



# The social dilemma: unravelling the disturbing impact on youth mental health

Sanjiv Nichani<sup>1</sup>, Antonio F. Corno<sup>2^</sup>

<sup>1</sup>Pediatric Cardiac Intensive Care Unit, Children's Hospital, Leicester Royal Infirmary, Leicester, UK; <sup>2</sup>Bioengineering Research Group, School of Engineering, University of Leicester, Leicester, UK

*Correspondence to:* Sanjiv Nichani, MRCP Pediatrics, OBE. Pediatric Cardiac Intensive Care Unit, Children's Hospital, Leicester Royal Infirmary, Infirmary Square, Leicester LE1 5WW, UK. Email: sanjivhealinglittlehearts@hotmail.com.

Submitted Aug 12, 2023. Accepted for publication Oct 29, 2023. Published online Nov 21, 2023.

doi: 10.21037/tp-23-426

**View this article at:** <https://dx.doi.org/10.21037/tp-23-426>

In our era dominated by the ubiquitous presence of social media, it is urgent to address the worrying toll taken on the mental health of our children and teenagers. As these vulnerable age groups grapple with the pressures of adolescence, the negative influence of social media has become an undeniable reality.

A recently published meta-analysis and literature review revealed the company Facebook, leader of the market, also owner of four companies Facebook, WhatsApp, Facebook-Messenger, and Instagram, in 2021, reported over 3.58 billion monthly users (1). Based on the extensive use of the above social networking sites, it is quite obvious to expect the potential risks involved in their systematic use. Permanent and easy access to the smartphones enables the young utilizers connecting to social media and social networks. Unfortunately, for the most fragile among the users this easy connection can lead to excessive use, resulting in negative consequences on mental health, particularly social anxiety and depression. Systematic use of social networking sites may affect sleep quality and quantity, as well as altered emotional communication patterns (1).

As responsible adults, clinicians and educators, it is incumbent upon us to delve deeper into this issue and initiate essential changes to safeguard the well-being of our youth.

Previous reports shed light on the alarming connection between excessive social media use and mental health issues among the young population (2-6), with a systematic review and meta-analysis revealing a significant correlation

between screen time spent on social media platforms and increased levels of depressive symptoms and suicidal thoughts in adolescents (2). The incessant exposure to carefully crafted and often unrealistic portrayals of life on social media platforms leads to feelings of inadequacy, anxiety, and a sense of missing out, contributing to the rising prevalence of mental health disorders (2-6).

Moreover, the rise of cyberbullying on social media is exacerbating the mental health crisis, with victims of cyberbullying experience higher rates of depression and anxiety (3). The anonymity provided by social media emboldens bullies, and the barrage of hurtful messages and comments can leave deep emotional scars on young minds.

The very design of social media platforms, with textual, video, speech, all network components that seem to encourage addictive behaviour, further deteriorating youth mental health (1). The intermittent reinforcement mechanism used by these platforms to keep users engaged contributes to the development of compulsive usage habits (4-6). The incessant quest for likes, shares, and comments fuels a never-ending cycle of seeking validation and approval from others, ultimately affecting self-esteem and self-worth (2-6).

Also, the correlation between the design of social media and addiction has been clearly demonstrated (7).

Continuous and excessive exposure to uncontrolled information and messages provided from social media has been proven to be associated with deleterious effects of the mental and psychological health of children and adolescents,

<sup>^</sup> ORCID: 0000-0003-4374-0992.

because of the subsequent impairment of the longitudinal brain development (8-10).

As responsible stakeholders in the digital age, both tech companies and parents should play pivotal roles in mitigating the damaging effects of social media on youth mental health.

Tech giants must acknowledge their ethical responsibility and prioritize user well-being over engagement metrics. Implementing features promoting mindful usage, providing tools for digital detox, and offering easy access to mental health resources, are crucial steps in this direction.

Even if there have been many discussions about the effectiveness of social media detox, at least two recent reports mentioned how the detox assisted persons with social media addiction (11,12).

Unfortunately, the tech giants do not appear actively involved in major works to mitigate this mental crisis, or, if and when they are, there are limitations and gaps in their existing work (1).

Parents must actively engage in open and honest conversations with their children about the potential pitfalls of social media. Understanding the platforms their children frequent, setting healthy screen time limits, and encouraging offline activities are crucial in fostering a balanced digital lifestyle (13). In addition, it has clearly been demonstrated the usefulness of how parents can help their children navigate social media and the dangers (14).

Furthermore, integrating digital literacy and mental health education into school curricula can empower young individuals to navigate the digital landscape responsibly and develop resilience against the negative impact of social media (8-10). In particular, it should be evident the need for educating the students about social media in schools, and even at universities, especially if the school and/or the university communicates with the students on mobile devices, which in turn necessitates mobile device use by an ever-younger population (15).

To bring about meaningful change, collaboration between governments, educators, mental health professionals, and technology companies is indispensable/essential.

Legislation and policies addressing online safety, data privacy, and age-appropriate content, must be formulated and enforced to protect the mental well-being of our children, taking in serious consideration the scientific evidence repeatedly demonstrating the negative consequences of the currently uncontrolled setting of all the social media.

It should be clarified if there are any existing legislation and policies at this time, considering the urgency to develop them in the context of our ever-growing digital era.

In conclusion, the damaging effects of social media on the mental health of children and teenagers have moved from a trending topic to a pressing societal concern. We cannot ignore the mounting scientific evidence linking excessive social media use to a host of mental health challenges. It is imperative for all stakeholders, parents, and society at large, to consolidate the lay of the land surrounding this growing mental health crisis and initiate informed discussions and implement proactive measures to create a safer, healthier digital space for our young generation.

The medical community should create a mechanism of sharing new and emerging evidence of the adverse impact of the social networking sites on the mental health of children and young people, regularly, with colleagues involved in the education, so that this can be disseminated to the parents in appropriate forums.

## Acknowledgments

*Funding:* None.

## Footnote

*Provenance and Peer Review:* This article was a standard submission to the journal. The article has undergone external peer review.

*Peer Review File:* Available at <https://tp.amegroups.com/article/view/10.21037/tp-23-426/prf>

*Conflicts of Interest:* Both authors have completed the ICMJE uniform disclosure form (available at <https://tp.amegroups.com/article/view/10.21037/tp-23-426/coif>). A.F.C. serves as Editor-in-Chief of *Translational Pediatrics* from June 2023 to May 2025. The other author has no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International

License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

## References

1. Weinstein AM. Problematic Social Networking Site use-effects on mental health and the brain. *Front Psychiatry* 2022;13:1106004.
2. Twenge JM, Martin GN, Campbell WK. Decreases in psychological well-being among American adolescents after 2012 and links to screen time during the rise of smartphone technology. *Emotion* 2018;18:765-80.
3. Ghandour RM, Overpeck MD, Huang ZJ, et al. Headache, stomachache, backache, and morning fatigue among adolescent girls in the United States: associations with behavioral, sociodemographic, and environmental factors. *Arch Pediatr Adolesc Med* 2004;158:797-803.
4. Abbott KA, Kocovski NL, Obhi SS. Impact of social anxiety on behavioral mimicry during a social interaction with a confederate. *J Soc Clin Psychol* 2018;37:1-21.
5. Kross E, Verduyn P, Demiralp E, et al. Facebook use predicts declines in subjective well-being in young adults. *PLoS One* 2013;8:e69841.
6. Lin LY, Sidani JE, Shensa A, et al. Association between social media use and depression among U.S. young adults. *Depress Anxiety* 2016;33:323-31.
7. Andreassen CS, Pallesen S, Griffiths MD. The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addict Behav* 2017;64:287-93.
8. National Institutes of Health. The teen brain: 6 things to know. National Institute of Mental Health. 2018. Available online: <https://www.nimh.nih.gov/health/publications/the-teen-brain-6-things-to-know/index.shtml>
9. Maza MT, Fox KA, Kwon SJ, et al. Association of Habitual Checking Behaviors on Social Media With Longitudinal Functional Brain Development. *JAMA Pediatr* 2023;177:160-7. Erratum in: *JAMA Pediatr* 2023;177:440.
10. Crone EA, Konijn EA. Media use and brain development during adolescence. *Nat Commun* 2018;9:588.
11. Schmuck D. Does Digital Detox Work? Exploring the Role of Digital Detox Applications for Problematic Smartphone Use and Well-Being of Young Adults Using Multigroup Analysis. *Cyberpsychol Behav Soc Netw* 2020;23:526-32.
12. Mirbabaie M, Stieglitz S, Marx J. Digital Detox. *Business & Information Systems Engineering* 2022;64:239-46.
13. Waring ME, Blackman Carr LT, Heersping GE. Social Media Use Among Parents and Women of Childbearing Age in the US. *Prev Chronic Dis* 2023;20:E07.
14. Nikken P, Schols M. How and Why Parents Guide the Media Use of Young Children. *J Child Fam Stud* 2015;24:3423-35.
15. Sun X, Haydel KF, Matheson D, et al. Are mobile phone ownership and age of acquisition associated with child adjustment? A 5-year prospective study among low-income Latinx children. *Child Dev* 2023;94:303-14.

**Cite this article as:** Nichani S, Corno AF. The social dilemma: unravelling the disturbing impact on youth mental health. *Transl Pediatr* 2023;12(11):2090-2092. doi: 10.21037/tp-23-426