



International Journal of Innovative Technologies in Social Science

e-ISSN: 2544-9435

Operating Publisher
SciFormat Publishing Inc.
ISNI: 0000 0005 1449 8214

2734 17 Avenue SW,
Calgary, Alberta, T3E0A7,
Canada
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ARTICLE TITLE	SOCIAL MEDIA AND YOUTH HEALTH: HOW DIGITAL PLATFORMS SHAPE HEALTH BEHAVIORS AND MENTAL WELL-BEING AMONG ADOLESCENTS
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DOI	https://doi.org/10.31435/ijitss.4(52).2026.6524
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RECEIVED	12 August 2026
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ACCEPTED	25 October 2026
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PUBLISHED	28 October 2026
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SOCIAL MEDIA AND YOUTH HEALTH: HOW DIGITAL PLATFORMS SHAPE HEALTH BEHAVIORS AND MENTAL WELL-BEING AMONG ADOLESCENTS

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ABSTRACT

The ubiquity of social media in adolescents' lives represents one of the most significant challenges to public health today, exerting a complex influence on their health behaviors and mental well-being. The aim of this study is to provide a synthetic summary of the current literature on the mechanisms through which digital platforms shape adolescents' physical and mental health, with a particular focus on risk and protective factors. The results of the review indicate a nonlinear relationship between social media use and well-being. On the one hand, excessive, problematic, or passive use of digital platforms is strongly correlated with higher levels of anxiety, depression, sleep disturbances, negative body image, and eating disorders. Exposure to phenomena such as cyberbullying or algorithmically promoted harmful content increases the risk of risky behaviors, including the use of psychoactive substances. On the other hand, active media use can bring tangible benefits by facilitating the development of peer relationships, providing social support, and offering access to reliable health information—which is particularly important for youth from marginalized groups. The impact of social media on youth health is not unequivocally negative but depends on usage patterns, individual developmental predispositions, and social context. Understanding these diverse mechanisms is crucial for developing effective clinical interventions, educational programs, and legal regulations. These will help minimize existing risks while harnessing the potential of digital technologies to effectively promote health among adolescents.

KEYWORDS

Social Media, Problematic Social Media Use (PSMU), Adolescent Mental Health, Health Behaviors

CITATION

Reczka, K., Zalewska, Z., Szymkowiak, J., & Woźniak, M. (2026). Social media and youth health: How digital platforms shape health behaviors and mental well-being among adolescents. *International Journal of Innovative Technologies in Social Science*, 4(52). [https://doi.org/10.31435/ijitss.4\(52\).2026.6524](https://doi.org/10.31435/ijitss.4(52).2026.6524)

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Introduction:

Over the past dozen or so years, the world has undergone an unprecedented digital transformation that has fundamentally reshaped the living environment, communication patterns, and leisure activities of the younger generations. The use of mobile devices and social media has become an integral and fully integrated part of the daily lives of adolescents around the world. Estimates indicate that in developed countries, as many as 95–97% of teenagers own a smartphone and actively use at least one social media platform. With unlimited access to broadband internet, the average time spent in front of screens for recreational purposes has increased dramatically, often exceeding recommended limits and reaching as high as nine hours a day. This ubiquity and “constant connectivity” with their peer network have made digital platforms one of the primary environments for socialization among young people. Due to its prevalence, this phenomenon has attracted enormous interest but also concern from parents, clinicians, researchers, and policymakers, who have begun to ask questions about the short- and long-term effects of such early exposure to the digital environment [1, 4, 11, 25, 28].

Social media can be defined as a broad collection of virtual communities and internet-based applications that enable users to create their own profiles, interact, generate and share content, and build networks of contacts. It is worth noting that the landscape of these platforms is undergoing constant and highly dynamic changes. Early social networking sites, such as MySpace and Facebook, relied largely on text-based communication and static images. Today, however, highly visual platforms such as Instagram, Snapchat, and TikTok have gained the most popularity, emphasizing the instant sharing of photos and short-form videos. These newer apps are characterized by advanced algorithms that drive content recommendations, infinite scroll mechanisms, and features designed to instantly quantify social approval, such as “likes,” shares, and the number of followers. The design of these platforms, intentionally engineered to maximize time spent in the app by providing users with a “flow experience,” utilizes conditioning mechanisms and irregular reinforcement, which makes their operation similar to the mechanisms underlying behavioral addiction [5, 9, 13, 17, 22].

To fully understand the impact that digital technologies have on adolescents’ health, this phenomenon must be situated within the specific developmental context of adolescence. This period is a time of profound biological, psychological, and social changes. Neurobiological maturation during this stage of life is characterized by a marked imbalance between the early-developing structures of the limbic system (including the amygdala and basal ganglia), which are responsible for emotionality, reward processing, and novelty seeking, and the more slowly maturing prefrontal cortex, which is responsible for impulse control, rational planning, and higher executive functions. This distinctive asymmetry makes adolescents particularly sensitive to emotional stimuli, social rewards, and peer pressure, while exhibiting a limited ability to inhibit risky behaviors. Furthermore, this period is marked by intense development and the search for one’s own identity, with acceptance by the peer group and a sense of belonging becoming an absolute priority. The features of social media—which offer constant feedback and the ability to immediately satisfy affiliation needs—therefore fall on exceptionally fertile ground, strongly resonating with the sensitivity of an adolescent’s nervous system [3, 5, 14, 18, 25].

The rapid expansion of social media has coincided with a global crisis in youth mental health. Epidemiological data from the past dozen or so years point to a significant and alarming increase in the prevalence of depressive and anxiety disorders, as well as suicidal behavior and self-harm, which is particularly evident among adolescent girls. The emergence of such pronounced negative population trends, coinciding with the widespread adoption of smartphones, has led to the widespread belief in public discourse that new technologies are solely to blame for the deterioration of young people’s mental health. This narrative, which often takes the form of a “moral panic,” has prompted researchers to rigorously seek empirical evidence. It should be noted, however, that while the temporal correlation between these phenomena is evident, from a methodological standpoint, it does not automatically imply a cause-and-effect relationship. As the results of rigorous longitudinal studies show, the actual impact of social media on well-being turns out to be a multidimensional, highly complex phenomenon dependent on numerous mediating variables [1, 4, 7, 11, 25, 27].

To better understand the mechanisms underlying the relationship between new technologies and health, researchers employ a variety of theoretical frameworks. One of the dominant approaches is the displacement hypothesis, which posits that excessive screen time “steals” time that should be devoted to activities fundamental to health: sleep, physical activity, and direct (face-to-face) social interactions. In contrast, the “Goldilocks hypothesis” suggests the existence of a nonlinear, U-shaped relationship between time spent using technology and well-being. According to this hypothesis, both extremes—such as a complete lack of access to technology (leading to social exclusion and a sense of alienation) and its drastic overuse—correlate with

reduced psychological well-being. In contrast, moderate use of digital media appears to foster optimal engagement in peer relationships and yield the greatest benefits [3, 4, 12, 19, 27].

In research on the impact of media, the Biopsychosocial Model and the Tripartite Influence Model occupy a special place. These models help explain how sociocultural pressures—especially those stemming from highly visual platforms—are internalized by adolescents. Daily, constant exposure to idealized and often digitally altered images of other users—which promote standards of thinness for girls and muscularity for boys—intensifies the tendency toward upward social comparisons. The resulting body dissatisfaction is, in turn, a very strong predictor of behaviors associated with pathological weight control, binge eating episodes, restrictive dieting, or excessive physical exercise. In extreme cases, this can lead to full-blown eating disorders, including anorexia or—increasingly recognized in the context of healthy eating trends on platforms such as Instagram—orthorexia nervosa [5, 9, 13, 14, 19, 21].

Equally important, social media constitutes an unregulated environment in which young people are exposed to commercial determinants of health. Marketing efforts carried out through sponsored posts and hidden advertisements created by so-called influencers aggressively promote the consumption of highly processed foods, energy drinks, and stimulants such as alcohol and tobacco products (including e-cigarettes). Existing theoretical frameworks, notably Social Learning Theory and the Facebook Influence Model, explain how observing peers or idols online directly shapes intentions and willingness to engage in risky behaviors in the real world. Furthermore, anonymity and the ease of content distribution in cyberspace foster phenomena such as cyberbullying and the promotion of self-destructive behaviors. Exposure to content that glorifies self-harm or suicide (the so-called “suicide contagion effect”) poses one of the most serious threats to emotionally vulnerable individuals struggling with mood disorders [6, 7, 8, 11, 20, 22].

Despite the extensive list of risks, it must be firmly emphasized that the impact of social media on young people is not unequivocally negative. A distinction is made between problematic Internet use (PUI)—often referred to as addictive behavior—and use based on an active, purposeful search for connections. Research highlights that active use (e.g., direct communication, messaging, creating and sharing educational content) can significantly strengthen social capital, reduce feelings of loneliness, and help relieve stress. For many teenagers, especially those struggling with health issues or belonging to marginalized groups (e.g., sexual and gender minorities), digital spaces often offer the only safe place to have their identity validated, find social support, and access reliable medical information that is unavailable to them in the offline world [1, 5, 10, 12, 15, 17].

Additionally, these platforms have tremendous potential as tools in the hands of public health professionals. Social media-based interventions, combining elements of social support and interactive psychoeducation, have been shown to be effective in promoting physical activity, encouraging participation in screening programs, improving dietary quality, and reducing psychological distress in patients. A modern clinical and educational approach should therefore evolve toward building digital literacy and the judicious integration of technology into therapeutic strategies, rather than focusing on the blanket and often ineffective prohibition of electronic device use [2, 15, 16, 18, 25, 26].

To summarize the above considerations, the relationship between social media and adolescent health appears to be a highly complex and nuanced phenomenon. The literature on this topic often suffers from methodological limitations, relying on cross-sectional data and general measurements of screen time, which do not fully capture the quality of young people’s digital experiences. For this reason, the aim of this review article is to provide a comprehensive, systematic synthesis and critical analysis of the current scientific evidence regarding the mechanisms through which digital platforms shape health behaviors and mental well-being during adolescence. This study explores both negative trajectories (including sleep disorders, body image issues, and cyberbullying) and positive aspects of media use (including social support and public health interventions), taking into account individual differences such as gender, age, and socioeconomic status. The findings are intended to inform the development of balanced, evidence-based recommendations for clinicians, school communities, and policymakers, enabling the minimization of risks while safely harnessing the potential of the digital world to promote youth health [4, 9, 11, 15, 18, 25, 28].

Methodology:

This review article was prepared based on a rigorous analysis of selected scientific literature, including systematic reviews, meta-analyses, and large-scale cohort and cross-sectional studies. To ensure the highest quality of evidence, the synthesis included 28 full-text, English-language articles published in peer-reviewed scientific journals that directly examined the complex relationships between the use of digital social media platforms and the mental and physical health of adolescents. The literature forming the basis of this study reflects data obtained from major electronic bibliographic databases, such as PubMed and Google Scholar. The search process was structured around the following keywords: adolescents, social media, mental health, depression, anxiety, body image, screen time, and problematic use. The main inclusion criteria for this review included study populations, exposure to specific media, and measured outcomes. First, the analysis was intentionally limited to children, adolescents, and young adults, with a particular focus on the 10- to 19-year-old age group, which aligns with the World Health Organization's (WHO) definition of adolescence. Second, active or passive use of interactive social media—including specific platforms based on sharing visual and textual content, such as Instagram, TikTok, Facebook, Snapchat, and Twitter—was defined as the exposure factor. Third, the articles had to report structured measurements of psychological endpoints (e.g., symptoms of depression, anxiety, self-esteem, sleep quality) or behavioral and physical health indicators (e.g., eating disorders, body image dissatisfaction, physical activity, risky sexual behavior, or substance abuse). Studies focusing exclusively on adults, studies that did not clearly distinguish social media use from general time spent watching television or playing video games, and descriptions of individual clinical cases were excluded from the review.

Results:

An analysis of social media usage patterns among today's youth reveals a highly varied picture of the impact of digital technologies on mental well-being and overall psychosocial functioning. The relationship between screen time and indicators of mental health is not linear, but in population-based longitudinal studies, it takes the form of a U-shaped curve. This means that moderate use of social media platforms—which facilitates integration with peer groups, identity formation, and access to emotional support—appears to be optimal for adolescents' mental health. Both complete isolation from the digital world and extreme, prolonged engagement in virtual life correlate with reduced life satisfaction, an increased sense of loneliness, and a higher risk of depressive symptoms. Age and gender are significant moderating factors in this relationship, with girls showing greater sensitivity to negative stimuli from social media as early as the early and middle stages of adolescence, while among boys, the greatest declines in well-being are observed later on, often in connection with a sudden withdrawal from online life. However, the key determinant of the direction of the media's impact is not the duration of exposure itself, but the nature of the activities undertaken. Active use—which involves initiating conversations, exchanging ideas, and creating one's own content—helps strengthen interpersonal relationships and improve mood. In contrast, passive use—limited to aimlessly scrolling through other people's profiles—intensifies feelings of envy, leads to frustration, and significantly lowers self-esteem, becoming one of the main predictors of deteriorating mental health [3, 15, 25, 27].

The literature clearly distinguishes the concept of problematic social media use, defined by the presence of symptoms typical of behavioral addictions, such as loss of control over time spent online, withdrawal symptoms, intense preoccupation with checking notifications, and neglect of daily responsibilities. This phenomenon affects a significant proportion of adolescents, and its development is closely correlated with poorer academic performance, lower levels of health literacy, and insufficient parental supervision. Problematic use of digital platforms is associated with a significant increase in the risk of psychosomatic complaints, including chronic headaches, neck pain, and muscle tremors. One of the most serious physiological consequences of social media overuse, particularly in the evening and at night, is disruption of the circadian rhythm and severe sleep deprivation. The constant anticipation of feedback from peers, driven by the fear of missing out on important events within the group, leads to delayed sleep onset and frequent awakenings during the night. Furthermore, the blue light emitted by mobile device screens directly inhibits melatonin synthesis, resulting in fragmented sleep, chronic morning fatigue, and secondary problems with concentration and emotional regulation during the day, creating a vicious cycle of deteriorating psychophysical health in young people [1, 4, 17, 18].

Uncontrolled exposure to virtual content also creates conditions conducive to extremely negative psychological phenomena, such as online victimization, an increase in self-destructive behaviors, and the

phenomenon of digital contagion. Cyberbullying is an exceptionally severe source of distress for today's teenagers because, unlike traditional bullying, the perpetrators often remain anonymous, and incidents of violence are not limited by time or space. Victims of cyberbullying exhibit drastically elevated levels of anxiety and a sense of hopelessness, and they are significantly more likely to experience suicidal thoughts and attempts. The situation is exacerbated by the fact that the specific nature of recommendation algorithms on social media can lead to the mass dissemination of content glorifying self-harm, restrictive fasting, or parapsychiatric behaviors. Exposure to this type of content by highly vulnerable individuals experiencing developmental crises triggers a mechanism of modeling and imitation, leading to the mass occurrence of specific symptoms—an example of which in recent years has been the surge in functional movement disorders and tics among teenagers who regularly consume certain video content on platforms such as TikTok. It has thus been demonstrated that these platforms can serve as an incubator and vector for psychopathological behaviors, requiring clinicians and parents to exercise particular vigilance and engage in early intervention [7, 9, 11, 23, 26].

The significant influence of digital platforms on adolescent development is evident in the area of body image, where mechanisms of internal assimilation of unrealistic role models play a dominant role. Daily, hours-long use of visually-driven apps exposes adolescents to constant contact with digitally altered and idealized images of their peers and celebrities. The consequence of this exposure is the internalization of the ideal of thinness among girls and the ideal of muscularity among boys, leading to obsessive social comparisons. Analyses indicate that every additional hour spent on such platforms directly increases teenagers' fear of weight gain and makes their self-esteem drastically dependent on their weight and physical appearance. This process fuels compensatory behaviors, such as self-induced vomiting, laxative abuse, or obsessive, excessive exercise, all aimed at meeting the aesthetic standards imposed by cyberculture [13, 16, 21, 28].

The virtual environment promotes not only a pathological pursuit of specific body proportions but also an orthodox approach to dietary habits, which in many young users develops into orthorexia—an obsessive focus on consuming only foods considered completely pure and healthy. Online communities centered around dietary trends often introduce strict classifications of food products, leading to a psychological fixation on meals. In addition to orthorexia, problematic social media use strongly predisposes adolescents to binge eating episodes and the associated feelings of guilt and distress. This stems largely from the fact that heavy engagement with digital devices and habitual screen-based eating lead to a loss of sensitivity to physiological signals of hunger and satiety. Furthermore, low mood and chronic anxiety are regulated through emotional eating, creating a feedback loop in which media use exacerbates weight control issues and intensifies the symptoms of eating disorders [14, 21, 28].

Exposure to commercial determinants of health and marketing campaigns ubiquitous on social media—which often employ hidden messaging and promote unhealthy consumption patterns—remains significant for adolescent health. Young people are targeted by advertising algorithms and influencer activities. This content often normalizes the consumption of highly processed foods and promotes psychoactive substances, including alcohol. Interactions and photos posted by peers in the context of parties and alcohol consumption are perceived by young people as highly credible evidence of the prevalence and acceptability of such practices, which lowers the threshold for alcohol initiation and increases the frequency of getting drunk. This problem is exacerbated by the fact that teenagers often trust information obtained through social media just as much as they trust authority figures, assessing the reliability of information based on the number of likes, comments, and reach of a given profile rather than its actual substantive value [10, 19, 22].

When considering the impact of social media, its potential as a tool for building mental resilience and promoting health is also taken into account, provided it is used in a mindful and balanced manner. For many teenagers, belonging to virtual communities means access to emotional, informational, and peer support that they may not receive in their immediate physical environment. Young people struggling with mental health issues, medical conditions, or those belonging to minority groups derive particular benefits from digital connectivity. The opportunity to share experiences with peers in similar life situations reduces stress levels and feelings of alienation. However, effectively harnessing this potential requires integrated digital education initiatives, supported by appropriate interventions and the creation of a safe, moderated environment that facilitates the exchange of experiences and adaptive coping with difficulties [2, 12, 20].

Discussion:

The relationship between social media and adolescent mental health is an extraordinarily complex phenomenon that defies clear-cut, reductionist assessments. Contrary to common narratives suggesting a direct and exclusive influence of digital technologies on the global mental health crisis among youth, the accumulated empirical evidence indicates that screen time alone explains only a fraction of the variance in depressive or anxiety symptoms. Contemporary research is increasingly moving away from treating social media as a homogeneous risk factor, favoring a perspective that accounts for the multidimensional nature of this phenomenon. Rather than blaming technology alone, researchers highlight the importance of specific usage patterns, individual psychological vulnerabilities, and the broader sociocultural context. Large-scale analyses show that, although correlations between the use of digital platforms and reduced well-being are noticeable, they are often weak, and in many cases, a clear cause-and-effect relationship cannot be established. These findings call for caution in making categorical judgments and suggest viewing social media as an environment in which young people operate rather than as the sole cause of pathological outcomes. [1, 5, 26]

A significant step in the evolution of our understanding of this issue is the shift away from simple linear models toward concepts such as the “golden mean” hypothesis. According to this hypothesis, as well as the results of rigorous, large-scale longitudinal studies, the relationship between engagement in the digital world and well-being follows a U-shaped curve. Moderate use of social media is associated with an optimal level of psychosocial functioning, facilitating the formation of peer relationships, access to information, and the exploration of one’s own identity. In contrast, both complete digital abstinence and extreme overuse of technology are associated with a higher risk of reduced life satisfaction and poorer well-being. Completely cutting teenagers off from social media platforms, in an era of their ubiquity, can lead to marginalization and exclusion from their peer group, which is an extremely powerful stressor during adolescence. On the other hand, excessive use—going beyond recreational norms and consuming most of one’s free time—is associated with increasing distress, feelings of loneliness, and difficulties with emotional regulation. This demonstrates that it is not the mere presence online, but rather extremes in its use, that pose a real threat to adolescents. [5, 25]

A discussion of the impact of digital media would not be complete without considering dynamic developmental trajectories and significant gender differences. Longitudinal studies identify specific windows of developmental vulnerability during which young people are particularly susceptible to the negative effects of online interactions. It has been shown that among girls, declines in life satisfaction associated with intensive social media use occur earlier, most often during early adolescence, which may be directly linked to their earlier biological maturation and stronger socialization toward building interpersonal relationships and focusing on the evaluation of physical appearance. In boys, however, a similar window of heightened vulnerability opens somewhat later, during mid-adolescence, and a significant decline in well-being among older boys is often associated with a sudden withdrawal and complete cessation of social media use, which may signal increasing social isolation. These subtle yet distinct differences in the pace of psychophysical development underscore the need to personalize research and prevention approaches, rejecting universal and standardized models of technology’s impact on the entire adolescent population. [3, 25]

A critical factor influencing the impact of digital platforms on mental health is the quality of interactions that take place on them, which is best illustrated by the fundamental distinction between active and passive use. Passive consumption—which involves silently and continuously scrolling through other users’ profiles without engaging in direct interaction with them—is consistently linked to increased anxiety, depressive symptoms, and general dissatisfaction with one’s own life. This phenomenon is exacerbated by the architecture of modern platforms, which promote an endless stream of carefully curated and idealized content, thereby facilitating harmful social comparisons. In contrast, active and purposeful use of social media—including direct messaging, participating in discussions, creating one’s own content, and maintaining relationships with friends—can serve as a buffer. It has been noted that intentional, interactive engagement online fosters the development of social capital, reduces feelings of loneliness, and promotes a better mood, as it satisfies the fundamental need for belonging during adolescence. This distinction clearly indicates that the medium itself is neutral, and its impact is determined by the specific manner of consumption. [5, 7, 22]

In the area of body image and eating disorders, the impact of visual social media platforms proves to be particularly destructive and well-documented. Applying the tripartite model of influence to the digital environment reveals that the internalization of body image ideals is the primary mechanism leading from media exposure to severe dissatisfaction with one’s appearance. Rigorous prospective studies confirm that every additional hour spent on social media increases young adolescents’ fear of weight gain, makes self-esteem drastically dependent on weight, and fuels pathological behaviors such as binge eating and the use of drastic

compensatory methods. The prevalence of diet culture and trends promoting so-called “clean eating” also stimulates the development of orthorexia symptoms in individuals who are excessively engaged in searching for health-related content online. Moreover, this issue, historically attributed mainly to young women, affects boys to an equal extent; for them, pressure from social media manifests as a pursuit of an unrealistic ideal of muscularity, pushing them toward dangerous behaviors related to building muscle mass. [10, 11, 18]

From a physiological and behavioral perspective, the impact of social media on sleep disorders and the phenomenon of cyberbullying remains a major challenge. Sleep deprivation, driven by a constant fear of missing out on important information, the evening anticipation of notifications, and the suppression of melatonin caused by exposure to blue light, is one of the strongest predictors of morning fatigue and a secondary exacerbation of depressive and anxiety symptoms. At the same time, the nature of the online environment creates a space for victimization; experiencing cyberbullying shows an extremely strong association with the internalization of psychological problems, helplessness, and, in extreme cases, self-harm and suicidal behaviors. Furthermore, unlimited access to a wide variety of content carries the risk of “digital contagion.” Constant exposure to material depicting self-destructive behaviors or specific psychopathological symptoms—such as eating disorders or phenomena resembling nervous tics—can trigger imitative mechanisms and lead to a widespread occurrence of similar symptoms among susceptible users, which poses a unique threat of the digital age. [1, 9, 12]

It is important to understand that social media rarely creates problems out of thin air; far more often, it acts as an amplifier of existing difficulties and inequalities in the real world. This phenomenon is well described by the “rich get richer” hypothesis in the context of psychosocial resources, which suggests that young people with strong offline support transfer these positive patterns to the online world, reaping additional benefits, while individuals struggling with problems in the real world are more vulnerable to negative online experiences. In particular, adolescents with attention deficits, attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorders, or a predisposition to depression show a greater tendency to resort to problematic use of digital platforms. This escape, although intended as a coping mechanism for stress, actually intensifies feelings of isolation and exacerbates the original symptoms of these conditions. Cyberspace is therefore not a universally toxic environment, but rather a mirror that reflects, amplifies, and exposes pre-existing vulnerabilities, making marginalized youth or those experiencing a crisis the most vulnerable to the destructive influence of algorithms. [24, 26]

Given the environmental context, it is impossible to ignore the importance of commercial determinants of health, including highly targeted digital marketing. The social media space is a deeply commercialized environment, saturated with hidden messages that promote the consumption of highly processed foods, energy drinks, and alcoholic beverages. Mechanisms of social influence, including the activities of popular online creators and influencers, normalize risky behaviors in the minds of adolescent audiences, blurring the line between genuine recommendations and paid advertising. The scale of the problem grows when one considers that teenagers often attribute a high level of credibility to health information found on social media, verifying it not on the basis of scientific evidence but by relying on superficial indicators of popularity, such as the number of followers, comments, and virtual “likes.” This susceptibility to marketing and peer influence makes young people particularly vulnerable to health misinformation, emotional manipulation, and the initiation of risky behaviors. [6, 21, 28]

In synthesizing the accumulated evidence, it is important to highlight the significant methodological limitations characterizing most of the existing publications in this area. The vast majority of the available literature is based on cross-sectional studies, which, while valuable for identifying correlations, do not allow for valid causal conclusions. Additionally, the widespread reliance on retrospective, subjective self-reports from adolescents regarding screen time is associated with high measurement error and low reliability compared to objective data. The lack of standardization in research tools, the ambiguity of definitions of problematic use, and insufficient consideration and control of confounding variables weaken the strength of the conclusions drawn. For science to effectively keep pace with the dynamic development of technology, future research directions must be based on long-term longitudinal studies that utilize objective digital traces and in-situ measurement methods in natural settings, which will allow for more precise mapping of the complex relationships between online behavior and fluctuations in well-being. [4, 26]

Given these growing challenges, it is an absolute priority to implement comprehensive preventive and clinical strategies that move away from the ineffective stigmatization of technology toward a balanced approach that supports digital resilience. In pediatric and psychological practice, the routine use of validated screening tools is crucial; these will help clinicians assess the quality of digital interactions and any impairment

in a teenager's daily functioning, rather than focusing solely on reducing screen time. Equally important is close collaboration with the family system through the joint creation of personalized media use plans and the promotion of open, non-judgmental communication about digital experiences. At the macrosocial and public health levels, robust legislative measures aimed at user protection and stringent corporate regulations are essential. Responsibility for the well-being of young people cannot rest solely on their shoulders and those of their parents; it is essential to hold technology companies accountable by compelling them to ensure transparency in their algorithms and to modify the architecture of their platforms, which is currently deliberately designed to maximize screen time at the expense of public health. [14, 16, 24]

Conclusions:

The impact of social media on adolescents' mental health and health behaviors is a complex, multidimensional phenomenon that depends on a number of moderating factors, making it impossible to unequivocally classify these technologies as either exclusively harmful or beneficial. As demonstrated in a literature review, total screen time has a relatively small, though statistically significant, association with reduced well-being; however, the manner in which digital platforms are used and users' individual predispositions are of key importance. Problematic social media use, as well as specific forms of activity—such as passive content browsing, making social comparisons based on appearance, and engaging with idealized body images—are strongly and consistently associated with a higher risk of depressive and anxiety symptoms, sleep disorders, and eating disorders. This includes, among others, orthorexia, binge eating, and the use of dangerous weight-control methods. These phenomena are further exacerbated by exposure to cyberbullying and unregulated marketing, which specifically exploits the psychological vulnerability of adolescents [4, 7, 11, 14, 16, 17, 21, 26, 28].

On the other hand, the deliberate and active use of social media can serve adaptive and protective functions, particularly in terms of building social capital, seeking emotional support, and shaping identity. Digital platforms offer adolescents spaces for building relationships and receiving health education, which—when used in moderation—correlates with optimal levels of life satisfaction. This points to a nonlinear relationship, in which both complete isolation from technology and its extreme overuse yield the least favorable outcomes for mental health. These findings call into question the effectiveness of interventions based solely on categorically banning screen time, suggesting instead the need for a more nuanced approach [15, 25, 27].

In light of these findings, effective preventive and therapeutic strategies should be based on a multi-level model of intervention. At the individual and family levels, it is crucial to develop digital literacy, foster open communication, and collaboratively establish healthy habits, such as limiting device use before bedtime. At the clinical level, healthcare professionals should routinely assess not only the amount of time spent on social media but, above all, the quality and function that social media serves in a patient's life, while taking into account the patient's pre-existing mental and physical health conditions. Ultimately, to fully protect the public health of adolescents, comprehensive legal regulations are necessary to compel technology companies to ensure algorithm transparency, limit harmful content, and design platforms in a way that is adapted to the stages of adolescents' neurological development [6, 11, 12, 19, 26].

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All authors have read and agreed to the published version of the manuscript.

Statement on the Use of AI-Assisted Technologies

The authors employed ChatGPT during the drafting of this work solely to refine linguistic expression and improve clarity. All AI-generated suggestions were carefully reviewed and edited by the authors, who take complete accountability for the final content and scientific integrity of the article.

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