

# The Impact of Social Media on Adolescent Anxiety and Depression

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**Abstract.** Social media is widely used among teenagers, especially in 2022, the number of users soared. Mental health is crucial to adolescence, because 50% of mental problems occur around this period, but there is a lack of systematic clarification of the specific impact of social media on adolescent anxiety and depression. This study defines social media as an online platform for information media interaction. The mental health of adolescents involves emotional stability, including the ability to regulate negative emotions, self-awareness of reality, daily life, social adaptation, conflict resolution, and empathy for the integration of family/school/peers. It uses case analysis and data statistics to explore the impact of social media. The results show that social media induces adolescent anxiety through peer comparison, cyberbullying, appearance anxiety and addiction-related withdrawals. It also exacerbates depression in low-esteem teenagers who lack family companionship. Targeted solutions are proposed for families, schools and platforms. The study clarifies the key impact, provides guidance for protecting the mental health of adolescents, and lays the foundation for future research.

**Keywords:** List the; keywords covered; in your paper.

## 1. Introduction

In today's digital age, social media has become a common part of young people's lives. YouTube, Instagram and other platforms have millions of users, of which YouTube users will exceed 1 billion in 2022, and Instagram has 300 million active users to publish 70 million photos every month. Although these platforms allow users to interact and share information, they also bring risks, and the impact on teenagers is particularly prominent. Adolescence is a critical stage of growth, with great changes in mood, thinking and body. It lays the foundation for lifelong physical and mental health, but 50% of mental health problems occur around the age of 14 at the beginning of puberty. As teenagers spend more time on social media, they face the challenges of the digital world, which will affect their confidence, social identity and ability to cope with pressure. This reality makes it imperative to study the impact of social media on the mental health of teenagers.

This article first defines key concepts such as social media and adolescent mental health and then analyzes the two main ways in which social media affects adolescents, that is, its relationship with anxiety and depression. Finally, it puts forward solutions from families, schools and platforms and shares future research directions, aiming to clarify the relationship between social media and adolescents' mental health, providing practical guidance to protect the well-being of teenagers.

## 2. Definition of Basic Concepts: Social Media and Adolescent Mental Health

### 2.1. Social Media

It is imperative to understand the basic concepts before the in-depth study. Regarding the reliable datum, social media is thought to be Online platforms with interactive and information transmission functions. It is defined as an online environment that supports user interaction and information dissemination. A large amount of internet users is able to access a series of spaces that fill by users' generation content, when users connect to these kinds of spaces, a social media service can be conducted, a social median service could be conducted, create a virtual social network [1]. For example, according to sampling research, YouTube and Instagram are currently the most popular

social media software. According to statistics, YouTube has more than 1 billion users (as of 2022), while Instagram has 300 million active users every month, creating and uploading 70 million photos and videos [2].

## 2.2. Mental Health

Adolescence is a very important part of the recognized stage of growth, marked by significant emotional, cognitive, and physical changes. Adolescent health includes mental health status, represents the emotional state and social adaptability of adolescents. If life is likened to a butterfly, the caterpillar stage represents childhood, while the developed butterfly symbolizes adulthood, then the importance of adolescence is like the process of weaving silk into a pupa. It lays the foundation for personal growth and development and can help lifelong. The development of physical and mental health achieves mature psychological maturity. However, in the rapidly changing modern society, with the development of virtual networks, teenagers are also at risk of serious mental health problems. In adolescence, mental health issues during adolescence deserve serious attention. According to the data, 50% of mental problems are found to appear at the beginning of puberty, about the age of 14 [3]. Teenagers encounter challenges while navigating the complexities of the digital world. The ever-changing Internet world sometimes helps, but sometimes it also becomes the culprit of teenagers' mental distress. These invisible or virtual forces will affect teenagers' self-confidence, courage, social identity, and long-term stress resistance and mental health [4].

Adolescent mental health is comprehensively understood from two angles: emotional stability and social adaptation. When these core aspects are fully developed, young people can show the ability to maintain stability in the emotional, cognitive and behavioral fields. In addition, they show the willingness to participate and provide constructive advice in different interpersonal environments, such as family, school and peer groups, while effectively resisting pressure and pursuing personal growth.

Emotional stability refers to the ability of adolescents to recognize and modulate distressing emotions, often measured through validated psychological scales, including anxiety and sadness, preventing such states from becoming pervasive or irreparable. They exhibit grounded cognitive functions, characterized by realistic self-perception and awareness under situations, in order to minimize persistent irrational thought logic. In terms of behavioral regulation, they adhere to structured daily routines. Maintaining an orderly and harmonious lifestyle can effectively avoid the stimulation of turmoil and conflict.

Social adaptation, on the other hand, teenagers need to learn to adapt to society, skills such as conflict resolution, empathy, and teamwork, which is interpreted as the need to skillfully integrate into various social environments. The scene of family life is the first classroom for teenagers, which is reflected by teaching mutual respect and understanding communication as well as maintaining a positive relationship with those who provide care. In the context of school education, it involves adapting to academic needs and promoting cooperation and interaction with teachers and students. In peer relationships, it shows the participation of respect and cooperation. In the face of social expectations, academic pressure or interpersonal conflicts, teenagers adopt proactive and solution-oriented strategies instead of resorting to avoidance or confrontation. Through these mechanisms, they not only strengthen their sense of belonging, but also move towards independent growth and meaningful social participation.

However, it is known that the contents that users generated are quite diverse, which means there might be both excellent and spam. Some of the contents are toxic and abuse of resources. Generally speaking, social media often reveals a wealth of information sources, in addition to the content itself, there are also a variety of non-content information [5], this innutritious content, such as advertising pop-ups that brings harmful content, such as violent, sexualized, or misleading advertising pop-ups.

may mislead teenagers and not conducive to their adolescent mental health. Some specific impacts would be listed.

### **3. Impact pathway 1: The Correlation between Social Media Use and Adolescent Anxiety**

Take the popular social software Facebook as an example. The platform has many functions. Through Facebook's privacy setting function, teenagers can freely shuttle to other people's homepages. Teenagers are in the stage of incomplete mental development, and it is easy to compare, especially with their peers, because they are eager to be recognized, loved by others, and accepted by society. When such emotions are excessive, there will be negative feedback, can trigger negative feedback loops, exacerbating emotional volatility. Excessive positive feedback will bring vanity. Excessive negative feedback can also make teenagers feel inferior and lose self-esteem, and it is difficult to balance the two, and eventually it is easy to lead to anxiety in teenagers.

Regarding the research method, it is to use sampling technology to select the participants of the focus group. This kind of sampling is highly purposeful and can be achieved by recruiting participants. Recruited from an outpatient child and adolescent psychiatric clinic in Kingston, the interviewees were gathered in the public library outside the clinic, to provide a neutral and comfortable discussion environment. The results of the first group showed that when they received fewer likes than their peers after posting their content, they would feel burdened, and self-esteem hurt. The results of the second group of research show that almost everyone will speak more unscrupulously on social media, which means that more cyberbullying occurs. Teenagers will be afraid that they will be attacked. Aggressive behavior is often misperceived as a sign of popularity, and more outstanding, which will lead to increased anxiety among teenagers [6].

Through another case analysis, the investigation and research conducted by the researchers in Iceland also had very remarkable results. Statistical research using the hierarchical linear model showed the correlation between social media and adolescent depression and anxiety. The results showed that even if the use time of social media was controlled, there was still no The law avoids the influence of their emotional and mental anxiety. In addition, it can also be found that the impact of social media such as Facebook and Instagram on different genders is also different, and the trouble and harm to teenage girls is greater [7]. Such mood swings can lead to insomnia, shivering, and even more adverse follow-up effects, which is not conducive to the physical and mental health of teenagers.

For teenagers who use social media for more than 3 hours a day, the problem of Internet addiction and addiction can also lead to anxiety and psychological damage. Social media often shows an almost fanatical pursuit of trends. Trends mean higher clicks and like, which also makes teenagers affected by what these bright virtual networks show. Among them, the most prominent anxiety is the appearance anxiety brought about by social media, and it is also more in the female group of teenagers [8]. In addition, the bad habit of overeating to relieve stress may lead to disordered eating or increased risk of obesity, and anxiety may also be caused.

In terms of social adaptability, social media may provide a virtual sense of belonging. Social media is easy to create a utopia, that may discourage real-world engagement and foster escapism. In this place, teenagers do not have to take responsibility. For example, they do not have to take on the role that needs to share responsibilities in the family. This will gradually break away from society. Because of these, they may drop out of school, resulting from social withdrawal and decreased academic motivation. So, it is difficult to adapt to social life and become people living in the information cocoon of social media. This will form a huge gap, and may find it difficult to accept it, generate greater anxiety, making it even more difficult to disengage from social media platforms.

### **4. Impact pathway 2: The Role of Social Media Use on Adolescent Depression**

Considering the special attributes of social media, that is, building a virtual space for interaction between strangers, such an opportunity is actually attractive to people, especially teenagers. They can meet people with the same frequency on the Internet, such as people with the same interests, who can support each other on the Internet. They can hold supportive conversations and provide emotional support to each other. However, it cannot be ruled out that some people may take this opportunity to

capture the fragile core of adolescents who have not yet fully developed. Since the two sides can talk freely on the Internet all day long, teenagers are more likely to be influenced by their emotions and social perceptions. Studies that study the correlation between the two show that adolescents may develop depression and self-abandonment mentality [9], especially when the teenager is not paid attention to by other family members and lacks the companionship and love of their parents, the teenager's self-esteem is actually low. In this case, it is easy for people with bad intentions on the Internet to take advantage of the void. According to statistics, people with high self-esteem post posts about friends, family and life, while people with low self-esteem tend to pay attention to others' posts. In the process of browsing, the self-esteem of people with low self-esteem will continue to decline. When teenagers are likely to fall into endless low self-esteem. They gave up and felt extremely empty, resulting in depression.

According to a study statistic in 2020, the rate of adolescent depression and suicide behavior has increased in the past two decades [10]. On social networking sites (SNS), a cross-sectional study has been carried out to assess whether adolescent depression is related to the use of social media. The evaluation found that compared with adolescents who do not often use social networks, adolescents who spend most of their time on social media led by SNS have a higher incidence of depression and require the intervention of parents and relevant counselors [11].

In China, through courses and online classes, 1,000 college students were recruited to participate in the test in 2022 and passed the Bergen Social Media Addiction (BSMAS). The test divided college students into two groups. Through the self-reported questionnaire, the results showed that depression, anxiety, and other negative emotions were directly related to the use of social media and social phobia [12]. In social surveys, it can be intuitively found that social media is actually addictive, just like tobacco and drugs. Some teenagers with social phobia can't receive the attention and care of others in real life, so they have to use social networks to constantly paralyze themselves and soothe their displeasure in real life. However, this method is not a long-term plan, just like drugs will cause great damage to the body and mind after giving people a floating feeling. Social networks, like poisonous snakes, will inject radical poison into teenagers' bodies with poisonous teeth, full of malicious poison to the world. Teenagers feel that they cannot be accepted by society and gradually leave normal. During the social orbit, their inner fear and pain will be keenly captured by the Internet and gradually amplified. Social media cannot block all information and people that are harmful to the process of establishing correct values for teenagers, which will lead to social marginalists trying to attract young people who have not been involved in the world. As a result, teenagers will become more silent, even refuse to eat, and follow harmful groups to do harm themselves. For example, such as self-harm. In this process, without the intervention of psychological counselors or family and friends, they may have more serious depressive symptoms, including somatization. which are extremely detrimental to the physical and mental health of adolescents.

## **5. Discussion and Solutions: Application of Research Findings and Prospects for Future Research**

Social imbalance and virtual environmental pressure aggravated through feedback mechanism, network environment and addictive behavior. Specifically, the feedback imbalance of teenagers comparing peers through Facebook and other platforms causes self-denial anxiety, the arbitrary speech on the platform leads to frequent online bullying, and the daily use of timeout is addictive. The platform's pursuit of trends gives rise to appearance anxiety, resulting in more detached teenagers. Society. The impression factors of depression are slightly different. The adverse induction and addiction effects trigger a blow to self-esteem and a break with social ties.

For these problems, families, schools and social platforms have targeted ending plans. In the family, parents can agree with teenagers on the daily use of social media to avoid unrestrained use through supervision. Secondly, parents need to increase their companionship with their children, such as engaging in structured family activities, such as regular shared meals or outdoor events, so that

children can get out of their dependence on the Internet and learn to enjoy the beauty of the real world. In school, teachers should implement monitoring systems in information technology classrooms or library computers, and block students' contact with bad or harmful websites at any time. Then, schools should regularly carry out mental health classes and pay attention to students' psychological condition.

For online platforms, the management should strictly control the harmful information of the platform, such as establishing a strict audit mechanism and timely intercepting extreme remarks such as cyberbullying. At the same time, it is recommended that the platform should establish a dedicated 'mental health help channel' integrating automated referrals to hotlines and professional resources. When users post negative content, it will automatically push the psychological assistance hotline or science popularization link.

In terms of future research prospects and long-term research impact, cross-cultural comparative research represents a promising direction for future studies. Transnational research on the differences in the social concepts of adolescents (such as Eastern collectivism vs Western individualism) and platform use preferences in different cultural backgrounds, analyzes how cultural factors manage the impact of social media on anxiety and depression, and provides targeted intervention strategies in different regions. In addition, the research on the impact of subdivision platform functions is also worthy of attention. Carry out research on the specific functions of social media, clarify the unique effect of diverse functions on adolescent anxiety and depression, such as whether likes and feedback are more likely to cause self-denial anxiety, and provide accurate directions for platform function optimization.

## 6. Conclusion

This study discusses the relationship between social media and adolescent mental health; the core concept is defined first. Social media is an interactive online platform for information transmission and virtual social construction. Adolescent mental health includes emotional stability - the ability of adolescents to digest negative emotions, maintain realistic self-perception and follow structured routines - and social adaptation, which requires conflict resolution and empathy to integrate into the family, school and social environment.

This study has identified two key paths of impact. For anxiety, social media triggers anxiety through peer comparison (leading to self-esteem problems), cyberbullying (from unrestrained speech), appearance anxiety (due to trend pursuit) and addiction-related social withdrawal, which is more harmful to girls. For depression, it affects teenagers with low self-esteem (lack of family companionship) and amplifies their inner pain through addiction. People who use it frequently have a higher incidence of depression.

Besides, targeted solutions are proposed: families supervise children's social network usage time and strengthen companionship; schools block harmful websites on campus computers and provide mental health courses regularly; platforms establish strict audit mechanisms and special mental health help channels.

This study clarifies the impact of social media on teenagers' anxiety and depression, provides guidance for protecting their mental health, and lays the foundation for future research, cross-cultural comparison problems, platform function segmentation, etc. to solve relevant challenges.

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