

The Impact of Social Media Use on Social Anxiety in Junior High School Students

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Abstract:

With the development of social media, the problems that previously cause people can't use social media, such as the difficulty of using smart devices, and learning to use social media, gradually integrating into the daily lives of middle and high school. Social media's possible effects on teenagers' mental health, particularly social media, has become an increasingly concerned issue among educators and researchers. This review aims to systematically synthesize and evaluate existing research to clarify the relationship between adolescents' social media use and social anxiety. The research findings from the literature primarily focus on three themes. First, the impact of social media is not uniform but largely depends on the usage patterns. Passive use, such as aimlessly scrolling through videos, is more strongly correlated with increased levels of social anxiety compared to active participation. Second, key psychological mechanisms, such as upward social comparison, significantly drive this relationship, linking social media use to reduced self-esteem and heightened concerns about others' evaluations. Third, individual differences, such as personality traits and self-esteem levels, act as moderating factors, amplifying or reducing the extent to which adolescents are affected. In summary, this review suggests that guiding adolescents to adopt healthier social media usage patterns is more important than simply restricting their social media use.

Keywords: Social media use; social anxiety; upward social comparison; self-esteem.

1. Introduction

Social media has evolved into a significant aspect of middle school kids' everyday lives, rather than just a technology. They are often described as digital natives, growing up on platforms like TikTok, Insta-

gram, and any kind of instant messaging applications. A typical student might start their day by checking overnight messages, spend their lunch break watching short videos, and then edit and share selfies to end the day. These platforms provide unprecedented opportunities for people to connect, communicate,

and express themselves. At the same time, they also bring new psychological pressures, as the feedback and peer evaluations received from social media become the way teenagers construct their identity and perceive their place in the social world.

Although the conveniences brought by social media have benefits, people are increasingly concerned about the psychological costs of teenagers using social media. One major problem is social anxiety, which is defined as an overwhelming dread of being judged negatively in social settings. For many teenagers, social media provides a way to gain validation and a sense of belonging. However, such an environment filled with likes, comments, and popularity metrics may exacerbate the fear of rejection, exclusion, or ridicule. This presents a clear paradox: platforms that help people stay connected may also increase their vulnerability to anxiety. Therefore, what is the real impact of social media use on middle school pupils' social anxiety levels?

Clarifying this complex relationship has significant practical implications. For educators and parents, understanding the underlying mechanisms helps them guide students in using the internet healthily. For mental health professionals, this can provide a basis for developing targeted intervention programs. Therefore, systematically reviewing existing research in this field is particularly necessary.

This article will first define the two core concepts of 'social media use' and 'social anxiety,' then systematically review the literature on their relationship, focusing on different usage patterns, key psychological processes, and individual difference factors. Finally, this article will summarize existing research and point out future research directions.

2. Defining Key Concepts

Social media use is not a single, simple behavior but a multidimensional, complex construct whose psychological impact depends largely on how people use social media. Simply measuring time spent online is limited, as the quality and type of use may be more important [1]. The difference between active and passive usage is a crucial one in this literature.

Active use refers to behaviors in which individuals interact directly with others by creating or sharing content, posting updates, commenting, and sending private messages. Passive use is often described as „lurking,“ consuming information without mutual interaction. Examples include scrolling through news feeds, other people's profiles, or viewing photos and videos without commenting. Passive consumption is more consistently associated with negative emotional outcomes, such as envy, decreased

self-esteem, and increased social anxiety. This distinction highlights that the impact of social media is not inherent to the platforms themselves, but rather is determined by how adolescents choose to interact with them.

Social anxiety is characterized as a severe and ongoing dread of one or more social settings, in which individuals fear being scrutinized or negatively evaluated. Core features include anticipatory anxiety, avoidance behaviors, which both of these can interfere the daily life of adolescents. It is important to distinguish between social anxiety and ordinary shyness. Although shyness is considered a relatively stable personality trait that may cause discomfort in unfamiliar environments, social anxiety is more intense and usually impairs daily functioning and causes severe distress.

In the context of junior high school students, social anxiety can manifest both offline and online. Offline, it may manifest as avoiding interaction with others during classes, reluctance to participate in group activities, and fear of introducing oneself to others. Online, it may manifest as repeatedly checking comments and like lists after posting, overconcern with crafting „perfect“ messages between sending messages in group chats, or not replying to messages to avoid interaction. These examples highlight the importance of social media on teenagers' self-perception and mental well-being by showing how the digital world gives old fears a new platform.

3. Usage Patterns and Direct Correlations

How adolescents use social media is generally more important than the amount of time they spend on screen. In some reviews and analyses, the strongest and most reliable association with anxiety stems from “Problematic social media use” (PSMU), such as compulsive checking and dysregulated use. In contrast, metrics based solely on time spent on social media exhibit a weaker correlation with anxiety. For instance, a meta-analysis identified anxiety and problematic social media usage (PSMU) have a modest connection ($r = .348$), suggesting that problematic use is a more robust predictor of anxiety than time spent alone [2]. Similarly, the duration itself is a less reliable predictor of anxiety, reinforcing the view that usage patterns matter more than mere time spent [1].

Numerous research show that the general correlation between social media use as determined by usage length and internalized problems in adolescents (such as anxiety, social phobia) is small, and it is difficult to establish a clear causal relationship [1]. However, large-scale cross-national data show that although high-intensity use is associated

with lower well-being in some cases, this association is often influenced by cultural and environmental factors [3]. This inconsistency highlights the limitations of viewing screen time as a risk indicator, suggesting that “Problematic social media use” is a more reliable predictive marker. This suggests that although “usage duration” can act as a rough marker, it is problematic or dysregulated use that more reliably signals risk. Additionally, literature suggests that focusing solely on “usage duration” often underestimates key mechanisms, as the actual impact may be mediated by factors such as sleep, social environment, and interpersonal relationships, rather than time itself [1]. Furthermore, a 2024 study on social media use and anxiety noted that the two are positively correlated beyond the typical scope of research, but when conducting research, the primary focus should be on the usage patterns of social media and the differences between sample groups [4]. According to a meta-analysis of 141 research that looked at both active and passive usage, there was a little positive association between active social media use and higher levels of online support ($r = .15$), well-being ($r = .15$), positive affect ($r = .11$), and anxiety ($r = .12$). While passive social media use was linked to worse emotional outcomes in general social circumstances, it was favorably connected with online support ($r = .15$) [5]. This implies that active engagement does not necessarily lead to negative outcomes, whereas passive consumption is more consistently linked to negative emotions.

Also, research suggests that passive use of social media may make users feel that others are more satisfied or successful through upward social comparison, leading to envy toward peers. For instance, research with a sample of Vietnamese high school students shows that passive use can lead to upward social comparison and envy. Separately, an analysis of „Problematic social media use“ also demonstrated that such use is related to stable anxiety [6]. Focusing on specific platforms, a systematic review on Instagram found that attention is mostly focused on indicators such as appearance comparison, body image concerns, eating disorders, and internalized symptoms (such as anxiety, depression). The overall evidence supports that social media, such as visually-oriented platforms, is related to negative psychological outcomes under certain circumstances, but effect sizes and study quality may vary due to individual differences [7]. But it is already evident that users with higher levels of social anxiety exhibit stronger platform attachment and self-worth on Instagram, and they engage more frequently in behaviors such as editing and modifying posts. The frequency and intensity of these behaviors are related to social anxiety [8]. Meanwhile, a study with a sample of 10- to 14-year-olds, a study covering common social media sites such as You-

Tube, Instagram, and TikTok shown that regular usage of social media is linked to upward social comparison, and that reducing self-worth, increasing positive emotions, and enhancing negative emotions are linked to subjective well-being, suggesting that the visual and social cues of social media may amplify comparison and stress [9].

4. The Impact on Self-Perception

Social media provides adolescents with a continuous stream of “highlight reels” of others, thereby amplifying upward social comparison. A recent review indicated that exposure to upward comparisons with “superior targets” systematically lowers individuals’ self-assessments and self-esteem, accompanied by poorer emotional outcomes [10]. This suggests that compared to the duration of use, how social media is used better displays its impact on adolescents’ self-perception.

Among individuals in this age group, social comparison related to appearance is particularly frequent. Studies have indicated a favorable relationship between appearance concern and social media use and appearance dissatisfaction, and seeing others’ appearance-related posts on social media as well as taking and editing selfies might negatively affect one’s perception of one’s physique [11]. In terms of usage, passive social media is more likely to trigger upward comparison and envy, along with self-negation, thereby reducing self-esteem and worsening emotional state [12]. Consistent with the previous evidence, it can be concluded that passive compared to active usage, social media use is more frequently linked to unpleasant feelings and a sense of isolation [5]. Furthermore, adolescents with higher levels of social anxiety tend to bind their self-worth to platform feedback—that is, the evaluations of others on social media, and to control their content to avoid external evaluation. This shows the reciprocal reinforcement between low self-esteem, external evaluation, and social anxiety [8].

5. Key Influencing Factors: Who is More Vulnerable?

Personality traits are important factors in explaining vulnerability. For example, neuroticism refers to a persistent tendency to experience negative effects, including high anxiety and emotional instability [13]. Numerous studies have found that adolescents with high neuroticism are more likely to experience anxiety and negative psychological emotions after using social media, while those with low neuroticism or high self-efficacy are less affected [14]. This indicates that vulnerable personality traits significantly amplify the impact of social media on anxiety.

Although there is a general link between social media use and social anxiety, not all teenagers are affected to the same extent. Increasing research shows that this relationship is influenced by personality traits, gender differences, and family and peer environments. In other words, the connection between social media use (X) and anxiety (Y) can be strengthened or weakened depending on individual characteristics and the surrounding environment (W).

Moreover, multiple systematic reviews and studies have shown that women have a higher risk of decreased self-esteem when discussing appearance-related topics, making them more susceptible to the negative effects of highly visual social media like Instagram, leading to an increase in social anxiety levels [15, 16]. Conversely, boys are relatively less affected in gaming or tool-based usage scenarios.

6. Conclusion

This review indicates that the relationship between social media use and middle school students' social anxiety is neither simple nor uniform. Instead, it reflects complex interactions between usage patterns, psychological mechanisms, and personal vulnerabilities. Consistent evidence shows that how adolescents use social media is more important than how often they use it. The characteristic of passive consumption, such as scrolling and browsing without interaction, is more closely linked to the intensification of anxiety compared to active use. Important factors that explain how specific usage habits might result in lower self-esteem and more social anxiety include upward social comparison and FOMO. In addition, personality traits, gender, and family or peer environments also play a regulatory role in shaping who is more susceptible to influence and under what conditions. In conclusion, these findings emphasize that the impact of social media on social anxiety can be understood as a dynamic system shaped by multiple factors, rather than a single causal pathway.

Despite these insights, the existing literature still has some limitations. First, many pieces of evidence rely on cross-sectional studies, which capture associations but cannot clearly show causation. Second, many studies depend on self-reported screen time or emotional state measurements, which may be influenced by recall bias or social desirability effects. Third, most studies are conducted in a Western cultural context, leaving an open question about the universality of these patterns and their applicability to adolescents in different cultural and socioeconomic environments. Longitudinal experimental designs should be used in future studies to better understand the directed and sustained effects of social media use on

social anxiety. Additionally, with the rapid development of platforms, emerging key areas such as TikTok and other short video applications are worth studying due to their particular abilities for comparison and expression of identity. Researchers should also consider how social and cultural factors, such as parents and peers, interact with digital behavior to shape outcomes. These directions will allow for a more nuanced and global understanding of how social media promotes adolescent well-being.

The study results indicate that intervention measures should shift from simple restrictions on adolescents' access to social media to guiding them in using it in healthier ways. The focus of the efforts should be on strengthening media literacy, cultivating adolescents' critical thinking, and their ability to resist harmful comparisons and evaluation pressures.

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