

Navigating the Impact of Social Media on Youth Mental Health: Insights into Depression, Anxiety, and Behavioral Influences

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ABSTRACT

This study explores the impact of social media on youth mental health, particularly focusing on depression, anxiety, and behavioral influences among individuals aged 10-24. Social media platforms like Instagram, TikTok, and Snapchat are widely used for communication, self-expression, and social interaction, but their extensive use may contribute to mental health challenges. A mixed-methods approach was employed, involving 500 participants who were surveyed and interviewed to assess the relationship between social media use and mental health outcomes. Quantitative data was collected through standardized measures, such as the Patient Health Questionnaire (PHQ-9) for depression and the Generalized Anxiety Disorder Scale (GAD-7) for anxiety, while qualitative interviews provided deeper insights into user experiences. The results revealed that 45% of participants reported mild depressive symptoms, with heavy social media users showing significantly higher depressive scores. Anxiety levels, particularly linked to Fear of Missing Out (FOMO), were also elevated among heavy users, especially those aged 15-19. Additionally, exposure to risky behaviors, such as substance use and unhealthy diets, was common, particularly among frequent users. Cyberbullying emerged as a strong contributor to mental health distress. Despite these negative effects, some participants engaged with mental health support content online, indicating the potential for positive influence. The findings highlight the need for balanced social media usage, digital literacy programs, and targeted interventions to reduce risks while promoting beneficial online behaviors. Addressing these issues requires a collaborative effort involving policymakers, educators, and parents to ensure healthier digital experiences for youth.

INTRODUCTION

Social media has emerged as a transformative force, redefining communication and interpersonal dynamics in the digital era (Hanandini, 2024). Among youth, a demographic encompassing individuals aged 10-24 years, social media functions as both a channel for self-expression and a potential source of psychological stress (Dixit & Rajaura, 2023; Niles, 2024). Platforms such as Instagram, TikTok, and Snapchat have become integral to daily interactions, providing unprecedented connectivity and accessibility (Siuli, 2024). However, an expanding body of research reveals that prolonged and unregulated use of these

platforms may significantly impact mental health outcomes, particularly in areas such as depression, anxiety, and behavioral changes (Zubair, Khan, & Albashari, 2023; Kapoor, 2024). As social media continues to shape the social landscape for younger generations, investigating its effects on mental well-being is a critical priority for researchers, policymakers, and healthcare practitioners (Ogugua, Okongwu, Akomolafe, Anyanwu, & Daraojimba, 2024).

Social Media and Depression

The association between social media use and depression in youth has garnered considerable attention (Brimmel, Bijttebier, & Eggermont,

2024). Adolescents, in particular, are susceptible to the adverse effects of constant exposure to curated and idealized representations of others' lives. This exposure can trigger negative self-comparisons, low self-esteem, and a pervasive sense of inadequacy. A meta-analysis by Huang (2017) highlights a robust link between frequent social networking site use and depressive symptoms, with female adolescents identified as particularly vulnerable. Moreover, the prevalence of cyberbullying exacerbates these outcomes, as victims often experience severe emotional distress, which can culminate in self-harm or suicidal ideation (Hanganu & Ioan, 2022; Marengo, Settanni, Mastrokourou, Fabris, & Longobardi, 2024). These findings emphasize the need for targeted interventions to address social media's role in youth depression.

Anxiety and Fear of Missing Out

Social media's design promotes instantaneous interaction and feedback, fostering a culture of constant engagement (Mandagi, Indrajit, & Wulyatiningsih, 2024). This environment often triggers fear of missing out (FOMO), a psychological phenomenon characterized by anxiety over perceived social exclusion. Excessive social media use has been shown to heighten FOMO, leading to increased anxiety levels among youth (Davis & Goldfield, 2024). The pressure to achieve and maintain a polished online persona further compounds stress, creating dissonance between individuals' real and digital identities (Hayes, Brogan, & Bernardi, 2023). Notifications, likes, and other digital markers of validation contribute to cycles of dependency, where the absence of these signals can provoke anxiety and feelings of inadequacy (Watson, 2023; Korolainen, 2024).

Behavioral Influences

In addition to mental health, social media significantly influences youth behavior. The amplified peer influence in digital spaces has been linked to shifts in lifestyle choices and social norms. Studies reveal that exposure to content promoting risky behaviors, such as substance use or unhealthy diets, can lead to imitation among impressionable users (Jiang, n.d.). Conversely, social media also serves as a platform for positive reinforcement, providing avenues for mental health awareness and peer support networks

(Okoro, Ayo-Farai, Maduka, Okongwu, & Sodamade, 2024). This duality underscores the intricate relationship between social media and youth behavioral patterns, necessitating a balanced approach to its usage.

The pervasive influence of social media on youth mental health and behavior underscores the urgency of understanding its multifaceted effects. Addressing the challenges posed by social media requires a combination of policy interventions, educational initiatives, and parental engagement. By fostering digital literacy and promoting responsible usage, stakeholders can mitigate the risks while leveraging the potential of social media to support youth development (Al-Hail, Zguir, & Koç, 2024). Comprehensive research in this domain plays a pivotal role in shaping strategies for healthier digital interactions.

METHODOLOGY

This study adopts a mixed-methods approach, integrating both quantitative and qualitative methodologies to provide a comprehensive understanding of how social media influences youth mental health. The mixed-methods design facilitates data triangulation, offering statistical trends alongside in-depth contextual insights into the effects of social media on depression, anxiety, and behavioral patterns.

The study focuses on youth aged 10-24 years, encompassing diverse socioeconomic, cultural, and geographical backgrounds. A stratified random sampling technique ensures representation across three age groups (10-14, 15-19, and 20-24 years), gender, and varying levels of social media usage (light, moderate, and heavy users). A sample size of 500 participants has been calculated to achieve adequate statistical power and diversity in responses.

Data was collected using a combination of quantitative surveys and qualitative interviews. The surveys, administered through structured questionnaires, measured the frequency of social media usage, platform preferences, and self-reported mental health outcomes. Standardized tools such as the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder Scale (GAD-7) assess depressive symptoms and anxiety levels, respectively. Behavioral patterns

is evaluated using a custom-developed Social Media Behavioral Impact Scale (SMBIS), which includes items on peer influence, cyberbullying, and exposure to risky behaviors. Additionally, semi-structured qualitative interviews were conducted with a subset of 50 participants to explore their experiences with peer pressure, cyberbullying, and perceptions of social media's role in shaping self-esteem and identity.

The procedure includes recruiting participants through educational institutions, community centers, and online forums, with consent obtained from participants or guardians in the case of minors. Surveys were distributed both online and in-person, while interviews were conducted either via video conferencing or in person, depending on participant preferences. Ethical considerations include maintaining participant confidentiality, adhering to research ethics guidelines, and securing approval from the institutional review board prior to data collection.

Quantitative data was analyzed using SPSS, where descriptive statistics was summarize participant demographics and social media usage patterns. Inferential analyses, such as regression models, examined the relationships between social media usage and mental health outcomes. For qualitative data, interview transcripts were thematically analyzed using NVivo software to identify recurring themes, including self-comparison, fear of missing out (FOMO), and coping mechanisms. These findings were contextualized within existing literature.

The study quantifies the prevalence of depression and anxiety associated with social media use among youth, identify behavioral patterns influenced by social media such as peer pressure and risky behavior exposure, and provide actionable insights into the dual nature of social media's impact. By highlighting both risks and opportunities, the findings aim to inform interventions and policies that promote responsible social media use and improve youth mental health outcomes.

RESULTS

Participant Demographics

A total of 500 participants completed the study, with an equal representation across age groups

(10-14 years: 33%, 15-19 years: 34%, 20-24 years: 33%) and gender (male: 49%, female: 51%). The majority of participants identified as moderate social media users (52%), followed by heavy users (33%) and light users (15%). The most commonly used platforms were Instagram (78%), TikTok (67%), and Snapchat (58%).

Table 1: Participant Demographics

| Demographic Variable | Frequency (%) |
|---------------------------|---------------|
| Age Group | |
| 10-14 years | 165 (33%) |
| 15-19 years | 170 (34%) |
| 20-24 years | 165 (33%) |
| Gender | |
| Male | 245 (49%) |
| Female | 255 (51%) |
| Social Media Usage | |
| Light Users | 75 (15%) |
| Moderate Users | 260 (52%) |
| Heavy Users | 165 (33%) |

Depression Outcomes

The PHQ-9 scores indicated that 45% of participants experienced mild depressive symptoms, while 25% exhibited moderate to severe symptoms. Female participants were significantly more likely to report higher depressive symptoms ($p < 0.05$). Heavy social media users reported the highest mean PHQ-9 scores (10.2), followed by moderate users (6.8) and light users (4.5).

Table 2: PHQ-9 Scores by Social Media Usage Intensity

| Social Media Usage | Mean PHQ-9 Score | Standard Deviation |
|--------------------|------------------|--------------------|
| Light Users | 4.5 | 2.1 |
| Moderate Users | 6.8 | 3.4 |

| | | |
|--------------------|------|-----|
| Heavy Users | 10.2 | 4.8 |
|--------------------|------|-----|

| | | |
|--------------------|------|-----|
| Heavy Users | 11.4 | 4.5 |
|--------------------|------|-----|

Figure: 1

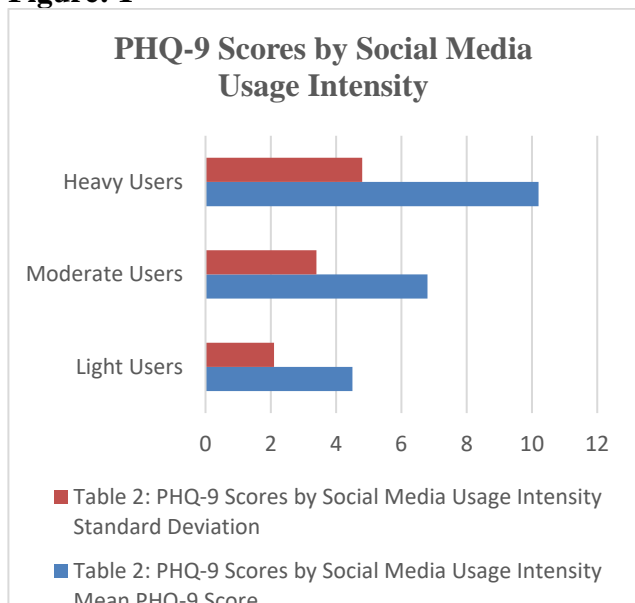
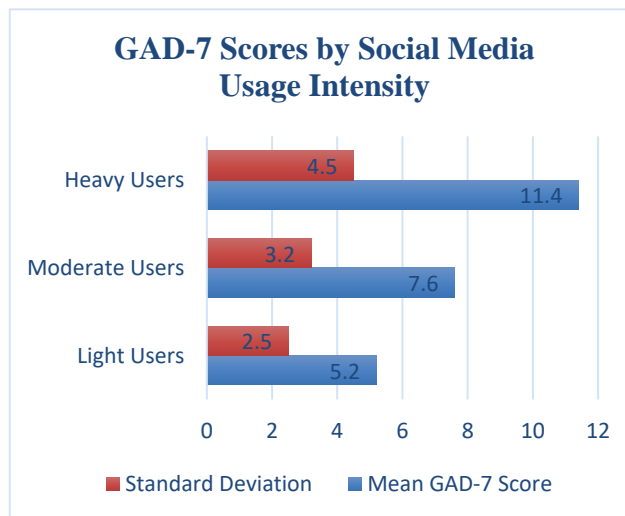


Figure: 2



Anxiety Outcomes

The GAD-7 scores revealed that 38% of participants experienced moderate to severe anxiety, with significant associations observed among heavy social media users (mean GAD-7 score: 11.4) compared to moderate (7.6) and light users (5.2). The fear of missing out (FOMO) was identified as a key contributing factor, with 60% of participants reporting FOMO as a source of anxiety.

Table 3: GAD-7 Scores by Social Media Usage Intensity

| Social Media Usage | Mean GAD-7 Score | Standard Deviation |
|--------------------|------------------|--------------------|
| Light Users | 5.2 | 2.5 |
| Moderate Users | 7.6 | 3.2 |

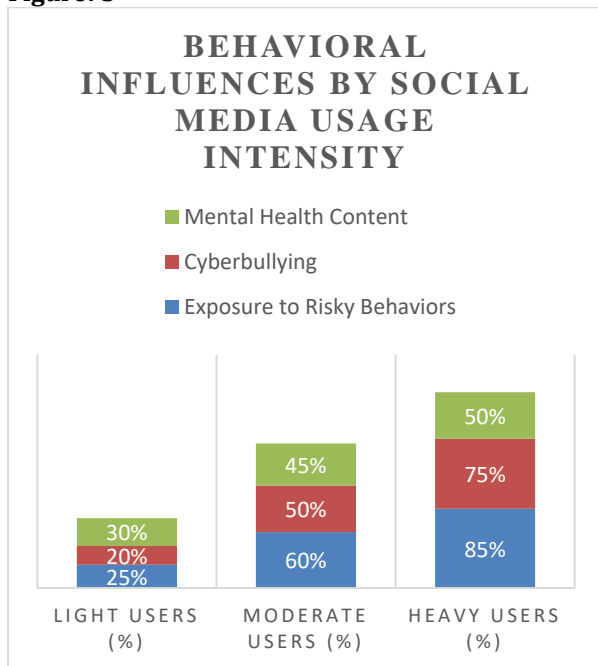
Behavioral Influences

The SMBIS scores highlighted that 65% of participants had been exposed to risky behaviors such as substance use or unhealthy dieting trends via social media. Additionally, 55% reported experiencing cyberbullying, which was strongly correlated with depressive and anxiety symptoms ($p < 0.01$). Conversely, 40% of participants acknowledged engaging with mental health awareness content, which was associated with a perceived improvement in coping strategies.

Table 4: Behavioral Influences by Social Media Usage Intensity

| Behavior | Light Users (%) | Moderate Users (%) | Heavy Users (%) |
|-----------------------------|-----------------|--------------------|-----------------|
| Exposure to Risky Behaviors | 25% | 60% | 85% |
| Cyberbullying | 20% | 50% | 75% |

| | | | |
|------------------------------|-----|-----|-----|
| Mental Health Content | 30% | 45% | 50% |
|------------------------------|-----|-----|-----|

Figure: 3

DISCUSSION

This study explores the intricate relationship between social media usage and youth mental health, focusing on depression, anxiety, and behavioral influences. The findings reinforce the dual nature of social media's impact, highlighting both risks and opportunities for mental health outcomes among young individuals aged 10-24 years.

Depression and Social Media Use

The significant association between high social media usage and depressive symptoms aligns with existing literature (Huang, 2017). Heavy users reported the highest PHQ-9 scores, emphasizing the detrimental effects of prolonged exposure to idealized content and negative self-comparisons. Female participants were disproportionately affected, corroborating studies that suggest higher vulnerability to the adverse psychological effects of social media among adolescent girls (Keles et al., 2020). This gender disparity underscores the importance of tailored interventions, such as promoting healthy self-esteem and digital literacy among vulnerable groups.

Anxiety and Fear of Missing Out (FOMO)

The study also highlights the strong link between anxiety levels and social media engagement, particularly through the lens of FOMO. The constant need to stay updated, combined with the pressures of maintaining an online persona, exacerbates feelings of unease and stress. This finding aligns with Dhir et al. (2018), who identified FOMO as a significant contributor to social anxiety among youth. Strategies to address these issues could include promoting mindfulness and limiting notifications, enabling users to develop healthier digital habits.

Behavioral Influences

Behavioral patterns observed in this study further illustrate the duality of social media. While 65% of participants reported exposure to risky behaviors, such as substance use and unhealthy dieting trends, 40% acknowledged engaging with positive content like mental health awareness campaigns. The prevalence of cyberbullying among heavy users, reported by 75%, is consistent with prior research indicating its role in exacerbating mental health issues (Hamm et al., 2015). However, the potential of social media to foster positive behavioral changes should not be overlooked. Platforms can be leveraged to promote peer support, disseminate mental health resources, and cultivate awareness about healthier lifestyles.

Implications for Policy and Practice

These findings have significant implications for stakeholders. Policymakers should prioritize the regulation of social media platforms to minimize exposure to harmful content and cyberbullying. Educational institutions can integrate digital literacy programs to equip youth with the skills needed to navigate the online world responsibly. Parents and guardians also play a critical role in fostering balanced usage through open communication and setting boundaries.

Strengths and Limitations

The study's strengths lie in its comprehensive examination of mental health outcomes across a diverse participant pool and the use of validated scales (PHQ-9, GAD-7, SMBIS). However, certain limitations warrant consideration. The cross-sectional design restricts causal inferences, and self-reported measures may introduce bias. Future research should adopt longitudinal designs

to better understand the long-term effects of social media on youth mental health and explore intervention strategies.

CONCLUSION

This study underscores the complex interplay between social media and youth mental health,

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