

IMPACT OF SOCIAL MEDIA ON MENTAL HEALTH

Hiba Alikkalparambil , Medical Student , Samarkand state medical university,
Uzbekistan (hibasakeer1@gmail.com)

Antony Alosi Cherian, Medical Student , Samarkand state medical university,
Uzbekistan (aloshiaca@gmail.com)

Erum Fariya , Medical Student , Samarkand state medical university Uzbekistan
(fariaerumfe@gmail.com)

Arshi Naaz, Medical Student , Samarkand state medical university, Uzbekistan
(arshinaaz142005@gmail.com)

ABSTRACT

Drawing on insights from *The Anxious Generation* by Jonathan Haidt, this article explores the growing impact of social media on adolescent mental health. In recent years, there has been a notable rise in anxiety, depression, and emotional distress among young people, coinciding with the widespread adoption of smartphones and social media platforms.

The objective of this article is to examine how increased screen exposure and online interaction contribute to these mental health challenges. Key factors discussed include the shift from a play-based to a phone-based childhood, leading to reduced real-world socialization, increased social comparison, and disrupted sleep patterns. Additionally, the article highlights mechanisms such as algorithm-driven engagement, validation-seeking behavior, and the psychological effects of constant online connectivity. These elements are analyzed in relation to their role in intensifying emotional vulnerability, particularly among adolescents.

The article concludes that excessive and unregulated use of social media plays a significant role in declining mental well-being. It emphasizes the need for preventive measures, including mindful technology use, delayed access to smartphones, and stronger awareness among parents and educators, to promote healthier developmental outcomes.

KEYWORDS

Core Mental Health Issues

- Anxiety and Depression
- Social media
- mental health
- Adolescents
- Anxiety
- Depression
- FOMO (fear of missing out)
- social comparison
- Cyberbullying
- sleep deprivation
- body image issues
- digital addiction
- mindful usage

Social media impacts mental health through addictive features like dopamine-driven, highlight-reel content, which often triggers anxiety, depression, body image issues, and FOMO (Fear of Missing Out). Key terms include cyberbullying, social comparison, sleep deprivation, and digital detox.

INTRODUCTION

Social media has become an integral part of modern life, especially among adolescents and young adults, offering instant communication, entertainment, and global connectivity. However, it is increasingly viewed as a “double-edged sword” because, alongside its benefits, it also contributes to rising concerns about mental health. Excessive engagement with social media platforms has been linked to anxiety, depression, low self-esteem, and distorted self-image, largely driven by constant exposure to idealized and curated online content.

Recent discussions in research and public health highlight several concerns. Scholars such as Jean Twenge and W. Keith Campbell suggest that heavy social media use may reduce face-to-face interaction, increasing feelings of loneliness and emotional distress among adolescents. Similarly, public health experts like Dr. Vivek Murthy, the U.S. Surgeon General, have noted that high daily usage of social media is associated with a greater risk of poor mental health outcomes in teenagers. Other researchers emphasize the concept of “meta-stress,” where continuous screen exposure disrupts sleep patterns and contributes to heightened anxiety levels.

Commonly identified issues include cyberbullying, unrealistic beauty standards, and the “highlight reel” effect, where users compare their everyday lives to idealized online portrayals. Overall, while social media is not solely responsible for mental health challenges, research indicates a strong association between excessive use and declining psychological well-being, particularly among young users.

ETIOLOGY

1. Phone-Based Childhood Shift (Jonathan Haidt)

- Shift from play-based to phone-based childhood as a key driver of mental health decline.
- Reduced real-world, unsupervised play essential for emotional regulation and social skill development
- Girls identified as early and more affected due to appearance-focused platforms like Instagram

2. Social Comparison and Digital Influence (Jean Twenge)

- 1 Constant upward comparison with curated “highlight reels” on social media.
- 2 Decreased self-esteem and increased body image dissatisfaction.
- 3 Dose-response effect: higher screen time (>3 hours/day) linked with increased risk of anxiety and depression.

3. “Alone Together” Effect (Sherry Turkle)

- Illusion of connection but increased emotional loneliness.
- Weakened face-to-face relationships.

- Dependence on “likes” and online validation for self-worth.

4. Physiological and Cognitive Mechanisms

- Sleep deprivation due to late-night screen use, worsening mood disorders.
- Attention fragmentation from constant notifications.
- Fear of Missing Out (FOMO) leading to compulsive checking and anxiety.

5. Cyberbullying and Online Harassment

- Exposure to trolling and abusive online interactions.
- Significant association between cyberbullying and increased depression and anxiety.
- Online environments often amplify emotional distress due to lack of accountability.

RISK FACTORS

The impact of social media on mental health is shaped by both behaviours we can change (modifiable) and inherent factors we

Modifiable	Non-modifiable
Passive scrolling of “highlight reel” content (linked to anxiety, depression, low self-esteem)	Adolescence (ongoing brain and emotional development)
Excessive usage time (>2–3 hours/day)	Female gender (higher vulnerability to social comparison effects)
Late-night social media use causing sleep disruption	Pre-existing mental health conditions (anxiety, depression, loneliness)

Use of appearance-focused platforms (Instagram, TikTok, Snapchat) affecting body image	Algorithm-driven platform design promoting continuous engagement (infinite scroll, AI feeds)
Low real-world social interaction and dependence on online validation	Structural shift to “phone-based childhood” (as discussed in <i>The Anxious Generation</i>)

CLASSIFICATION

Although social media–related mental health effects are not a formal medical disease, they can be classified based on severity and functional impact:

1. Based on Severity of Psychological Impact

1. Mild:

- Occasional stress, distraction, and temporary mood changes after social media use

2. Moderate:

1. Persistent anxiety, low self-esteem, body image concerns, sleep disturbances, and reduced concentration

3. Severe:

- Clinical depression, severe anxiety disorders, social withdrawal, and in extreme cases, self-harm tendencies

2. Based on Pattern of Social Media Use

1. Passive use:

- Continuous scrolling and consumption of content, strongly linked with negative mental health outcomes

2. Active use:

- Direct communication and content sharing, relatively less harmful when balanced

3. Problematic/Addictive use:

- Compulsive engagement with loss of control, often associated with emotional dependency and functional impairment

3. Developmental Vulnerability (as highlighted in The Anxious Generation)

- Early adolescence: Highest vulnerability due to emotional and cognitive development stage.
- Mid-to-late adolescence: Continued risk with increasing peer comparison and identity formation pressures.

PATHOPHYSIOLOGY

The development of mental health problems due to social media use occurs through a stepwise neuropsychological and behavioural cascade.

1. Early Exposure to Social Media & Smartphones

- Constant access to digital platforms during adolescence

2. Dopamine-Driven Reward Activation

- Likes, comments, and notifications stimulate brain reward pathways

3. Development of Habitual / Compulsive Use

- Increased screen

4. Exposure to Curated “Highlight Reel” Content

- Idealized images and lifestyles dominate feed

5. Social Comparison Process

- Upward comparison with peers or influencers
- Perception of personal inadequacy

6. Psychological Effects

- Low self-esteem, body image dissatisfaction, and emotional insecurity

7. Physiological Disruption

- Sleep disturbance due to late-night usage
- Increased stress response and fatigue

8. Emotional Dysregulation

- Increased anxiety, irritability, and depressive symptoms

9. Vicious Cycle Formation

- Negative emotions drive further social media use for escape or validation time and reduced self-control over usage

CLINICAL FEATURES

The mental health effects of excessive social media use present with a range of psychological, behavioural, and functional symptoms, particularly in adolescents.

1. Psychological Symptoms

- Persistent anxiety and excessive worry
- Depressive mood and loss of interest in daily activities
- Low self-esteem and feelings of inadequacy
- Increased irritability and emotional instability
- Fear of Missing Out (FOMO)

2. Cognitive Symptoms

- Reduced attention span and poor concentration
- Difficulty focusing on academic or routine tasks
- Overthinking and constant comparison with others
- Negative self-perception and distorted body image

3. Behavioural Signs

- Excessive or compulsive social media use
- Preference for online interaction over face-to-face communication
- Social withdrawal and isolation from family or peers

- Frequent checking of phone or notifications

4. Physical / Functional Signs

- Sleep disturbances or insomnia (especially due to late-night usage)
- Fatigue and reduced energy levels
- Decline in academic performance
- Reduced participation in physical and social activities

COMPLICATIONS

Prolonged and excessive social media use, particularly when associated with psychological distress, can lead to significant long-term consequences affecting mental, social, and functional well-being.

1. Mental Health Complications

- Development of chronic anxiety disorders
- Major depressive disorder
- Increased risk of emotional burnout and stress-related disorders
- Persistent low self-esteem and negative self-image

2. Behavioural and Social Complications

- Social withdrawal and isolation from real-life relationships
- Dependence on online validation and digital interaction
- Poor interpersonal skills due to reduced face-to-face communication
- Increased vulnerability to cyberbullying-related trauma

3. Academic and Functional Complications

- Decline in academic performance and concentration ability
- Reduced productivity and motivation
- Poor time management and increased procrastination

4. Severe Long-Term Outcomes

- Risk of self-harm behaviors in vulnerable individuals
- Suicidal ideation in cases of severe untreated depression (as discussed in The Anxious Generation)
- Long-term impairment in emotional regulation and resilience development

DIAGNOSIS

The diagnosis of mental health issues related to social media use is primarily clinical, as there are no specific laboratory or imaging tests that can directly confirm the condition. It is based on a detailed assessment of symptoms, behavioural patterns, and psychosocial history.

1. Investigations

- Detailed clinical history of social media usage (duration, frequency, patterns)
- Psychological assessment for symptoms of anxiety, depression, or stress
- Evaluation of sleep patterns and daily functioning
- Assessment of academic, social, and occupational impairment
- Screening questionnaires (e.g., PHQ-9 for depression, GAD-7 for anxiety)

2. Lab Findings

- No specific laboratory marker for diagnosis
- Laboratory tests may be used only to rule out other causes (e.g., thyroid dysfunction, vitamin deficiencies contributing to mood changes)

3. Imaging

- No role of routine imaging in diagnosis
- Neuroimaging is not indicated unless there is suspicion of other neurological or psychiatric conditions.

MANAGEMENT

Management of social media-related mental health problems is mainly psychological and behavioural, focusing on reducing harmful usage patterns and improving overall mental well-being. There is no role for surgical treatment.

1. Medical / Psychological

- Cognitive behavioural Therapy (CBT) as first-line treatment
- Counselling for anxiety, depression, and digital dependency
- Medications (antidepressants/anxiolytics) if clinically required
- Improve sleep hygiene and reduce night-time screen use
- Reduce screen time and promote digital detox
- Encourage physical activity and real-life social interaction

2. Preventive Measures

- Parental monitoring of adolescents' screen use
- Education on healthy social media habits
- Promoting offline hobbies and social engagement

CONCLUSION

Social media has become an integral part of modern life, especially among adolescents, but excessive and unregulated use is increasingly linked to mental health challenges such as anxiety, depression, low self-esteem, and social isolation. Researchers like Dr. Jean Twenge, Sherry Turkle, and Dr. Vivek Murthy have highlighted how constant digital exposure, social comparison, and reduced face-to-face interaction can negatively affect emotional well-being. Studies also point to factors such as sleep disruption, cyberbullying, and dependency on online validation as major contributors to psychological distress.

While social media offers benefits like connectivity and information sharing, its impact depends largely on how it is used. The key takeaway is that balanced and mindful usage is essential. Promoting healthy digital habits, limiting excessive screen time, and encouraging real-world social interactions can significantly help protect mental health, particularly in younger individuals.

REFERENCES

- Twenge, J. M. (2017). *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood*. Atria Books.

- *Turkle, S. (2011). Alone Together: Why We Expect More from Technology and Less from Each Other. Basic Books.*
- *Murthy, V. H. (2023). Social media and Youth Mental Health: Advisory from the U.S. Surgeon General. U.S. Department of Health and Human Services.*
- *Keles, B., McCrae, N., & Grealish, A. (2020). "A systematic review: The influence of social media on depression, anxiety and psychological distress in adolescents." International Journal of Adolescence and Youth.*
- *Primack, B. A. et al. (2017). "Social Media Use and Perceived Social Isolation Among Young Adults in the U.S." American Journal of Preventive Medicine.*
- *American Psychological Association (APA). (2023). Health Advisory on Social Media Use in Adolescents.*
- *World Health Organization (WHO). (2022). Adolescent Mental Health Fact Sheet.*