

The Influence of Social Media's Speed and Immediacy on Adolescent Mental Health: Risks,
Mechanisms, and Mitigation Strategies

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The increase in social media since the early 2000s has raised concerns over its influence on mental health in adolescents and young adults. Depression rates among adolescents have risen by 52% from 2005 to 2017 (UCLA). It is important to understand both physiological and psychological impacts of social media in order to develop interventions to mitigate its negative effects. Current research suggests excessive social media usage leads to feelings of depression and anxiety, while also disrupting sleep patterns and metabolic issues. Social media use among adolescents is associated with a wide range of health issues including anxiety, depression, and metabolic disorders. Despite its negative effects, it may serve as an outlet for some conditions with controlled social media use through short breaks resulting in significant improvements.

Social media influences factors of mental health such as sleep deprivation, metabolic disorders, and other physiological conditions. Heather Woods is a lecturer from the University of Glasgow. Her study, “#Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression and low self-esteem” was published to the *Journal of Adolescence* in 2016. It consisted of 467 Scottish adolescents where social media usage at night was measured. Mental health using factors such as sleep quality, anxiety, depression, and self-esteem was measured as well. Woods found that “Nighttime-specific social media use predicted poorer sleep quality after controlling for anxiety, depression and self-esteem” (Woods, 2016). Through demonstrating a relationship between social media use at night and sleep disturbances, Woods highlights a potential mechanism through which social media may worsen these mental health issues. Elena Bozzola, a pediatric consultant from the Bambino Gesù Children’s Hospital in Rome, Italy. Her study, “The Use of Social Media in Children and Adolescents: Scoping Review on the Potential Risks” was published to *PubMed Central* in 2021.

Bozzola states “Pro-eating disorder content has become more easily accessible by the users” and “It is likely that the suboptimal quality of online information on [social media] contributes to the development of unhealthy eating attitudes and behaviors” (Bozzola, 2021). Bozzola also states that excessive social media may lead to eye disorders such as myopia, irritation, and even burning sensations amongst many other conditions (Bozzola, 2021). This provides additional evidence on the risks of social media on negative mental and physical health outcomes. The presence of pro-eating disorder content on social media increases the potential harm that exposure to harmful online content can pose to individuals. This supports the argument that social media can lead to negative health outcomes when used excessively. Elida Sina is a postdoctoral researcher from the Leibniz Institute for Prevention Research and Epidemiology. Her paper, “Media use trajectories and risk metabolic syndrome in European children and adolescents: The IDEFICS/I.Family cohort”, was published to *PubMed Central* in 2021. This longitudinal study with over 10 thousand participants discusses the relationship between metabolic disorders and social media. Sina found that social media was a risk factor in metabolic syndrome among adolescents and children (Sina, 2021). This shows the potential health implications of excessive social media usage. It also emphasizes the importance of considering the physiological impacts in addition to the psychological impacts of social media in populations. As social media continues to grow and play larger roles in society, understanding its broader health implications is necessary for interventions and balanced digital lifestyles. The impacts of social media extends beyond sleep disturbances and eating disorders and includes fast-paced content that can significantly influence mental health.

Fast-paced social media content influences mental health. Ine Beyens is an assistant professor from the University of Amsterdam with her research focusing on media effects, children and media, and parental mediation. Her study, “Screen media use and ADHD-related behaviors: Four decades of research” was published to *PubMed Central* in 2018. Beyens uses a literature review in order to determine a relationship between social media use and ADHD behaviors among younger populations. She found that “there does exist a relation between children’s media use and ADHD-related behaviors” (Beyens, 2018). Through uncovering the relationship between social media use and ADHD-related behaviors, Beyens highlights another potential consequence of excessive exposure to fast social media content. This suggests that the rapid-fire nature of some social media platforms contributes to attention deficits and hyperactivity among children and adolescents. Understanding these dynamics is important for developing strategies for healthier social media habits and mitigating the negative effects of digital overuse. Dr. Gadi Lissak is a behavioral medicine psychologist from the Bezalel Academy of Arts and Design. His study, “Adverse physiological and psychological effects of screen time on children and adolescents: Literature review and case study” was published in *Environmental Research* in 2018. In her publication, Lissak states “ADHD-related behavior was linked to sleep problems, overall screen time, and violent and fast-paced content which activates dopamine and the reward pathways”. This reinforces the argument that fast-paced digital content, specifically social media, can have detrimental effects on mental health. The activation of dopamine and reward pathways by fast-paced content increases its addictive potential and suggests a mechanism that may increase ADHD symptoms. It is evident that social media's impact extends beyond conditions like ADHD. However, it is important to consider how social

media functions as an avenue for individuals struggling with depression, anxiety, and similar challenges, specifically when used appropriately.

Social media may be an avenue for people who have depression, anxiety, and be beneficial when taken in short intervals. Mesfin Awoke Bekalu is a researcher from the Lee Kum Sheung Center for Health and Happiness from the Harvard T.H. Chan School of Public Health. This article posted on the Chan School of Public Health's website discusses Mesfin's study about the connections between mental health, social media, and well being. His publication discusses outcomes such as social well-being, positive mental health, and self-rated health. Mesfin found that routine social media use had a positive correlation with social well-being, positive mental health, and self-rated health (Mesfin, 2020). This suggests that for some individuals, social media may offer a place for support and connection that aids in their mental health. Jeffery C. Lambert is a senior lecturer from the department for health at the University of Bath. His study, "Taking a One-Week Break from Social Media Improves Well-Being, Depression, and Anxiety: A Randomized Controlled Trial" was published in *Cyberpsychology, Behavior, and Social Networking* in 2022. His results found that a 1 week break from social media resulted in significant improvements in well-being, depression, and anxiety with a 95% confidence interval for each improvement (Lambert, 2022). This suggests that while social media can serve as a supportive platform, periodic breaks may be necessary to improve overall well-being. Integrating strategies for mindful social media usage with the introduction of scheduled breaks could be beneficial for maintaining mental and physical health in an increasingly digital world.

In conclusion, the rise of social media usage among adolescents and young adults has come with concerns over both mental and physical health of users. With rising depression rates,

it's evident that social media plays a role in mental well-being. While excessive use has been correlated to negative mental health including anxiety, depression, and low self-esteem, social media can serve as a coping mechanism if used appropriately. These findings emphasize the importance of understanding the nuanced and complex relationship between social media, mental health, and physical health. This is also important for implementing effective strategies to mitigate social media's negative effects while increasing its potential for improving well-being. As the digital landscape becomes more prominent, adopting a balanced approach to social media usage is essential for promoting positive mental and physical health outcomes.

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