Research Article

Social Media Use and Psychological Well-Being Among Adolescents: A Narrative Review of Risk and Protective Factors

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Abstract

Social media has taken a major role in the lives of teenagers, giving rise to a platform and means through which they can communicate and develop their identity. However, increased use of social networking sites raises questions about their potential link with symptoms of anxiety, depression, dissatisfaction with one's body, sleep disturbances, and psychological distress in general. The association of the use of social media and the adolescents' psychological well-being is highly complex and cannot be studied in terms of the overall amount of time they spend online. The present review considers psychological, behavioral, developmental, and familial variables that can influence the risk of problematic use of social media and its opposite factors, which can lead to resistance to it. It has been shown that compulsive use, fear of missing out, passive use, social comparison based on appearance, and sleep deprivation are much more relevant to adolescents' mental states than the time spent online used alone. Adolescent self-esteem, emotional regulation, and social support can also be important, with issues such as digital literacy, supportive peer relationships, active use of social media, and successful parenting playing a protective role. The review highlights the importance of developmentally appropriate guidance and coordinated action involving adolescents, families, schools, healthcare professionals and digital platforms. A balanced approach that recognizes both the benefits and risks of social media is essential to support adolescent psychological well-being.

Keywords: Adolescents; Social media; Psychological well-being; Mental health; Problematic social media use; Risk factors; Protective factors.

Introduction

Adolescence is a time of significant physical, emotional, cognitive and social development. In that time, adolescents develop a greater sense of identity, build relationships outside their families and become more aware of peers' opinions and social judgement. New technologies and social networks have emerged as important environments for achieving these goals of adolescence. Adolescents tend to utilize social media to keep in touch with friends, share experiences, pursue interests, express ideas, as well as gather information. For many of them, online communication is integrated with their daily lives, school, family and friends (1,2).

The growing popularity of social media raises many questions about the impact of websites on the health of adolescents. Online platforms provide an opportunity for social connections, peer support, creativity and access to health information but in the same time expose adolescents to the risks of cyberbullying, ideals of unrealistic bodies, social comparisons, harmful content and continuous pressure to stay online. Thus, the same social network may be beneficial for one adolescent and harmful for another. Different results are determined by a variety of factors including a stage of development, emotional characteristics of a particular adolescent, motives for using social media, type of online communication and availability of online interactions and the support available in their offline environment (3,4).

A major issue in ongoing research is the difference between the length of time spent on social media and problematic social media use. Mere time spent fails to capture whether online activity has a negative impact on sleep, educational progress, relationships and emotional state. Indicators such as compulsive checking and lack of control, obsession, discomfort caused by inability to connect, and use despite adverse consequences are more appropriate when defining problematic behavior. This review provides an overview of the connection between social media use and adolescent health, focusing on risk factors, protective factors, and implications for practice (5,6).

Social Media Use During Adolescence

Through social media, it is possible for young people to bond with friends, connect with others, and engage with groups that share similar interests. These social channels can facilitate the process of discovering one's identity and sharing one's thoughts, skills, and experiences with the world. This type of communities can be helpful especially for those who do not feel welcomed by people nearby. Social media can also be a source of health information, which may encourage individuals to seek health assistance (2,3).

At the same time, the design of many platforms invites users to use them frequently because of the presence of notifications, recommendations, continuous streams of information, and indicators providing users with social approval. Such features increase attention to other people's opinions and hinder some users from leaving. Adolescents may keep returning to the platform to avoid missing something important or to receive reassurance about their actions. . The developmental importance of peer relationships during adolescence may make these experiences especially salient (7,8).

Consequently, it is important to understand the effects of social media in terms of both its purpose and its content and context. Communication with friends, participation in creative activities and interaction with people in support groups is different from mere prolonged passive browsing or being constantly exposed to perfect images. Using an average measure of time spent on the internet can mask these distinctions (9, 10).

Psychological Well-Being and Social Media Engagement

The psychological well-being refers to several factors including emotional functioning, self-esteem, social connectedness, as well as ability to cope with stress and participate in various life activities. The use of media and social networking influences these areas of psychological well-being through various channels. For example, easier communication via social networks may help people feel the sense of belonging as well as receive emotional support. On the other hand, negative feedback, cyberbullying and constant comparison with the idealized images of other users may lead to feelings of inadequacy, stress and depressed mood (3,5).

A number of studies show a link between the problematic use of social media and anxiety and depression. Meta-analyses presented in the literature demonstrate medium strength relationships between problematic use of social media and symptoms of anxiety (0.348) and depression (0.273). The relationship between general time use of social media and symptoms of depression is weaker than that (0.11) and rather heterogeneous as well. However, this information may indicate that quality and nature of participation in social networking may be more important than the amount of time spent in such activities (5,6,11,12).

The relationship between the two phenomena could go both ways. People who are feeling lonely, anxious, depressed, and insecure may resort to social networks to calm down and improve their mood. On the other hand, if they face problems such as social comparisons, conflicts, lack of sleep, or cyberbullying, their distress might impair their mental health even further. This cycle shows that we must not only focus on their online behavior now but also take into account their weaknesses (13,14,15).

Risk Factors Associated with Problematic Social Media Use

Individual psychological factors

Each person's personality and psychological characteristics can affect the way youth employ social media and react to online situations. Lowered self-esteem, anxiety, symptoms of depression, emotional dysregulation, and problems with the recognition and expression of emotions have been connected to the inappropriate usage of online platforms. Young people who are unable to cope with unpleasant feelings may resort to using digital media in order to distract from their problems temporarily. However, even though this may come in handy at some point, overuse of social media may inhibit people from learning other ways to cope with difficulties(15,16,17).

Alexithymia, which refers to trouble in identifying and expressing emotions, may also influence the level of people's communication with others. Young people having communication problems in real life may find it easier to interact with people over the Internet through messages. Nonetheless, relying too much on online approval may become harmful if it replaces real-life supportive relationships or strengthens self-doubt(14,18).

Behavioural patterns and fear of missing out

FOMO or fear of missing out occurs when an individual worries that others are having fun without them. For teens, FOMO can lead to constant checking of their online activities and messages, at home, school or during lessons. In fact, constantly waiting for updates can bring problems in terms of distraction and anxiety (19,20,21).

Another way of behaviour in this respect is passive browsing, which means that a person who is browsing without making any interaction is just looking at curated photos and posts. Due to this, the person might be comparing him/herself with others and seeing their findings can cause someone's low mood. In most cases, active communication can safeguard a teen against negative experiences, while active usage is not always useful (9,22).
The frequent updates on short video sites may also provide an impulse for continuous engagement. The quickness of the content change and the ongoing novelty can make it impossible for some young people to control their online activities. Phubbing, which is paying attention to a mobile device instead of the people around, can impact the quality of family and friends' relationships. As a result of using phones at night, sleep can be replaced by phone activities, notifications can postpone the bedtime, or even influence the night rest (23,24).

Developmental and sociodemographic factors

Adolescents are certainly not a uniform group and their vulnerability may differ depending on their age, stage of development and social conditions. Middle adolescence is usually associated with greater importance of peers' approval, self-identity and social status. These concerns may lead to increased sensitivity to online feedback and comparison. Research shows that there are gender-related differences in some parameters, particularly that young females tend to be more vulnerable to social comparison and feelings of body dissatisfaction (25,26,27). However, these trends shouldn't be applied across the board and gender differences may be due to the content of the platform, social norms and media exposure, among others.
Young people who suffer from discrimination, being ostracised or not being accepted in society can find solace through communication online. For these adolescents, social media may serve as a way to get help, not harm. In any case, it is important to take into account an adolescent's social context when estimating the risks (3).

Family and social environment

The relationships within the family can either help mitigate the chances of having problems with the use of social media or increase them. Supportive parental communication, parental warmth, consistency in expectations and a cooperative approach to solve the problems effectively used by teenagers contribute to the formation of good online behavior. On the contrary, harsh punishment from parents, conflicts between parents and emotional neglect result in the emergence of emotional issues, which, in turn, lead teenagers to the need of escape from the real world into online activities (28,29,30).
Parental phubbing is also worth being discussed. If parents constantly prefer cellular phones to their kids, they set a bad example of distracted technology use and miss the opportunity of having meaningful communication with their children. No supervision might leave teenagers alone with harmful information or unresolved issues online. Proper parental engagement is not about controlling or punishing children. It is about talking to the kids, establishing trustful relationships, showing them an appropriate example and agreeing on the rules together (8,31).
Summary of the risk factors and their potential influence on adolescents are given in Table 1

Table 1: Risk Factors Associated with Problematic Social Media Use Among Adolescents

Category	Risk factors / contributing factors	Potential influence on adolescents
Individual psychological factors	Low self-esteem, anxiety, depressive symptoms, emotional dysregulation and difficulty identifying or expressing emotions	May encourage adolescents to use social media as an escape or for short-term mood regulation, potentially reducing opportunities to develop alternative coping strategies
	Alexithymia (difficulty identifying and describing feelings)	May make online communication more appealing than face-to-face interaction and increase dependence on online validation
	Poor impulse control and self-regulation	May contribute to repeated checking of social media and difficulty stopping use
Behavioural patterns and fear of missing out	Fear of missing out (FOMO)	May encourage frequent checking of messages and feeds, causing distraction during lessons, study periods and family activities, and contributing to anxiety
	Passive browsing and upward social	Exposure to idealized images and posts may

	comparison	lead to comparisons involving appearance, popularity, achievements and lifestyle
	Prolonged engagement with short-form videos and continuously updated feeds	Repeated novelty and rapid content changes may make attention and online time difficult to regulate
	Phubbing	Divided attention during face-to-face interactions may interfere with the quality of family and peer relationships
	Night-time social media use and notifications	May displace sleep, delay bedtime and interrupt rest
Developmental and sociodemographic factors	Developmental concerns during middle adolescence, including peer acceptance, identity and social status	May increase sensitivity to online feedback and social comparison
	Gender-related differences in online experiences	Female adolescents may be more vulnerable to appearance-related comparison, body dissatisfaction and certain internalising symptoms
	Discrimination, social exclusion and limited acceptance	May influence adolescents to seek support and affirmation through online communities; social media may also serve a protective role
Family and social environment	Harsh discipline, interparental conflict and emotional neglect	May contribute to emotional difficulties and encourage adolescents to seek relief through online activity
	Lack of supportive family communication and parental warmth	May reduce opportunities for guidance and the development of healthy digital habits
	Parental phubbing	May model distracted technology use and reduce meaningful parent–adolescent communication
	Limited parental supervision and guidance	May leave adolescents less prepared to manage harmful online content and online conflict
	Inadequate parental involvement in digital activities	May limit opportunities to establish trust, digital role-modelling and collaboratively agreed boundaries

Protective Factors and Positive Influences

Digital literacy and self-regulation

Digital competence is broader than just being able to work with various devices or programs. Young people must know how to evaluate the credibility of information online, see if something is manipulated, remember that some things are shaped by algorithms and identify persuasive and commercial motivations. Through critical digital literacy, youth might be able to interpret information online in a more realistic way and minimize the impact of unrealistic representations. Self-regulation abilities such as the ability to identify triggers, manage notifications, and turn off devices would further help keep the use of technology moderate(3,10).

Positive peer relationships and purposeful engagement

Using social networks helps to maintain and develop friendships. Using social networks effectively engages users in collaborative activities and therefore helps them to belong to a community. However, these benefits are maximized if online contacts are used in conjunction with offline meaningful interactions. Adolescents should be taught how to think about the effects of particular online platforms and exchanges on their emotional state(3,32).

Supportive parenting and family media practices

By introducing open communication methods and getting the adolescents involved in the formulation of family media recommendations, parents and caregivers can contribute to the positive functionality in their use of technology. Mealtimes without devices, already scheduled hours for studying, and limited use during the night will not only make family members communicate more with each other but also provide more opportunities for sleep. The implementation of rules will be effective only if they comply with the necessity of their explanation and demonstration by adults. Parents should be examples of responsible use of devices and not rely on the usage of punitive measures in case of possible problems (28,29,33).

Sleep and offline activities

Adequate sleep plays a key role in emotional regulation, focus, learning and health. Receiving notifications at night, excessive web-surfing or using any type of electronic device prior to going to sleep can delay or disturb the sleep process. Following a nightly routine, decreasing usage of gadgets before going to bed and keeping them away from the sleep area can help with good sleep. Getting involved in physical activity, hobbies and offline socializing (3).

Table 2 explains the protective factors and positive influences on Adolescent Social Media Use

Category	Protective factors and positive influences	Potential benefits
Digital literacy and self-regulation	Critical evaluation of online information and credibility of sources	Helps adolescents identify misinformation, manipulated content and unrealistic online representations.
	Understanding algorithms and commercial or persuasive motivations	Enables adolescents to interpret online content more critically and realistically.
	Ability to identify personal triggers and manage notifications	Promotes awareness and control over social media use.
	Ability to switch off devices and regulate screen time	Supports moderate and balanced use of technology.
Positive peer relationships and purposeful engagement	Maintaining and developing friendships through social networks	Strengthens peer relationships and social connectedness.
	Participation in collaborative online activities	Promotes a sense of belonging and community participation.
	Combining online interactions with meaningful offline relationships	Supports healthy social relationships and interpersonal development.
	Reflecting on the emotional effects of online platforms and interactions	Improves emotional awareness and helps adolescents recognise the influence of online experiences on their well-being.
Supportive parenting and family media practices	Open communication between parents and adolescents	Encourages trust, guidance and responsible technology use.
	Involving adolescents in developing family media recommendations	Promotes shared responsibility and acceptance of digital boundaries.
	Device-free family mealtimes and scheduled study hours	Encourages family communication and reduces unnecessary screen exposure.
	Limiting device use during night-time	Supports healthy sleep practices.
	Parental role-modelling of responsible device use	Encourages adolescents to adopt appropriate digital behaviours.
	Explanation and demonstration of family media rules rather than punitive measures	Promotes understanding and consistent adherence to digital boundaries.

Sleep and offline activities	Following a regular night-time routine	Supports adequate sleep and emotional regulation.
	Reducing gadget use before bedtime	Helps prevent sleep delay and disturbance.
	Keeping electronic devices away from the sleeping area	Reduces night-time notifications and unnecessary device use.
	Participation in physical activities and hobbies	Encourages healthy lifestyles and engagement beyond digital platforms.
	Offline socialising and face-to-face interactions	Strengthens interpersonal relationships and social connectedness.

Social Media Use and Common Psychological Concerns

Anxiety, depression and stress

Stress could be linked with need for instant reactions, fear of missing opportunities, evaluation through social networking, as well as difficulty in understanding peer relationships. Checking the online channels frequently may contribute to keeping away from the state of one's recovery. Symptoms of depression could be associated with social comparisons, online bullying, isolation, dissatisfaction with online behavior. Yet, some adolescents manage to turn to their virtual world for assistance, which helps them to reduce isolation. Therefore, the assessment of the case should take into consideration the adolescents' actual experience on the Internet(5,20,34).

Body image and self-esteem

Platforms based on visual content can expose young people to manipulated images, beauty standards, and other content that reinforces a narrow vision of beauty. Constant exposure may be linked with feelings of dissatisfaction with one's appearance and could lead to self-objectification and lower body image. Young people may also feel compelled to present themselves in an ideal way online. Media literacy programs should teach about image manipulation, filters, advertising, and the variety of what is considered a "normal" body (22,26,35).

Cyberbullying and social relationships

Cyberbullying and online harassment can happen even when students are not at school, and it can affect teenagers where they normally feel safe and relaxed. Victims may have feelings of fear and shame, become socially withdrawn, and be psychologically distressed. Schools and parents need to provide clear systems for reporting incidents and upcoming disclosures. Education should foster respectful online conversations, and help from bystanders, and create a safe environment where young people can come forward for help without fear of being blamed(3,36).

Sleep disturbance and daily functioning

The usage of social media could impact sleep negatively if it happens late at night, disrupts normal routine, or creates pressure to be available online. Sleep disturbances, in turn, could affect mood, ability to concentrate, school performance, and relationships. In clinical and educational settings, it is better to find out about the usage of devices at night and its consequences than just ask about the amount of time spent browsing(3,16).

Figure 1 depicts social media use and psychological concerns



Figure 1: Social media usage and psychological concerns(image generated with AI assistance- Google Gemini NotebookLM)

Cultural and Contextual Considerations

The context of using social media as well as its implications is influenced by social and economic factors as well as by family circumstances. Social comparison online may be relevant for young people in the rapidly digitising world, where they are likely to deal with academic competition, parental expectations of success, changing social norms, and issues related to looks and social status. Studies conducted in India have confirmed links between the use of social media and mental health problems, such as anxiety and depression, and these links seem to vary across studies and populations(11,37).

It is important to realise that culturally appropriate solutions imply acknowledgement of the various adolescent experiences that differ in terms of access to technology, expectations from families, languages, gender norms, and mental health services. While interventions used in one context can be applied in other areas, they may require adaptation. More longitudinal studies that take the local social context into account are needed to see how social media use affects social situation and development of adolescents(11).

Implications for Adolescent Health, Education and Practice

Healthcare providers involved with the adolescents should use digital experiences in holistic psychosocial assessments wherever relevant and clinically indicated. The inquiry can cover the platforms used, the motivations for their use, both positive and negative experiences on the Internet as well as sleep, cyberbullying, mood, body image, and difficulties with concentration and carrying out day-to-day obligations. Evaluation should focus on the loss of control, harm, and functioning rather than the amount of time spent online(3,5).

When harmful patterns are detected, the intervention should be tailored to the individual's needs and be free of judgement. Cognitive behavioral approaches can help youngsters in recognizing maladaptive thinking connected with social comparison, coping with FOMO-induced anxiety, and improving emotional regulation. In cases of severe distress or persistent symptomatology, a mental health evaluation and referral are crucial. Delivery of care should involve a variety of professionals including nurses who can educate and guide the youth and their families(32,38).

Schools and colleges play an important role in advancing digital well-being. School programs should teach digital literacy, internet safety, privacy, respectful communication, cyberbullying prevention and skills to spot misinformation. Programs on social-emotional learning should increase coping skills, self-esteem, friendships and conflict resolution skills. They should not present social media as being bad(3).

At the family level, parents should cooperate with their children to create media plans with rules about technological devices, time spent studying, mealtimes and sleep. Parents should demonstrate proper technology practices and communicate with their kids about the internet. At the regulatory level, children need protection through the use of strategies that ensure their privacy, proper monitoring, and availability of reporting systems and rules that minimize harmful online engagement(29,30,33).

Recommendations

A coordinated plan must be used to ensure that adolescents use social media both safely and appropriately. Medical practitioners should ask about social media addictions and problematic use; schools should teach children digital literacy and the social-emotional aspects of using electronic media; and parents must create limits for their children. Adolescents should be encouraged to have face-to-face interactions with their peers, engage in physical activities, and get enough sleep. Companies must make sure their platforms are safe for young users, respond effectively to content that can be harmful to minors, and take into account the nature of their design(3,11).

Conclusion

Social media has been a vital role in adolescent social life and development, with its ability to establish a connection, facilitate self-expression, and access information posing risks to mental health. The evidence presented in this review shows that the link between social media and mental health is complex and determined by personal factors, engagement styles, development, family context, and broader social factors. It seems that it is the poor regulation of social media usage rather than the time spent on screens that affects anxiety, depression, lack of body satisfaction, and sleep disturbance. Digital literacy and purposeful usage, parents' mediation, and the establishment of positive relationships may minimize the risks associated with social media use. An integrated approach involving the cooperation of families, schools, medical practitioners, decision-makers, and technology companies is needed to effectively support mental well-being.

References

1. Hidalgo MI, González-Fierro MJC. Adolescencia: aspectos físicos, psicológicos y sociales. An Pediatr (Barc). 2014;12(1):42–46.
2. Nagata JM, Memon Z, Talebloo J, Li K, Low P, Shao IY, et al. Prevalence and patterns of social media use in early adolescents. Acad Pediatr. 2025;25(4):102784.
3. Office of the Surgeon General. Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory. Washington, DC: US Department of Health and Human Services; 2023.
4. Vogels E, Gelles-Watnick R, Massarat N. Teens, Social Media and Technology 2022. Washington, DC: Pew Research Center; 2022.
5. Shannon H, Bush K, Villeneuve PJ, Hellemans KGC, Guimond S. Problematic social media use in adolescents and young adults: systematic review and meta-analysis. JMIR Ment Health. 2022;9(4):e33450.
6. Ivie EJ, Pettitt A, Moses LJ, Allen NB. A meta-analysis of the association between adolescent social media use and depressive symptoms. J Affect Disord. 2020;275:165–174.
7. Flannery JS, Burnell K, Kwon SJ, Jorgensen NA, Prinstein MJ, Lindquist KA, Telzer EH. Developmental changes in brain function linked with addiction-like social media use two years later. Soc Cogn Affect Neurosci. 2024;19(1):nsae008.
8. Yin L, Wang P, Li H, Mao N, Hu H, Griffiths MD. Gender differences in the associations between parental phubbing, fear of missing out, and social networking site addiction: a cross-lagged panel study. Technol Soc. 2024;78:102668.
9. Stockdale LA, Coyne SM. Bored and online: reasons for using social media, problematic social networking site use, and behavioral outcomes across the transition from adolescence to emerging adulthood. J Adolesc. 2020;79(1):173–183.
10. Ostendorf S, Wegmann E, Brand M. Problematic social-networks-use in German children and adolescents—the interaction of need to belong, online self-regulative competences, and age. Int J Environ Res Public Health. 2020;17(7):2518.
11. Rana AN, Kumar A, Palkin, Ambavat S. Meta-analysis of social media usage patterns and their impact on anxiety and depression in adolescents: a global and Indian perspective. Journal of Contemporary Clinical Practice. 2025;11(8):1012–1022.
12. Wöbbeking Sánchez S, Melero Ventola AR, Gómez Martínez MÁ, Wöbbeking Sánchez M. Classification of the main risk factors for problematic social network use in adolescents: a systematic review. Rev Psicol Clin Ninos Adolesc. 2026;13(2):15–26.
13. Kardefelt-Winther D. A conceptual and methodological critique of internet addiction research: towards a model of compensatory internet use. Comput Human Behav. 2014;31:351–354.

14. Pace CS, Rogier G, Muzi S. How are the youth? A brief-longitudinal study on symptoms, alexithymia and expressive suppression among Italian adolescents during COVID-19 pandemic. Int J Psychol. 2022;57(6):700–708.
15. Calandri E, Cattelino E, Graziano F, Begotti T. The interplay between self-esteem and anxiety symptoms in the prediction of problematic social media use in adolescents. Psychol Sch. 2021;58(6):1174–1186.
16. Wartberg L, Thomasius R, Paschke K. The relevance of emotion regulation, procrastination, and perceived stress for problematic social media use in a representative sample of children and adolescents. Comput Human Behav. 2021;121:106788.
17. Iannattone S, Mezzalira S, Bottesi G, Gatta M, Miscioscia M. Emotion dysregulation and psychopathological symptoms in non-clinical adolescents: the mediating role of boredom and social media use. Child Adolesc Psychiatry Ment Health. 2024;18(1):5.
18. Akbari M, Bahadori MH, Khanbabaei S, Milan BB, Horvath Z, Griffiths MD, Demetrovics Z. Psychological predictors of the co-occurrence of problematic gaming, gambling, and social media use among adolescents. Comput Human Behav. 2023;140:107589.
19. Przybylski AK, Murayama K, DeHaan CR, Gladwell V. Motivational, emotional, and behavioral correlates of fear of missing out. Comput Human Behav. 2013;29(4):1841–1848.
20. Fabris MA, Marengo D, Longobardi C, Settanni M. Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: the role of stress associated with neglect and negative reactions on social media. Addict Behav. 2020;106:106364.
21. Tomczyk Ł. FOMO among Polish adolescents: fear of missing out as a diagnostic and educational challenge. In: Rocha Á, et al., editors. Trends and Applications in Information Systems and Technologies. Vol 1365. Cham: Springer; 2021. p. 540–550.
22. Maheux AJ, Roberts SR, Nesi J, Widman L, Choukas-Bradley S. Longitudinal associations between appearance-related social media consciousness and adolescents' depressive symptoms. J Adolesc. 2022;94(2):264–269.
23. Wang J, Wang M, Lei L. Longitudinal links among paternal and maternal harsh parenting, adolescent emotional dysregulation and short-form video addiction. Child Abuse Negl. 2023;141:106236.
24. Chotpitayasunondh V, Douglas KM. Measuring phone snubbing behavior: development and validation of the Generic Scale of Phubbing and the Generic Scale of Being Phubbed. Comput Human Behav. 2018;88:5–17.
25. Orben A, Przybylski AK, Blakemore SJ, Kievit RA. Windows of developmental sensitivity to social media. Nat Commun. 2022;13(1):1649.
26. Arrivillaga C, Rey L, Extremera N. Problematic social media use and emotional intelligence in adolescents: analysis of gender differences. Eur J Educ Psychol. 2022;15(1):1–12.
27. Castrén S, Mustonen T, Hylkilä K, Männikkö N, Kääriäinen M, Raitasalo K. Risk factors for excessive social media use differ from those of gambling and gaming in Finnish youth. Int J Environ Res Public Health. 2022;19(4):2406.
28. Geurts SM, Koning IM, Vossen HGM, van den Eijnden RJJM. Rules, role models or overall climate at home? Relative associations of different family aspects with adolescents' problematic social media use. Compr Psychiatry. 2022;116:152318.
29. Geurts SM, Koning IM, Van den Eijnden RJJM, Vossen HGM. Predicting adolescents' problematic social media use from profiles of internet-specific parenting practices and general parenting dimensions. J Youth Adolesc. 2023;52(9):1829–1843.
30. Demers H, White-Gosselin CÉ, Poulin F. Relationship with parents in adolescence and social media addiction in adulthood: longitudinal links and mediation analyses. Can J Behav Sci. 2024;56(3):210–221.
31. Taş İ. The relationship between social ignore and social media addiction among adolescents: mediator effect of satisfaction with family life. Youth Soc. 2023;55(4):708–729.
32. Favini A, Culcasi F, Cirimele F, Remondi C, Plata MG, Caldaroni S, Luengo Kanacri BP. Smartphone and social network addiction in early adolescents: the role of self-regulatory self-efficacy in a pilot school-based intervention. J Adolesc. 2024;96(3):551–565.
33. Philippi J, Simon-Kutscher K, Austermann MI, Thomasius R, Paschke K. Investigating parental factors for adolescent problematic gaming and social media use – a cross-sectional and longitudinal approach. J Adolesc Health. 2024;75(4):626–634.
34. Xiao W, Peng J, Liao S. Exploring the associations between social media addiction and depression: attentional bias as a mediator and socio-emotional competence as a moderator. Int J Environ Res Public Health. 2022;19(20):13496.

35. Simon PD, Cu SM, De Jesus KE, Go NT, Lim KT, Say CL. Worried about being imperfect? The mediating effect of physical appearance perfectionism between Instagram addiction and body esteem. Pers Individ Dif. 2022;186:111346.
36. Martínez-Ferrer M, León-Moreno C, Suárez-Relinque C, Del Moral-Arroyo G, Musitu-Ochoa G. Cybervictimization, offline victimization, and cyberbullying: the mediating role of problematic use of social networking sites in boys and girls. Psychosoc Interv. 2021;30(3):155–162.
37. Jabbar J, Dharmarajan S, Raveendranathan RP, Syamkumar D, Jasseer A. Influence of social media on adolescent mental health. Int J Engl Lit Soc Sci. 2022;7(1):72–76.
38. Kumkronglek J, Sirisatayawong P, Chupradit S. Effects of a life skills enhancement program on the life skills and risk behaviors of social media addiction in early adolescence. Clin Pract Epidemiol Ment Health. 2023;19:e230113202226.