

## Review Article

# The flip side of social media: unveiling the effects of social media on mental health

Ajaykumar B. Malle\*, Sachin D. Pawar, Pravinkumar S. Pal, Sajid A. Mulani

CLINICA Research Solutions LLP, CBD Belapur, Navi Mumbai, Maharashtra, India

**Received:** 20 January 2024

**Accepted:** 21 February 2024

### \*Correspondence:

Dr. Ajaykumar B. Malle,

E-mail: [drajay.m@clinicaresearch.com](mailto:drajay.m@clinicaresearch.com)

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## ABSTRACT

Mental health, commonly known as behavioral health, is the psychological, emotional, and social well-being of an individual. It mostly affects a person's ideas, emotions, behaviors, and relationships with other people. The idea that social media use and mental health are inextricably related appears to be the most intricate and varied. The effect of social media on mental health is a complicated topic with many moving parts. According to a countrywide survey carried out in India, as of 2023, approximately 67.5% of adults in the country utilize at least one social networking site; this percentage may be steadily increasing over time. Despite its numerous benefits, social media has also been connected to problems in society and poor mental health outcomes. People need to be aware of the potential risks of social media like disinformation, addiction, cyberbullying, data security and privacy concerns, and its possible effects on mental health. This review offers a thorough analysis of social media's effects on mental health, and it demonstrates how crucial it is to develop a thoughtful and balanced relationship with our digital life to ensure that the advantages of connection do not come at the expense of our mental health.

**Keywords:** Cyberbullying, Fear of missing out, Mental health, Polarization, Social media

## INTRODUCTION

According to the world health organization (WHO), mental health is a state of well-being that empowers individuals to cope with life's stresses, realize their abilities, learn effectively, work productively, and contribute to their communities.<sup>1</sup> It predominantly influences an individual's thoughts, feelings, actions, and interactions with others. Clinically significant impairment in intellectual functioning, emotional control, or behavior signifies a mental condition in that person, often accompanied by distress or functional impairment in key areas. Over the past two decades, the rise of social media has transformed the way people communicate, share information, and connect with one another.<sup>2</sup> Platforms such as Facebook, Twitter, Instagram, Snapchat, and many others have fundamentally altered the landscape of human interaction, bringing friends, family, and even strangers closer together in the digital orbit. While the

benefits of this technological revolution are undeniable, it is essential to critically examine the intricate relationship between social media and mental health. The ubiquitous blue glow of smartphone screens has become a fundamental part of our daily lives, prompting questions about how this digital age phenomenon influences our psychological well-being.<sup>3</sup>

Social media has seamlessly integrated into our daily practices, becoming an extension of our lives in both personal and professional spheres. The significance of understanding the impact of social media on an individual's mental well-being is underscored by the sheer magnitude of its presence in society. According to a national survey conducted in India in January 2023, nearly 67.5% of people in India use at least one social networking platform, a figure that might be progressively rising over the years.<sup>4</sup> In Mumbai, six out of ten teenagers between the ages of 9 and 17 spend more than three hours on various social media or gaming sites. A survey by

community-based social media platform local-circles also discovered that children exhibited signs of aggression, impatience, or hyperactivity after extended social media interactions.<sup>5</sup> Beyond India, the influence of social media spans the globe, connecting individuals from diverse cultures, backgrounds, and different age groups. Consequently, any study of mental health in the 21<sup>st</sup> century must acknowledge the persistent role of social media in people's lives. For many, these platforms are a source of comfort and connection, enabling individuals to stay in touch with friends and family members across geographical gaps, share personal milestones and experiences, and access valuable information on a wide range of topics. However, this immense power to connect also comes with an inherent responsibility to scrutinize its capability to cause harm.

The notion that social media and mental health are fundamentally linked appears to be complex and multifaceted. Striking an equilibrium between the potential positive and negative consequences that these platforms bring into our lives is crucial. This review article not only describes various approaches to social media but also delves into their effects on human mental well-being. It equips people to make informed decisions about their online activities, guides the next generation toward responsible digital citizenship, and helps formulate policies that safeguard mental well-being in this digital age. The purpose of this review article is to provide an in-depth examination of the impact of social media on mental health. It primarily explores the negative aspects of this relationship, delving into research findings and statistics that shed light on the subject. Additionally, this review discusses coping mechanisms and the support systems available in the digital landscape.

## **CYBERBULLYING AND ONLINE HARASSMENT**

One of the most distressing aspects of social media is the prevalence of cyberbullying as well as online harassment. Cyberbullying and online harassment refer to the intentional use of digital communication tools to harm, threaten, or intimidate others. Individuals, especially adolescents, can become victims of hurtful comments, threats, or ridicule. The consequences of cyberbullying and online harassment can be severe, particularly when it comes to their impact on mental health. They can lead to feelings of anxiety, depression, and emotional distress, and in severe cases, they can contribute to suicidal ideation. Some group leaders may intentionally exclude individuals from online groups, chats, or activities. These types of isolation can lead to feelings of loneliness and rejection, putting negative pressure on the mental health of the isolated person. There is a type of cyberbullying called doxing, which involves the spiteful act of sharing an individual's private as well as personal information, including their address, phone number, and/or workplace, with harmful intent. Posting explicit or compromising images or videos of someone without their consent is

another form of cyberbullying. This can lead to severe emotional distress and harm to one's reputation.<sup>6,7</sup>

Cyberbullying, just like other forms of bullying, might lead to serious, long-lasting problems. The stress of living with a constant state of disturbance or fear can lead to issues with mood, energy level, sleep, as well as appetite. It can also make somebody feel anxious, jumpy, or sad. If someone is already depressed or anxious, cyberbullying can make things significantly worse. Those who are cyberbullied can struggle to concentrate on their work, which can affect how well they perform. The constant threat of abuse and humiliation can lead to a condition of chronic stress. Hurtful comments and insults can significantly impact the self-esteem and self-worth of individuals, contributing to feelings of inadequacy and leading to the withdrawal of the person suffering from communities and social networks to escape harassment. This isolation can lead to profound loneliness and feelings of being cut off from support. In severe cases, like image-based abuse (revenge porn), the relentless harassment may push individuals to contemplate or even attempt suicide. The fear and emotional anguish associated with cyberbullying can have tragic consequences. Some victims of cyberbullying may develop symptoms akin to post-traumatic stress disorder (PTSD). Repeated exposure to traumatic online events can lead to intrusive thoughts, flashbacks, and emotional trauma.<sup>8</sup>

## **FEAR OF MISSING OUT**

Fear of missing out (FOMO) is a pervasive psychological phenomenon driven by the fear or anxiety that someone is missing out on something exciting, interesting, or enjoyable that others are experiencing, particularly on social media.<sup>9</sup> It's a form of social anxiety that arises when individuals perceive that their peers or connections are participating in activities or events without them. FOMO is deeply intertwined with social media usage and can have a significant impact on an individual's mental well-being. Social media often presents a filtered and curated version of people's lives, highlighting their achievements, exciting events, and positive moments. This selective representation can create an unrealistic perception of constant excitement and achievement, fostering FOMO. Social media platforms offer instant updates and real-time notifications. This fast-paced nature can make users feel compelled to engage with the platform continually to avoid missing out on the latest updates or conversations. Most constant comparison with peer's accomplishments and experiences can generate feelings of inadequacy. Seeing other's adventures and achievements can lead individuals to question their own life choices and accomplishments. Social pressure to conform to popular trends or events can exacerbate FOMO. Users may feel compelled to engage in activities they are not genuinely interested in to avoid missing out on what others are doing. This FOMO puts a very negative impact on person's mental health, as individuals

worry about missing out on exciting events or social opportunities, leading to overthinking and feelings of anxiety and stress. Persistent feeling of being left out/not measuring up to others experiences can contribute to feelings of sadness and depression. Additionally, FOMO can exacerbate pre-existing mental health conditions.<sup>10</sup>

### **FEAR OF DISCONNECTION**

The fear of disconnection is an emotional and psychological response to the idea of being separated from digital devices, particularly smartphones and the internet, which is also referred to as nomophobia. It often involves feelings of anxiety, discomfort, and even panic at the thought of being without digital connectivity. This anxiety of detachment often arises from a dependency on digital devices for communication, information, and entertainment. Many individuals rely on digital devices for work, social connections, and responsibilities. Similarly, some individuals may have developed addictive behaviors regarding digital device use.<sup>11</sup> Digital detox provides a way to resilience for many social media-related addictions but can be particularly challenging for individuals suffering from nomophobia, as there is the fear of being without a mobile phone or unable to use it.<sup>12</sup> Also, individuals constantly worrying about digital disconnection can hinder concentration and reduce productivity, and can interfere with real-life experiences and relationships, as individuals may prioritize digital connectivity over in-person interactions. This anxiety related to the fear of disconnection can contribute to sleep disturbances and insomnia.<sup>11</sup>

### **SOCIAL COMPARISON**

Social comparison is a natural psychological process in which people evaluate their attitudes, abilities, qualities, as well as traits with others. It is a fundamental aspect of human behavior and serves as a basis for self-assessment along with self-development. However, social comparison can often act as a double-edged sword with both positive and negative implications for the mental health of a person. When an individual compares themselves to others they perceive as superior in some way, that situation is called an upward social comparison. It can lead to feelings of inadequacy or low self-esteem, especially when comparing to idealized online personas.<sup>13</sup> On the other hand, downward social comparison takes place when people compare themselves to those they perceive as less fortunate or less successful. It can lead to feelings of gratitude or superiority. Temporal comparison involves comparing oneself to a past version of oneself or imagining a future personality.<sup>14</sup> On social media, temporal comparison can foster nostalgia or create a sense of urgency to achieve certain goals. Comparing oneself to others can elicit feelings of envy and jealousy, which are detrimental to mental well-being. These emotions can lead to unhappiness and strained relationships. The habit of comparing one's life to idealized online representations can result in chronic

dissatisfaction with one's own experiences and circumstances. Therefore, constantly measuring oneself against others can promote anxiety and stress. Pressure to compete or keep up with peers can be devastating.<sup>15</sup>

### **EXCESSIVE SCREEN TIME AND ADDICTION**

In the digital age, screen time addiction can be referred to as technology or internet addiction, which is a growing concern. It is generally related to the excessive use of digital devices, particularly smartphones, computers, or tablets, as well as the compulsive engagement with online activities, which can have significant repercussions on mental health. The use of digital devices and engagement with social media can trigger release of dopamine, a neurotransmitter associated with pleasure and reward. This positive reinforcement can lead individuals to seek out digital experiences more frequently, potentially causing addiction.<sup>15</sup> As internet offers an almost endless array of content, from social media updates to videos, games, and news, the sheer volume of content can make it challenging to disengage, fostering habit of excessive screen time. Digital devices offer means of social connection as people make friends on social media, and for many, these connections have been particularly valuable during periods of social isolation. However, this reliance on screens can become compulsive. For some, excessive screen time serves as a form of escapism from real-life stressors or challenges. The digital world can provide a temporary refuge from difficult emotions or daily responsibilities, but as it is temporary, these types of addictions can have a long-term or permanent negative impact on mental health.<sup>16</sup>

Excessive screen time is linked to anxiety and depression, particularly when it interferes with real-life social interactions and physical activities.<sup>16</sup> Additionally, blue light emitted by screens can disrupt sleep patterns, making it harder to fall asleep and stay asleep. Sleep disturbances can exacerbate mental health issues.<sup>17</sup> Paradoxically, excessive screen time can lead to social isolation, loneliness, despite being connected digitally, due to loss of personal touch. Real-life relationships may suffer, and individuals may feel isolated from physical interactions. Overuse of digital devices can reduce productivity and hinder completion of daily tasks, leading to feelings of stress and frustration. Overreliance on digital experiences can hinder development of healthy emotional regulation, as individuals may turn to screens to cope with distress instead of employing healthier coping mechanisms. This can also contribute to physical health problems, such as eyestrain, headaches, and neck/back pain due to lack of physical movement, which can indirectly impact mental health.<sup>18</sup>

### **EROSION OF PRIVACY AND DATA CONCERNS**

The erosion of privacy and data concerns in the digital age is a pressing issue with significant implications for mental health. It pertains to the collection, sharing, and

potential misuse of personal information by online platforms and third parties, often without individuals' explicit consent. Online platforms, particularly social media, and tech companies collect vast amounts of user data, including personal information, browsing habits, location, and interactions with digital content. This data is often used to create detailed user profiles, enabling advertisers to deliver highly targeted ads.<sup>19</sup> While some may appreciate personalized content, others may find it invasive and uncomfortable. High-profile data breaches have exposed the vulnerabilities of digital platforms. These breaches can result in the exposure of sensitive personal information, causing significant distress for the individuals affected. Some companies may often monetize user data by selling it to third parties, raising concerns about the security and ethics of this practice. Online platforms employ algorithms to curate content and news feeds. While these algorithms aim to keep users engaged, they can also create echo chambers, limiting exposure to diverse perspectives. When individuals become aware that their data is collected by someone, they may become concerned about who has access to their information and how it may be used. This can foster anxiety and paranoia in individuals. The feeling of having one's data collected and used without explicit consent can lead to a sense of loss of control over one's personal information, along with a perception of being monitored and surveilled, leading to emotional discomfort and a sense of privacy intrusion. This may affect mental well-being and cause distress. Apart from this, the risk of identity theft and fraud due to data breaches can cause severe emotional distress. Additionally, people may lose faith in the government.<sup>20</sup>

## ECHO CHAMBERS AND POLARIZATION

Social media systems tend to prioritize content that aligns with a user's existing beliefs and preferences. This leads to the formation of echo chambers, where individuals are exposed only to content that reinforces their views. In simple words, an echo chamber is a metaphorical concept that refers to a situation in which individuals are primarily exposed to information, ideas, or beliefs that confirm and reinforce their existing viewpoints and opinions.<sup>21</sup> Furthermore, people tend to seek information that confirms their pre-existing beliefs and avoid information that challenges them. These types of cognitive biases reinforce echo chambers, as individuals actively avoid dissenting views. Along with this, digital spaces and online communities often attract like-minded individuals who share similar beliefs and interests, further isolating individuals from diverse perspectives.<sup>22</sup>

These types of echo chambers can contribute to polarization. Polarization refers to the process of individuals or groups moving to opposite extremes on a particular issue, belief, or ideology.<sup>23</sup> Polarisation is directly associated with mental illnesses since it is frequently interpreted as a gain or loss of social standing.<sup>24</sup> As users may be less exposed to diverse

perspectives, this can lead to social and political divisions, where they tend to seek out information that aligns with their pre-existing beliefs while avoiding or dismissing contrary perspectives. This can also contribute to political, ideological, and social polarization by intensifying the divide between different groups with opposing views. Some social media outlets may present news and information in a polarized manner, catering to specific ideological or political groups. The speed and virality of information on social media can amplify polarized views, as extreme or sensational content tends to garner more attention.<sup>25</sup> Polarization can be exacerbated by divisive political or social events that lead to increased tensions and in-group/out-group dynamics. These types of negative impacts on people's mental health can contribute to violence in societies or communities.<sup>23,25</sup>

As individuals become more polarized, they may become less willing to compromise or find common ground with those who hold opposing views. Polarization due to echo chambers can cause distrust and hostility between different groups, contributing to social divisions. In political contexts, polarization can hinder effective governance and decision-making, as politicians become entrenched in their positions. These consequences can lead to cognitive dissonance, where individuals experience discomfort when confronted with conflicting information. This discomfort can result in a resistance to changing one's views.<sup>23,25</sup>

## COMPARISON TO UNREALISTIC BEAUTY STANDARD

Social media often highlights unrealistic beauty standards, especially in the realm of body image and appearance. The phenomenon of comparing oneself to unrealistic beauty standards involves individuals evaluating their own appearance, self-worth, and body image based on culturally perpetuated ideals of beauty that are often unrealistic and unattainable. These standards are frequently promoted through media, advertising, and social influence. Exposure to these ideals can contribute to poor self-esteem, body dissatisfaction, and even the development of mental health disorders like eating disorders.<sup>26</sup> Advertisers also employ idealized beauty standards to sell products, suggesting that individuals can achieve happiness and success if they conform to these standards. In addition to media and advertisers, social media platforms often feature influencers who use filters to create unrealistic, pleasant images that present an idealized version of themselves. Emphasizing physical appearance and perfection, peer groups and societal expectations can contribute to the reinforcement of unrealistic beauty standards, as people may feel compelled to conform to be accepted.<sup>27,28</sup>

These unrealistic properties of the digital world have a detrimental impact on mental health. Constant comparison to idealized beauty standards can lead to low

self-esteem and poor body image, as individuals may feel they fall short of these standards.<sup>29</sup> The unrealistic beauty ideals can foster body dissatisfaction and a negative relationship with one's own body, putting pressure to conform to these standards and contributing to the development of eating disorders such as anorexia or bulimia.<sup>30</sup> Furthermore, the anxiety and stress related to trying to meet these standards can contribute to depression and anxiety disorders. Individuals who feel they do not measure up to these standards may withdraw from social situations and activities, leading to social isolation.<sup>31</sup>

### **INACCURATE SELF-PERCEPTION**

The process of filtering content on social media can lead to distorted self-perceptions, where users may present idealized versions of themselves, creating discrepancies between their online and offline identities and contributing to feelings of inauthenticity and loneliness. Inaccurate self-perception, often referred to as distorted self-image or distorted self-concept, occurs when individuals have a skewed or inaccurate view of themselves, their abilities, or their worth.<sup>31</sup> This phenomenon can significantly impact mental health and well-being. Societal and cultural factors, including media portrayals and societal expectations, can contribute to unrealistic or unattainable self-perceptions. Thus, disorders like depression, anxiety, or eating disorders can alter self-perception. For example, depression can lead to a negative self-image, while eating disorders can result in distorted body image. Furthermore, childhood experiences, including parenting styles and early social interactions, foster comparison to others in teenagers and adolescents, particularly in areas like appearance or achievements, which can create a distorted view of one's own abilities and worth.<sup>30,32,33</sup>

### **DISTORTED REALITY AND MENTAL HEALTH**

The constant exposure to filtered, curated, and often unrealistic content can distort one's perception of reality.<sup>34</sup> This disconnects between the idealized online world and the complexities of real life can contribute to feelings of depression, inadequacy, and disillusionment. Distorted reality, a skewed or altered perception of the world, can have a significant impact on an individual's mental health and overall well-being. Distorted reality can manifest in various ways, including delusions, hallucinations, cognitive distortions, or altered perceptions of self and others. Teenagers and adolescents, who are mainly addicted to video games and exposed to pornographic content at an age where they can't differentiate between good or bad, may become detached from reality. This can cause psychiatric conditions such as schizophrenia, schizoaffective disorder, and bipolar disorder, leading to distorted reality in the form of delusions (firmly held false beliefs) and hallucinations (perceiving things that are not real). This can lead to self-harming behaviors or, in rare cases, harm to others.<sup>35-37</sup>

### **DIGITAL DETOX RESILIENCE TO SOCIAL MEDIA ADDICTION**

According to the WHO, addiction is defined as dependency (WHO expert committee 1964) as the ongoing use of something for solace, stimulation, or relief that frequently results in cravings when it is not there. Social media addiction can be classified as a behavioral addiction. Digital detox usually offers some resilience methods to prevent social media addiction.<sup>38</sup> A digital detox is a conscious and temporary break from using digital devices and engaging with online content. It involves reducing or completely abstaining from screen time, which includes smartphones, computers, tablets, and other digital gadgets. The purpose of a digital detox is to allow individuals to unplug, recharge, and regain control over their digital lives.<sup>39</sup> The constant presence of digital devices in our lives can lead to feelings of overwhelm and information overload. Excessive screen time and online engagement can contribute to stress and anxiety, making a detox necessary to alleviate these issues.<sup>16</sup> A digital detox can help individuals reconnect with loved ones and engage in real-life activities, leading to improved relationships and well-being. Prolonged screen time, particularly before bedtime, can interfere with sleep quality. A detox can promote better sleep. Excessive use of digital devices can hinder productivity; a detox can help individuals regain focus and efficiency in their work or daily tasks. Even though digital detox shows greater benefits in this digital world, the actual implementation of this in real life is more difficult due to the fear of disconnection.<sup>12,39</sup>

### **DISCUSSION**

The profound influence of social media on mental health is a dynamic and intricate phenomenon that demands careful consideration. The ubiquity of social media platforms in our daily lives, while offering unprecedented connectivity and convenience, simultaneously poses significant challenges to psychological well-being. Cyberbullying and online harassment emerge as distressing facets of social media, contributing to anxiety, depression, and, in severe cases, suicidal ideation. Addressing these challenges necessitates not only heightened awareness but also therapeutic support for victims. In certain circumstances, victims may choose to prosecute their harassers. Since regulations pertaining to cyberbullying vary throughout jurisdictions, it is usually advisable to consult legal professionals. The government of India has launched various initiatives to tackle cyberbullying, including the Nirbhaya scheme, cybercrime prevention against women and children (CCPWC) scheme, and I4C scheme. Additionally, online reporting portals, like the national cybercrime reporting portal, helpline numbers for women and children, and amendments to pertinent legal provisions of the IT act and Indian penal code 1860 have been implemented. These programs have the potential to lower general crime rates while also helping people who are the targets of

internet bullying. Practicing digital well-being, which includes setting boundaries, limiting screen time, and cultivating a healthy relationship with technology, can help reduce the risk of cyberbullying.<sup>40</sup>

## CONCLUSION

The FOMO drives a relentless pursuit of curated online experiences, inducing anxiety and stress. Understanding and mitigating FOMO's impact is crucial for fostering a healthier relationship with social media. The fear of disconnection, or nomophobia, underscores a growing dependence on digital devices, disrupting real-life experiences and relationships. Implementing digital detox strategies becomes imperative to counteract the adverse effects of this dependency. Social comparison, amplified by unrealistic beauty standards, creates a breeding ground for negative self-perception, leading to issues like low self-esteem, body dissatisfaction, and mental health disorders. Recognizing these unrealistic standards and promoting a culture of self-acceptance is pivotal. Excessive screen time and addiction contribute to anxiety, depression, and social isolation, highlighting the need for establishing healthier relationships with digital devices. This requires a balance between online engagement and real-world interactions. Privacy erosion and data concerns bring forth issues of security and ethics, necessitating robust policies to safeguard personal information. The formation of echo chambers and subsequent polarization accentuates the importance of promoting diverse perspectives and critical thinking. The distorted reality perpetuated by filtered online content poses a risk to mental health, emphasizing the need for media literacy and resilience-building strategies. Thus, it is crucial for individuals to be aware of these potential risks and to use social media mindfully, while platforms and authorities should take measures to address issues like cyberbullying, misinformation, and hate speech to create a safer and healthier digital environment.

## ACKNOWLEDGEMENTS

Author would like to thanks to CLINICA research solutions LLP. Also, to the top management for their continued guidance and support.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Malle AB, Pawar SD, Pal PS, Mulani SA. The flip side of social media: unveiling the effects of social media on mental health. *Int J Community Med Public Health* 2024;11:1401-7.