

Impact of Yoga on Social Media-Induced Stress among Adolescents wellbeing

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Abstract

The teenage years are a rollercoaster, as this is the age of growth, mental and emotional challenges, hormonal surges, puberty, and much more. During this period, parents need to understand how this phase can be managed tactfully while providing adolescents with proper nutrition and building healthy habits. Whatever is inculcated at this age tends to remain with them for a long period. Between academic pressures, social anxieties, and the ever-changing landscape of technology and social media, adolescents face a unique set of challenges. Adolescence is considered a critical period for shaping adult life, making adolescent well-being a top priority for schools and policymakers. In this context, yoga offers a promising approach for fostering the balanced and healthy development of adolescents.

Yoga is a powerful and accessible tool for navigating this crucial period and cultivating long-term well-being. Although it is often difficult for parents to encourage adolescents of this age to practise yoga, this has to be handled in a creative manner. As technology and living habits continue to evolve, the benefits of yoga become even more relevant. Increasingly screen-based lifestyles can lead to sedentary habits, poor posture, and reduced attention spans. Yoga provides a much-needed antidote. Teenagers are encouraged through yoga to move their bodies, develop discipline, and focus on the present moment. These skills can prove invaluable throughout life, enabling them to adapt to change, manage stress effectively, and maintain a healthy lifestyle.

Keywords: yoga, social media, Stress, adolescents' wellbeing

Introduction:

Social media is used by youth is nearly universal. Up to 95% of youth ages 13–17 report using a social media platform, with more than a third saying they use social media “almost constantly.” Vogels, E. et al. (2022). Although age 13 is commonly the required minimum age used by social media platforms in the U.S. (COPPA, 2013) nearly 40% of children ages 8–12 use social media. Rideout, V. et al. (2022) Despite this widespread use among children and adolescents, robust

independent safety analyses on the impact of social media on youth have not yet been conducted. There are increasing concerns among researchers, parents and caregivers, young people, healthcare experts, and others about the impact of social media on youth mental health. Office of the Surgeon General (OSG). (2021), American Psychological Association. (2023)

The detrimental impact of academic stress extends beyond psychological health, affecting students' overall well-being (OECD, 2017; Pascoe et al., 2020). A key consequence is impaired cognitive functioning, such as reduced concentration and memory issues (OECD, 2017). Prolonged stress also promotes unhealthy behaviors including substance use (Leonard et al., 2015), physical health issues like metabolic syndrome (Pervanidou and Chrousos, 2012), and sleep disorders (Deng et al., 2023).

Statement of the problem India, home to one-fifth of the world's adolescent population (UNICEF, 2021), places immense emphasis on academics, often equating adolescent self-worth with achievement in secondary education (Souza et al., 2019). This high-pressure environment, coupled with ever-increasing competition, has severely impacted the mental health of Indian adolescents (Deb et al., 2015; Malhotra and Patra, 2014), contributing to anxiety, emotional instability, and, in extreme cases, suicide (Arun et al., 2017). Data from the National Crime Records Bureau (NCRB) (Wire, 2022) shows distressing suicide statistics in India—one student every hour—underscoring the gravity of the situation. The COVID-19 pandemic has further intensified these issues, with adolescents continuing to experience heightened psychological distress even as schools return to normal (Singh et al., 2023; Nandhini et al., 2023). Additionally, the increasing prevalence of internet addiction (Putra et al., 2023) has raised further concerns, including cognitive deficits (Firth et al., 2020), sleep disorders (Lu et al., 2023), and declining physical health (Hossin et al., 2022).

Social media:

The definition of social media has been highly debated over the past few decades. As a result, there isn't a single, widely-accepted scholarly definition of social media. (Aichner et al., 2021) The definition may vary from the cited research in this document based on the methods used in each study. In making conclusions and recommendations, this document regards social media as "internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others." (Carr & Hayes, 2015) For the purposes of this product, we did not include studies specific to online gaming or e-sports.



Social media applications	Examples
Social media	Facebook, Twitter, Instagram, Snapchat, Threads, Snapchat, X, LinkedIn, Telegram, Threads
Media sharing	Whatsapp, Instagram, Youtube, Snapvhat, TikTok, Telegram
Messengers	Fcaebook Messenger, Whatsapp, Telegram, Viber, Message
Blogging platforms	WordPress, Wikipedia
Discussion forum	Reddit, Twitter
Fitness & lifestyle	Fitbit

Negative impact of social media on stress and mental-health of adolescents:

How is our life affected by the use of social media? In India, there are about 118 million active social media users (Gurung, 2015) out of which most are adolescents on social network sites such as Facebook, Twitter etc. This results that students pay less attention to real world and social interaction rather they spend most of their time online. In addition, study time is being compromised too and lesser time is spared to family members. The situation leads to lack of exercise resulting in a bad state of health. Other major psychological consequences are internet addiction, Facebook depression, sleep deprivation, insomnia and restlessness.

A University of Michigan study indicated that Facebook usage in young adults lead to decline in subjective well-being. Moreover, it was also found that as the intensity of use of Facebook increased in young adults the worse, they felt moment-to-moment and the less they felt satisfied with their lives (Kross, Verduyn, et al. 2013).

As such, adolescents may experience increased emotional sensitivity to the communicative and interactive nature of social media.¹⁶ Social media use among adolescents is predictive of a subsequent decline in life satisfaction during certain developmental stages, including girls aged 11–13 years and boys aged 14–15 years.¹⁷ Since adolescence is a vulnerable period of brain development, social media exposure during this phase warrants further scrutiny.

Yoga as a tool for stress management among adolescents:

Adolescence is a critical period for shaping adult life, making the well-being of adolescents a top priority for schools and policymakers. In this context, yoga offers a promising approach to fostering balanced and healthy development of adolescents (Mala, 2018). The teenage years are often riddled with stress and anxiety. Exams, social pressures, and the constant flow of information from technology can take a toll on mental well-being. With many hormonal changes happening at this age, it becomes difficult to handle ourselves emotionally. Yoga incorporates Pranayama, or yogic breathing techniques, which have a calming effect on the mind and body. By practicing deep breathing exercises, adolescents can learn to manage stress in healthy ways, leading to improved emotional well-being, better sleep, and a greater ability to cope with life's challenges.

However, research on yoga interventions tailored specifically for adolescents is less developed than for adults. Most studies focus on individual practices such as Surya Namaskar (Stec et al., 2023; Sharma and Acharya, 2018), Super Brain Yoga (Jois et al., 2017; Jois and D'Souza, 2018), and Yoga Nidra (D'souza et al., 2021; Vaishnav et al., 2018). While integrated interventions, which combine various practices, seem more promising for engaging school students in yoga sessions, research on such integrated approaches remains scarce (Verma et al., 2014; Kauts and Sharma, 2012; Pant et al., 2013; Kumar and Tiwary, 2014; Kumar and Singh, 2017; Pradhan and Pramanik, 2024; Banerjee, 2014,2017; Metri, 2018). Furthermore, much of the existing research focuses mainly on stress-related challenges (Pant et al., 2013; Kumar and Tiwary, 2014; Kumar and Singh, 2017; Pradhan and Pramanik, 2024), with fewer studies addressing cognitive functions (Verma et al., 2014; Kauts and Sharma, 2012; Banerjee, 2017).

Yoga for adolescent well-being

Yoga, as an ancient system of exercise, is being sed more and more by people of all ages to promote overall health and fitness. Yoga also has the potential to reduce obesity and other health issues. Since yoga is hailed as a mindfulness exercise (Burke, 2010), it enhances one's self-awareness including breathing, posture, diet, and behaviors, and it has the potential to influence the all aspects of personality and health. Yoga reduced adults' anxiety (Brown & Gerbarg, 2005), Yoga therapy is defined by the International Association of Yoga Therapists (IAYT) as "the process of empowering individuals to progress toward improved health and well-being through the application of the philosophy and practice of yoga" (Taylor, 2007). It is recognized by the National Institutes of Health (NIH), National Center for Complementary and Alternative Medicine (NCCAM) as a form of CAM in the category of "mind-body" medicine. NCCAM (2010) asserts that mind-body medicine "focuses on the interactions among the brain, mind, body, and behavior, and on the powerful ways in which emotional, mental, social, spiritual, and behavioral factors can directly affect health."

In recent decades, research on yoga's benefits for adults has sparked growing interest in its potential as a therapeutic tool for adolescents. Contrary to earlier beliefs, adolescents today are increasingly experiencing psychological challenges, such as anxiety and emotional distress, as early as in secondary school (OECD, 2017). A key barrier is that many students lack access to mental healthcare due to parental neglect and societal pressures. In this context, yoga serves as a self-management tool for student well-being (Mala, 2018).

An early study by (Khalsa et al., 2012) demonstrated yoga's positive effects on emotional regulation, self-esteem, and resilience, contributing to enhanced mental health outcomes in school settings. These findings advocated for integrating yoga into school curricula to promote student wellness (Khalsa and Butzer, 2016). While research on adolescents is less extensive than on adults, existing studies suggest that yoga is promising for managing academic-related stress and anxiety (James-Palmer et al., 2020; Khunti et al., 2023). Additionally, yoga has been linked to cognitive benefits, particularly improvements in memory and attention, in adolescent students (Verma et al., 2014; Jois et al., 2017). Yoga also supports physical health by improving joint flexibility and circulation (Kongkaew et al., 2018), crucial for students who spend long hours sitting in classrooms. Overall, early research suggests that yoga benefits both the mental and physical well-being of adolescents (Khunti et al., 2023; Kongkaew et al., 2018), which can contribute to better academic performance (Kauts and Sharma, 2009). Research consistently supports yoga's effectiveness in managing mental health disorders, such as stress, anxiety, and depression (Telles et al., 2012; Breedvelt et al., 2019). It has also been linked to improved immune function (Venkatesh et al., 2020), further supporting physical health.

Studies indicated that social media is not only a distraction to teenagers who have become addicted to checking their news feeds, but that it can lead to psychological and health issues as well (Krakowsky (2014). And a number of studies proved Yoga to be an effective practice for overall wellbeing (eg. Cramer et al., 2012; Ten Damme, 2013; Mehta et al., 2010), thus the present study proposes that yoga should be implemented as a complementary therapy in schools and colleges. In this regard, Mardesich

Although there is a "generally correlated" link between teen social media use and depression, certain outcomes have been inconsistent (such as the association between time spent on social media and mental health issues), and the data quality is frequently poor [Kraut Ret al. 1998].

Browsing social media could increase your risk of self-harm, loneliness, and empathy loss, according to a number of research studies. Other studies either concluded that there is no harm or

that some people, such as those who are socially isolated or marginalized, may benefit from using social media [Berryman C et al. (2018)]. Because of the rapid expansion of the technological landscape in recent years, social media has become increasingly important in the lives of young people. Social networking has created both enormous new challenges and interesting new opportunities. Research is beginning to indicate how specific social media interactions may impair young people's mental health [N C Med J. 2020].

Teenagers could communicate with one another on social media platforms, as well as produce, like, and share content. In most cases, these individuals are categorized as active users. On the other hand, teens can also use social media in a passive manner by "lurking" and focusing entirely on the content that is posted by others. The difference between active and passive social media usage is sometimes criticized as a false dichotomy because it does not necessarily reveal whether a certain activity is goal-oriented or indicative of procrastination [Meier A et al. 2016]. However, the text provides no justification for why this distinction is wrong [Corkin DM 2011]. For instance, one definition of procrastination is engaging in conversation with other people to put off working on a task that is more important. The goal of seeing the information created by other people, as opposed to participating with those same individuals, may be to keep up with the lives of friends. One of the most important distinctions that can be made between the various sorts is whether the usage is social. When it comes to understanding and evaluating all these different applications of digital technology, there are a lot of obstacles to overcome. Combining all digital acts into a single predictor of pleasure would, from both a philosophical and an empirical one, invariably result in a reduction in accuracy [Clark JL et al. 2018].

The findings of this research have often been difficult to interpret, with many studies suggesting that social media use may have a somewhat negative, though not significantly damaging, impact on one's mental health [Scharnow M 2016]. There is a growing body of research attempting to provide a more in-depth understanding of the factors that influence the development of mental health, social interaction, and emotional growth among adolescents [Riehm KE et al. 2019].

It is challenging to provide a succinct explanation of the effects that social media has on young people because it makes use of a range of different digital approaches [Dienlin T et al. 2022, Abi-Jaoude E et al 2020]. To utilize and respond to social media in either an adaptive or maladaptive manner, it is crucial to first have a solid understanding of personal qualities that some children may be more likely to exhibit than others [39]. In addition to this, the specific behaviors or experiences on social media that put teenagers in danger need to be recognized.

Conclusion

To conclude, it can be said that today's adolescents are facing tremendous pressure to achieve success in a highly competitive world, often by hook or by crook. The situation is frequently overwhelming, and with weakened family ties and the negative effects of social media, children and adolescents are more stressed than ever before in human history. Thus, in the present scenario, increased cases of depression, anxiety, and other mental health problems are being observed. To overcome such issues, the study proposes yoga as a preventive, economical, and widely applicable solution within the education system itself. The tools of yoga and Om chanting are proven methods for managing physical, mental, and emotional stress. Bringing these practices into schools, institutes, and community organizations is a simple way to make students' lives happier and healthier, enhance their capacity to learn effectively, manage their emotions, regulate their behaviour, and achieve personal as well as academic success in schools and colleges, thereby contributing to a healthier society.

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