents to cyberbullying, exclusion, or harmful messaging related to self-harm and hopelessness (Memon et al., 2018; Hinduja and Patchin, 2018).

Substance use is another behavioral domain significantly influenced by social media. Adolescents are exposed to peer and influencer content that often portrays alcohol and drug use in a positive or normalized light. Research shows that this exposure correlates with higher rates of drinking, marijuana use,

and experimentation with other substances (Sampasa-Kanyinga and Chaput, 2016; Rutherford et al., 2022). These risks are especially high for adolescents with limited parental supervision or inadequate access to health education resources. Importantly, social media does not affect all adolescents equally. Youth from underrepresented racial or ethnic backgrounds are more likely to experience racial discrimination online, which contributes to poorer mental health outcomes (Tao and Fisher, 2022). Female adolescents are disproportionately affected by appearance-based pressures and cyberbullying, while youth from lower-income households face increased risks due to reduced oversight and fewer protective supports (Sun et al., 2021).

Research also shows that problematic social media use can mirror behavioral addictions. Adolescents may exhibit compulsive checking, dependency on online validation, or difficulty disengaging from digital platforms, particularly when under stress or facing social exclusion (Shannon et al., 2022). These patterns interfere with emotional development and increase the likelihood of long-term psychological and behavioral challenges.

In sum, the impacts of social media on adolescent health are substantial and multifaceted. While digital engagement is nearly universal among youth, its effects are shaped by frequency, type of content, individual vulnerabilities, and social context. These findings underscore the need for comprehensive, equity-driven public health strategies to mitigate the harm of social media while promoting healthy, intentional use among adolescents.

## Are There Any Benefits of Social Media Use by Adolescents?

While much of the research highlights the risks of social media use among adolescents, there is also evidence that, when used intentionally and in moderation, social media can offer meaningful benefits. These benefits are particularly evident when adolescents use digital platforms to foster healthy peer relationships, access educational or affirming content, and maintain connections during periods of social isolation.

One of the clearest examples of social media's positive impact occurred during the COVID-19 pandemic. Social distancing and remote learning created barriers to in-person interaction, but adolescents who used social media constructively reported lower levels of loneliness and anxiety. A study by Cauberghe et al. (2021) found that adolescents who actively engaged with peers through social platforms during the pandemic were better able to cope with emotional stress and maintain a sense of social connection. Social media also plays a role in identity development and self-expression, especially for adolescents navigating complex social environments. Youth who may not feel comfortable discussing personal challenges within their family or school settings often turn to online spaces to find supportive communities. These digital connections can promote self-awareness, reduce feelings of isolation, and encourage positive coping strategies (Winstone et al., 2021).

Adolescents from underrepresented groups may particularly benefit from connecting with peers who share similar experiences, values, or challenges. By curating their digital environments to include uplifting or empowering content, many youths are able to enhance their mental well-being. A systematic review by Berger et al. (2022) noted that adolescents who sought out affirming online spaces reported improved mood, greater resilience, and stronger peer belonging. These benefits were more likely when adolescents used social media for active engagement, such as creating content, joining supportive groups, or participating in cause-based discussions. Additionally, positive content consumption, such as following science channels, creative hobby pages, or mental health education accounts—can enhance adolescents'

skills, self-efficacy, and sense of purpose. Adolescents who follow pages related to academic interests or personal growth are more likely to report using social media as a tool for learning and self-improvement (Godard and Holtzman, 2024). These uses contrast with passive scrolling, commonly referred to as “doom scrolling” by youth-aged and adult individuals, which has been linked to negative mental health outcomes.

A 2018 systematic review by Memon et al. emphasized that the nature of engagement, active versus passive use—plays a key role in determining whether social media has a beneficial or harmful effect. Adolescents who use social media actively and purposefully are more likely to experience increased social connectedness, whereas those who use it to compare themselves to others or seek constant validation are more likely to develop emotional distress. In summary, social media can support adolescent development when used with intention and balance. Encouraging youth to seek out positive content, connect with supportive communities, and use social platforms to enhance real-world relationships may help counter some of the risks associated with heavy or unstructured use. Educational interventions that teach adolescents how to engage with digital spaces in healthy, affirming ways can help them maximize benefits while reducing harm.

## Recommendations to Limit Impacts of Social Media Use on Adolescent Mental Health

As the evidence shows, the mental and behavioral health risks associated with adolescent social media use are significant, but not inevitable. Preventive strategies should focus on promoting intentional, informed, and supportive use of digital platforms. Recommendations must also reflect the unique needs of youth from diverse family systems, racial and economic backgrounds, and those with limited access to adult supervision or health education. Comprehensive interventions should include collaboration among families, schools, healthcare providers, and policymakers. The following strategies offer actionable approaches to mitigate harm and promote healthier digital behavior.

### Educate Parents and Students on Impacts of Social Media Use

Awareness is a critical first step in reducing risks. Parents and adolescents need access to accurate, age-appropriate information. For example, learning what is considered excessive use and what emotional and behavioral consequences could result from extended social media use. Educational efforts could assist in equipping families with tools to foster open communication about digital habits.

**Recommended actions** (Amirthalingam and Khera, 2024):

- Organize school-based events focused on social media education
- Invite public health experts to discuss the impacts of digital media on adolescent brain development
- Distribute parent guides explaining signs of problematic use and how to implement healthy boundaries
- Provide tutorials on how to use parental control apps to monitor and limit access to inappropriate content



## Set Time Limits

Excessive screen time is a key predictor of poor mental health outcomes. Research consistently shows that adolescents who use social media for more than two to three hours per day are at significantly higher risk for depression, anxiety, and emotional dysregulation (Riehm et al., 2019).

### **Recommended actions:**

- Encourage parents to limit recreational screen time to under two hours per day
- Install parental control tools such as Apple Screen Time, Google Family Link, or Qustodio
- Establish digital curfews to reduce nighttime use, which has been linked to poor sleep quality (Alonzo et al., 2021)

## Promote Positive Content

Helping adolescents identify and follow accounts that promote education, creativity, mental wellness, or social good can reduce harmful effects from negative comparisons or peer conflict. Encouraging active, goal-oriented social media use can support adolescent development.

### **Recommended actions:**

- Support youth in curating feeds that reflect their interests, values, and personal growth goals
- Use parental controls to block inappropriate or harmful content
- Encourage adolescents to engage in positive interactions online and report harmful behavior

## Parental Monitoring

Parental involvement is among the strongest protective factors for adolescent mental health. Monitoring should be balanced with respect for adolescent autonomy and framed as a strategy to promote safety and well-being.

### **Recommended actions** (Amirthalingam and Khera, 2024):

- Teach parents how to use digital tools to monitor screen time and restrict harmful content
- Host workshops that build parents confidence in guiding online behavior without alienating their child
- Encourage regular family conversations about online experiences, peer interactions, and emotional well-being

## Social Media Literacy Programs for Adolescents

Digital literacy can empower adolescents to recognize unhealthy patterns and choose healthier forms of engagement. Programs should focus on building skills in media analysis, emotional self-awareness, and peer support.

### **Recommended actions:**

- Offer school-based programs that distinguish passive from active use and explain how each impacts mental health and overall wellbeing (Godard and Holtzman, 2024)
- Teach students how to spot addictive behaviors and the importance of taking digital breaks
- Normalize practices like “digital detoxing” and mindful use to improve focus and reduce anxiety

## Cyberbullying Prevention

Cyberbullying remains a significant threat to adolescent emotional health. Prevention strategies must involve not only individual education but also school policy and digital platform accountability.

### **Recommended actions:**

- Integrate cyberbullying education into school health curricula
- Train students to recognize, report, and intervene in online harassment situations
- Guide parents in recognizing signs of cyberbullying and supporting their children in seeking help
- Promote empathy, digital civility, and inclusive online behavior in all settings

## Cell Phone Restriction in Schools

Limiting in-school cell phone use has been shown to improve concentration, reduce anxiety, and promote in-person social interaction. Removing distractions in academic settings may also protect mental wellness.

### **Recommended actions:**

- Pilot school-based policies that restrict cell phone use during instructional hours (Huey and Giguere, 2022)
- Evaluate program outcomes by comparing student focus, academic performance, and reported well-being
- Use findings from pilot programs to inform wider implementation across districts
- Incentivized learning coupled with access to cellular use

It may not be feasible to completely remove or significantly limit access to a cellular or other device with computing capabilities. We must be creative in our approaches to adherence to any and all public and population health interventions. As it relates to cell phone restrictions in schools, blanket policies that limit use without some form of incentive or award may feel like a punishment. Using a software application to implement a scale-based system which tracks screentime could be beneficial. In this example, students can earn some sort of reward or incentive for having under a certain amount of screentime per day, week, or month (whichever is applicable to the school). These rewards would also be available to students without a cell phone however, jurisdictional discretion is advised for monitoring, feasibility, equity, and inclusion.

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