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(REVIEW ARTICLE)



# The impact of social media on mental health and well-being

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#### **Abstract**

The rise of social media has transformed the landscape of interpersonal communication, presenting both opportunities and challenges for mental health and well-being. This article explores the multifaceted impact of social media on individuals, particularly focusing on its psychological effects. Research indicates that social media can foster a sense of community and belonging, providing users with social support and a platform for self-expression. However, it also has a darker side, as excessive use can lead to increased feelings of anxiety, depression, and loneliness. The phenomenon of social comparison is amplified on these platforms, where curated representations of life can distort reality, leading to dissatisfaction and low self-esteem among users. Moreover, cyberbullying and negative interactions can further exacerbate mental health issues, particularly in younger populations. This article reviews current literature on the subject, highlighting the importance of understanding these dynamics for developing effective mental health interventions and promoting responsible social media use. By analysing both the positive and negative aspects of social media, this study aims to provide a balanced perspective that encourages users to cultivate healthy online habits and supports mental well-being in a digital age.

**Keywords:** Social Media; Mental Health; Well-being; Social Comparison; Cyberbullying

#### 1. Introduction

# 1.1. Background on Social Media Growth

## 1.1.1. Overview of the Exponential Rise of Social Media Platforms

The rise of social media platforms has been nothing short of exponential, transforming communication and interaction across the globe. Beginning with early platforms like Friendster and MySpace in the early 2000s, social media evolved rapidly, with Facebook launching in 2004 and quickly gaining millions of users. According to Statista, as of January 2024, there are over 4.9 billion social media users worldwide, representing more than 60% of the global population (Statista, 2024). The advent of smartphones and increased internet accessibility further fuelled this growth, making social media an integral part of everyday life. Platforms such as Instagram, Twitter, TikTok, and LinkedIn have emerged, each catering to specific demographics and interests, contributing to the vast diversity of social media experiences available today (Katz & Aspden, 1997).

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### 1.1.2. The Role of Social Media in Daily Life

Social media plays a significant role in daily life, influencing how individuals communicate, share information, and interact with one another. It serves as a primary means of communication for many, facilitating connections among friends, family, and colleagues, regardless of geographical barriers. Moreover, social media has become a vital tool for information dissemination, allowing users to stay updated on current events, trends, and topics of interest (Pew Research Center, 2021). In addition to personal communication, businesses leverage social media for marketing and customer engagement, utilizing platforms to reach wider audiences and foster brand loyalty (Khan, 2017). Social media's impact extends to mental health, where it can both positively and negatively affect users, leading to increased connectivity but also contributing to issues like anxiety and depression due to social comparison and cyberbullying (Twenge, 2019).



Figure 1 Role of Social Media

#### 1.2. Relevance to Mental Health

### 1.2.1. Initial Concerns About Mental Health in Relation to Social Media Use

When social media began to gain widespread popularity, initial concerns about its impact on mental health emerged primarily from anecdotal evidence and early studies. Critics pointed out that platforms could foster unhealthy comparisons, contribute to feelings of inadequacy, and increase social isolation, particularly among younger users. Studies suggested that the constant exposure to curated lives and idealized images could lead to low self-esteem and body image issues (Vogel et al., 2014). Additionally, concerns were raised about cyberbullying and harassment, which were seen as potential triggers for anxiety, depression, and suicidal ideation among adolescents (Patchin & Hinduja, 2010). As social media use became more pervasive, these concerns highlighted the need for a deeper understanding of its mental health implications.

# 1.2.2. The Growing Body of Research Linking Social Media to Mental Health Outcomes

As social media's influence expanded, researchers began to conduct more rigorous studies to investigate the relationship between social media use and mental health outcomes. A growing body of literature has consistently found both positive and negative effects. On one hand, social media can provide support networks, foster connections, and promote positive interactions (Frison & Eggermont, 2016). On the other hand, excessive use and exposure to negative content have been associated with increased anxiety, depression, and feelings of loneliness (Twenge et al., 2017). Recent meta-analyses suggest that the correlation between social media use and mental health outcomes is complex and influenced by various factors, including the type of platform used, individual differences, and the context of social interactions (Smahel et al., 2020). The nuanced findings indicate that while social media can be a source of distress for

some, it can also serve as a valuable tool for others, underscoring the need for tailored interventions and awareness about healthy social media practices.

## 1.3. Purpose of the Study

The purpose of this study is to investigate the complex relationship between social media usage and mental health outcomes among adolescents. As social media has become an integral part of daily life, understanding its effects on mental well-being is essential for parents, educators, and policymakers. This study aims to answer the following research questions:

- What is the correlation between the amount of time spent on social media and levels of anxiety and depression among adolescents?
- How do different types of social media platforms impact users' mental health differently?
- What role does social comparison play in the relationship between social media usage and self-esteem?

The objectives of the study are threefold. First, it seeks to quantify the mental health impacts associated with various social media usage patterns. Second, the study will explore the differences in mental health outcomes related to specific platforms and their features, such as visual content and interaction types. Lastly, the study aims to understand the mediating effects of social comparison on mental health outcomes, thereby contributing to the existing literature and informing strategies for healthier social media practices among adolescents. Ultimately, the findings may guide interventions to promote positive mental health in a digital age.

#### 2. Theoretical framework

## 2.1. Psychological Theories on Social Behaviour

## 2.1.1. Social Comparison Theory

Social Comparison Theory, proposed by Leon Festinger in 1954, posits that individuals have an innate drive to evaluate their own opinions and abilities by comparing themselves to others. This process helps individuals develop self-concept and gauge their social standing. In the context of social media, users are constantly exposed to curated representations of others' lives, leading to upward or downward comparisons. Upward comparisons may trigger feelings of inadequacy and low self-esteem, particularly when users perceive themselves as lacking in comparison to those they follow. Conversely, downward comparisons can enhance self-esteem by making individuals feel superior to others. Research indicates that frequent engagement in social comparison on social media platforms is associated with negative mental health outcomes, including increased anxiety and depression (Vogel et al., 2014). This theory provides a framework for understanding how social media interactions can impact individuals' perceptions of themselves and their mental well-being.

# 2.1.2. Social Identity Theory

Social Identity Theory, developed by Henri Tajfel and John Turner in the 1970s, explores how individuals derive part of their identity from the social groups to which they belong. This theory posits that group membership influences self-esteem, attitudes, and behaviours. In the realm of social media, users often engage in group dynamics by identifying with specific online communities or networks. This identification can foster a sense of belonging, yet it can also lead to in-group favouritism and out-group discrimination. The pressure to conform to group norms and expectations can exacerbate feelings of inadequacy, particularly if individuals feel they do not measure up to the perceived standards of their group. Research has shown that individuals who heavily identify with online communities may experience heightened social anxiety and stress, particularly if they fear judgment from peers (Tajfel & Turner, 1979; Gibbons & Buunk, 1999). Understanding Social Identity Theory is crucial for comprehending the complex interactions between social media use and mental health.

#### 2.2. Framework of Mental Health Impact

Cognitive-behavioural theories offer a robust framework for understanding the mental health impacts of online interactions, particularly within the context of social media. These theories posit that our thoughts, emotions, and behaviours are interconnected and that maladaptive thought patterns can lead to negative emotional states and behaviours. In the realm of social media, users are often bombarded with curated images and narratives that can distort their perceptions of reality. This exposure can lead to cognitive distortions, such as catastrophizing or overgeneralization, where individuals may believe they are the only ones experiencing negative emotions or challenges,

further exacerbating feelings of isolation and inadequacy. One significant cognitive-behavioural mechanism at play is the phenomenon of social comparison, which can trigger feelings of jealousy, anxiety, and depression. Users frequently engage in upward comparisons, evaluating themselves against others who appear more successful, attractive, or happy, leading to negative self-evaluation and diminished self-worth (Festinger, 1954). Cognitive-behavioural theories emphasize the role of cognitive restructuring, where individuals can learn to challenge and change these distorted beliefs, thus improving their emotional well-being.

Additionally, the impact of online interactions on mental health can be understood through the lens of reinforcement principles. Positive feedback, such as likes and comments, can reinforce self-esteem and a sense of belonging. Conversely, negative interactions, such as cyberbullying or social exclusion, can lead to cognitive distortions that affect self-perception and mental health (Wang et al., 2019). Understanding these cognitive-behavioural theories is crucial for developing interventions that address the negative mental health outcomes associated with social media use. By focusing on cognitive restructuring and promoting healthy online interactions, individuals can mitigate the adverse effects on their mental health.

# 3. Positive impact of social media on mental health

#### 3.1. Social Support and Connection

### 3.1.1. The Role of Social Media in Enhancing Connection and Community-Building

Social media platforms have fundamentally transformed how individuals connect and interact, particularly for those who are distant or feel isolated. One of the most significant advantages of social media is its ability to bridge geographical barriers, allowing users to communicate and engage with friends, family, and even strangers from around the world. This connectivity is especially beneficial for individuals who may be physically isolated due to various circumstances, such as geographical location, health issues, or social anxiety. By facilitating real-time communication through messaging, video calls, and sharing of personal content, social media provides a sense of belonging and emotional support that can significantly enhance mental well-being (Holt-Lunstad et al., 2010). Moreover, social media plays a crucial role in community-building. Online platforms enable users to form groups centred around shared interests, experiences, or challenges, fostering a sense of community and belonging. Whether through Facebook groups, Twitter chats, or Instagram communities, these virtual spaces allow individuals to connect with others who understand their circumstances, share resources, and provide emotional support. Such interactions can be particularly beneficial for marginalized or niche communities, offering a platform for advocacy, information sharing, and mutual encouragement (Baker & Algorta, 2016).

Maintaining relationships through social media also contributes to emotional resilience. Regular updates, likes, comments, and shared experiences help strengthen bonds, even across distances. The ability to engage in social rituals, such as celebrating birthdays or milestones through online platforms, reinforces connections and can mitigate feelings of loneliness and isolation (Kraut et al., 2002). In summary, social media enhances connection among distant individuals and plays a vital role in community-building, facilitating relationships that can improve mental health and foster a supportive environment.

## 3.2. Self-Expression and Empowerment

## 3.2.1. Self-Expression and Empowerment through Social Media

Social media platforms serve as vital avenues for marginalized voices, offering spaces where individuals can express themselves authentically and advocate for their rights. Platforms like Instagram, Twitter, and TikTok have become popular tools for social movements, allowing users to share their experiences and perspectives that are often overlooked in mainstream discourse. For instance, hashtags like #BlackLivesMatter and #MeToo have galvanized communities, enabling individuals to share personal narratives that resonate with broader societal issues. This democratization of voice empowers users to challenge stereotypes and contribute to cultural dialogues, fostering a sense of belonging and validation (Thompson, 2020).

Moreover, social media facilitates personal storytelling, which is crucial for identity exploration and self-empowerment. Users can curate their online presence, showcasing their unique identities and experiences. This process not only affirms their individuality but also connects them with others who share similar backgrounds or struggles. For marginalized groups, sharing stories of resilience and empowerment can lead to collective healing and solidarity, as individuals find common ground through their narratives. Research indicates that personal storytelling on social media

can enhance self-esteem and encourage users to embrace their identities (Litt, 2012). Furthermore, social media enables users to engage in dialogue around identity, facilitating discussions about race, gender, sexuality, and disability. These conversations often challenge dominant narratives and promote a more inclusive understanding of diverse experiences. By providing platforms for these discussions, social media empowers individuals to reclaim their narratives and foster a sense of agency over their identities.

In summary, social media is a powerful tool for self-expression and empowerment, particularly for marginalized voices. By promoting personal storytelling and facilitating identity exploration, these platforms enable individuals to assert their presence, connect with others, and contribute to important social conversations.

### 3.3. Mental Health Awareness and Support Groups

#### 3.3.1. Use of Platforms for Mental Health Advocacy and Peer Support

Social media has become a crucial tool for mental health advocacy and peer support, allowing individuals to share their experiences and raise awareness about mental health issues. Platforms like Facebook, Instagram, and Twitter host a myriad of groups and campaigns aimed at destignatizing mental health challenges. For example, hashtags such as #MentalHealthAwareness and #BreakTheStigma have gained traction, encouraging open discussions about mental health struggles and fostering community support. Users often find solace in connecting with others facing similar challenges, creating a sense of belonging and reducing feelings of isolation. By amplifying voices and sharing stories, these platforms empower individuals to advocate for their mental health needs and promote greater understanding within society (Naslund et al., 2016).

## 3.3.2. Online Therapy and Mental Health Communities

The rise of online therapy and mental health communities represents a significant shift in how mental health support is accessed. Platforms like BetterHelp and Talkspace provide users with convenient access to licensed therapists through messaging, video calls, and live chats. This flexibility allows individuals to seek help without the barriers of traditional in-person therapy, such as geographical limitations or scheduling conflicts. Additionally, online communities, such as those found on Reddit or specialized forums, offer spaces for users to engage in discussions, share coping strategies, and seek advice from peers who understand their struggles. These virtual environments foster a sense of safety and support, encouraging individuals to discuss their mental health openly. Research indicates that online therapy can be as effective as face-to-face sessions, making mental health resources more accessible to diverse populations (Andersson & Cuijpers, 2009).

## 4. Negative impact of social media on mental health

# 4.1. Social Comparison and Self-Esteem

### 4.1.1. The Role of Curated Content and Comparison to Idealized Images

Curated content on social media plays a significant role in shaping users' perceptions of reality and self-worth. Many platforms, such as Instagram and TikTok, emphasize visual storytelling, often leading users to share highly curated versions of their lives that highlight only their successes and joyful moments. This selective sharing can create an unrealistic standard of beauty, success, and happiness, leading viewers to engage in social comparisons.

Research has shown that individuals frequently compare themselves to the idealized images and lifestyles portrayed by influencers and peers. Such comparisons can have detrimental effects on mental health, fostering feelings of inadequacy, anxiety, and depression. For instance, a study by Tiggemann and Slater (2013) found that exposure to idealized images on social media correlates with negative body image and increased dissatisfaction among users. The continuous cycle of viewing curated content can create a "compare and despair" mindset, where individuals feel they fall short in comparison to the carefully constructed realities presented online. Moreover, the algorithm-driven nature of social media often reinforces these comparisons, as users are exposed to content that aligns with their interests and behaviours, further entrenching feelings of inadequacy. While some users may benefit from curated content by gaining inspiration or motivation, the overwhelming emphasis on perfection can overshadow the authenticity of everyday life. This highlights the need for critical engagement with social media and a shift towards promoting more realistic and diverse representations of life experiences.

## 4.2. Cyberbullying and Online Harassment

#### 4.2.1. Negative Effects on Body Image and Self-Worth, Especially in Adolescents

The pervasive nature of social media has led to significant negative effects on body image and self-worth, particularly among adolescents. This age group is especially vulnerable to the influence of social media due to their developmental stage, where self-esteem and identity are still being formed. Research indicates that adolescents are more likely to internalize the idealized images they encounter online, often leading to body dissatisfaction and low self-esteem. Studies have shown that the constant exposure to filtered and curated images of seemingly perfect bodies can result in negative body image, as young users frequently compare themselves to these unrealistic standards. For instance, a study by Perloff (2014) found that greater social media use was associated with increased body dissatisfaction and a higher likelihood of developing eating disorders among young women. The tendency to engage in upward social comparisons—where individuals evaluate themselves against those they perceive as better off—can exacerbate feelings of inadequacy and unworthiness.

Moreover, the role of social media in perpetuating specific beauty ideals, often dominated by thinness and muscularity, can further undermine self-worth. Adolescents who do not conform to these ideals may experience bullying, exclusion, or negative feedback, leading to psychological distress. The negative impact on body image is not confined to females; males also report dissatisfaction with their bodies and increased pressure to conform to idealized masculine standards. Thus, addressing the harmful effects of social media on body image and self-worth is critical to fostering healthier self-perceptions among adolescents.

#### 4.2.2. Prevalence of Cyberbullying and Its Impact on Psychological Well-Being

Cyberbullying has emerged as a significant issue in the digital age, particularly affecting adolescents and young adults. Defined as the intentional and repetitive use of digital platforms to harass, threaten, or humiliate individuals, cyberbullying can take various forms, including spreading rumours, sending threatening messages, or posting harmful content online. Research indicates that approximately 15-25% of students experience cyberbullying at some point, with higher rates reported among those who are active users of social media (Patchin & Hinduja, 2020). The psychological impact of cyberbullying is profound and multifaceted. Victims often experience a range of emotional responses, including anxiety, depression, and lowered self-esteem. The pervasive nature of online harassment can make victims feel trapped, as the digital environment offers little respite. Unlike traditional bullying, cyberbullying can occur 24/7, intensifying feelings of helplessness and isolation. Furthermore, victims may internalize the negative messages they receive, leading to long-term issues such as chronic stress and a decline in academic performance.

Additionally, the impact of cyberbullying extends beyond the individual, affecting peer relationships and overall school climate. Witnesses to cyberbullying also report feelings of fear and anxiety, contributing to a toxic environment that undermines psychological well-being for all involved. Addressing the prevalence and consequences of cyberbullying is essential to fostering safer online spaces and promoting mental health among young people.

## 4.2.3. Case Studies of Cyberbullying Leading to Anxiety and Depression

Cyberbullying has led to numerous tragic cases that highlight its severe psychological impacts, particularly anxiety and depression. One notable case is that of Amanda Todd, a Canadian teenager who became a victim of relentless online harassment after an intimate photo was shared without her consent. Todd faced severe bullying from peers, which contributed to her struggle with depression and anxiety. In a poignant video she posted online before her death in 2012, Todd expressed her feelings of isolation and despair, illustrating the profound emotional toll cyberbullying can take on victims. Her story prompted widespread media attention and discussions about the dangers of cyberbullying and the importance of mental health support.

Another significant case is that of Tyler Clementi, an 18-year-old college student who was bullied after his roommate secretly filmed and shared a romantic encounter with another male student. The harassment that followed led Clementi to experience profound anxiety and shame, culminating in his tragic suicide in 2010. His case highlighted the intersection of bullying, mental health, and societal stigma, sparking national conversations about LGBTQ+ bullying and the need for mental health resources on college campuses. Both cases underscore the devastating impact of cyberbullying on mental health, particularly among vulnerable populations. They serve as critical reminders of the importance of awareness, prevention, and support systems to protect individuals from the damaging effects of online harassment.

#### 4.3. Addiction and Overuse

#### 4.3.1. Social Media Addiction, FOMO (Fear of Missing Out), and Compulsive Usage

Social media addiction has emerged as a significant concern in contemporary society, characterized by excessive and compulsive use of social media platforms. One of the key factors contributing to this addiction is the phenomenon known as FOMO, or Fear of Missing Out. FOMO refers to the anxiety that arises when individuals perceive that others are experiencing something exciting or rewarding without them. This fear drives users to check their social media accounts frequently, often leading to compulsive behaviour as they strive to stay connected and informed about social activities, events, or trends.

Research indicates that FOMO is prevalent among social media users, particularly adolescents and young adults. A study conducted by Przybylski et al. (2013) found that individuals who experience high levels of FOMO tend to engage in more frequent social media use, resulting in a cycle of compulsive behaviour. The need for social validation and the desire to avoid feelings of exclusion can lead to unhealthy patterns of usage, including neglecting real-life relationships, academic responsibilities, and personal well-being. Moreover, the design of social media platforms, with their endless scroll features, notifications, and algorithm-driven content, exacerbates this compulsive usage. Users often feel compelled to stay engaged to avoid missing important updates or interactions, further reinforcing the cycle of addiction. Consequently, social media addiction not only affects individual mental health, contributing to anxiety and depression, but it also impacts overall quality of life, as users prioritize online interactions over meaningful, offline experiences.

#### 4.3.2. Mental Health Consequences: Sleep Disturbances and Mood Disorders

The pervasive use of social media is increasingly linked to various mental health consequences, particularly sleep disturbances and mood disorders. One of the primary ways social media affects sleep is through its impact on users' sleep hygiene. Engaging with social media late at night can lead to disrupted sleep patterns due to the blue light emitted from screens, which interferes with melatonin production and delays the onset of sleep (Hale & Guan, 2015). Furthermore, the constant notifications and alerts can create an environment of hyper-arousal, making it difficult for individuals to unwind before bedtime.

Research has shown that individuals who spend excessive time on social media are more likely to report poor sleep quality and shorter sleep duration (Woods & Scott, 2016). This lack of sleep can exacerbate mood disorders, including anxiety and depression, leading to a vicious cycle where poor mental health further hinders sleep quality. Sleep disturbances can result in increased irritability, reduced emotional regulation, and a heightened sensitivity to stressors, further contributing to mood disorders. Additionally, the content consumed on social media can influence mood. Exposure to negative or distressing content, cyberbullying, and unrealistic portrayals of life can lead to feelings of inadequacy and hopelessness, aggravating mood disorders. This interplay between social media use, sleep disturbances, and mood disorders highlights the need for a more profound understanding of the mental health implications of social media engagement and emphasizes the importance of promoting healthier online habits.

## 5. Social media and specific mental health disorders

# 5.1. Anxiety and Depression

#### 5.1.1. Link Between Social Media Overuse and Increased Anxiety/Depression

The overuse of social media has been closely linked to heightened levels of anxiety and depression among users. Numerous studies indicate that excessive engagement with social media platforms can lead to negative psychological outcomes, primarily due to the constant exposure to curated, idealized images and lifestyles. This phenomenon fosters feelings of inadequacy and low self-esteem, as users often compare their lives unfavourably to the seemingly perfect lives displayed online (Vogel et al., 2014).

Moreover, the addictive nature of social media contributes to a cycle of compulsive behaviour. Users frequently check their accounts for likes, comments, and messages, which can create anxiety around social validation. The phenomenon known as "Fear of Missing Out" (FOMO) further exacerbates these feelings, as individuals worry about being excluded from social events or experiences that are often highlighted on their feeds (Przybylski et al., 2013). This anxiety can lead to a sense of isolation, even in the presence of online connections, as the quality of interactions often diminishes in favour of superficial engagement. Research has demonstrated a direct correlation between high social media usage and increased symptoms of depression. A longitudinal study found that individuals who used social media excessively were

more likely to report depressive symptoms over time (Keles et al., 2020). This link underscores the need for awareness and moderation in social media usage, as the mental health consequences of overuse can be profound and far-reaching.

#### 5.2. Loneliness and Isolation

### 5.2.1. Paradox of Connectedness Leading to Loneliness

Despite the promise of social media to connect individuals across vast distances, a growing body of evidence suggests that it may contribute to feelings of loneliness. The paradox lies in the fact that while users can maintain a network of online friends and acquaintances, these virtual connections often lack the depth and emotional intimacy characteristic of face-to-face interactions. Research indicates that individuals who primarily engage with others online report higher levels of loneliness compared to those who have regular in-person interactions (Holt-Lunstad et al., 2010). This superficial engagement can leave users feeling isolated, as online communications often fail to fulfil the psychological need for meaningful relationships. Consequently, the constant stimulation from social media can create a false sense of connection while simultaneously amplifying feelings of loneliness and alienation.

### 5.2.2. Displacement of Real-World Interactions by Virtual Ones

The rise of social media has led to a significant displacement of real-world interactions by virtual ones. Many individuals, particularly younger generations, increasingly rely on digital communication to maintain relationships, often at the expense of face-to-face interactions. This shift can result in reduced social skills, diminished empathy, and a lack of genuine human connection (Turkle, 2015). As people spend more time engaging with their screens, they may find themselves missing opportunities for authentic interactions, such as sharing experiences with family and friends in real life. Moreover, the convenience of online communication can create a preference for virtual engagements over traditional socializing, further exacerbating feelings of isolation. As real-world interactions decline, the richness of human relationships is often compromised, leading to negative mental health outcomes and a sense of disconnection in an increasingly connected world.

## 5.3. Sleep Disturbances and Mental Health

## 5.3.1. Blue Light Exposure and Its Effect on Sleep

Blue light, emitted from screens of smartphones, tablets, and computers, has been shown to disrupt the body's natural circadian rhythm. Exposure to blue light in the evening interferes with melatonin production, a hormone crucial for regulating sleep. This disruption can lead to difficulty falling asleep and maintaining restful sleep, resulting in a diminished quality of rest (Hale & Guan, 2015). As individuals increasingly engage with their devices before bedtime, the prevalence of sleep disturbances has risen, contributing to a cycle of poor sleep hygiene. Research indicates that limiting blue light exposure in the hours leading up to sleep can enhance sleep quality and duration, promoting better overall health.

# 5.3.2. Sleep Deprivation and Its Impact on Mental Health

Sleep deprivation is closely linked to a range of mental health issues, including anxiety, depression, and mood disorders. Lack of adequate sleep can impair cognitive functioning, emotional regulation, and stress response, leading to heightened sensitivity to negative stimuli (Walker, 2017). Prolonged sleep deprivation exacerbates existing mental health conditions and can trigger new episodes of psychological distress. Studies suggest that individuals with chronic sleep deficits are at a higher risk of developing mood disorders, creating a vicious cycle where mental health struggles further contribute to sleep disturbances. Prioritizing sleep is essential for maintaining mental well-being, highlighting the need for awareness and interventions aimed at improving sleep hygiene.

# 6. Social media and youth mental health

# 6.1. Impact on Adolescents and Young Adults

#### 6.1.1. Developmental Vulnerabilities and Increased Susceptibility

Adolescents and young adults are particularly vulnerable to the negative impacts of social media due to ongoing brain development and their quest for identity formation. During these formative years, individuals are more susceptible to external influences, including peer pressure and societal expectations, which are often amplified through social media platforms. The constant exposure to curated content can lead to distorted self-perceptions and unrealistic comparisons, heightening feelings of inadequacy and anxiety (Valkenburg & Peter, 2011).

Research indicates that adolescents who frequently engage in social media are more likely to experience mental health challenges, including depression and anxiety. The developmental tasks of this age group, such as establishing autonomy and building self-esteem, can be complicated by the pressure to conform to idealized images and lifestyles portrayed online (Seabrook, Kern, & Rickard, 2016). Moreover, the transient nature of online interactions can foster feelings of isolation and loneliness, despite the perception of connectivity. The reliance on social media for social validation can lead to increased stress and decreased self-worth, as individuals may equate their value with likes, comments, and followers. As a result, it is crucial to understand the unique developmental vulnerabilities that young people face in the digital age and to promote healthier online habits to mitigate the adverse effects on mental health.

### 6.1.2. Peer Pressure, Social Validation, and Its Role in Identity Formation

Peer pressure and social validation play critical roles in the identity formation process, particularly during adolescence. As individuals seek acceptance and belonging, the influence of peers can significantly shape their self-concept and behaviour. Social media platforms amplify this dynamic by providing constant opportunities for comparison and validation through likes, comments, and shares. Adolescents often gauge their self-worth based on online interactions, leading to a heightened sensitivity to peer approval (Valkenburg & Peter, 2011).

The desire for social validation can prompt young users to conform to prevailing trends, ideals, or behaviours that may not align with their authentic selves. This pressure to present a curated, often idealized version of oneself can lead to dissonance between online personas and real-life identities, which can be detrimental to mental health. For example, research has shown that adolescents who prioritize social media validation are more likely to experience anxiety and depression due to the constant need to maintain a favourable online image (Seabrook, Kern, & Rickard, 2016). Moreover, the fear of missing out (FOMO) exacerbates this phenomenon, compelling individuals to engage in activities primarily to showcase them on social media, rather than for personal enjoyment. This compulsive behaviour can stifle authentic self-exploration and create a cycle of dependence on external validation for self-esteem. Understanding the implications of peer pressure and social validation in the digital age is crucial for fostering healthier identity development and promoting mental well-being among adolescents.

#### 6.2. Parental Concerns and Role

## 6.2.1. Parents' Awareness of Social Media's Effects

Parents play a pivotal role in moderating their children's social media usage and understanding its potential effects on mental health. Despite the growing body of research highlighting the negative impacts of social media, many parents remain unaware of these issues, often viewing social media as a harmless aspect of modern life. Studies have shown that while parents recognize the benefits of social media for connectivity and communication, they often underestimate the risks associated with excessive use, such as cyberbullying, body image concerns, and addiction (O'Keeffe & Clarke-Pearson, 2011).

This lack of awareness can lead to insufficient guidance and support for adolescents navigating online spaces. Many parents may not actively monitor their children's social media activities or engage in conversations about online experiences, which can result in their children facing challenges without adequate parental support. Moreover, parents themselves may be influenced by their social media habits, leading to mixed messages regarding online engagement. Efforts to enhance parental awareness are crucial. Educational programs that inform parents about the potential mental health implications of social media, along with practical strategies for fostering healthy online habits, can empower them to support their children effectively. Encouraging open dialogue between parents and children about social media experiences can also foster resilience and critical thinking, helping adolescents navigate the complexities of digital interactions. By increasing awareness and promoting proactive engagement, parents can play a vital role in mitigating the adverse effects of social media on their children's mental health.

# 6.2.2. Strategies for Monitoring and Moderating Usage

Monitoring and moderating social media usage among adolescents is essential for fostering healthier online behaviours and mitigating potential negative effects on mental health. Parents, educators, and guardians can employ several effective strategies to achieve this.

Open Communication: Establishing a dialogue about social media use is crucial. Parents should discuss the
platforms their children are using, the nature of their interactions, and any concerns they may have.
Encouraging children to share their online experiences can help parents identify potential issues and provide
guidance.

- **Setting Limits**: Parents can set clear boundaries regarding the amount of time spent on social media. Implementing daily or weekly limits on screen time can help adolescents develop healthier habits. Tools such as parental control apps can assist in monitoring usage and enforcing these limits effectively.
- **Encouraging Alternative Activities**: Promoting offline activities, such as sports, hobbies, or family outings, can help reduce reliance on social media for social interaction. Encouraging a balanced lifestyle that includes face-to-face interactions can diminish the impact of social media on mental health.
- **Modelling Healthy** Behaviours: Parents should lead by example, demonstrating balanced social media usage. By modelling healthy online habits, such as prioritizing real-world interactions over virtual ones, parents can instil similar values in their children.
- **Education on Digital Literacy**: Teaching adolescents about the potential risks and benefits of social media can empower them to make informed decisions. Discussing topics like privacy, online etiquette, and the importance of critical thinking can help them navigate social media more responsibly.

By employing these strategies, parents and guardians can better monitor and moderate social media usage, contributing to their children's overall mental well-being.

#### 6.3. Policy and Education Interventions

# 6.3.1. Current Policies Around Social Media Usage for Minors

Current policies regarding social media usage for minors vary significantly across countries and platforms. Many social media companies have age restrictions, typically requiring users to be at least 13 years old to create an account. This age limit aligns with the Children's Online Privacy Protection Act (COPPA) in the United States, which aims to protect the privacy of children under 13 by restricting data collection and online marketing (Federal Trade Commission, 1998).

Some countries have implemented stricter regulations, such as France, which requires parental consent for minors using social media platforms (European Commission, 2020). Additionally, various states are introducing legislation that mandates age verification methods and restricts the advertising of harmful content to minors. These policies aim to enhance online safety for young users, but their enforcement remains a challenge. Advocates call for more comprehensive measures, including education on safe online practices and stricter penalties for platforms that fail to comply with age regulations (Livingstone et al., 2018).

## 6.3.2. Digital Literacy and Mental Health Education Initiatives

Digital literacy and mental health education initiatives are crucial for equipping minors with the skills to navigate the complexities of social media effectively. Many schools and organizations are increasingly integrating digital literacy programs into their curricula, focusing on responsible online behaviour, critical thinking, and evaluating online content (Hollis et al., 2017). These programs aim to empower students to recognize misinformation, cyberbullying, and the potential impact of social media on mental health.

Furthermore, mental health education initiatives often accompany digital literacy programs, teaching students about emotional well-being, coping strategies, and resources for seeking help. Workshops and seminars led by mental health professionals can provide valuable insights into the effects of social media on self-esteem and relationships. By fostering a well-rounded understanding of both digital skills and mental health, these initiatives strive to create a safer and more supportive online environment for young people (Best et al., 2014).

# 7. Cultural and gender differences in social media impact

## 7.1. Cultural Variations in Social Media Use

# 7.1.1. Differences in Social Media Effects Based on Cultural Values

Cultural values significantly shape how social media affects individuals and communities. In collectivist cultures, such as those in many Asian countries, social media is often viewed as a tool for fostering community and family connections. Here, users may prioritize shared experiences and group harmony over individual expression, which can lead to positive social reinforcement and support (Hofstede, 2011). In contrast, in individualistic cultures, like the United States, social media is frequently associated with self-promotion and personal achievement, potentially leading to increased anxiety and feelings of inadequacy when individuals compare themselves to others (Schneider et al., 2016). These differing cultural frameworks can influence how users engage with platforms, their motivations for use, and their mental health outcomes.

### 7.1.2. Examples from Diverse Regions on How Social Media Usage is Perceived

In Western countries, social media is primarily perceived as a platform for self-expression and networking. For instance, in the U.S., platforms like Instagram and Twitter are popular for sharing personal milestones and professional achievements. However, this can foster a competitive atmosphere that exacerbates anxiety and low self-esteem among users (Tiggemann & Slater, 2014).

Conversely, in many African countries, social media serves as a vital tool for community building and activism. For example, during the Arab Spring, social media platforms like Twitter and Facebook were used to organize protests and share information, showcasing their role in empowering marginalized voices and driving social change (Howard et al., 2011). In both contexts, the perception of social media can vary widely based on cultural attitudes toward technology and community engagement.

## 7.2. Gender Differences

# 7.2.1. Gendered Experiences of Online Interaction

Gender significantly influences how individuals engage with social media and the experiences they encounter. Women often face heightened scrutiny regarding their appearance and behaviour on social platforms, leading to increased pressure to conform to societal beauty standards. This can manifest in experiences such as cyberbullying or negative comments about their physical appearance, which can adversely affect mental health (Kumar & Nayar, 2021). Men, on the other hand, may experience pressure to portray strength and success, often leading to a focus on achievement-based self-presentation. The different societal expectations placed on genders can shape the nature of online interactions, with women often reporting a greater impact on self-esteem and body image due to social comparison, while men may struggle with feelings of inadequacy related to success and masculinity.

#### 7.2.2. Specific Mental Health Outcomes for Men and Women

Research indicates distinct mental health outcomes related to social media use for men and women. Women tend to experience more negative effects on body image and self-esteem due to the emphasis on appearance-driven content prevalent on platforms like Instagram (Tiggemann & Slater, 2014). They are more likely to report dissatisfaction with their bodies and increased anxiety about meeting beauty ideals. Conversely, men often experience issues related to self-worth linked to achievement and status, leading to anxiety and depression when they perceive themselves as falling short (Seabrook et al., 2016). Both genders face challenges, but the underlying issues may differ, with women experiencing body image concerns and men grappling with societal expectations of success.

#### 8. Mitigating the negative impacts of social media

# 8.1. Role of Social Media Companies

## 8.1.1. Ethical Responsibilities of Companies Like Facebook, Instagram, and Twitter

Social media companies such as Facebook, Instagram, and Twitter hold significant ethical responsibilities due to their influence on millions of users worldwide. Firstly, they must prioritize user safety by actively combating harmful content, including hate speech, harassment, and misinformation. Implementing effective moderation systems and transparent reporting mechanisms is crucial to fostering a safe online environment (Gorwa, 2019).

Secondly, these platforms have a responsibility to protect user privacy and data security. Ethical data management practices, including clear privacy policies and user consent protocols, are vital to maintaining user trust (Zuboff, 2019). Companies should ensure that user data is not exploited for profit without consent, especially concerning targeted advertising. Additionally, social media platforms should be transparent about their algorithms and the potential impact of curated content on user mental health. Providing users with tools to manage their online experiences, such as content filtering and screen time reminders, can help mitigate negative mental health outcomes (Kumar & Nayar, 2021). By embracing these ethical responsibilities, social media companies can contribute to a healthier online ecosystem that prioritizes user well-being while fostering responsible engagement.

# 8.1.2. Implementations of Algorithms to Limit Harmful Content

Social media platforms like Facebook, Instagram, and Twitter have increasingly implemented algorithms designed to detect and limit harmful content, including cyberbullying. These algorithms use machine learning techniques to analyse user-generated content in real-time, flagging posts that exhibit patterns associated with harassment or abusive

behaviour. For instance, platforms employ natural language processing (NLP) to identify derogatory language, threats, or targeted attacks against individuals.

Additionally, these algorithms can assess user behaviour, such as repeated reporting of a particular account, to determine potential risks of cyberbullying. Once flagged, the content may either be removed automatically or escalated to human moderators for review. Some platforms also provide users with warnings or reminders about their behaviour if their posts are identified as potentially harmful, encouraging a culture of accountability. Furthermore, social media companies are investing in developing more sophisticated algorithms that not only detect explicit abusive language but also understand context, which is crucial for nuanced situations often seen in cyberbullying. For example, recent advancements in sentiment analysis aim to capture the emotional tone of posts, allowing for more effective identification of harmful interactions before they escalate. These efforts are part of a broader initiative to create safer online environments and reduce the incidence of cyberbullying.

### 8.2. Digital Detox and Mindful Usage

### 8.2.1. Strategies for Reducing Negative Impact: Digital Detox and Usage Time Limits

To mitigate the negative impacts of social media, strategies such as digital detox and usage time limits have gained popularity. A **digital detox** involves taking a break from all digital devices, particularly social media, allowing individuals to reconnect with themselves and their immediate environment. This break can reduce stress, anxiety, and feelings of inadequacy associated with constant online engagement. Research shows that even short periods of disconnection can lead to improved mental health outcomes, as individuals experience lower levels of anxiety and greater life satisfaction upon returning to offline interactions (Woods & Scott, 2016).

**Usage time limits** are another effective strategy. Many social media platforms now offer features that allow users to track and limit their time spent on the app. By setting daily time limits, users can cultivate a healthier relationship with social media, reducing compulsive behaviours and encouraging more mindful usage. Studies indicate that reducing time spent on social media can lead to improved mood and decreased symptoms of depression (Keles et al., 2020). Together, these strategies empower individuals to take control of their social media consumption, ultimately enhancing their overall mental well-being.

#### 8.2.2. Promoting Mindful Social Media Habits for Mental Health Well-Being

Promoting mindful social media habits is essential for enhancing mental health and well-being. Mindfulness encourages users to engage with social media consciously, rather than reactively. This practice involves being aware of one's feelings and reactions while using social platforms, helping individuals recognize when they may feel overwhelmed or negatively affected by the content they consume.

One effective approach is to curate social media feeds to include positive, uplifting content that aligns with personal values and interests. Research indicates that exposure to negative or idealized portrayals on social media can contribute to feelings of inadequacy and anxiety (Vogel et al., 2014). By following accounts that promote mental health awareness, self-acceptance, and positivity, users can create a supportive online environment.

Another strategy is to practice digital mindfulness techniques, such as taking breaks to assess emotional responses during usage or engaging in activities that foster real-world connections. Establishing intentional boundaries around social media usage, such as designated "social media-free" times, can also help reduce stress and promote healthier interactions. Ultimately, these mindful practices can enhance mental health outcomes, fostering a more positive and fulfilling social media experience.

#### 8.3. Role of Governments and Mental Health Organizations

# 8.3.1. Policy Recommendations for Mental Health Protections Online

To protect mental health in the context of social media, several policy recommendations should be implemented. First, age restrictions should be enforced more rigorously to ensure that platforms are not accessible to children without parental consent, thus safeguarding vulnerable populations from harmful content. Second, social media companies should be mandated to provide mental health resources directly on their platforms. This could include links to crisis hotlines, educational content on mental health, and access to professional help.

Additionally, policies should encourage platforms to adopt algorithmic transparency to allow users to understand how content is curated and how it may affect their mental well-being. This transparency can help mitigate the negative

impact of algorithm-driven content that often promotes unrealistic standards. Lastly, companies should be required to conduct regular assessments of their platforms' impacts on mental health and report these findings to the public and regulatory bodies. By implementing these policies, social media can become a safer environment that prioritizes mental health and well-being (Lundgren et al., 2022).

## 8.3.2. National and Global Efforts in Regulating Social Media

Efforts to regulate social media on national and global scales are increasingly relevant as concerns about mental health and online safety grow. In the United States, initiatives such as the Children's Online Privacy Protection Act (COPPA) aim to protect the privacy of children under 13 by requiring parental consent for data collection. States like California have introduced legislation like the California Consumer Privacy Act (CCPA) to enhance user privacy rights and data protection (Calvert et al., 2020). Globally, organizations such as the European Union have implemented the General Data Protection Regulation (GDPR), which mandates strict data protection measures and user rights, including the right to access and delete personal data. Furthermore, countries like the United Kingdom are proposing the Online Safety Bill, which focuses on protecting users from harmful content and requires platforms to take greater responsibility for user safety (Cave et al., 2021).

Collectively, these national and global efforts signify a growing recognition of the need for robust regulations in the social media landscape, aiming to foster a safer online environment that prioritizes mental health and well-being.

#### 9. Conclusion

# 9.1. Recap of Key Findings

#### 9.1.1. Summary of Both the Positive and Negative Impacts of Social Media on Mental Health

Social media has a complex relationship with mental health, presenting both positive and negative impacts. On the positive side, social media platforms facilitate connection and community building, allowing individuals to maintain relationships with family and friends, even over long distances. They also provide a platform for self-expression and empowerment, especially for marginalized voices, enabling users to share personal stories and advocate for social causes. Furthermore, social media can enhance mental health awareness, offering resources and support through online communities and peer support groups. However, the negative impacts of social media on mental health are significant and growing. The phenomenon of social comparison can lead to feelings of inadequacy and lower self-esteem, particularly among adolescents. The portrayal of idealized images and lifestyles can distort body image perceptions and contribute to issues like anxiety and depression. Cyberbullying is another severe consequence, leading to psychological distress and emotional turmoil for many users.

Additionally, excessive use of social media can result in addiction, characterized by compulsive checking of notifications and a pervasive Fear of Missing Out (FOMO), which further exacerbates anxiety and can disrupt real-world interactions and sleep patterns. Ultimately, while social media offers valuable opportunities for connection and expression, it is crucial to navigate these platforms mindfully to mitigate risks to mental health.

# 9.2. Final Thoughts on Responsible Usage and Future Directions

The dual nature of social media necessitates a balanced approach to leverage its benefits while mitigating associated risks. Individuals and communities must adopt responsible usage practices, such as setting boundaries on screen time and curating content to align with personal well-being. By promoting digital literacy, users can be better equipped to understand the impact of their online interactions and cultivate a healthier relationship with social media.

Looking ahead, future research should explore the nuanced effects of social media on diverse populations and the long-term implications of usage patterns. Investigating the efficacy of technological interventions—such as features that promote mindful usage or reduce exposure to harmful content—can provide insights into improving user experiences. Furthermore, collaboration between tech companies, mental health professionals, and policymakers is essential to create supportive online environments that prioritize mental well-being and ensure user safety.

## Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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