



“From Screen Dependence to Self-Confidence: Reclaiming Psychological Well-Being Among Adolescents in the Digital Age: A Narrative Review”

Megha Manjula Gaikwad 

Nursing Officer, Neurosurgery, NSCB Super Speciality Hospital, Jabalpur
PhD Scholar, Peoples University, Bhopal, MP

Corresponding author E-mail: gaikwad.megha74@gmail.com

Date of Publication: 17/08/2026

DOI [10.5281/zenodo.21981414](https://doi.org/10.5281/zenodo.21981414)

Abstract: Background: Smartphones are embedded in adolescent education, communication, entertainment and social life. Their effects are not uniformly harmful; however, problematic smartphone use (PSU) is associated in the literature with poorer sleep, anxiety, depressive symptoms, stress and other difficulties. Self-esteem and related self-processes appear relevant to this relationship, suggesting that adolescent digital well-being should be approached as more than simple screen-time reduction.

Aim: To synthesize evidence on problematic smartphone use, self-esteem/self-confidence and adolescent psychological well-being, and to propose a strength-based psychiatric nursing framework that moves from restriction alone toward self-regulation, real-world mastery, supportive relationships and digital autonomy.

Methods: This manuscript uses a narrative review design. Literature was purposively identified from PubMed-indexed studies, systematic reviews and meta-analyses, together with World Health Organization guidance on youth mental health and digital environments. Priority was given to adolescent or youth populations, problematic smartphone/social-media use, self-esteem, loneliness, sleep, anxiety/depression, identity development and intervention research. Because this was not a preregistered systematic review, no PRISMA flow count or pooled effect estimate was generated.

Results: Existing evidence supports an association between PSU and poorer mental-health indicators, but causality is often uncertain and effects vary by individual vulnerability and type of digital engagement. A meta-analysis has reported a robust negative association between PSU and self-esteem. More recent research emphasizes loneliness, belonging, social comparison and identity processes. Intervention evidence is emerging, including adolescent trials targeting social support/loneliness and a 2026 nurse-led Health Belief Model educational intervention.

Conclusion: The clinically useful goal is not a phone-free adolescent, but an adolescent who can use technology intentionally without losing sleep, relationships, competence, identity development or emotional balance. Psychiatric nurses can contribute through screening, psychoeducation, motivational and strength-based work, family engagement, sleep protection, real-world mastery experiences and referral when impairment is significant.

Keywords: *adolescents; problematic smartphone use; self-confidence; self-esteem; digital well-being; psychiatric nursing; mental health promotion; resilience; social media*

1. Introduction

Adolescence is a formative developmental period in which identity, autonomy, peer relationships, coping patterns and beliefs about personal competence undergo rapid change. The World Health Organization (WHO) estimates that one in seven people aged 10–19 years experiences a mental disorder and emphasizes the importance of socio-emotional learning, psychological well-being and access to appropriate mental-health care [1]. At the same time, smartphones and social platforms have become part of the developmental environment in which adolescents learn, communicate and construct a sense of self.

Digital technology should not be framed as inherently harmful. WHO notes that digital environments provide opportunities for information, connection and participation while also creating risks, particularly for young people [2,3]. The relationship is complex and may be bidirectional: psychological distress can contribute to heavier or more problematic digital use, while particular patterns of digital use can also intensify difficulties [3]. Therefore, a clinically responsible discussion must distinguish ordinary or beneficial smartphone use from problematic use characterized by impaired control, functional interference or persistent negative consequences.



A useful shift for psychiatric nursing is to move from the language of confiscation and prohibition toward the language of digital autonomy. The central question becomes: how can adolescents regain agency over attention, sleep, relationships and self-evaluation while retaining the benefits of technology? This review uses the phrase “from screen dependence to self-confidence” to describe that developmental and therapeutic movement. It does not imply that all smartphone use causes low confidence or that simply removing a device will improve mental health.

2. Aim and Review Questions

The aim of this narrative review is to examine the relationship between problematic smartphone use, self-esteem/self-confidence and psychological well-being among adolescents, and to identify implications for psychiatric and mental health nursing.

- How is problematic smartphone use associated with adolescent mental-health outcomes?
- What is known about the relationship between problematic smartphone use and self-esteem or related self-processes?
- Which psychological and social mechanisms may connect problematic digital use with reduced well-being?
- What intervention approaches appear promising for restoring healthier digital self-regulation?
- How can psychiatric nurses contribute to prevention, early identification and strength-based intervention?

3. Narrative Review Method

A narrative review approach was selected because the objective is integrative and clinically interpretive rather than the estimation of one narrowly defined pooled effect. Evidence was identified through targeted searches of PubMed-indexed literature and authoritative WHO material, with emphasis on systematic reviews, meta-analyses, longitudinal research and intervention studies. Search concepts included combinations of adolescent, smartphone, problematic smartphone use, mobile phone dependence, social media, self-esteem, self-confidence, loneliness, identity, anxiety, depression, sleep, intervention and nursing.

Priority was given to literature directly relevant to adolescents and young people. Seminal or highly relevant evidence was retained when it clarified the relationship between PSU and mental health. Recent intervention evidence through 2026 was included where available. This review is intentionally described as narrative: it was not preregistered, did not use duplicate independent screening, and did not perform formal risk-of-bias scoring across all included sources. Accordingly, it should not be represented as a systematic review.

4. Problematic Smartphone Use as a Mental-Health Concern

A systematic review and meta-analysis involving 41,871 children and young people reported a median PSU prevalence of 23.3% and associations with depression, anxiety, perceived stress and poor sleep quality [4]. A separate meta-analysis also found significant associations of PSU with poor sleep, depression and anxiety [5]. These findings establish an important association, but they do not justify a simple causal statement because much of the evidence is cross-sectional and heterogeneous.

A later meta-analysis of 27 studies and 120,895 participants found moderate, robust correlations between PSU and symptoms of anxiety and depression [6]. Academic functioning may also be relevant; a 2024 systematic review and meta-analysis examined the association between PSU and academic achievement [7]. Taken together, the evidence suggests that clinicians should ask not only how long an adolescent uses a phone, but whether use is interfering with sleep, school functioning, emotional regulation, family interaction and face-to-face relationships.

5. Self-Esteem, Self-Confidence and the Digital Self

Self-esteem and self-confidence are related but not identical. Self-esteem concerns global self-worth, whereas self-confidence more broadly reflects trust in one's abilities and capacity to manage situations. Self-efficacy is more task-specific. For international publication, these constructs should not be treated as interchangeable; outcome measures must match the construct being claimed.

A meta-analysis of 31 independent samples (27,004 participants; mean age approximately 17 years) found a negative association between global self-esteem and PSU, with the authors concluding that self-esteem is relevant to prevention and treatment [8]. This does not prove that smartphone use lowers self-esteem in every adolescent. Indeed, research on social media and self-esteem shows small average effects and substantial person-to-person variation [9].

This distinction is central to the proposed “reclaiming the self” model. The target is not an artificial increase in positive self-statements. Rather, confidence can be strengthened through experiences of competence, autonomous decision-making, realistic self-appraisal, supportive relationships and the ability to tolerate periods of boredom, uncertainty or social non-response without compulsively returning to a device.

6. Psychological Pathways

6.1 Social Comparison and Identity

Adolescence is a period of identity exploration. A 2025 systematic review of social media and adolescent identity development found



that what young people do online may matter more than simple duration of use. Authenticity was associated with greater self-concept clarity, whereas social comparison was associated with identity exploration and identity distress [10]. This supports interventions that teach adolescents to recognize comparison processes rather than relying only on time limits.

6.2 Loneliness and Belonging

Loneliness can be both a context for and a correlate of problematic digital use. Longitudinal evidence has shown that loneliness may predict later PSU in adolescents [11]. A 2026 adolescent study also identified self-esteem and boredom proneness as pathways linking loneliness with addictive smartphone use and highlighted the relevance of belonging and group activity [12]. These findings support a psychiatric nursing approach that asks what need the phone is serving: connection, escape, reassurance, stimulation or relief from difficult emotion.

6.3 Sleep and Emotional Regulation

Sleep is one of the most clinically actionable domains. Meta-analytic evidence links PSU with poorer sleep quality [4,5]. Late-night use can also coexist with anxiety, rumination, fear of missing out or disrupted routines. Nursing assessment should therefore include bedtime phone practices, nocturnal notifications, sleep timing and daytime impairment rather than treating "screen time" as a single undifferentiated exposure.

6.4 Family and Relational Modeling

Digital habits develop within relationships. Research on parental phubbing has linked parent phone behavior, parent-child relationship quality, adolescent self-esteem and problematic mobile phone use [13]. Family recommendations should therefore avoid placing all responsibility on the adolescent. Consistent household norms, device-free conversations and adult modeling may be more credible than rules applied only to young people.

7. From Restriction to Digital Autonomy

A prohibition-only model assumes that the device is the problem and removal is the solution. A psychiatric model asks a broader question: what psychological function is the behavior performing, and what healthier capacities can replace that function? Digital autonomy can be defined here as the adolescent's ability to choose when, why and how to use a device in a way that is consistent with sleep, relationships, learning, safety and personal values.

The proposed pathway is: awareness of use patterns -> identification of emotional and social triggers -> realistic digital boundaries -> protected sleep and offline time -> real-world mastery and social connection -> improved self-efficacy -> greater digital autonomy and psychological well-being.

This pathway should be interpreted as a conceptual clinical framework, not as an experimentally proven causal sequence. It is intended to generate testable nursing interventions and research hypotheses.

8. Psychiatric Nursing Framework: RECLAIM

For clinical and research translation, this review proposes the mnemonic RECLAIM. It is an author-developed framework synthesized from the reviewed evidence and should be presented as a conceptual model requiring empirical validation.

Element	Clinical focus	Example nursing action
R - Recognize	Patterns, impairment and triggers	Briefly assess control, sleep, school impact, mood, relationships and situations that trigger repetitive checking.
E - Explore	Meaning and function of use	Ask whether the phone provides connection, escape, reassurance, entertainment, identity expression or relief from boredom.
C - Create boundaries	Collaborative, realistic limits	Co-design device-free periods, notification changes and bedtime routines rather than imposing an all-or-nothing ban.
L - Link offline	Belonging and face-to-face support	Strengthen family conversation, peer connection, hobbies, group participation and trusted-adult support.
A - Activate mastery	Self-efficacy and competence	Set achievable offline goals that allow adolescents to experience success, responsibility and skill development.
I - Improve regulation	Emotion and attention skills	Teach coping, pause-and-choose skills, problem solving, relaxation and management of urges to check.
M - Maintain and monitor	Relapse prevention and escalation	Review progress, normalize setbacks, reinforce gains and refer for specialist assessment when significant impairment or comorbidity is present.

9. Intervention Evidence

Intervention evidence is developing. A 2025 randomized controlled trial evaluated a personal-resources intervention designed to activate perceived social support and reduce loneliness among adolescents with problematic smartphone use [14]. Importantly for nursing, a 2026 randomized controlled trial evaluated a nurse-led



Health Belief Model-based educational intervention for reducing smartphone addiction in adolescents, reporting that nurse-led education may reduce problematic use and highlighting a role for nurses in healthy digital behavior [15].

These studies support moving beyond awareness lectures. Effective programs are more likely to combine knowledge with personal resources, social support, behavior-change techniques and follow-up. However, the evidence base remains too limited to claim that any single nursing protocol is universally effective.

10. A Proposed School-Based Psychiatric Nursing Intervention

A future nurse-led program derived from this review could be delivered in brief school sessions and evaluated experimentally. A practical structure is shown below.

Session	Theme	Core activity	Target
1	My digital pattern	Self-monitoring map: when, why and how I reach for my phone	Awareness
2	My mind online	Identify comparison, reassurance seeking, boredom and emotional triggers	Insight
3	Sleep and attention	Design a realistic evening/notification plan	Self-regulation
4	Confidence offline	Choose one achievable mastery activity and one face-to-face connection goal	Self-efficacy
5	My digital autonomy plan	Personal boundaries, support person, coping plan and review date	Maintenance

11. Assessment and Outcome Measurement

For research, the primary outcome should be selected before data collection. If the manuscript or intervention claims to improve self-esteem, a validated self-esteem measure is required; if it claims self-efficacy or self-confidence, the corresponding validated construct should be measured. PSU should also be measured with a validated instrument appropriate to the population and language. Secondary outcomes may include sleep quality, loneliness, anxiety/depressive symptoms, perceived stress, school functioning, family interaction and objectively or subjectively recorded use patterns.

Researchers should avoid defining success only as fewer minutes of smartphone use. A clinically meaningful improvement may involve better control, fewer sleep disruptions, less interference,

improved relationships or greater ability to disengage voluntarily even if total use remains substantial for educational reasons.

12. Implications for Psychiatric and Mental Health Nursing

Psychiatric nurses can contribute at universal, selective and indicated levels. Universal work includes digital mental-health literacy, sleep hygiene and healthy coping education. Selective work can target adolescents showing early loss of control, social withdrawal or persistent sleep disruption. Indicated care requires assessment of co-occurring mental-health difficulties and referral when impairment is substantial.

The therapeutic stance should remain non-judgmental. Adolescents may reasonably resist messages that portray their entire digital world as harmful. Collaborative assessment can preserve rapport while identifying specific patterns that are causing difficulty. Nurses can also involve parents or caregivers in shared routines and modeling rather than framing the adolescent as the sole problem.

Within schools, psychiatric nurses may collaborate with counselors, psychologists, teachers and families to integrate digital well-being into broader mental-health promotion. The nursing contribution is particularly relevant because the intervention can connect behavioral habits with sleep, mood, stress, coping, family communication and early referral.

13. Research Gaps and Future Directions

- More longitudinal and experimental research is needed to clarify directionality between PSU, self-esteem, loneliness and mental-health symptoms.
- Interventions should compare restriction-only approaches with autonomy-, competence- and relationship-focused approaches.
- Nurse-led interventions need replication across cultures and school systems, including low- and middle-income settings.

Future studies should distinguish smartphone use, social-media use, gaming, educational use and specific online behaviors rather than treating all screen exposure as equivalent.

- Objective device-use data can complement self-report, but should be interpreted alongside function and impairment.
- Research should examine which adolescents benefit, which are unaffected and which may be harmed by particular digital patterns.
- The proposed RECLAIM framework requires content validation, feasibility testing and controlled evaluation before it can be considered an evidence-based intervention.

14. Strengths and Limitations of This Review



A strength of this review is its integration of meta-analytic evidence, recent adolescent identity and loneliness research, WHO guidance and emerging intervention studies, including nurse-led evidence. It also deliberately avoids equating all smartphone use with pathology and proposes a clinically testable psychiatric nursing framework.

The principal limitation is the narrative design. The search and selection process was not a full systematic-review workflow, and no formal risk-of-bias assessment or quantitative synthesis was performed. The literature also uses inconsistent terminology, including problematic smartphone use, mobile phone dependence, smartphone addiction and problematic social-media use. Many studies are cross-sectional, so causal conclusions should be avoided.

15. Conclusion

The journey from screen dependence to self-confidence is best understood as a movement toward digital autonomy rather than a rejection of technology. Evidence links problematic smartphone use with poorer sleep, anxiety, depression, stress and lower self-esteem, but effects are heterogeneous and may be bidirectional. For adolescents, the quality and psychological function of digital engagement may matter as much as duration.

Psychiatric and mental health nursing can contribute by identifying impairment early, protecting sleep, exploring emotional triggers, strengthening offline relationships, creating achievable mastery experiences and helping adolescents develop realistic self-regulation. Emerging intervention research, including nurse-led work, makes this a timely field for nursing scholarship. The proposed RECLAIM framework offers a structured hypothesis for future school-based intervention research but requires formal validation.

Declarations

Ethics approval and consent to participate: Not applicable to narrative review.

Consent for publication: Not applicable.

Conflict of interest: The author declares no conflict of interest.

Data availability: No primary dataset was generated for this narrative review.

Funding: Self-Funded

References

1. World Health Organization. Mental health of adolescents. Geneva: WHO; 2025.
2. World Health Organization. Digital environments and mental health. Geneva: WHO.
3. World Health Organization Regional Office for Europe. Addressing the digital determinants of youth mental health and well-being: policy brief. Copenhagen: WHO Regional Office for Europe; 2025.
4. Sohn SY, Rees P, Wildridge B, Kalk NJ, Carter B. Prevalence of problematic smartphone usage and associated mental health outcomes amongst children and young people: a systematic review, meta-analysis and GRADE of the evidence. *BMC Psychiatry*. 2019;19:356. doi:10.1186/s12888-019-2350-x.
5. Yang J, Fu X, Liao X, Li Y. Association of problematic smartphone use with poor sleep quality, depression, and anxiety: a systematic review and meta-analysis. *Psychiatry Res*. 2020;284:112686. doi:10.1016/j.psychres.2019.112686.
6. Augner C, Vlasak T, Aichhorn W, Barth A. The association between problematic smartphone use and symptoms of anxiety and depression-a meta-analysis. *J Public Health (Oxf)*. 2023;45(1):193-201. doi:10.1093/pubmed/fdab350.
7. Paterna A, Alcaraz-Ibáñez M, Aguilar-Parra JM, Salavera C, Demetrovics Z, Griffiths MD. Problematic smartphone use and academic achievement: a systematic review and meta-analysis. *J Behav Addict*. 2024;13(2):313-326. doi:10.1556/2006.2024.00014.
8. Casale S, Fioravanti G, Bocci Benucci S, Falone A, Ricca V, Rotella F. A meta-analysis on the association between self-esteem and problematic smartphone use. *Comput Human Behav*. 2022;134:107302. doi:10.1016/j.chb.2022.107302.
9. Cingel DP, Carter MC, Krause HV. Social media and self-esteem. *Curr Opin Psychol*. 2022;45:101304. doi:10.1016/j.copsyc.2022.101304.
10. Avci H, Baams L, Kretschmer T. A systematic review of social media use and adolescent identity development. *Adolesc Res Rev*. 2025;10(2):219-236. doi:10.1007/s40894-024-00251-1.
11. The vicious cycle between loneliness and problematic smartphone use among adolescents: a random intercept cross-lagged panel model. 2024. PubMed PMID: 38555341.
12. Maftei A, Merlici IA, Opariuc-Dan C. Fun in a box? Loneliness and adolescents' problematic smartphone use: a moderated mediation analysis of the underlying



mechanisms. Psychol Rep. 2026;129(1):97-126.
doi:10.1177/00332941241226681.

13. Parents' phubbing and problematic mobile phone use: the roles of the parent-child relationship and children's self-esteem. Cyberpsychol Behav Soc Netw. 2019. PubMed PMID: 31747305.
14. Hu Y, Pei M, Wang D, Wu X, Wang D. Activating perceived social support combined with diluting loneliness: effects of the personal resources energized intervention program (PREIP) on problematic smartphone use among adolescents. J Behav Addict. 2025;14(2):914-928. doi:10.1556/2006.2025.00016.
15. Effectiveness of a nurse-led health belief model-based educational intervention for reducing smartphone addiction in adolescents: a randomized controlled trial. J Pediatr Nurs. 2026;89:18-28. doi:10.1016/j.pedn.2026.03.049.
16. Vincente-Benito I, Ramírez-Durán MDV. Influence of social media use on body image and well-being among adolescents and young adults: a systematic review. J Psychosoc Nurs Ment Health Serv. 2023;61(12):11-18. doi:10.3928/02793695-20230524-02.
17. Agustini N, Yusuf A, Ahsan A. Relationships among self-esteem, bullying, and cyberbullying in adolescents: a systematic review. J Psychosoc Nurs Ment Health Serv. 2024;62(5):11-17. doi:10.3928/02793695-20231013-01.