Exploring the Relationship between Social Media Use and Adolescent Mental Health & Well-being: A Review

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Abstract

Social media has been implicated in exacerbating mental health issues, prompting a need for more awareness and support. This review paper is planned to systematically explore the intricate relationship between social media use and its impact on adolescents' mental health. For this, 51 papers were identified from the PubMed database after applying inclusion and exclusion criteria and other filters. The findings of identified studies are mixed suggesting both positive and negative impacts of social media use ranged from poor to moderate level. This review aims to provide a comprehensive understanding of the current research landscape on the relationship between social media use and adolescent mental health. Furthermore, the present study also aims to identify gaps in the existing literature to guide future research in this emerging field.

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INTRODUCTION

n a few decades, the use of digital devices and social media has become an unavoidable part of life, with adolescents being active users on multiple platforms (Schønning *et al.*, 2020). Adolescence is a critical period in the lives of young people when they undergo considerable physical, psychological and social changes as they grapple with new roles and intimate relationships (Christie & Viner, 2005). They develop their own self-concepts, becoming more independent (Erikson, 1968) at this age. The present time can be quite terrifying for teenagers due to personal and academic stressors along with others that exist in society today. Nowadays, teenagers have impressive collections of digital gadgets such as smartphones, tablets, laptops, desktops as well as game consoles which avail their exceptional access to digital media. The media environment has expanded and diversified significantly over time with social media platforms playing an essential role within this ecosystem. In its broadest sense, social media involves any digital application or software that allows interaction between users. Over the past years, many social media platforms have

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experienced fast growth and expansion, leading to concerns regarding their possible impacts on mental health but also well-being.

It interferes with every facet of existence in the present and the concept of life without such technologies and media integration seems almost unthinkable. Teenagers, for instance, can be deemed as the chief customers of such effects. At the same time, they are less experienced, both in terms of cognition and emotional aspects, of the loop. Research shows that there is an increase in the use of social networks among teenagers where 97% use social networks daily (Woods & Scott, 2016). Additionally, new studies indicate that self-generated images of new and developing relationships are matching online for 57% of US teenagers and about half of them use Facebook or similar sight to convey their affection toward somebody (Lenhart, Smith, & Anderson, 2015, p. 3). As the study has demonstrated, social media is gradually becoming more critical in adolescents' developmental process, particularly the emotional and social one (O'Keefe & Clarke-Pearson, 2011).

The active use of social networks has led to an increase in research on the positive and negative effects of social media use on adolescents' psychological well-being. Various studies (Karim et al., 2020; Marino et al., 2018; Nesi, 2020; Twenge et al., 2020) have explored whether constant use of social media is associated with mental health issues such as depression and anxiety. Despite the extensive research carried out, the effect of social media on the mental health of adolescents remains a topic of debate due to inconsistent and mixed findings. Different studies have reported varied results, with some showing no effect while others show either positive or negative effects (Valkenburg et al., 2021). These mixed findings are mainly from cross-sectional quantitative studies.

Rational/Research Question

Some investigations (Karim and Baig, 2020; Marino et al., 2018; Nesi, 2020; Twenge et al., 2020) have attempted to establish correlational pathways between extreme social media engagement and mood disorders, including depression and anxiety. The youths spend lots of their time on social media; however, the results of various studies show that mixed and inconsistent results have been obtained

regarding the impact of social media on the mental health of the youths. In different camp studies and different types of study, the findings have been diverse, ranging from no effect or reduced effect to positive or negative effects (Valkenburg et al. 2021). Although there are mixed results, most of them come from cross-sectional quantitative research. Different researches have examined the effects that are associated with social media on youths. Despite the work done that depicts the harmful and detrimental impacts of social media, other findings depict that social media has both positive and negative impacts, with regard to adolescents' mental health. Positive aspects of social media can also be associated with the way of using social media as the tool that helps to establish a connection with other people, friends and families and even with new acquaintances. We know that there is posited a causal relationship where adolescent social networking addiction improves the indicators of teenage anxiety and depression rates (Anderson & Jiang, 2018a, b; Clark et al., 2018). The main research question for this scoping review can be stated as: What is the state of the art in research regarding the relationship between adolescents' social media use and their mental health and well-being? With the aim of answering this research question, the authors first undertook a search of major databases using a number of keyword searches which included 'adolescents', 'social media,' 'students,' 'youth,' 'stressed,' 'depression,' and 'anxiety.'

METHOD AND RESULT

Studies conducted over the past five years (from 2018–2023) were included in the review. To find out the relevant studies, databases such as PubMed and Google Scholar were consulted using relevant keywords such as "social media AND mental health" and "Social media AND adolescent mental health," which resulted in 1269 studies. After imposing inclusion and exclusion criteria following PRISMA criteria, a total of 51 studies were identified. Studies focusing on other dimensions of behavior, such as reading habits, interpersonal relationships, general internet use, etc., were excluded from the analysis. Data from these studies were extracted and summarized according to predetermined criteria.

Inclusion and Exclusion Criteria

The following criteria have been imposed to include/ exclude studies in this review (Table 1):

DISCUSSION

The information available to us regarding the correlation between social media use and mental health among the youth today is disjointed and convoluted. A comparative analysis of the literature has revealed that a number of studies exploring the relationship between social media engagement and teenage mental health have been undertaken between 2018-2023. The findings of such studies thus present a complex and definitively intricate perceptive of the disincentives and incentives of participation in social media. On the other hand, the plethora of evidence in empirical studies suggests that spending long

Table 1.	Inclusion	and	exclusion	critoria
Table I:	Inclusion	anu	exclusion	Criteria

Inclusion criteria	Exclusion criteria	
Studies conducted between 2018-2023	Case report studies	
The age group of participants was selected between 13–18 years	Internet addiction, general internet use	
Only full-text available studies selected	Duplicate	
The language of the article in English	Incorrect age or mixed age group population	



Figure 1: The PRISMA figure showing the steps to choose the studies for systematic review

hours on social networks has a positive correlation with various mental health risks associated with anxiety, depression, or even loneliness. These are the common negative impacts that are associated with such phenomena as cyberbullying, the emergence of the negative perception of body image connected with the effect of exposure to beauty standards, and the so-called pressure of presentability. The current literature presents research interest in the causal relationship between social media and the variables of concern among adolescents. In general, such research has focused on the impact of social media on different aspects of psychological health, like depression and anxiety, self-esteem, body image dissatisfaction, loneliness, quality of sleep, and psychological well-being (Orchard et al., 2020). Research has also indicated that the amount of time that is spent on social media websites is negatively correlated with mental health ratings, where it was established that those who spent long hours on social media sites had higher ratings of depression and anxiety. Also, previous studies have shown that social media use negatively affects adolescents' self-esteem self, as well as body image dissatisfaction (Keles et al., 2019; Ivie et al., 2020; Vahedi & Zannella, 2021; Popat & Tarrant, 2023). On the other hand, research has also focused on the constructive usage of social media, where they have argued the usefulness of Social media in maintaining social relations during and after the breakout of COVID-19 as physical interactions were restricted (Figure 1).

Some of the uses of social media include advocating for oneself, providing and receiving emotional support from peers and cultivating social groups, a mix that can be both positive and useful to different groups of teenagers. For instance, the opportunities to gain other's health-related experiences and professional knowledge on social networks help adolescents obtain the necessary knowledge and support for handling mental health issues. In addition, social media has the potential to act as a creative outlet as well as an environment in which adolescents can find others who are similar to themselves, participate in activities, and possibly feel acknowledged and included by members of their community (Odgers, 2018; Smith, Leonis & Anandavalli, 2021; Popat & Tarrant, 2023).

However, several other mentoring researches point out that social media has no or even a very small detrimental effect on the health and well-being of adolescents. For instance, Twenge and Campbell (2019) have stated that social media and sexting undermine well-being, and Orben and Przybylski (2019) have claimed that any relationship between digital technology use and adolescent well-being may be considered negligible. However, as we analyze these two opposite perspectives, it can be stated without any doubt that social media occupies a significant position, mainly among young people. Nonetheless, beyond discrepancies resulting from different approaches and datasets, the benefits, as well as risks of social media usage on adolescents' well-being, can be defined as ranging from low to modest effects only.

First, while there is a growing number of case studies that examine the effects of social media on adolescent mental health, there are still several areas that have not been fully explored. First, more empirical research should be conducted to clarify the unexplored antecedents that contribute to adolescents' different experiences of social media, where few exhibited poor mental health compared to others showing either no or potentially improved mental health due to their perceived use of social media (Beyen *et al.*, 2020).

There is also a lack of large-scale longitudinal studies that would explain the precise functioning of the causation between multiple uses of social media networks and different mental health results (Ulvi et al., 2022). Furthermore, the findings of most of the research carried out in this area may have drawn strength from self-report measures, which may be influenced by some form of social desirability bias besides not encompassing the entire extent of the effects of adolescents' engagement in social media on their mental health. A further limitation is the absence of qualitative research regarding the attitudes and lived experiences of young people, specifically regarding the connection between social media usage and mental health. Exploratory and descriptive research methodologies would help to capture the thoughts of adolescents concerning social media and the findings proposed for their mental well-being. Such studies could explain why

adolescents continue and frequently use social media and their viewpoint of the utility and disadvantageous of it. Moreover, only a few empirical works focus on the possible contingent impact of social media usage on the mental health of males and females. For most of the studies or articles that have been conducted on the use of social media and the mental health of adolescents, there seems to be limited research done focusing specifically on boys and men.

In addition, there is still a lack of attention to other environmental determinants that could moderate the link between social online media usage and psychological well-being, including cultural expectations and parents' involvement. Therefore, based on the inputs presented herein it could be noted that the effects of social media on adolescents' Well-being are a topic with many dimensions. Another important implication is that research exploring social media and mental health outcomes in this group is still limited or scarce.

CONCLUSION

The current research focusing on social media usage and the well-being of teenagers is vast and definable at the same time. These studies reveal that while social media poses certain benefits to mental health among adolescents, it also poses risks. I can particularly testify to the negative impacts of social media, as it took me two weeks to edit my figure in the mirror. Compounding variables like the time interaction on platforms, the types of content consumed, or even self-differences make up the impact of social media. Stress and anxiety, depression and dissatisfaction with life, and reduced life satisfaction have been linked to its overuse, the relationship between negative interactions and internalizing and externalizing mental health problems (Allen, 2019). However, some positives are observed for certain people, for instance, an opportunity to expand social networks and gain friends (Office of the Surgeon General, 2023).

Research also suggests that the elements that relate to social comparison on social networking sites and the amount of content concerning selfharm or suicide increase worsening mental health risks in teenagers with poor psychological well-being (Abi-Jaoude *et al.*, 2020). However, one has to note that 'the research did not present homogeneity across the board', or what Subrahmanyam *et al.*, (2013) refer to as 'person variables', including the proneness to comparison, socioeconomic status, and geographical location affect the results of the research dramatically (Khalaf *et al*, 2023).

In total, investigations note that it is delicate to conclude that social app affects adolescents in this or that way since each receives its impacts in view of their individual luggage, culture, and life situation (Office of the Surgeon General, 2023). Since there are potential gender differences in social media use and the association between social media and mental health is not yet known exactly, it is reasonable to hypothesize that the relationship between social networking site use and mental health is different for men and women. More so, the study needs to consider other personal attributes in relation to the effects that social media has on mental well-being, including socioeconomic status or geographical location. In addition, it would be equally important to consider under which conditions social media can act as a tool for raising awareness of mental health problems among teenagers. This can be done through developing mental health literacy and providing resources and support for youth in navigating the challenges they may encounter on social media.

IMPLICATIONS OF FINDINGS

The effects that social media has on the mental health of teenagers is a subject of research and still presents endless loops. Any consequences of the study call for future research to expound on factors that may be used to identify the usage of social media as having adverse effects on the mental health of some adolescents and having no effects on the mental health of other adolescents. Therefore, it is implied that new high-quality longitudinal studies should be conducted to best describe the temporal associations and the potential causal link between the amount and type of social media engagement and the mental health of adolescents. However, to build on this study, future work will need to define what characteristics of social media use could lead to improvements in mental health. Further, it is imperative to call for more gender-robust analyses for the research literature, given that the use of social media could have different characteristics and impacts on the mental health of users based on gender. Moreover, the role of SES and geographical location might lie in the relationship between social media utilization and mental health.

In light of the information presented in the current study, there seems to be a general trend toward the notion that social media impacts adolescents' well-being in a positive and negative manner. In more detail, while research in this context continues to emerge, it is clear that any factor cannot singularly drive the relationship between social media and mental health but involves multivariate antecedents. They indicate that the conventional methods of helping the obese and encouraging healthier lifestyles should be replaced with targeted approaches.

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