EXPERT OPINION

Impact of Social Media on Mental Health of Children and Adolescents

Reviewed by:

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Introduction

Social media and smartphone use have become an integral part of our lives in recent times. There has been a rapid surge in access to internet as well as media devices since the pandemic.[1] In India, social media use is no longer restricted to urban areas. Internet access and social media usage in the young population in India have advanced from urban to rural areas.[2]

A study conducted in two rural areas of Kolhapur district in India included 650 students aged between 15 and 18 years. The study noted that 87.86% of the adolescents in these areas used social media. A vast majority of the participants used it for entertainment and communication. Only a few used it for educational purposes.[2]

Use of social media and smartphone devices can be good for the youth but if not used responsibly, they can have an adverse impact on their health and overall well-being.

This article discusses the impact of social media on the mental health of children and adolescents based on findings from some recent studies and reviews.

Impact of social media and smartphone use on mental health of youth

Social media use is affecting the mental health of children and adolescents across the globe. A study conducted among adolescents in the United States noted that use of social media was linked to mental health conditions and the correlation was stronger in frequent users. Therefore, frequent use may have an adverse impact on the mental health of young individuals.[3]

A study involving young individuals, 12-24 years of age, from British Columbia, Canada, looked at the use of TikTok during the pandemic for gaining information about mental health. While the platform could be helpful in enhancing awareness around mental health and decreasing stigma, it could also have a negative effect on mental health by providing access to distressing content and incorrect information about diagnoses and treatments.[4]

A study conducted among children and adolescents from Israel (8 to 14 years of age), noted that increased social media use was associated with more psychiatric symptoms and negative emotions. However, it was also found to be associated with greater positive emotions and life satisfaction.[5]

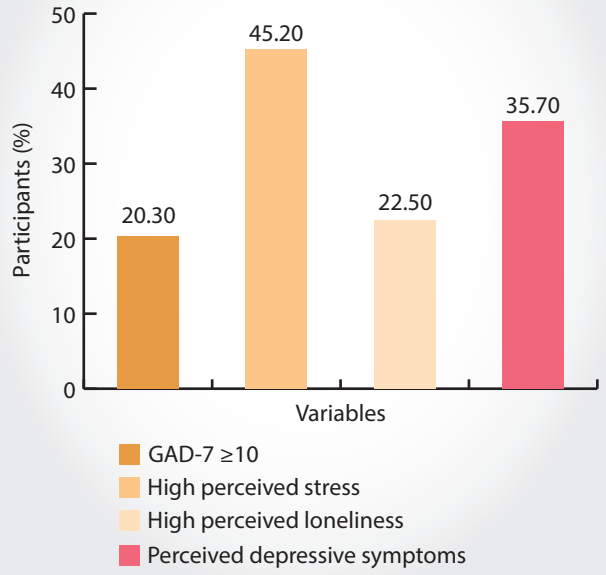
The Indian study conducted in Kolhapur noted that while 70% of the adolescents reported that they enjoyed the use of social media, 30% were found to have negative feelings, such as anxiety, depression, loneliness, and nervousness. A large number of the participants reported that social media had an adverse effect on their lifestyle.[2]

In a study evaluating the use of social media and its effect among adolescents in Ethiopia, the participating adolescents stated that social media use had both positive and negative effects in their lives. The negative effects included addiction to social media and negative impact on confidence. Parents also noted positive and negative effects of social media use in their children.[6]

A study among adolescents in Turkey noted that those who used Instagram for longer durations had higher loneliness scores. Additionally, Twitter users experienced lower loneliness scores but higher anger scores.[7]

Excessive or improper use of social media may pose a risk to mental health. Children and adolescents who spend several hours a day on social media have a greater risk of behavioral problems.[1] A link has been noted between teenage social media and smartphone use and increased mental distress, self-harming behaviors, and suicidality.[8]

Figure 1. Proportion of participants with smartphone overdependence reporting GAD-7 ≥10, high perceived stress, high perceived loneliness, and perceived depressive symptoms



A study conducted among adolescents in South Korea noted that overdependence on smartphones was significantly associated with mental health. Those having overdependence on smartphones had a higher likelihood of reporting generalized anxiety disorder 7-item (GAD-7) of ≥10, high perceived stress, high perceived loneliness, and perceived depressive symptoms (Figure 1).[9] It has been reported that use of smartphone for listening to music, online chats, watching TV, and playing games leads to negative effects on mental health of adolescents. Use of smartphones for online courses was noted to have no impact on mental health.[10]

Use of social media can also affect the eating behaviors of adolescents. Some content on social media endorses pro-eating disorder messages. The use of platforms containing such content is linked to a crusade to become thin. Adolescents who seek nutritional information online may be exposed to inadequate and incorrect information. This can result in unhealthy eating behaviors.[1] A study evaluating the association between social media, eating attitudes, anxiety, and depression among adolescents noted that the use of social networking may heighten the likelihood of unhealthy eating attitudes among adolescents who do not have a risk of developing eating disorders. However, it may also serve a protective role among those already having these symptoms.[11] Increased use of internet to obtain nutritional information has been shown to be linked to increased disordered eating among adolescents.[12]

Social media use and sleep

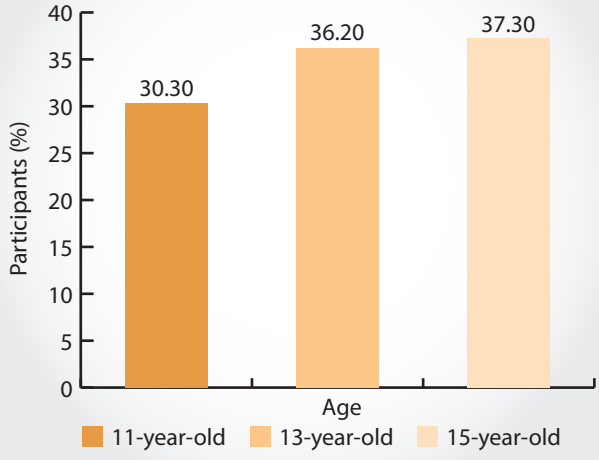
A recent study noted an association between intense and/or problematic social media use and sleep-onset difficulties among adolescents.[13] In a study of female adolescents, 12-18 years of age, there was an association of poor sleep with social media use, anxiety, and depression.[14] Yet another study noted intense and problematic social media use to be linked to poorer sleep patterns among adolescents.[15]

A systematic review of data on the effect of electronic media on sleep in children and adolescents (0-15 years of age) included evidence from western countries. Investigators noted evidence for electronic media use linked with short sleep duration across the age groups. Among children aged 6-12 years, evidence indicated that electronic media use was associated with later bedtime and poor sleep quality. Among those aged between 13 and 15 years, evidence pointed to an association between screen time and difficulty in falling asleep. Additionally, social media use was found to be linked to poor sleep quality.[16]

A study in Italy explored the relationship between technology and social media usage and sleep-onset problems in adolescents.[17] Around 34.3% of the adolescents were noted to have sleep-onset difficulties. Figure 2 shows the percentage of participants with sleep-onset difficulties in different ages. Adolescents who used electronic devices more frequently appeared to have sleep-onset difficulties more commonly. The odds ratios for the association between difficulty falling asleep and technology and social media use were:

- General use—1.50 for highest vs. lowest tertile
- For playing games—1.35 for ≥1.8 vs. <0.8 hours per day
- Use of online social networks—1.40 for always compared to never or rarely

Figure 2. Participants with sleep-onset difficulties



- YouTube use—2.0 for always compared to never or rarely.

Evidence thus points to an association between social or electronic media use and sleep problems in adolescents across the world.

Can social media help promote mental health?

While social media use is associated with some negative effects on the mental health of youth, as evident from published literature, it can have some positive effects as well.

A study explored if social media could be used to promote mental health among adolescents aged 11 to 18 years from the perspective of key stakeholders. The participants stated that internet could serve as a useful tool for education, provided it is used cautiously and supported by adults, such as teachers.[18]

Social media can contribute to helping adolescents deal with tough times by getting support from others. Therefore, by providing support and reducing the stigma around mental illnesses, media can help protect the youth against mental health issues, particularly those who lack resources.[19]

Despite the potential negative impacts, social media can play a role in promoting mental health.[18] Social media can help increase awareness about mental health. Because of the possibility of anonymity in sharing information online, adolescents feel comfortable and may seek help.[19] Digital media may also be helpful as a tool to provide mental health interventions.[19]

Conclusion

It is evident from the available evidence that social media and smartphone use can affect the mental health of children and adolescents. Social or electronic media use can also be associated with sleep problems in this group.

However, despite the adverse effects, social media and internet can be utilized to promote the mental health of the youth. With a better understanding of the benefits of social media, clinicians can devise ways to use this tool to promote overall health and well-being of children and adolescents as they use social media and smartphones on a daily basis for various purposes.

Social media may be used to identify individuals at risk and devise appropriate online strategies to help them and the community at large.

Additionally, it is important to understand that 'social media literacy' is vital for today's youth to make their own decisions about accessing content online safely and responsibly. Inculcating social media literacy in the youth enables them to assess the information available and put it to use in a positive and responsible way. As parents and clinicians, it is our duty to make the young individuals aware of the benefits and harms of social media and empower them to take their own conscious decision on responsible use of social media and smartphones.

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