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## Review

# Social media as a bridge and a window: The changing relationship of adolescents with social media and digital platforms

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**Abstract**

Social media use became central to adolescents' lives and development during the COVID-19 pandemic, with some adolescents first initiating social media use in this period. The unique circumstances of the pandemic contributed to changing patterns of social media use among teens and popularity of features. The pandemic also facilitated use and engagement with social media to strengthen social connection, emerging identities, and access to information and resources. It also impacted teens' online experiences and exposure to broader societal problems on SM. Recent research, with a focus in the United States, is presented on how the pandemic has shaped adolescents' experiences with social media in meaningful ways across development. We argue that research on adolescent social media use needs to consider how the COVID-19 pandemic has shaped the use and influence of social media in adolescents today.

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**Introduction**

Many have pointed to social media (SM) as a driving force behind the emerging teen mental health crisis [1], with nearly all teens using SM daily [2]. Yet, the rise and influence of SM *and* these mental health problems did not occur in a vacuum. SM use proliferated during the largest international health crisis in modern history: the COVID-19 pandemic. With school closures and physical distancing measures, SM became the primary way

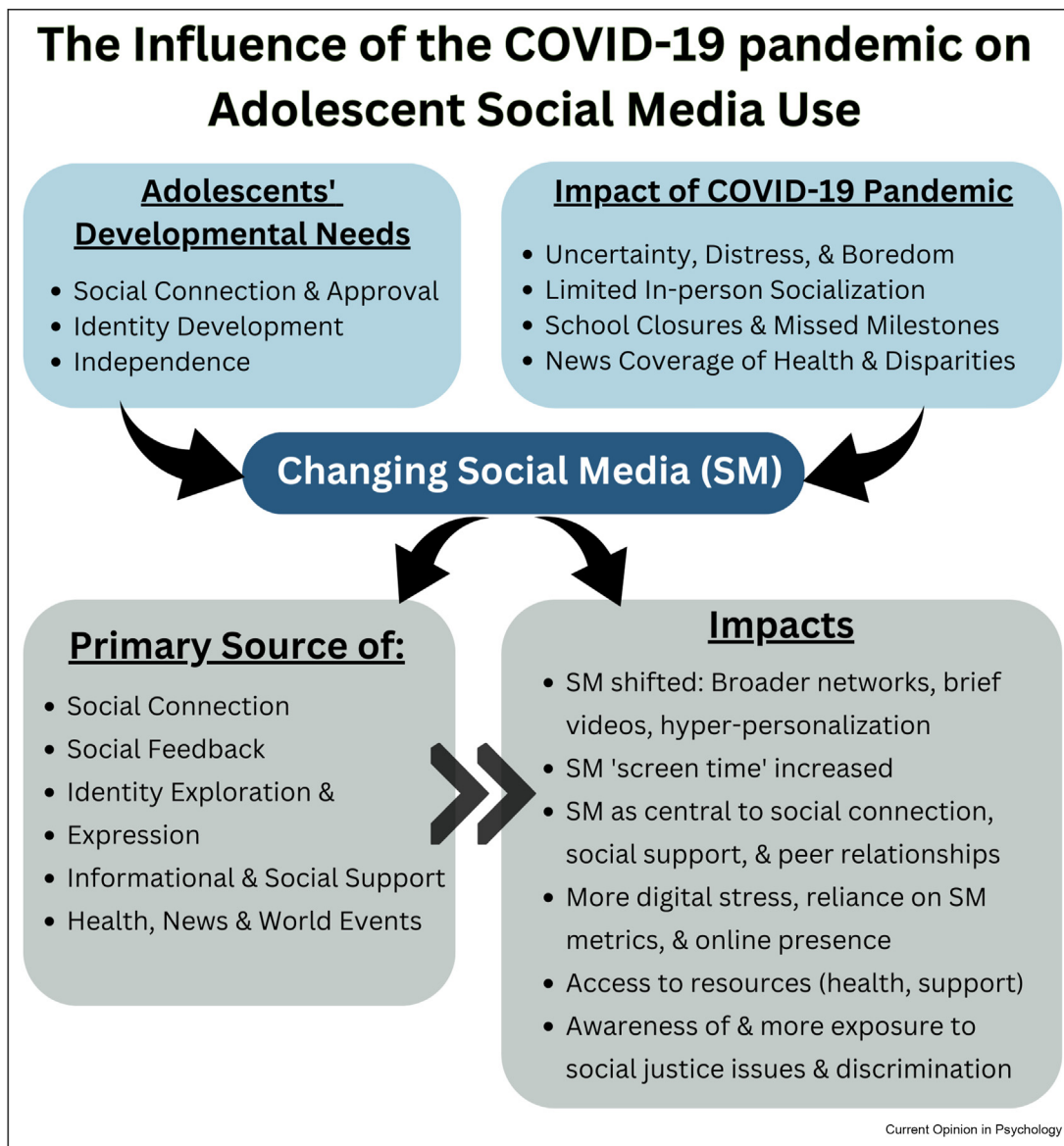
adolescents could interact with their peers, explore and express their emerging identities, and stay abreast of pandemic news and world events [3]. SM became a space where normative activities and milestones occurred, amplifying its role during a period of rapid neurobiological and social-emotional development [4,5]. Some adolescents are not only “digital natives,” but also “Generation COVID of SM.” Their first interactions and experiences with SM were during the COVID-19 pandemic, fundamentally shaping their perceptions of, interactions with, and responses to SM. In this article, we review research on adolescents' patterns with SM use during the COVID-19 pandemic, primarily focused in the United States (U.S.), and present research on how the pandemic has shaped teens' SM use for connecting with peers and the broader world in new and potentially lasting ways (Figure 1).

**Changing patterns of adolescent social media use and well-being**

Adolescents' SM use spiked dramatically in the beginning of the COVID-19 pandemic [6–8]. Following that initial spike, some research indicates that SM use patterns returned to relatively pre-pandemic levels [9]. A nationally representative survey in the U.S. found that SM use increased from spring 2019 to fall 2021, but only by 17 min on average among teens [9]. Daily time spent on all screens increased by an average of 77 min. However, a U.S.-based survey indicates SM use is much higher for teen girls, with an average of 2 h per day for major SM platforms and most teens checking SM “almost constantly” [10].

Findings on the effects of SM use on adolescent mental health and well-being are mixed [11]. A systematic and meta-analytic review of 30 studies conducted across the world found a small overall association between SM use and mental health symptoms during the pandemic [11], with effects dependent upon specific SM behaviors. In contrast, a longitudinal study of early adolescents in the U.S. found that although SM use increased during the pandemic, the relationship between social technology use and well-being did not change [12]. These findings are consistent with those reported by other meta-analytic and umbrella reviews [13–15]. Despite small positive associations, there is growing consensus in the

Figure 1



Overview of how the COVID-19 pandemic influenced social media and its impact on adolescents.

**Note.** This figure is intended to provide a summary of key points raised in the text and encourage further consideration about the impact of COVID-19 on adolescent social media use. It is an exhaustive list of all ways in which the COVID-19 pandemic influenced adolescents during the pandemic, which differentially impacted adolescents based on their individual characteristics, families, communities, and broader societal impacts (e.g., geography, socioeconomic status, structural racism).

field that the effects of SM largely depend upon characteristics, motivations, engagement, and experiences that vary at the individual level [15,16]. For instance, there might be key windows of vulnerability during which SM has a greater impact on adolescents, with these windows occurring at different ages for males (14–15 and 19 years old) and females (11–13 and 19 years old) [17]. Methodological innovations [18] are needed to improve the science behind adolescent SM

use and disentangle effects within-person, between people, and over time and development.

**Social media as a changing platform for interaction**

Although usage patterns may not have substantially changed, what constitutes SM has shifted. The unique circumstances of the pandemic have fundamentally shaped and changed the nature of SM. Loneliness, uncertainty, and boredom fueled the need and popularity

of SM features to stay connected, informed, and entertained. Many SM platforms allow users to create and view an endless stream of short videos and broadly connect with users through hyper-personalized algorithms that highlight salient experiences, information, and entertainment, often through creativity-fueled “social challenges” [19]. TikTok is now the second most popular SM behind YouTube among teens in the U.S. [2], both of which include these features. Multi-player gaming, online streaming, and community forums skyrocketed for gamers to connect during the pandemic [20]. Ultimately, these features shifted adolescents’ connections from predominantly friends and family to a broader global network of mostly unknown users with content tailored to their interests. Thus, every adolescent has unique experiences on SM, affecting how they use it and its impact.

### **Social media as central to adolescents’ social connection and support**

During the pandemic, many adolescents did not have the opportunity to forge in-person social connections alongside normative developmental milestones. SM became a primary way to maintain existing relationships, build new ones, gain social support, and cope with the pandemic [12,21,22]. Teens connected directly through video chatting, individual and group messaging, community discussion boards and forums, and multi-player gaming, as well as indirectly through content generation of photo sharing, video blogging (“vlogging”), browsing, and interacting with others’ content and experiences (e.g., likes, shares, views). Many qualities of in-person interactions translate to online communication [23], and most adolescents report that SM makes them feel more connected with and supported by their friends [2]. However, one daily diary study in the Netherlands found that early adolescents preferred offline contact during the pandemic compared to older adolescents [24], suggesting that relationships on SM might evolve across adolescence.

The impact of SM on well-being during the pandemic also varies by SM behaviors. SM behaviors such as one-to-one communication, digital disclosures in friendships, and positive online experiences buffered against stress and loneliness during the pandemic [11,25]. One study in the U.S. among adolescent girls found that video chatting and messaging also promoted daily positive affect and protected against depressive and anxiety symptoms over time [26]. Longitudinal studies of youth in the U.S. suggest that *less* time spent socializing online with others (i.e., digital socialization) increased the risk for psychopathology six months later, and greater levels of SM socialization buffered the relationship between pandemic-related stress and internalizing symptoms [27].

The pandemic cemented the presence of SM in teens’ lives as a source of social connection and to combat social isolation and loneliness [28]. As physical distancing practices subsided, SM and online communication remain central to peer interaction. Consistent with this, the American Psychological Association released recommendations in 2023 that youth using SM “should be encouraged to use functions that create opportunities for social support, online companionship, and emotional intimacy that can promote healthy socialization” [29].

### **Changing importance of social media availability, quantifiability, and social approval**

Although SM facilitated social connection during the pandemic, teens’ expectations have shifted around online interactions. Many teens report feeling “digital stress,” including pressure to be available to peers and worry about peer approval [30]. The absence of other activities during the pandemic made it more likely that peers could immediately respond to messages or posts, thereby heightening expectations of others and perceptions of one’s own availability demands [31].

SM feedback can provide quantifiable evaluation of oneself and social acceptance [32], with heightened importance on metrics (e.g., likes, shares, views) to assess social standing and peer approval. Many teens feel pressure to gain SM attention via likes, comments and views [33], which can be both rewarding and threatening to adolescents’ emerging sense of self. An experimental study in the U.S. found that adolescents who were randomly assigned to receive few likes (compared to more likes) during a standardized SM interaction felt more strongly rejected; they also reported more negative affect and more negative thoughts about themselves [34]. This suggests that SM facilitates online social status comparison, even without negative comments. Adolescents also may be aligning their self-perception more with how they think others evaluate them on SM [35], which could amplify self-esteem in positive ways or exacerbate negative experiences of social rejection or cyberbullying. Socially vulnerable youth may be more affected by SM metrics and feedback [34,36], underscoring that individual differences may magnify negative and positive experiences on SM [10].

Without other sources of feedback, SM became a central means of experimenting with self-presentation content (e.g., selfies, vlogging), with metrics likely becoming more important for social comparison and self-evaluation as teens expressed and forged their identities [37]. However, the extent to which teens’ SM presence during the pandemic has influenced or transformed offline identities and behaviors remains unclear [38]. Some teens become preoccupied with their appearance

on SM, affecting their offline experiences and contributing to increases in depressive symptoms [39], which was likely more pronounced during the pandemic. In a large study of adolescents in the U.S., frequency of online social comparison, receiving negative feedback, and risky self-presentation mediated the association of digital media use with internalizing and externalizing problems in boys and girls [40]. As a powerful tool of social reward and threat, teens likely became accustomed to checking SM more frequently to maintain these connections and “check” social feedback [10], with potential long-term effects. A recent longitudinal, neuroimaging study in the U.S. suggests that habitual SM checking in early adolescence may be associated with changes in the brain’s sensitivity to social rewards and punishments [41], though more work is needed to fully understand its effects.

### **Social media as a bridge to the world and oneself**

Through SM, adolescents formed connections with individuals, communities, and social movements that existed outside of their local geographic region or networks [42]. Sharing stories and content on SM, as well as social gaming with broader audiences allowed adolescents to access new peers and experiment with new ways of expressing themselves [42]. SM also provided an outlet for adolescents to understand how others were coping with the COVID-19 pandemic and relate to others adjusting to a “new normal” [43]. Connecting with others, known and unknown, became a way of sharing across a broader experience of humanity [43], which is now central to how adolescents understand their own experiences.

With broader connections to the world, exploring one’s identities on SM became magnified, especially for youth who hold minoritized identities. In particular, SM provided LGBTQ+ teens spaces to safely explore parts of their identity and gain access to LGBTQ+-specific information [44]. LGBTQIA+ youth use SM for both informational and emotional support to explore, experiment, or express their sexual and/or gender identities [45]. Reliance on SM for this support during the pandemic has made it an integral source of identity-affirming connections and resources, which could be life-saving for some [45,46].

### **Social media as a window to the world: News, online hate, and broader problems**

Adolescents used SM to stay informed and cope with the grim realities of the COVID-19 pandemic. With empty social calendars and more time on SM, some adolescents became more aware of global events and social justice issues [42]. Although not a new phenomenon, there was increased mainstream coverage of racial disparities of the COVID-19 pandemic [47], as well as

racially motivated murders of Black Americans [36] and hate crimes towards Asian Americans during the pandemic [48,49]. Black and Asian American adolescents may not easily escape exposure to SM content depicting violence against those who share their identities, which could have profound physical and mental health effects [50]. Indeed, many adolescents of color are regularly exposed to online racial discrimination [51] and traumatic events [52]. Exposure to these events, and widespread SM dissemination of videos of violence, has only increased. While SM became a primary resource for news and world events during the pandemic, it has since also increased exposure to online hate and broader societal events with potential implications for adolescents’ well-being.

### **Generation COVID of social media: Need for research on initiation during the pandemic**

In the context of the pandemic, adolescents turned to SM in new ways for interaction with the world, some for the first time. Initiation of SM use was likely expedited due to social distancing practices of the pandemic. However, parents may not have had the capacity to use active parental mediation strategies for managing teens’ SM use. In some cases, less parental mediation could have led teenagers to develop unhealthy SM habits (e.g., disrupting sleep, consuming misinformation, cyberbullying [53]), which could persist into their current SM interactions. Examining how the pandemic shaped first-time users SM initiation and engagement during the pandemic, and parent relationships around teen SM use, is critical to understand its effects among adolescents today.

### **Concluding remarks**

A large and growing body of research has sought to better understand the impact of SM on adolescents’ development and wellbeing during and since the pandemic. Findings demonstrate that effects are highly variable, depending heavily on individual differences and contextual factors [15]. Effects of the COVID-19 pandemic on adolescents’ SM use are likely similar, with adolescents affected in ways we have yet to fully understand. A universal takeaway, however, is that adolescents’ SM behaviors and social worlds were likely shaped in ways that are inextricably linked to the pandemic. In the absence of traditional developmental experiences, ‘Generation COVID’ had a unique reliance on social technology to learn about themselves and connect with others. Unlike those who came before and after them, their experiences with SM have been fundamentally different. Teens themselves should be part of this broader conversation to integrate their experiences with SM during the COVID-19 pandemic into future research [54]. Research evaluating the effects of SM use on adolescent well-being and mental health must attend to the broader context of adolescents’ lives [55], including

the pandemic. Moving forward, research on SM use and its influence, and policies around SM use, must acknowledge and actively consider how the COVID-19 pandemic has shaped its impact on adolescents [3].

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## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

No data was used for the research described in the article.

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This theoretical review paper outlines ways in which the COVID-19 pandemic may have intensified the benefits and drawbacks for social media for adolescent development and well-being, across key domains of social connection, self exploration/expression, and access to information online. Researchers end by calling for more precise scientific work examining how, when, where, and for whom social media may have different impacts.
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This report summarizes a nationally-representative survey of 1397 teen girls' in the United States positive and negative perceptions of social media, including specific platforms, features, and experiences. It also breaks down findings by race/ethnicity (36% White, 12% Hispanic, 18% Black, 10% Asian, 3% Other, 22% Multi-racial) youth with depressive symptoms (63% no symptoms, 19% mild symptoms, 18% moderate-severe symptoms), and socially vulnerable youth. Girls of color encountered both identity-affirming and discriminatory content monthly on SM. Girls with mild-severe depressive symptoms were more likely to report that SM has a negative effect on their peers than girls without depressive symptoms. Demographic variables were weighted for analyses.
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In this longitudinal study of 586 middle school students in the United States. The sample was 51% female, 48% male, and 1% non-binary or some other gender identity. At the first time point, the average age of the sample was 12.26 years old. At the second time point, the average age of the sample was 13.67 years old. The sample was 46% White, 15% Hispanic, 9% Black, 6% Asian, 7% Biracial, 5% Native American, 1% Middle Eastern, and 10% Other/Unknown Racial Identity. The authors investigated whether there were differences in positive and negative social technology use during the pandemic and whether the relationship between social technology use and well-being changed during the pandemic among early adolescents. The authors found increases in both negative and positive social media use from the period before to during the pandemic. They did not find that the relationship between social technology use and well-being changed during the pandemic.
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