

The Impact of Social Media Use on Mental Health Among Adolescents

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Abstract

The use of social media in adolescent life was evaluated for the potential impact it might have on mental health through aspects such as depression, anxiety, and self-esteem. Because many youths around the world engage actively in using social media, their psychological impacts have to be analyzed thoroughly. A cross-sectional survey design was used, in which 165 adolescents between 18 and 25 years of age were involved. The adopted questionnaire helped in assessing usage patterns of social media and mental health status, mainly discussing depression, anxiety, and self-esteem among adolescents. The results showed that heavy use of social media (over three hours a day) was significantly associated with higher levels of depression, anxiety, and lower self-esteem. A significant number of participants who spent more time on social media platforms reported emotional distress, and social comparison and managing online images were identified as key contributors. The findings of this study are in line with the existing literature, which confirms the negative impact of social media on adolescent mental health. The study calls for further research into protective factors and coping mechanisms and emphasizes the need to promote responsible social media use to safeguard youth well-being.

Key words: Social Media, Mental Health, Adolescents

Introduction:

Social networking websites (SNS) is an integral part of adolescence in the West with teens spending one hour daily on social media and over half visiting SNS platforms regularly (1). Inasmuch as social media promotes connectivity, sharing information, and self-expression, it is often blamed for the increasing prevalence of mental health disorders among young people (2). Adolescents of today are on Facebook, Instagram, and Twitter, where they interact with friends, express their opinions, and gather information. This engagement often has negative impacts on their mental health. The study on social media and its impact has increased over the past few years, and people have been discussing its associations with mental health and psychological outcomes among adolescents. Research has shown that Generation Y youth are highly active users of platforms such as Instagram and Snapchat (3,4). However, critics have also argued that it is contributing to the exacerbation of mental health issues, including depressive symptoms, anxiety, and decreased life satisfaction (5,6). These effects are particularly pronounced among adolescents who experience greater stressors with less-than-optimal coping skills. While social media offers

an outlet to stay connected and express oneself, excessive or improper use has been linked to mental health problems such as anxiety, depression, and diminished self-esteem. The underlying mechanisms of these associations, however, remain unclear, as does the extent to which these effects manifest in real-world settings. Research studies have established correlations between social media use and various psychological issues, including suicidal thoughts, depression, poor sleep quality, social anxiety, and psychophysiological imbalances (7–10). High levels of social media use have also been correlated with body image dissatisfaction and eating disorders (11). Additionally, the effects of social media addiction, including an intense desire to communicate, can lead to negative experiences and reduced well-being (12). While some studies report a significant negative impact on well-being, others suggest marginal effects. This variability underscores the importance of continued research to explore the correlation between social media use and mental health in adolescents, thereby addressing the existing knowledge gaps. The pervasive influence of digital media on teenagers highlights the need for stakeholders to promote online safety and responsible usage. Educating the youth and society, in general, about the dangers of overexposure to social media is an important step to manage its consequences (13). The increasing digital space makes it more important to learn its implications on mental health.

Methodology:

The research approach adopted was a cross-sectional design in order to understand the effect of social media use on mental health among adolescents. This was to be able to obtain a snapshot of the association between the usage patterns of social media and indicators of mental health such as depression, anxiety, and self-esteem. The design used was a quantitative design, enabling the collection and analysis of standardized data to better understand trends and relationships. The study design targeted collecting data from the young adults who were 18–25 years of age. The selection of this age group was made because individuals at this age group are active users of social media and are very susceptible to its potential mental health effects. Inclusion criteria were young adults in the specified age range who were active users of social media applications such as Facebook, Instagram, and Twitter. Excluded from the sample were individuals who had a diagnosed or known mental health condition to minimize confounding factors in the results. A total of 165 participants formed the sample, which was big enough to give a proper statistical analysis and generalize the findings. The recruitment process was through online sites, using adverts on WhatsApp, Instagram, and Facebook to get a representative number of people in different parts of the world. Online communities and research-oriented groups were also tapped to facilitate recruitment. A pre-developed questionnaire was employed as the main instrument for data gathering. The questionnaire contained modules that measured the patterns of participants' social media usage, including how often they used it, for how long, and for what purpose. In addition, standardized scales were integrated to measure the mental health outcomes of depression, anxiety, and self-esteem. Participants were also required to reflect on how these issues had affected them over the last seven days. The questionnaire was set to be user-friendly, concise, and accessible to ensure maximum participation and accurate responses. The data collection process was completely online, offering participants the opportunity to complete the questionnaire at any convenient time. The social media site played a huge role in dispersing the survey link, as it reached the correct demographic. In the recruitment approach, the concerns of ethics had been prioritized. Participants were ensured informed consent before filling the questionnaire, and confidentiality was strictly maintained along with anonymity, as the rights of participants were assured that they could withdraw their participation at any point without it affecting them negatively. Statistical analysis was conducted after data collection to establish trends and correlation. Descriptive statistics included frequency, mean, median, and mode in summarizing the data. The associations between social media use and the prevalence of mental health disorders were examined by a chi-square test. The results of the analyses provided insight into the nature

and extent of the relationships being studied. The study obtained ethical approval from the Institutional Review Board before beginning data collection. The study followed ethical considerations to ensure the rights and welfare of the participants were protected. The participants had to give informed consent before being included in the study, and steps were taken to ensure data confidentiality and anonymity. Participants were assured that they could withdraw from the study at any time without any consequences. The study aimed to identify key risk and protective factors associated with social media use and its impact on adolescents' mental health. The findings were expected to contribute to a deeper understanding of how social media influences mental health and to inform interventions and strategies that promote the psychological well-being of young adults in the digital age.

Result:

The study analyzed data from 165 participants aged 18–25 years to evaluate the relationship between social media use and mental health.

Social Media Usage Patterns:

Majority of participants spent more than 3 hours per day on social media with 68% while 22% spent 1–3 hours, and 10% spent less than 1 hour. Popular social media platforms used were Instagram 91%, Facebook 82%, and Twitter 47%. The primary reasons for using social media included communication, entertainment, and information seeking.

Table 1: Social Media Usage Patterns

Usage Hours	Percentage of Participants
<1 Hour	10
1-3 Hours	22
>3 Hours	68

Mental Health Outcomes:

Depression symptoms were mentioned by 58% of the survey respondents, of whom 35% showed moderate to severe levels. Anxiety cases occurred to 64% of the participants, and 41% manifested moderately to severely. Moreover, 47% of participants revealed low self-esteem, strongly correlated with heavy social media use ($p < 0.05$). Summary of the above findings is depicted in Table 2.

Table 2: Prevalence of Mental Health Issues

Mental Health Issue	Prevalence (%)	Moderate to Severe Cases (%)
Depression	58	35
Anxiety	64	41
Low Self-Esteem	47	-

Gender Differences

The analysis found gender-based disparities in mental health outcomes. Females reported more depression (62%) and anxiety (68%) than males, who reported 48% and 55%, respectively. Low self-esteem was also slightly higher among females (50%) than males (43%). These differences are summarized in Table 3.

Table 3: Gender Differences in Mental Health Outcomes

Gender	Depression Prevalence (%)	Anxiety Prevalence (%)	Low Self-Esteem Prevalence (%)
Female	62	68	50
Male	48	55	43

Correlation between social media and mental health:

Chi-square tests showed that there was a strong association between heavy social media use and mental health problems. Users who spent more than 3 hours a day on social media were twice as likely to have depression (OR = 2.1, 95% CI [1.4–3.2]), anxiety (OR = 2.3, 95% CI [1.5–3.6]), and low self-esteem (OR = 1.9, 95% CI [1.3–2.9]).

Further Findings:

Participants who regulated their social media activities or followed positive accounts reported fewer mental health issues. About 23% actively reduced their screen time after realizing its negative effects on their well-being.

Discussion:

The findings of the current study are in line with previous studies that have reported the increasing concern about social media use and its impact on adolescents' mental health. Many studies have pointed out the growing body of evidence and the gaps and shortcomings in current research [14,15,16,17]. This is in line with our findings, which showed significant associations between excessive social media usage and higher rates of depression, anxiety, and low self-esteem among adolescents. Another study stated that teenagers with high social media usage tend to experience more phobic anxiety, paranoid thinking, and hostile and angry feelings [18]. Our research supports this statement, as those participants who spent more than three hours a day on social media demonstrated higher mental health problems, including depression and anxiety. These results agree with the fact that long exposure to social media contents may lead to emotional dysregulation and adverse thought patterns. Consistent with the observed behavioral trends of our participants, the dramatic increase in the use of the Internet by youth such that nearly half of the teenagers' report going online "constantly" can be related to 68% of the participants spending more than three hours daily on social media platforms [19]. This is a manifestation of habitual and excessive engagement with the Internet as a mainstay in risks associated with mental health. This association between increased use of Facebook and depression among teens, especially in those who center on the management of their online persona and comparison to others [20]. Our results are consistent with these findings because 58% of participants reported symptoms of depression and a significant portion had moderate to severe levels. Social comparison and pressure to maintain an idealized self-image may worsen these mental health issues. Although the studies above have established a general consensus on the negative impact of social media, there are some discrepancies regarding the degree of these effects. A study argued for a more nuanced understanding of the relationship between social media and mental health, suggesting that individual differences and contextual factors play a critical role [17]. Our findings also indicate variability, with participants reporting no adverse effects at all; this calls for further research on protective factors and coping strategies that minimize such risks. The current research supports literature findings [14, 15], where excessive use of social media by adolescents affects mental health. In line with a study perspective [17], the fact that the effects were not homogeneous makes this association inconclusive and therefore calls for additional research in light of the factors of contextual and individual differences. This paper therefore emphasizes promoting healthy social media habits among youth while developing awareness in their mental well-being.

Conclusion:

This analysis has explored, through the relationships between social media use and teen mental health indicators, the links between high frequency of social media and increased levels of depression, anxiety, and low esteem. The general findings support various existing literature where excessive exposure of social media among adolescents has emerged as a form of adverse risk factor, such as negative emotional responses in the event of depression or anxiety. Although some of the adolescents reported no adverse effects, the general trends point out the need for

understanding the risks associated with the use of social media. The future research agenda should include identification of protective factors, coping strategies, and the role of individual differences in mitigating the mental health risks. The need for raising awareness and responsible social media use will be critical to fostering the mental well-being of youth.

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