



The influence of social media and digital technologies on adolescent mental health – A literature review

Wpływ mediów społecznościowych i technologii cyfrowych na zdrowie psychiczne młodzieży – przegląd piśmiennictwa

Anna Zalewska¹ , Katarzyna Gądek¹ , Adam Lichodij¹ , Weronika Hariasz² , Mikołaj Michałek³ ,
Marta Drobik¹ , Mikołaj Kozieł¹

¹Wydział Lekarski, Uniwersytet Medyczny im. Piastów Śląskich we Wrocławiu / Faculty of Medicine, Medical University of Wrocław, Poland

²Wydział Lekarski, Uniwersytet Opolski / Faculty of Medicine, University of Opole, Poland

³Oddział Ortopedii, Traumatologii i Onkologii Narządu Ruchu, Wojewódzki Szpital Specjalistyczny we Wrocławiu / Department of Orthopaedics, Traumatology, and Oncology of the Musculoskeletal System, Regional Specialist Hospital in Wrocław, Poland

ABSTRACT

Social media has become an integral part of adolescents' daily lives, offering new ways to connect, express oneself, and access support. However, growing concerns highlight its potential risks to mental health. This paper explores the relationship between social media use and psychological well-being in young people, considering both the benefits and the drawbacks. This review draws on recent literature to examine the psychological impact of digital engagement among adolescents and young adults. It investigates areas such as social media addiction, emotional health, body image, and the influence of online communities. Excessive social media use is associated with increased rates of anxiety, depression, low self-esteem, and sleep problems and is often linked to social comparison and fear of missing out. At the same time, social media can serve as a valuable tool for emotional connection, peer support, and identity formation – particularly for marginalized or vulnerable groups. The addictive nature of these platforms, however, remains a significant concern. The influence of social media on adolescent mental health is complex and multifaceted. While the risks are well-documented, the potential for positive impact should not be overlooked. Encouraging mindful and balanced use, addressing problematic behaviors, and supporting digital literacy may help young people navigate online spaces in healthier, more resilient ways.

KEYWORDS

mental health, adolescents, social media, digital technologies, internet addiction

Received: 18.05.2025

Revised: 02.06.2025

Accepted: 30.06.2025

Published online: 18.09.2025

Address for correspondence: Weronika Hariasz, Wydział Lekarski, Uniwersytet Opolski, ul. Oleska 48, 45-052 Opole, tel. +48 53 393 63 69, e-mail: 131880@student.uni.opole.pl



This is an open access article made available under the terms of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) license, which defines the rules for its use. It is allowed to copy, alter, distribute and present the work for any purpose, even commercially, provided that appropriate credit is given to the author and that the user indicates whether the publication has been modified, and when processing or creating based on the work, you must share your work under the same license as the original. The full terms of this license are available at <https://creativecommons.org/licenses/by-sa/4.0/legalcode>.

Publisher: Medical University of Silesia, Katowice, Poland



STRESZCZENIE

Media społecznościowe stały się integralną częścią życia młodzieży, oferując nowe możliwości nawiązywania relacji, wyrażania siebie i uzyskiwania wsparcia. Jednocześnie rosną obawy dotyczące ich potencjalnego negatywnego wpływu na zdrowie psychiczne. Celem artykułu była analiza powiązań między korzystaniem z mediów społecznościowych a dobrostanem psychicznym młodych osób, uwzględniając zarówno korzyści, jak i zagrożenia. Artykuł opiera się na aktualnej literaturze, analizując wpływ cyfrowego zaangażowania na zdrowie psychiczne nastolatków i młodych dorosłych. Skupiono się na takich kwestiach, jak uzależnienie od mediów społecznościowych, emocjonalność, wizerunek ciała oraz rola społeczności internetowych. Nadmierne korzystanie z mediów społecznościowych wiąże się ze zwiększonym ryzykiem wystąpienia lęku, depresji, niskiej samooceny i problemów ze snem, często wynikającymi z porównywania się z innymi i lęku przed wykluczeniem. Z drugiej strony media społecznościowe mogą pełnić pozytywną rolę – umożliwiają nawiązywanie relacji, wsparcie rówieśnicze i kształtowanie tożsamości, szczególnie w przypadku grup marginalizowanych. Problem uzależnienia od tych platform pozostaje jednak dużym wyzwaniem. Wpływ mediów społecznościowych na zdrowie psychiczne młodzieży jest złożony i wielowymiarowy. Choć zagrożenia są dobrze udokumentowane, nie należy pomijać potencjału mediów. Promowanie świadomego i zrównoważonego korzystania z internetu, reagowanie na problematyczne zachowania i wspieranie kompetencji cyfrowych może pomóc młodym ludziom poruszać się w przestrzeni internetowej w zdrowszy i bardziej świadomy sposób.

SŁOWA KLUCZOWE

zdrowie psychiczne, młodzież, media społecznościowe, technologie cyfrowe, uzależnienie od internetu

Introduction

In recent years, mental health has taken a central place in public discourse, with increasing recognition of its critical role in overall well-being. The emergence of digital technologies and social media has had a huge impact on how people connect, form relationships, and engage with the world [1]. Communication applications have become an inseparable part of life, especially for adolescents and young adults [2]. While social media can offer meaningful connections and mental health support, growing evidence suggests that they also pose serious risks to adolescents' well-being [1]. With adolescents spending increasingly more time online, often several hours daily, concerns about the psychological consequences of such habits are rising [3].

Research regarding screen time and mental health has been inconsistent. Some studies show a substantial association between time spent online and poor well-being, while others find it to be irrelevant or beneficial [4]. On the one hand, social media platforms can cultivate social connection and provide emotional support and access to mental health resources [5]. Adolescents value the relationships built online and the comfort provided by their online peers [6]. On the other hand, evidence suggests associations between social media use and increased risks of depression, anxiety, and loneliness [7]. Adolescents frequently exposed to idealized images and unrealistic lifestyles reported lower self-esteem, increased body dissatisfaction, and a higher incidence of eating disorders [8].

Studies showed that by 2024, over 95% of teenagers in developed countries owned a smartphone and nearly 90% used social media daily, often as their primary means of communication and emotional regulation [9]. Research has also shown that frequent engagement with online platforms is associated with poor sleep

quality, difficulty falling asleep, and sleep disturbances [10]. Social media's addictive nature, fueled by constant notifications, can interfere with everyday responsibilities, aggravating existing mental health issues. The growing lack of control over social media use is beginning to impact the everyday functioning of young people and is cause for concern [11].

In light of the growing awareness about the negative psychological effects of excessive digital media use, the concept of a *digital detox* – voluntarily refraining from using smartphones and social media for a set period – has gained increasing attention in both clinical and public health settings. Recent studies suggest that even short-term disconnection from social media platforms can lead to significant improvements in mood, attention, sleep quality, and overall well-being, particularly among adolescents and young adults [12].

By exploring both beneficial and adverse outcomes, as well as the concept of social media addiction, this article aims to provide a nuanced understanding of how digital engagement affects the psychological well-being of adolescents and young adults in contemporary society.

The negative impact of social media on adolescents' mental health

The negative impact of social media, which significantly affects the mental health of young people, is an increasing problem in the modern world [13]. Adolescents are almost constantly using or thinking about social media platforms, highlighting their deep integration into the daily lives of this age group [14]. A 2024 study revealed a concerning correlation: teenagers aged 12–15 who spent more than 3 hours a day in the virtual world of social media experienced twice the risk of negative mental health outcomes,



including an increase in symptoms of depression and anxiety [15]. The world of social media skillfully creates and showcases positive aspects of life, joyful moments, and the flawless appearance of influencers who become role models and objects of fascination for adolescents.

Young people, who are often not fully aware of the curated nature of this virtual reality, constantly compare their daily lives with these unrealistic standards. One of the key mechanisms resulting from this negative impact is the continuous self-comparison with idealized images of others [16]. Many young individuals begin to feel dissatisfied with their bodies and experience pressure to always be happy and slim [17]. Social media platforms generate a sense of inadequacy, lower self-esteem, and lead to constant comparisons with peers, often based on a superficial online image [18]. A study conducted on 7th- and 8th-grade students showed that as many as 51.7% of girls and 45% of boys reported experiencing an eating disorder, characterized by strict physical exercise and skipping meals [8]. Moreover, a significant majority of the respondents with eating disorders had active social media accounts – 75.4% of girls and 69.9% of boys had at least one such account, further emphasizing the potential role of these platforms in shaping negative patterns and attitudes [8]. A 2022 WHO study showed that many adolescents have difficulty controlling their social media use, resulting in negative consequences [19]. Individuals living with highly stigmatized mental illnesses, such as schizophrenia, schizoaffective disorder, or bipolar disorder, are unfortunately susceptible to online hate due to their condition [20]. The anonymity and widespread reach of the internet can embolden individuals to express discriminatory views and engage in harmful behavior, from making derogatory comments to outright harassment [21]. This online vitriol exacerbates the existing societal stigma, potentially leading to more social isolation, psychological distress, and a reluctance to seek or adhere to treatment among those affected. All of the above demonstrates that social media has a negative impact on young people, leading to lower self-esteem, poorer well-being, and increasing envy, which negatively affects young people's mental health [22]. Social media use is also associated with severe psychological distress [23].

Social media as a tool for connection and support

The negative impact of social media on mental health needs to be acknowledged. However, there could be benefits to using social media that could contribute to the well-being of some individuals.

As human beings, we need to connect with people and have meaningful relationships with them [24]. One of the opportunities that social media provides is the ability to meet new people. This is especially important

for teenagers during puberty, because socialization is a part of the process of becoming an adult [25]. Making friends online is less stressful for adolescents than meeting in person [26].

Additionally, social media creates a space where people with stigmatized diseases such as schizophrenia, schizoaffective disorder, or bipolar disorder can support each other. They can share personal experiences and problems, as well as seek advice and help in overcoming the challenges associated with living with a particular disease [27]. Access to social media enables individuals with stigmatized disorders to reach out for comfort when they are struggling, while allowing them to maintain anonymity [27].

For people with serious mental illnesses, it is important to feel like they belong to a group. This can have a positive impact on their well-being and even on their recovery [27]. Social media allows users to form support groups, helping them feel less isolated in their condition and providing access to educational resources about it. This is crucial in combating the stigma surrounding certain diseases such as ADHD, which is imposed by people who lack experience with these illnesses [25].

LGBTQ+ adolescents often turn to social media to seek emotional support – and to help others in need. Being able to express and build their identity online is also beneficial to this group [28].

Social media provides a place for conversations about mental health. If used mindfully, it can be beneficial for promoting positive well-being [6]. Some adolescents suggested that social media could be used to spread awareness about issues that could impact one's mental health [29]. Online forums are a safe space for users to overcome concerns regarding seeking professional help when suffering from physical or mental health problems [6]. In a culture focused on celebrities' online lives, when a public figure shares their experiences with mental health challenges, it can promote learning about mental illnesses [29]. The accessibility of social media can help provide therapy for adolescents with mental health disorders, even those living in isolated locations [30]. Increased anonymity online contributes to the help-seeking process because it promotes self-disclosure [31].

Research among adolescents hospitalized for suicidal behavior showed that the participants valued humorous content available on social media. The entertainment that social media provides improved their mood [5].

Other research shows that young people use social media as a distraction from difficult situations [32].

Online groups can also connect people with similar interests, including art, politics, science, nature, and others [5].

When used mindfully, social media can serve as a tool for maintaining connections and accessing mental health support. It also provides opportunities for self-expression and personal growth.



Social media addiction and its impact on adolescents

In the modern digital era, social media has become an integral part of everyday life. As of 2024, more than five billion individuals around the world were active on social media; this figure is expected to surpass six billion by 2028 [33]. Facebook, Instagram, and YouTube are currently the three most widely used social media platforms globally, attracting billions of active users each month [34]. Although social media offers various benefits to many users, its excessive use can, in some cases, lead to behavioral addiction, which further adversely affects mental health.

The scale of this phenomenon is significant. Globally, an estimated 210 million people may be affected by internet or social media addiction [35]. Young people are particularly vulnerable, as shown in a study in which over 50% of teenagers in the United States believe it would be difficult for them to give up social media entirely [3]. Surprisingly, the overall prevalence of problematic social media use did not increase since the onset of the COVID-19 pandemic, except in low-income countries, where it is significantly higher [36]. Social media addiction can be defined as a pattern of excessive, uncontrollable use of social media platforms that interferes with everyday responsibilities, strains personal relationships, and can have harmful effects on both psychological and physical health [37]. It has been characterized by the six core symptoms commonly associated with addiction: salience, tolerance, mood modification, relapse, withdrawal, and conflict [38].

A growing body of research has highlighted the psychological consequences of social media overuse, especially among adolescents. A study conducted in Thailand examined 972 high school students and found that 41.9% met the criteria for addiction to Facebook, while 21.9% reported general mental health problems. The students identified as having an addiction were significantly more likely to experience symptoms such as depression, anxiety, and social dysfunction. Notably, they were 1.7 times more likely to report mental health concerns than their non-addicted peers. The study also revealed that greater levels of addiction were associated with increased psychological distress [39]. Moreover, it has been found that Facebook addiction significantly predicts higher narcissistic behavior and lower levels of self-esteem [40].

Another concerning finding comes from a large-scale study conducted across six European countries that investigated the psychosocial effects of social networking site use among 10,930 adolescents aged 14–17. The results revealed that 70% of the participants used social media on a daily basis and nearly 40% engaged with it for two or more hours per day. Heavier social media use was associated with higher levels of internalizing problems such as anxiety, depression, and somatic complaints. Furthermore, it correlated with

lower academic performance and reduced participation in offline activities, particularly among younger adolescents. However, older adolescents who used social media more intensively showed slightly higher levels of offline social competence, suggesting that age may moderate both the risks and benefits of social media use [41].

Addressing social media addiction requires a multifaceted approach, combining therapeutic methods with preventive strategies. A study from Helwan University demonstrated that cognitive-behavioral therapy significantly reduced addictive behavior among students by targeting cognitive distortions and improving coping skills [42]. In addition, digital tools like self-monitoring apps and software for setting time limits can help users manage their screen time and develop healthier habits. These tools offer accessible support and complement traditional therapy [43].

Conclusions

The analysis of the current literature indicates that social media exerts both negative and positive effects on the mental health of young people. Excessive use of social networking platforms is associated with an increased risk of depression, anxiety, low self-esteem, body dissatisfaction, and eating disorders. Continuous exposure to idealized images leads adolescents to negative self-comparisons and feelings of inadequacy. Additionally, behavioral addiction to social media exacerbates emotional dysfunction, academic decline, and social withdrawal. Nevertheless, the studies reviewed herein highlight that social media can serve as a valuable source of social support, identity formation, and mental health education, particularly among marginalized populations. Online communities offer opportunities for positive interactions, peer support, and psychoeducation. Addressing the impact of social media on young people requires a balanced approach that combines preventive education, the promotion of healthy digital habits, and therapeutic interventions such as cognitive-behavioral therapy.

While the research consistently demonstrates strong associations between social media use and various mental health challenges in adolescents, a closer examination reveals notable methodological limitations. Many of the cited studies rely on cross-sectional designs and self-reported data. Although these approaches are useful for identifying patterns, they significantly limit the ability to draw causal inferences. It remains unclear whether social media use contributes to psychological distress, or whether adolescents already experiencing mental health difficulties are more likely to engage heavily with digital platforms. This potential bidirectional relationship is seldom examined directly and thus further investigation is warranted. Large-scale surveys and meta-analyses offer valuable statistical



insights and high external validity, yet they often overlook important contextual factors such as family dynamics, school environment, and cultural influences. In contrast, qualitative studies provide depth by capturing adolescents' lived experiences and motivations; however, their findings are often limited in generalizability due to small or demographically narrow samples.

Despite the expanding body of literature on the psychological impact of social media, several key gaps remain. Future research should focus on specific subpopulations, such as adolescents with pre-existing mental health conditions, neurodivergent individuals, or those from socioeconomically disadvantaged backgrounds – groups that may be particularly

vulnerable to negative digital influences. Longitudinal studies are especially needed to capture the developmental trajectory of social media's effects over time, particularly during early adolescence, a critical period for identity formation. Furthermore, future investigations should consider the role of mediating factors, including parental involvement, digital literacy initiatives in schools, cultural differences, and broader community-level interventions.

Empowering adolescents to use social media mindfully is crucial for supporting their mental well-being and fostering resilience in the digital environment, laying the foundation for healthier digital habits that can positively influence their psychological development well into adulthood.

Authors' contribution

Study design – A. Zalewska, W. Hariasz

Manuscript preparation – A. Zalewska, W. Hariasz, K. Gądek, A. Lichodij, M. Michalek, M. Drobik, M. Kozieł

Literature research – A. Zalewska, W. Hariasz, K. Gądek, A. Lichodij, M. Michalek, M. Drobik, M. Kozieł

Final approval of the version to be published – A. Zalewska, W. Hariasz, K. Gądek, A. Lichodij, M. Michalek, M. Drobik, M. Kozieł

REFERENCES

1. Khalaf A.M., Alubied A.A., Khalaf A.M., Rifaey A.A. The impact of social media on the mental health of adolescents and young adults: A systematic review. *Cureus* 2023; 15(8): e42990, doi: 10.7759/cureus.42990.
2. O'Reilly M., Dogra N., Whiteman N., Hughes J., Eruryar S., Reilly P. Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. *Clin. Child Psychol. Psychiatry* 2018; 23(4): 601–613, doi: 10.1177/1359104518775154.
3. Vogels E.A., Gelles-Watnick R., Massarat N. Teens, Social Media and Technology 2022: TikTok has established itself as one of the top on line platforms for U.S. teens, while the share of teens who use Facebook has fallen sharply. Pew Research Center, 2022. JSTOR [online] <https://www.jstor.org/stable/resrep63507> [accessed on 12 May 2025].
4. Twenge J.M., Campbell W.K. Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Prev. Med. Rep.* 2018; 12: 271–283, doi: 10.1016/j.pmedr.2018.10.003.
5. Weinstein E., Kleiman E.M., Franz P.J., Joyce V.W., Nash C.C., Buonopane R.J. et al. Positive and negative uses of social media among adolescents hospitalized for suicidal behavior. *J. Adolesc.* 2021; 87: 63–73, doi: 10.1016/j.adolescence.2020.12.003.
6. Popat A., Tarrant C. Exploring adolescents' perspectives on social media and mental health and well-being – A qualitative literature review. *Clin. Child Psychol. Psychiatry* 2023; 28(1): 323–337, doi: 10.1177/13591045221092884.
7. Samra A., Warburton W.A., Collins A.M. Social comparisons: A potential mechanism linking problematic social media use with depression. *J. Behav. Addict.* 2022; 11(2): 607–614, doi: 10.1556/2006.2022.00023.
8. Wilksch S.M., O'Shea A., Ho P., Byrne S., Wade T.D. The relationship between social media use and disordered eating in young adolescents. *Int. J. Eat. Disord.* 2020; 53(1): 96–106, doi: 10.1002/eat.23198.
9. Anderson M., Jiang J. Teens, Social Media and Technology 2018. Pew Research Center, 2018 [online] <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/> [accessed on 12 May 2025].
10. Scott H., Biello S.M., Woods H.C. Social media use and adolescent sleep patterns: cross-sectional findings from the UK millennium cohort study. *BMJ Open* 2019; 9(9): e031161, doi: 10.1136/bmjopen-2019-031161.
11. De D., El Jamal M., Aydemir E., Khera A. Social media algorithms and teen addiction: Neurophysiological impact and ethical considerations. *Cureus* 2025; 17(1): e77145, doi: 10.7759/cureus.77145.
12. Coyne P., Woodruff S.J. Taking a break: The effects of partaking in a two-week social media digital detox on problematic smartphone and social media use, and other health-related outcomes among young adults. *Behav. Sci.* 2023; 13(12): 1004, doi: 10.3390/bs13121004.
13. Primack B.A., Shensa A., Sidani J.E., Whaitte E.O., Lin L.Y., Rosen D. et al. Social media use and perceived social isolation among young adults in the U.S. *Am. J. Prev. Med.* 2017; 53(1): 1–8, doi: 10.1016/j.amepre.2017.01.010.
14. Tomczyk Ł. Problematyczne użytkowanie internetu oraz portali społecznościowych wśród polskiej młodzieży. *e-mentor* 2019; 2: 44–54.
15. Katella K. How Social Media Affects Your Teen's Mental Health: A Parent's Guide. *Yale Medicine*, June 17, 2024 [online] <https://www.yalemedicine.org/news/social-media-teen-mental-health-a-parents-guide> [accessed on 12 May 2025].
16. Festinger L. A theory of social comparison processes. *Human Relations* 1954; 7(2): 117–140, doi: 10.1177/001872675400700202.
17. van den Berg P., Paxton S.J., Keery H., Wall M., Guo J., Neumark-Sztainer D. Body dissatisfaction and body comparison with media images in males and females. *Body Image* 2007; 4(3): 257–268, doi: 10.1016/j.bodyim.2007.04.003.
18. Rodgers R.F., McLean S.A., Paxton S.J. Longitudinal relationships among internalization of the media ideal, peer social comparison, and body dissatisfaction: implications for the tripartite influence model. *Dev. Psychol.* 2015; 51(5): 706–713, doi: 10.1037/dev0000013.
19. Teens, screens and mental health: New WHO report indicates need for healthier online habits among adolescents. WHO, 25 September 2024 [online] <https://www.who.int/europe/news/item/25-09-2024-teens--screens-and-mental-health> [accessed on 12 May 2025].
20. Ross A.M., Morgan A.J., Jorm A.F., Reavley N.J. A systematic review of the impact of media reports of severe mental illness on stigma and discrimination, and interventions that aim to mitigate any adverse impact. *Soc. Psychiatry Psychiatr. Epidemiol.* 2019; 54 (1): 11–31, doi: 10.1007/s00127-018-1608-9.
21. Tamarana R., Mathur M., Madhusudan V., Annapurna Kiranmai P. Cyber-victimization–influence of parental rules and impact on mental health among Indian adolescents. *Front. Psychol.* 2025; 16: 1470202, doi: 10.3389/fpsyg.2025.1470202.
22. Ziaits Z., Zamojska A. The impact of social media on health security on the example of Facebook, Instagram and YouTube. [Article in Polish]. *International Relations, Public Communications and Regional Studies* 2020; 1(7): 122–131, doi: 10.29038/2524-2679-2020-01-122-131.
23. Mougharbel F., Chaput J.P., Sampasa-Kanyinga H., Hamilton H.A., Colman I., Leatherdale S.T. et al. Heavy social media use and psychological distress among adolescents: the moderating role of sex, age, and parental support. *Front. Public Health* 2023; 11: 1190390, doi: 10.3389/fpubh.2023.1190390.



24. Baumeister R.F., Leary M.R. The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychol. Bull.* 1995; 117(3): 497–529.
25. Allen K.A., Ryan T., Gray D.L., McInerney D.M., Waters L. Social media use and social connectedness in adolescents: The positives and the potential pitfalls. *Australian Educational and Developmental Psychologist* 2014; 31(1): 18–31, doi: 10.1017/edp.2014.2.
26. Kennedy J., Lynch H. A shift from offline to online: Adolescence, the internet and social participation. *J. Occup. Sci.* 2016; 23(2): 156–167, doi: 10.1080/14427591.2015.1117523.
27. Naslund J.A., Aschbrenner K.A., Marsch L.A., Bartels S.J. The future of mental health care: peer-to-peer support and social media. *Epidemiol. Psychiatr. Sci.* 2016; 25(2): 113–122, doi: 10.1017/S2045796015001067.
28. Craig S.L., Eaton A.D., McInroy L.B., Leung V.W.Y., Krishnan S. Can social media participation enhance LGBTQ+ youth well-being? Development of the social media benefits scale. *Social Media + Society* 2021; 7(1): 2056305121988931, doi: 10.1177/2056305121988931.
29. Pop R., Kinney R., Grannemann B., Emslie G., Trivedi M.H. VitalSign: Screening, diagnosis, and treatment of depression for adolescents presenting to pediatric primary and specialty care settings. *J. Am. Acad. Child Adolesc. Psychiatry* 2019; 58(6): 632–635, doi: 10.1016/j.jaac.2019.01.019.
30. O'Reilly M., Dogra N., Hughes J., Reilly P., George R., Whiteman N. Potential of social media in promoting mental health in adolescents. *Health Promot. Int.* 2019; 34(5): 981–991, doi: 10.1093/heapro/day056.
31. Gupta C., Jogdand D.S., Kumar M. Reviewing the impact of social media on the mental health of adolescents and young adults. *Cureus* 2022; 14(10): e30143, doi: 10.7759/cureus.30143.
32. Best P., Manktelow R., Taylor B. Online communication, social media and adolescent wellbeing: A systematic narrative review. *Child. Youth Serv. Rev.* 2014; 41: 27–36, doi: 10.1016/j.childyouth.2014.03.001.
33. Number of social media users worldwide from 2019 to 2029 (in billions). Statista, 2025 [online] <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/> [accessed on 12 May 2025].
34. Most popular social networks worldwide as of February 2025, by number of monthly active users (in millions). Statista, 2025 [online] <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/> [accessed on 12 May 2025].
35. Longstreet P., Brooks S. Life satisfaction: A key to managing internet & social media addiction. *Technol. Society* 2017; 50: 73–77, doi: 10.1016/j.techsoc.2017.05.003.
36. Casale S., Akbari M., Seydavi M., Bocci Benucci S., Fioravanti G. Has the prevalence of problematic social media use increased over the past seven years and since the start of the COVID-19 pandemic? A meta-analysis of the studies published since the development of the Bergen social media addiction scale. *Addict. Behav.* 2023; 147: 107838, doi: 10.1016/j.addbeh.2023.107838.
37. Cheng C., Ebrahimi O.V., Luk J.W. Heterogeneity of prevalence of social media addiction across multiple classification schemes: latent profile analysis. *J. Med. Internet Res.* 2022; 24(1): e27000, doi: 10.2196/27000.
38. Griffiths M. A 'components' model of addiction within a biopsychosocial framework. *J. Substance Use* 2005; 10(4): 191–197, doi: 10.1080/14659890500114359.
39. Hanprathet N., Manwong M., Khumsri J., Yingyeun R., Phanasathit M. Facebook addiction and its relationship with mental health among Thai high school students. *J. Med. Assoc. Thai.* 2015; 98 Suppl 3: S81–S90.
40. Malik S., Khan M. Impact of facebook addiction on narcissistic behavior and self-esteem among students. *J. Pak. Med. Assoc.* 2015; 65(3): 260–263.
41. Tsitsika A.K., Tzavela E.C., Janikian M., Ólafsson K., Iordache A., Schoenmakers T.M. et al. Online social networking in adolescence: patterns of use in six European countries and links with psychosocial functioning. *J. Adolesc. Health* 2014; 55(1): 141–147, doi: 10.1016/j.jadohealth.2013.11.010.
42. Mousa S. The effectiveness of cognitive-behavioral therapy in alleviating social media addiction among university youth groups. *Egyptian Journal of Social Work* 2023; 15(1): 175–200, doi: 10.21608/ejsw.2023.164679.1163.
43. Cemiloglu D., Almourad M.B., McAlaney J., Ali R. Combatting digital addiction: Current approaches and future directions. *Technol. Society* 2022; 68: 101832, doi: 10.1016/j.techsoc.2021.101832.