

Social Media Use and Mental Health in Adolescents and Young Adults: A Critical Review of Recent Evidence

Yaseen Khamis Jumaa^{1*}

¹Hawija General Hospital, Kirkuk Health Directorate, Kirkuk, Iraq.

* Corresponding Author Email: mykj1993@gmail.com

ABSTRACT

Social media is embedded in the everyday lives of adolescents and young adults, prompting sustained research into its relationship with mental health. This critical narrative review examines evidence on depressive and anxiety symptoms, loneliness, cyberbullying, social comparison, and the potential benefits of online social support. It synthesizes the studies and reviews cited in the source manuscript, with particular attention to systematic reviews, meta-analyses, and umbrella reviews. No reproducible database search or formal risk-of-bias assessment was documented for this version; the findings should therefore be read as a selective narrative synthesis rather than an exhaustive systematic review. Across the cited evidence, general social media use is associated with small and variable mental-health differences, whereas problematic or compulsive use shows more consistent associations with depressive and anxiety symptoms and sleep difficulties. Online experiences may also provide belonging, peer support, and access to mental-health information. Effects vary with the pattern and purpose of use, individual vulnerability, and social context. Most findings are observational and do not establish that social media use causes mental-health conditions. Transparent review methods and stronger longitudinal and culturally diverse research are needed.

Keywords: Social Media Use; Problematic Social Media Use; Mental Health; Adolescents; Young Adults; Depression; Anxiety; Loneliness.

Article Information

Received: July 15, 2026; Revised: August 17, 2026; Online: September 2026y

INTRODUCTION

Social media platforms have become a central setting for communication, self-expression, and peer interaction, particularly among adolescents and young adults. They can help users maintain relationships, find communities with shared interests, and access information. At the same time, continuous availability, social feedback, exposure to idealized content, and online harassment may create experiences associated with psychological distress. These competing possibilities have made the relationship between social media and mental health an important public-health and research question.

The evidence does not support a simple conclusion that social media is uniformly harmful or beneficial. Recent syntheses distinguish between general use and problematic social media use (PSMU). General social media use (SMU) refers here to engagement with social networking platforms

without assuming harm. PSMU refers to a pattern of use associated with impaired control or meaningful interference with everyday functioning. The term “social media addiction” is not used as a synonym for PSMU unless a study explicitly applies and validates an addiction-related measure. Problematic internet use (PIU) is broader still; findings about PIU are treated as adjacent evidence rather than direct evidence about PSMU.

This review considers associations between social media use and symptoms of depression and anxiety, loneliness, cyberbullying, and social comparison, while also considering social support and other potential benefits. Its central argument is that the quality, context, and functional consequences of use are more informative than time spent alone, although available evidence remains heterogeneous and largely observational (Ahmed et al., 2024; Valkenburg et al., 2022).

REVIEW APPROACH

This manuscript is a critical narrative review of literature cited in the source manuscript, with emphasis on systematic reviews, meta-analyses, umbrella reviews, and selected observational studies relevant to adolescents and young adults. The source materials did not document a reproducible search of named bibliographic databases, a complete search strategy, predefined screening criteria, or a formal appraisal of study quality. No such procedures are claimed here. The references were checked selectively to address attribution and scope issues identified during editorial review. Consequently, the article does not claim comprehensive coverage, and selection bias is possible. A journal requiring a systematic review would require a separately conducted and fully documented systematic search and screening process.

EVIDENCE ON SOCIAL MEDIA USE AND MENTAL HEALTH

Recent syntheses point to a distinction between the amount of general use and problematic patterns of engagement. Ahmed et al. (2024) reported small associations between general social media use and mental-health outcomes, while associations involving problematic use were more consistent across depression, anxiety, sleep, and well-being outcomes. The strength and direction of associations varied across studies. These findings support cautious interpretation: an average association does not imply that every user is affected in the same way, nor does it establish a causal effect.

A meta-analysis focused on adolescents and young adults found moderate positive correlations between PSMU and depressive symptoms ($r = .273$), anxiety symptoms ($r = .348$), and stress ($r = .313$) across 18 studies involving 9,269 participants (Shannon et al., 2022). These pooled correlations indicate association, not diagnosis or causation. Differences in measures, samples, and study designs also limit direct comparison across outcomes and populations.

ANXIETY AND SOCIAL MEDIA USE

The association between social media use and anxiety depends in part on how use is

defined. In the meta-analysis by Shannon et al. (2022), PSMU was associated with anxiety symptoms among adolescents and young adults. Potentially relevant experiences include persistent monitoring of notifications, concern about social feedback, and fear of missing out (FoMO), although the available evidence does not establish that any one mechanism explains the association (Tandon et al., 2021).

A separate meta-analysis of 37 studies involving more than 36,000 adolescents and young adults reported a positive association between PIU and social anxiety (Ding et al., 2023). Because PIU encompasses online activities beyond social networking, this finding provides context but should not be interpreted as a direct estimate of the relationship between PSMU and social anxiety. Distinguishing these constructs is essential when comparing results across studies.

DEPRESSIVE SYMPTOMS

Depressive symptoms are among the most frequently examined outcomes in this literature. A systematic review of PSMU reported associations with depression and anxiety, while noting variation in definitions and study methods (Lopes et al., 2022). The broader meta-analytic evidence suggests that associations are generally more consistent when studies measure problematic use than when they measure frequency or duration alone (Ahmed et al., 2024; Shannon et al., 2022).

Some studies also identify cyberbullying, social comparison, and sleep disruption as relevant correlates or possible pathways. These factors may overlap with social media use and with pre-existing mental-health difficulties. Cross-sectional findings cannot determine whether problematic use precedes symptoms, symptoms contribute to problematic use, or both are influenced by other factors. Accordingly, phrases such as “causes depression” or “increases the risk of developing depression” should be avoided unless supported by an appropriate longitudinal or experimental design.

LONELINESS AND ONLINE RELATIONSHIPS

Social media can support connection, but digital contact is not equivalent to meaningful social connection in every context. The U.S.

Surgeon General's 2023 advisory discusses the health consequences of social disconnection and loneliness and presents the widely cited comparison with the risks associated with smoking; that comparison concerns social connection and health, not a direct estimate of harm caused by social media use (Office of the Surgeon General, 2023).

A 2025 UK cohort study found that total time spent online was associated with loneliness, whereas time spent specifically on social media was not; problematic use and online victimization were more informative correlates (Matthews et al., 2025). A systematic review likewise describes mixed associations among social media use, social anxiety, and loneliness (O'Day & Heimberg, 2021). Loneliness also reflects broader social and economic conditions, so it should not be attributed to digital use alone (Qualter et al., 2021).

CYBERBULLYING AND SOCIAL COMPARISON

Cyberbullying is one plausible pathway linking online experiences with emotional distress. A systematic review reported associations between cyberbullying involvement and a range of mental-health and social difficulties among adolescents (Bottino et al., 2015). Because this review is older, its findings should be interpreted as foundational rather than as a complete account of current prevalence or platform-specific experiences. Victimization, perpetration, and overlapping roles should be distinguished, and observed associations should not be described as proof of causation.

Repeated exposure to idealized images and socially rewarded content may also invite upward comparison and dissatisfaction with appearance or self-worth. However, the present review does not treat popular commentary as equivalent to peer-reviewed empirical evidence. The strength of any relationship is likely to depend on content, individual characteristics, and the user's wider social environment. More recent, well-designed research is needed to clarify these pathways and identify which groups are most affected.

POTENTIAL BENEFITS AND ONLINE SOCIAL SUPPORT

Social media can provide access to peer support, identity-affirming communities, health information, and opportunities for self-expression. Online groups may be particularly useful for people who have difficulty accessing in-person support or who face stigma. Reviews of digital mental-health research describe these opportunities alongside risks, while emphasizing the need for careful evaluation of safety, information quality, and clinical relevance (Naslund et al., 2020).

A study of university students during the COVID-19 pandemic distinguished intensive use from problematic use. Perceived social support through social media was associated with life satisfaction, whereas problematic patterns were linked to less favorable outcomes (Boniel-Nissim & Alt, 2022). These findings illustrate why intensity and impairment should not be treated as interchangeable. They do not, however, establish that active use is universally protective or that passive use is uniformly harmful.

WHO MAY BE MORE VULNERABLE

Adolescents and young adults are a major focus of this literature because social relationships, identity, and emotional regulation are developing during these life stages. An umbrella review found that evidence on adolescent social media use and mental health is mixed and that associations vary across individuals and contexts (Valkenburg et al., 2022). Age alone does not determine vulnerability. Gender, prior mental-health difficulties, family and peer relationships, socioeconomic conditions, platform features, and the nature of online interactions may all shape users' experiences. The evidence therefore favors proportionate, context-sensitive support over assumptions that all young people respond in the same way. Clinicians and educators may consider asking about digital experiences when there are relevant signs of distress or functional impairment, while avoiding the assumption that time online by itself signals a mental-health problem.

SUMMARY OF SELECTED EVIDENCE**Table 1. Selected reviews and studies discussed in this narrative synthesis. Findings are associations unless the cited design supports stronger causal inference.**

Source and design	Main finding relevant to this review	Interpretive limitation
Ahmed et al. (2024) Systematic review and meta-analyses	General SMU showed small associations with mental-health outcomes; associations for problematic use were more consistent across mental health and sleep outcomes.	Substantial variation across measures and study designs; pooled associations do not establish causality.
Shannon et al. (2022) Systematic review and meta-analysis	Across 18 studies and 9,269 young participants, PSMU correlated with depressive symptoms ($r = .273$), anxiety ($r = .348$), and stress ($r = .313$).	Correlations describe association; included studies differ in measures and populations.
Ding et al. (2023) Systematic review and meta-analysis	PIU was positively associated with social anxiety across 37 studies and more than 36,000 adolescents and young adults.	PIU is broader than PSMU; this is adjacent evidence, not a direct estimate for social media.
Valkenburg et al. (2022), Umbrella review	Evidence on adolescent social media use and mental health was mixed, with meaningful differences among individuals and contexts.	Underlying reviews inherit limitations and inconsistencies in primary studies.
Matthews et al. (2025), Young-adult cohort study	In a UK cohort, total time online was associated with loneliness, whereas time specifically on social media was not; problematic use and online victimization were more informative correlates.	Observational findings do not establish causal direction or generalize to all populations.

LIMITATIONS

This review has limitations at both the evidence and review levels. Much of the underlying literature is observational, relies on self-reported exposure and symptoms, and uses inconsistent definitions of general use, problematic use, and addiction-like behavior. Platform features and patterns of use also change rapidly, while studies differ in age groups, cultural settings, measures, and outcomes. These factors create heterogeneity and limit causal interpretation.

The review itself is narrative and selective. The source manuscript did not provide a database search strategy, reproducible screening procedures, or a formal assessment of risk of bias. The references were checked selectively rather than exhaustively, and publication bias cannot be ruled out. Evidence from Arab and Iraqi populations is not sufficiently represented in the cited material to support strong claims about local prevalence or distinctive effects. The conclusions should therefore be treated as a structured overview of selected evidence, not a complete or systematic assessment of the field.

IMPLICATIONS FOR PRACTICE AND RESEARCH

Schools and health services can strengthen digital-literacy education by helping young people recognize problematic patterns, online

harassment, sleep disruption, and harmful social comparison. In clinical settings, questions about digital experiences may be included in psychosocial assessment when symptoms or functional difficulties make them relevant. Such inquiry should be individualized and should not equate ordinary social media use with disorder.

Supportive online communities and reliable digital mental-health resources may complement existing services, particularly when they improve access and reduce isolation. Their effectiveness and safety should be evaluated rather than assumed. Future studies should use longitudinal and, where appropriate, experimental designs; distinguish duration from purpose and impairment; report validated measures and uncertainty estimates; and include culturally diverse samples. Research in Iraq and the wider Arab region would help determine how social norms, family settings, language, and local platform practices shape these associations.

CONCLUSION

The evidence reviewed here suggests that social media use and mental health are related in complex, context-dependent ways. General use is associated with small and variable differences in mental-health outcomes, while problematic use shows more consistent associations with depressive and anxiety symptoms, stress, and

sleep difficulties. Online interactions can also provide support, belonging, and access to information. Because much of the evidence is observational, these relationships should not be described as established causal effects. Research and practice should focus on the quality and consequences of digital experiences, individual needs, and social context, supported by transparent review methods and stronger locally relevant evidence.

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