Research Article

Emerging Addictions and Psychological-Clinical Interventions: A Scoping Review on the Existence of Instagram Addiction

Noemi Maria Vitale¹, Abdulnaser Fakhrou², Grazia Petralia¹, Pasquale Caponnetto^{1,3}

¹Department of Educational Sciences, Section of Psychology, University of Catania, Catania 95121, Sicily, Italy

²Department of Psychological Sciences, College of Education, Qatar University, AlQiteefiya, Doha 00000, Qatar

³Center of Excellence for the Acceleration of Harm Reduction (COEHAR), University of Catania, Catania 95121, Sicily, Italy

Keywords: Instagram, Addiction, Social media, New addiction, Smartphone addiction, Fear of missing out

Health Psychology Research

Vol. X, 2025

Background

The pervasive use of social media, particularly Instagram, has raised growing concerns about its potential to foster behavioral addictions that impair psychological well-being and social functioning.

Objective

This study aims to investigate and synthesize recent research on Instagram addiction within the domains of clinical psychology, diagnosis, psychotherapy, and treatment, with the goal of contributing both theoretical and practical advancements to the existing literature.

Methods

A scoping review was conducted from May 10, 2023, to October 10, 2023, to identify current diagnostic paradigms associated with Instagram addiction, investigate underexamined aspects of the phenomenon, examine correlations with related theoretical constructs and comorbidities, assess the evaluation scales currently in use, and develop a conceptual framework to navigate recent scientific discoveries. Relevant studies were retrieved from PubMed, PsycINFO, MDPI, APA, ScienceDirect, ResearchGate, and Scopus.

Results

A total of 170 non-duplicate records were identified. Among these, 50 full-text articles were assessed for eligibility, and five met the eligibility criteria and were included in the final review.

Conclusion

The findings highlight the association between Instagram addiction and negative psychological outcomes such as depression, social anxiety, loneliness, academic underperformance, and body dissatisfaction. The evidence supports classifying Instagram addiction as a behavioral addiction, underscoring the need for dedicated diagnostic criteria and appropriate treatment strategies.

1. INTRODUCTION

How often have we picked up our phones to briefly check something, only to realize that hours have slipped away? The act of "scrolling" through content provides an illusion of productivity while fostering continuous engagement.

The advent of social media has radically changed communication among both young people and adults, permeating

nearly every aspect of social, familial, and professional life. This review aims to explore the existing literature on social media use, with particular focus on Instagram. It first examines the advantages and potential risks associated with these platforms, emphasizing Instagram's unique features and the specific threats it may pose. The review then outlines potential correlations between Instagram use and the development of dysfunctional behaviors, including

*Corresponding author:

Pasquale Caponnetto

Department of Educational Sciences, Section of Psychology, University of Catania, Catania 95121, Sicily, Italy/Center of Excellence for the Acceleration of Harm Reduction (COEHAR), University of Catania, Catania 95121, Sicily, Italy Email: p.caponnetto@unict.it

dependence, along with associations with personality traits, life satisfaction, academic performance, and sexualization.

By exploring these thematic areas, this review attempts to investigate whether Instagram dependence can be classified as a genuine behavioral addiction. In addition to investigating the presence of Instagram dependence, this work aims to raise awareness and encourage future research in this domain, assigning appropriate importance to what appears to be a genuine addiction. Accordingly, Instagram dependence should be recognized through formal diagnostic criteria and addressed through targeted therapeutic interventions.

Instagram addiction, or addiction to Instagram, is typically categorized under the broader class of conditions known as new addictions. These constitute a heterogeneous set of behavioral disorders that share common psychopathological features, such as a progressive loss of control over the addictive behavior and impairment of social, familial, and occupational functioning. Several scholars have highlighted similarities between new addictions and substance use disorders, not only in clinical manifestations but also in the underlying neurobiological mechanisms of addictive behavior.¹

Instagram addiction is considered a subtype of Internet addiction. The concept of Internet addiction was first introduced in 1995 by Goldberg,² who proposed diagnostic criteria for Internet addiction disorder. He described it as a maladaptive pattern of Internet use characterized by tolerance, withdrawal symptoms, and a range of psychological, familial, social, and occupational impairments.

Individuals affected by Internet addiction tend to gradually increase the amount of time spent online, often engaging in prolonged and more frequent sessions that exceed their original intentions.³ Over time, they may become unable to stop using the Internet, experiencing withdrawal-like symptoms such as psychomotor agitation, anxiety, intrusive fantasies, vivid dreams about online activity, and obsessive thoughts about what is happening online while disconnected.¹ Despite experiencing negative consequences, such as sleep deprivation and neglect of personal, familial, and professional life, affected individuals often persist in excessive use.

In certain cases, such as among socially anxious or introverted individuals, online communication may serve as a coping mechanism to alleviate interpersonal difficulties, stress, and discomfort encountered in real life. This virtual environment can offer a sense of freedom, enabling individuals to express themselves without fear of rejection or judgment.⁴

However, while digital platforms may facilitate communication for some, they can also contribute to the development of psychopathological conditions or exacerbate existing stress and social discomfort. Several studies have reported comorbidities between Internet addiction and various pathological disorders, such as mood disorders, personality disorders, anxiety disorders, substance use disorders, relational anxiety, and avoidance behavior. ^{5,6} In addition, factors such as low self-esteem, emotional instability, poor emotional regulation, relational inhibition, and loneliness have been identified as potential risk factors for problematic Internet use. ^{7,8}

Numerous studies have addressed this issue through systematic reviews and meta-analyses examining the epidemiology of Internet addiction. Research has also explored its neurobiological correlates and its associations with depression, anxiety, stress, and insomnia. Furthermore, several studies have investigated how psychological distress during

the COVID-19 pandemic may have intensified Internet addiction. 9-13

Specifically regarding Instagram addiction, several studies have investigated its relationship with the Big Five personality traits and with procrastination among university students. Moreover, a dedicated psychometric tool—the Instagram Addiction Scale (TIAS)—has been developed to assess this specific form of behavioral dependence.¹³⁻¹⁶

Despite a growing body of literature, research on Internet and Instagram addiction still lacks comprehensive epidemiological data and validated clinical assessment tools. The purpose of this review is to identify and synthesize existing studies on Instagram addiction to better understand potential psychological and clinical interventions for its prevention and treatment.

2. MATERIALS AND METHODS

2.1. RESEARCH OBJECTIVE

The primary objective of this research was to examine and evaluate existing studies on the problematic use of Instagram as a behavioral addiction. The study aimed to identify underexplored aspects by delving into the instruments and scales currently used in the literature and to develop a theoretical framework that can guide the interpretation of current findings.

2.2. SEARCH STRATEGIES

This systematic review was conducted following the PRISMA 2020 guidelines. A comprehensive literature search was performed from May 10, 2023, to October 10, 2023, across the following databases: PubMed, PsycINFO, MDPI, APA, ScienceDirect, ResearchGate, and Scopus. The search utilized the following strings of keywords and Boolean operators:

"Internet Addiction" AND "social media addiction" AND "New Addiction" AND "Instagram Addiction" AND "Fear of missing out" OR "FOMO" AND "smartphone addiction" AND "digital addiction."

2.3. ELIGIBILITY CRITERIA

Articles were included if they were written in English and published between 2018 and 2023. Eligible studies met the following PICO criteria:

- (i) Participants (P): Individuals who use Instagram excessively
- (ii) Intervention (I): Psychological-clinical interventions targeting behavioral addictions
- (iii) Comparison (C): Individuals with a history of addiction or no history of addiction
- (iv) Outcomes (O): Improvements in overall psychological well-being and reductions in psychopathological symptoms.

2.4. DATA EXTRACTION

Data were extracted using a standardized form that included the following elements for each study: authors, publication year, country, study design, sample characteristics, treatment type, measurement instruments, and reported outcomes (Table 1).

Table 1. Summary of included studies

Authors	Year	Nation	Study design	Sample	Treatment	Measurements	Outcomes
Kircaburun and Griffiths ¹⁴	2018	United Kingdom	Cross- sectional study	752	NA	IAS; BFI; Self-Liking Scale	Agreeableness, conscientiousness, and self-liking were negatively associated with Instagram addiction, whereas daily Internet use was positively associated with Instagram addiction. Self-liking partially mediated the relationship between Instagram addiction with agreeableness and fully mediated the relationship between Instagram addiction with conscientiousness.
Sholeh and Rusdi ¹⁵	2019	Indonesia	Cross sectional	251	NA	TIAS; SMEQ; RSES	The results show that TIAS is valid and reliable in measuring addiction to Instagram through six core components, which include: (i) salience, (ii) mood modification, (iii) tolerance, (iv) withdrawal, (v) conflict, and (vi) relapse.
Foroughi et al. 16	2021	Malaysia	Cross sectional	364	N A	BFAS; CGPA; SADS; CES-D; SWLS; Self-reported scale for physical activity	Recognition needs, social needs, and entertainment needs all contributed to Instagram addiction. However, information needs were not a significant predictor of Instagram addiction. The findings also illustrated that physical activity had a moderating role in the effect of social needs and entertainment needs on Instagram addiction. The findings also provide evidence of the negative impact of Instagram addiction on academic performance and the positive effect of Instagram addiction on social anxiety and depression. Academic performance was a positive predictor of life satisfaction, while social anxiety and depression negatively influenced students' life satisfaction.
Rogowska and Libera ¹⁹	2022	Poland	Cross sectional	954	NA	BIAS; DJGLS; SWLS	The prevalence of Instagram addiction, loneliness, and dissatisfaction with life was 17.19%, 75%, and 40.15%, respectively. The mediating effect of loneliness on the relationship between Instagram addiction and life satisfaction was found bidirectionally in women but not among men.
Prichard et al. ²⁰	2023	Australia	RCT	230	NA	VAS; 7-point Likert scale; 10-item version of the Twenty Statements Test	Planned comparisons revealed that viewing images of Influencers led to greater negative mood, body dissatisfaction, self-objectification, and appearance comparison than viewing control images. Viewing sexualized images also led to greater negative mood, body dissatisfaction, and appearance comparison than did viewing standard fashion images. State appearance comparison was found to mediate these differences. The findings highlight the negative impact of sexualized images on social media and the need for enhanced regulation in relation to Influencer advertising.

Abbreviations: BIAS: Bergen Instagram Addiction Scale; BFI: Big Five Inventory; BFAS: Bergen Facebook Addiction Scale; CES-D: Centre for Epidemiologic Studies Depression Scale; CGPA: Cumulative grade point average; DJGLS: de Jong Gierveld Loneliness Scale; IAS: Instagram Addiction Scale; RSES: Rosenberg Self-Esteem Scale; SADS: Social Avoidance and Distress Scale; SMEQ: Social Media Engagement Questionnaire; SWLS: Satisfaction With Life Scale; TIAS: The Instagram Addiction Scale; VAS: Visual analogue scales

2.5. RISK OF BIAS ASSESSMENT

The risk of bias for the included studies was assessed using the Cochrane Risk of Bias tool for randomized trials, version 2 (RoB-2), as developed by Sterne *et al.*¹⁷

3. RESULTS

3.1. CHARACTERISTICS OF THE INCLUDED STUDIES

A total of 170 articles were initially retrieved from the databases listed above. After removing 80 articles in the initial screening phase, 90 potentially relevant studies remained. These were selected based on a preliminary assessment of the title and year of publication.

Given the small number of eligible articles, it is evident that this field remains underexplored and warrants further exploration. These 90 articles were then subjected to a more detailed screening process, including an evaluation of the abstract, language of publication, and relevance to the research topic. Articles primarily focused on brain structures or neurotransmitter activity which were outside the predetermined theme, were excluded. Only articles published between 2018 and 2023 were considered. Following this process, 40 articles were eliminated. The remainder were read in full, and a further 45 articles were removed for not meeting the eligibility criteria. Ultimately, five studies met all criteria and were included in this systematic review.

A detailed summary of the article selection process, including inclusion and exclusion criteria, is presented in Figure 1. Furthermore, the results of the risk-of-bias assessment using the RoB2 tool are summarized in Figure 2.

3.2. INSTAGRAM ADDICTION SCALE

Sholeh and Rusdi¹⁵ developed the TIAS to measure addictive behavior in Instagram users. Over the past two decades, the Internet and social media addiction have become important

scholarly topics in clinical psychology. This addiction often exhibits characteristics similar to those of drug addiction and alcoholism, yet they are not consistently recognized or treated as such.

The rise of social networking platforms, particularly Instagram, has contributed to a growing prevalence of problematic usage patterns. Despite a growing body of literature on social media addiction, few studies have specifically focused on Instagram-related addictive behaviors.

To address this gap, Sholeh and Rusdi¹⁵ aimed to validate an instrument designed to measure Instagram addiction. The TIAS consists of two subscales: Instagram Feed Addiction and Instagram Stories Addiction. This scale is grounded in Griffiths's six-component model of addiction, which defines addiction as consisting of: (i) salience; (ii) mood modification; (iii) tolerance; (iv) withdrawal; (v) conflict; and (vi) relapse. ^{14,18}

The study sample comprised 251 Instagram users (62 males and 189 females), aged between 15 and 30 years. The TIAS contains 20 items, each corresponding to one of the six components of addiction identified by Griffiths. A five-point Likert scale was used to assess the severity of Instagram-related addictive behaviors across feeds and story contexts.

Sample items included: "I often think about photos/videos posted by others on the Instagram feed," "I post photos/videos on the Instagram feed to attract the attention of others," "I see the content of posts on the Instagram feeds to reduce guilt, anxiety, helplessness, or depression," "I try to limit my time for Instagram, but it doesn't work."

All items reflect behaviors commonly observed in individuals exhibiting signs of Instagram addiction. The findings confirmed that the six addiction dimensions were valid for both subscales, supporting the theoretical foundation of this instrument. 15,18-19

Survey data further indicated that Instagram had the most negative physiological impact among social networking sites, when compared to platforms such as YouTube, Twitter, Snapchat, and Facebook.

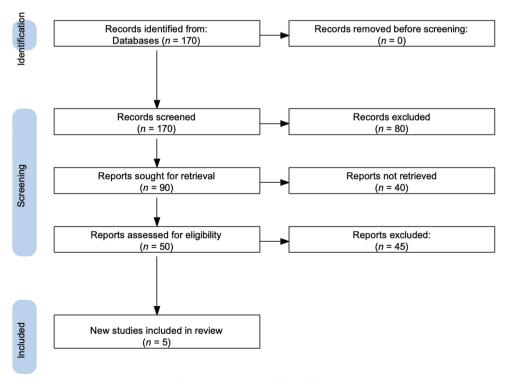


Figure 1. PRISMA flow chart

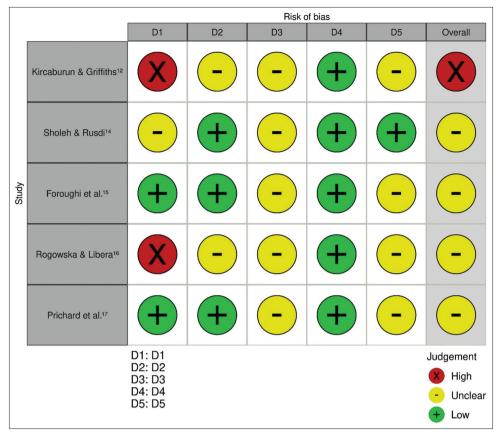


Figure 2. Cochrane risk-of-bias tool (RoB-2)

A key challenge in this area of research has been the absence of a standardized scale specifically designed to measure Instagram addiction. This absence has hindered the development of more targeted and robust empirical investigations. Consequently, this gap has attracted increasing attention from researchers in clinical psychology, social sciences, and cyberpsychology. Sholeh and Rusdi¹⁵ addressed this need by developing an instrument specifically designed to measure Instagram addiction.

The authors successfully created a valid and reliable instrument. However, future research is needed to evaluate the scale's performance across diverse populations, including analyses of demographic variables, item difficulty, and psychometric reliability.

3.3. SCHOOL PERFORMANCE, SOCIAL ANXIETY, AND DEPRESSION

Prichard *et al.*²⁰ analyzed the associations between university students' psychological needs and Instagram addiction, focusing on its correlations with academic performance, depression, social anxiety, and life satisfaction. Recent studies have also suggested that physical activity may serve as a protective factor against addictive behaviors.

Data were collected through paper-based surveys from a sample of 382 undergraduate students at the University Sains Malaysia. The following instruments were used:

- Bergen Facebook Addiction Scale, adapted for Instagram (BFAS; adapted for Instagram), to assess addiction
- Cumulative Grade Point Average for academic performance
- Social Avoidance and Distress Scale for social anxiety
- Centre for Epidemiologic Studies Depression Scale for depression

- Satisfaction With Life Scale for life satisfaction
- A self-reported scale for physical activity.

The results demonstrated that four previously identified psychological needs were positively associated with Instagram addiction. However, contrary to expectations, information needs did not significantly predict Instagram addiction, likely because the other platforms are more effective at satisfying these needs. As hypothesized, Instagram addiction was negatively associated with academic performance. ^{19,21} Moreover, it showed a positive association with both social anxiety and depression, supporting earlier findings. Foroughi *et al.* ²² stated that excessive use of social media can foster feelings of envy, which in turn may lead to depression.

In addition, the study confirmed that physical activity moderated Instagram addiction, suggesting that engaging in physical activity satisfies students' entertainment needs in healthier, non-digital ways.

These findings offer practical implications for a broad range of stakeholders, including Instagram users, educators, families, policymakers, and social media designers, in developing effective strategies and interventions to prevent or mitigate Instagram addiction.

3.4. SELF-OBJECTIFICATION AND SEXUALIZATION

The study by Prichard *et al.* aimed to experimentally examine the impact of exposure to Instagram images of female influencers dressed either in fashionable clothing (fashion condition) or lingerie/bikinis while posing suggestively (sexualized condition) on women's negative mood and body dissatisfaction. A total of 230 women aged between 17 and 25 years participated in the study.²⁰

A key driver behind the widespread dissemination of such images is the rise of a new form of celebrity, the so-called

"influencers." The individuals gain visibility through large follower counts and frequent engagement on social media platforms. It has been suggested that some influencers normalize a highly sexualized esthetic that borrows elements from pornographic imagery. Such sexualized images often direct viewers' attention to specific body parts, such as the breasts or buttocks, using provocative poses and facial expressions characterized by blinking eyes and pouty lips.

Tiggemann's narrative review outlines the negative effects of idealized images on body image, drawing on sociocultural theory and objectification theory. ²³⁻²⁵ According to sociocultural theory, social media disseminates unrealistic body ideals that prompt women to internalize and compare themselves to these standards. Exposure to such imagery may lead women to adopt an observer's perspective of their own bodies—a process called self-objectification, which has been linked to various mental health issues, including body dissatisfaction, disordered eating, and depression. ²⁶

The purpose of the study was to investigate the effects of viewing standardized (fashionably dressed) and sexualized (revealing and suggestively posed) images of the same influencer on participants' mood and body dissatisfaction, compared to a control condition (images of fashion products). In addition, the study examined whether social comparison and self-objectification mediated these effects.

According to the study's hypotheses, participants who viewed influencer images were expected to report higher levels of negative mood and body dissatisfaction than those who viewed control images. Furthermore, exposure to sexualized images was hypothesized to elicit stronger negative effects than exposure to standard fashion images. Both effects were expected to be mediated by social comparison and self-objectification.

To assess these variables, participants completed the Visual Analog Scales for mood and body dissatisfaction before and after image exposure. The State Appearance Comparison Scale was used to measure social comparison, and the Twenty Statements Test was used to measure self-objectification post-exposure.

As hypothesized, exposure to influencer images led to significantly greater negative mood, body dissatisfaction, appearance-related social comparison, and self-objectification compared to the control condition. In addition, exposure to sexualized influencer images produced more pronounced negative mood, body dissatisfaction, and appearance-based comparisons than exposure to standard fashion influencer images. ²³ However, the mediation analysis revealed that only appearance-based social comparison, not self-objectification, significantly mediated these effects.

These findings are in line with an expanding body of literature demonstrating the detrimental impact of idealized peer imagery on social media on women's body image.

4. DISCUSSION

The present scoping review examined five studies investigating Instagram addiction and its relationships with various psychological constructs, including depression, loneliness, social anxiety, academic performance, and body satisfaction. While this systematic analysis provides valuable insights into the current state of Instagram addiction research, the limited number of included studies reflects the nascent nature of this field and highlights significant gaps in our understanding of this emerging behavioral addiction.

A major contribution of the reviewed studies lies in the development and validation of psychometrically sound assessment instruments. Notably, Sholeh and Rusdi¹⁵ introduced the TIAS, which demonstrated robust validity and reliability in assessing Instagram addiction through a comprehensive validation process involving 251 participants. TIAS represents a crucial advancement by distinguishing between Instagram feed addiction and Instagram stories addiction, acknowledging that different platform features may elicit distinct addictive behaviors and psychological responses.

However, several methodological limitations in the TIAS validation study warrant critical examination. While the sample size of 251 participants was adequate for initial validation, it may not be sufficient to establish robust psychometric generalizability across broader and more diverse populations. Subsequent cross-cultural validation studies, such as the Turkish adaptation involving 587 participants, have extended the applicability of TIAS across linguistic and cultural contexts, suggesting a broader utility than initially established.²⁵ Furthermore, although the original study was theoretically grounded in Griffiths' six-component model of addiction, this framework may oversimplify the nuanced and multifaceted nature of social media addiction, particularly considering Instagram's unique interactive and visual features, which differentiate it from more traditional forms of addictive behaviors.

The BFAS, though not Instagram-specific, has emerged as the most extensively validated instrument in this domain. Meta-analytic evidence confirms the unidimensionality of the BSMAS with an optimal pooled Cronbach's alpha coefficient of 0.83, supporting its construct validity through significant associations with anxiety, depression, Internet gaming disorder, and stress. Further validation using Item Response Theory has confirmed the BSMAS's reliability, especially in measuring moderate to high levels of problematic social media use. Younger participants consistently exhibited higher risk profiles, aligning with the demographic characteristics observed across the reviewed studies, which predominantly focused on young adult populations.

The relationship between Instagram addiction and academic performance, as examined by Foroughi *et al.*, ¹⁶ reveals complex mediating mechanisms that extend beyond simple time-displacement theories. The finding that Instagram addiction negatively impacts academic performance while simultaneously increasing social anxiety and depression suggests a bidirectional relationship, wherein problematic use both stems from and contributes to psychological distress. This bidirectional relationship is particularly concerning given that longitudinal studies have demonstrated measurement invariance of social media addiction scales over 2-year intervals, suggesting that early patterns of problematic use may persist and worsen over time.

Cross-cultural validation evidence further illuminates the question of universality versus cultural specificity in Instagram addiction. Research involving Bangla-speaking populations has demonstrated good internal consistency, composite reliability, and measurement invariance across groups, suggesting that the core phenomenology of Instagram addiction may transcend cultural boundaries. However, the literature remains predominantly focused on Western and Asian populations, limiting our understanding of how Instagram addiction may manifest in other cultural contexts, particularly those with differing patterns of social media use or regulatory frameworks.

The experimental study by Prichard *et al.*²⁰ on self-objectification and sexualization provides crucial insights into the mechanisms by which Instagram exposure

affects body image and psychological well-being. The finding that exposure to sexualized influencer images led to greater negative mood, body dissatisfaction, and appearance-based comparison than standard fashion images demonstrates the specific harmful effects of sexualized social media content. This experimental evidence is particularly valuable as it establishes causal relationships rather than merely correlational associations, addressing a significant methodological gap in the broader literature on social media addiction. However, the study's exclusive focus on female participants limits the generalizability of its findings to male users and older demographic groups, revealing a significant gap in our understanding of how Instagram affects diverse demographic groups. The finding that appearance comparison, rather than self-objectification, mediated the negative effects of image exposure aligns with social comparison theory and suggests that comparative cognitive processes may be more central to Instagram's harmful psychological impacts than objectification mechanisms. 26-28 This has important implications for intervention design, suggesting that strategies targeting social comparison may be more effective than those focused solely on reducing self-objectification. However, the artificial nature of the laboratory setting and the brief exposure duration may not accurately capture the cumulative effects of chronic Instagram use, thus limiting the ecological validity of these findings.

Despite these contributions, the reviewed studies exhibit several critical limitations that constrain the strength and generalizability of conclusions regarding Instagram addiction. Foremost among these limitations is the extreme heterogeneity across studies, which reflects not only methodological variation but also a lack of theoretical consensus on the conceptualization of social media addiction. Sample size limitations further weaken the findings, with study populations ranging from 230 to 954 participants, potentially undermining statistical power and the robustness of psychometric validation. ¹⁴⁻¹⁶ The demographic homogeneity of the samples, predominantly consisting of university students and young adults, further restricts the generalizability of findings to broader populations across different age groups and developmental stages.

Arguably, the most significant gap in the current literature is the absence of longitudinal studies. Understanding the developmental trajectory of Instagram addiction requires extended observation periods to capture the dynamic nature of addictive behaviors over time. While recent research has demonstrated longitudinal measurement invariance for social media addiction scales across two-year intervals, no studies have specifically examined the natural history of Instagram addiction, including onset patterns, progression trajectories, and potential for spontaneous remission. This limitation is particularly concerning given that addiction is fundamentally a developmental disorder that unfolds over time.

Another major methodological limitation is the lack of control groups comprising individuals with minimal or no social media exposure. Such control groups are essential for establishing baseline patterns of non-addictive use and identifying protective factors against problematic behavior. Without these comparisons, it is difficult to distinguish between normative engagement and clinically significant additive behaviors—a distinction crucial for establishing clinical thresholds and developing appropriate interventions.

Furthermore, existing research fails to adequately address the complexity of Instagram's platform features. Instagram integrates multiple functionalities, including photo sharing, Stories, direct messaging, shopping, and video content (Reels), each of which may be associated with different usage patterns and psychological effects. While the TIAS's distinction between Feed and Stories addiction represents an important first step, future assessment instruments should address the full spectrum of Instagram's features and their distinct addictive potentials.

Finally, the cultural specificity of Instagram addiction remains poorly understood despite growing cross-cultural validation evidence. While psychometric studies have demonstrated measurement invariance across different cultural contexts, the prevalence, manifestation, and psychosocial consequences of Instagram addiction may vary significantly across cultures with different social media norms, regulatory environments, and attitudes toward technology. Understanding these cross-cultural variations is essential for developing culturally sensitive prevention and intervention strategies.

Furthermore, the current literature lacks sophisticated theoretical models that integrate biological, psychological, and social factors in the etiology and maintenance of Instagram addiction. While individual studies have examined components such as personality factors (e.g., the Big Five traits), psychological needs (e.g., recognition, social, and entertainment), and contextual variables (e.g., physical activity levels), comprehensive models that synthesize these factors into coherent theoretical frameworks are notably absent. Such integrative models are essential for understanding why certain individuals develop problematic Instagram use patterns, while others maintain healthy usage despite similar exposure levels.

The intervention and treatment implications of Instagram addiction remain largely unexplored. While several studies have identified relevant risk factors and correlates, none of the reviewed studies have examined the effectiveness of interventions or treatment outcomes. This represents a critical gap, particularly given the clinical implications of identifying Instagram addiction as a genuine behavioral addiction that may warrant specific therapeutic approaches. For example, the finding that physical activity moderates Instagram addictive behavior suggests promising intervention targets; however, systematic evaluations of preventive and treatment strategies are currently lacking.

To advance the field, future research should prioritize several key areas. First, large-scale longitudinal studies involving diverse samples are essential to establish the natural history, risk factors, and developmental trajectories of Instagram addiction. These studies should incorporate control groups with minimal or no social media exposure and follow participants across critical developmental stages to capture dynamic patterns of use and risk emergence.

Second, there is an urgent need for intervention research aimed at developing and empirically evaluating evidence-based prevention and treatment strategies. Given Instagram's unique features, generic social media interventions may be inadequate. Platform-specific approaches are likely necessary to address Instagram addiction effectively.

Third, research should expand beyond young adult populations to examine Instagram addiction across the lifespan, including adolescents, middle-aged adults, and older populations. Age-related differences in Instagram use patterns, vulnerability factors, and psychosocial consequences are likely to exist but remain poorly understood.

Fourth, cross-cultural research involving diverse global populations is essential to identify both universal and culture-specific aspects of Instagram addiction. Such research would support the development of culturally appropriate assessment and intervention tools.

Finally, the field would benefit from more rigorous research designs capable of establishing causal relationships between Instagram use and psychological outcomes. While the study by Prichard *et al.*²⁰ represents an important step in this direction, additional experimental research is needed to elucidate the mechanisms through which Instagram use contributes to addictive behaviors and psychological distress. These future studies should incorporate ecologically valid exposure paradigms that better reflect real-world Instagram use patterns.

5. CONCLUSION

This scoping review highlights the growing recognition of Instagram addiction as a real and emerging behavioral concern. The evidence reviewed points to significant associations between problematic Instagram use and various psychological outcomes, including mood disturbances, body dissatisfaction, and academic underperformance.

This work underscores the need for developing educational and outreach projects that can be disseminated across both social and academic contexts. Such initiatives should aim to enhance public awareness, not only for the opportunities that social media platforms like Instagram offer, but also of the potential psychological risks associated with their excessive use. Raising awareness among young people is particularly critical, as it may serve as a foundational step toward preventing the onset and escalation of social media addiction.

Future research should continue to delve into this issue in greater depth, taking into account the specific characteristics of individual social media platforms and their interactions with user-specific psychological variables. Increased attention to this behavioral addiction is essential for guiding clinical and psychological research toward the development of effective interventions and tailored treatment

strategies that address the diverse manifestations of social media addiction.

ACKNOWLEDGMENTS

None.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare they have no competing interests.

AUTHOR CONTRIBUTIONS

Conceptualization: Noemi Maria Vitale, Pasquale Caponnetto

Formal analysis: All authors Investigation: All authors Methodology: All authors

Writing-original draft: All authors Writing-review & editing: All authors

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

CONSENT FOR PUBLICATION

Not applicable.

DATA AVAILABILITY STATEMENT

Not applicable.

Submitted: 25 April 2025; Revision received: 27 July 2025; Accepted: 30 July 2025; Published: 08 October 2025

REFERENCES

- 1. La Barbera D, La Cascia C, Sideli L. Una vita in gioco: Determinanti psicopatologiche e aspetti psicodinamici dei giocatori long term. In: Picone F, editor. *Il Gioco D'azzardo Patologico: Prospettive Teoriche ed Esperienze Cliniche. Rome: Carocci Editore*; 2010. p. 49-62.
- 2. Goldberg I. IAD. In: Cinti ME, editor. Internet Addiction Disorder un Fenomeno Sociale in Espansione; 1995. p. 6-7. Available from: https://www.iucf.indiana.edu/brown/hyplan/addict.html [Last accessed on 2025 Jun 15].
- 3. Salicetia F. Internet addiction disorder (IAD). *Proced Soc Behav Sci.* 2015;191:1372-1376. doi: 10.1016/j.sbspro.2015.04.292
- 4. Celik SS, Celik Y, Hikmet N, Khan MM. Factors affecting life satisfaction of older adults in Turkey. *Int J Aging Hum Dev.* 2018;87(4):392-414. doi: 10.1177/0091415017740677
- 5. Wang L, Qiu J, Yan S, Liu W. Does Mobile Social Media Undermine our Romantic Relationships? The Influence of Fear of Missing out (FOMO) on Young People's Romantic Relationships. Research Square [Preprint]; 2021. doi: 10.21203/rs.3.rs-636141/v1
- 6. Sakamoto S, Miyawaki D, Goto A, *et al.* Associations between Internet addiction, psychiatric comorbidity, and maternal depression and anxiety in clinically referred children and adolescents. *Neuropsychiatr Dis Treat.* 2022;18:2421-2430. doi: 10.2147/ndt.s383160
- 7. Tandoc EC, Ferrucci P, Duffy M. Facebook use, envy, and depression among college students: Is facebooking depressing? *Comput Hum Behav*. 2015;43:139-146. doi: 10.1016/j.chb.2014.10.053
- 8. Bozoglan B, Demirer V, Sahin I. Loneliness, self-esteem, and life satisfaction as predictors of Internet addiction: A cross-sectional study among Turkish university students. *Scand J Psychol*. 2013;54(4):313-319. doi: 10.1111/sjop.12049
- 9. Villegas Dominguez J, Muñoz Bautista B, Gonzalez David E, *et al.* Self-esteem associated with the use of social networks in university students. *Eur J Public Health*. 2022;32(Suppl 3):ckac131.255. doi: 10.1093/eurpub/ckac131.255
- 10. Pan YC, Chiu YC, Lin YH. Systematic review and meta-analysis of the epidemiology of internet addiction. *Neurosci Biobehav Rev*. 2020;118:612-622. doi: 10.1016/j.neubiorev.2020.08.013
- 11. Pop-Jordanova N, Loleska S. Neuropsychological

- correlates of internet addiction. *Pril (Makedon Akad Nauk Umet Odd Med Nauki)*. 2021;42(3):17-28. doi: 10.2478/prilozi-2021-0031
- 12. Younes F, Halawi G, Jabbour H, *et al.* Internet addiction and relationships with insomnia, anxiety, depression, stress, and self-esteem in university students: A cross-sectional designed study. *PLoS One.* 2016;11(9):e0161126. doi: 10.1371/journal.pone.0161126
- 13. Ballarotto G, Marzilli E, Cerniglia L, Cimino S, Tambelli R. How does psychological distress due to the COVID-19 pandemic impact on Internet addiction and Instagram addiction in emerging adults? *Int J Environ Res Public Health*. 2021;18(21):11382. doi: 10.3390/ijerph182111382
- 14. Kircaburun K, Griffiths MD. Instagram addiction and the Big Five of personality: The mediating role of self-liking. *J Behav Addict*. 2018;7(1):158-170. doi: 10.1556/2006.7.2018.15
- 15. Sholeh A, Rusdi A. A New Measurement of Instagram Addiction: Psychometric Properties of the Instagram Addiction Scale (TIAS). Berlin: ResearchGate. 2019. p. 91-97.
- 16. Foroughi B, Griffiths MD, Iranmanesh M, *et al.* Associations between Instagram addiction, academic performance, social anxiety, depression, and life satisfaction among university students. *Int J Ment Health Addict.* 2022;20:2221-2242. doi: 10.1007/s11469-021-00510-5
- 17. Sterne JAC, Savović J, Page MJ, *et al.* RoB 2: A revised tool for assessing risk of bias in randomised trials. *BMJ*. 2019;366:14898. doi: 10.1136/bmj.14898
- 18. Fournier L, Schimmenti A, Musetti A, *et al.* Deconstructing the components model of addiction: An illustration through "addictive" use of social media. *Addict Behav.* 2023;143:107694. doi: 10.1016/j.addbeh.2023.107694
- 19. Rogowska AM, Libera P. Life satisfaction and Instagram addiction among university students during the COVID-19 pandemic: The bidirectional mediating role of loneliness. *Int J Environ Res Public Health*. 2022;19(14):8414. doi: 10.3390/ijerph19148414
- 20. Prichard I, Taylor B, Tiggemann M. Comparing and self-objectifying: The effect of sexualized imagery posted by Instagram influencers on women's body image. *Body Image*. 2023;46:347-355. doi: 10.1016/j.bodyim.2023.07.002

- 21. Al-Yafi K, El-Masri M, Tsai R. The effects of using social network sites on academic performance: The case of Qatar. *JEnterp Inf Manag*. 2018;31(3):446-462. doi: 10.1108/JEIM-08-2017-0118
- 22. Foroughi B, Iranmanesh M, Gholipour HF, Hyun SS. Examining relationships among process quality, outcome quality, delight, satisfaction, and behavioral intentions in fitness centers in Malaysia. *Int J Sports Mark Spons*. 2019;20(3):374-389. doi: 10.1108/ijsms-08-2018-0078
- 23. Gurrieri L. Social Influencers: New Advertising Code Addresses Hyper-Sexualisation, but not Where it's Needed Most. The Conversation; 2021. Available from: https://theconversation.com [Last accessed on 2025 Jun 15].
- 24. Tiggemann M, Hayden S, Brown Z, Veldhuis J. The effect of Instagram "likes" on women's social comparison and body dissatisfaction. *Body Image*. 2018;26:90-97. doi: 10.1016/j.bodyim.2018.07.002

- 25. Tiggemann M. Sociocultural perspectives on human appearance and body image. In: Cash TF, Smolak L, editors. *Body Image: A Handbook of Science, Practice, and Prevention*. 2nd ed. New York: Guilford Press; 2011. p. 12-19.
- 26. Fredrickson BL, Roberts TA. Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychol Women Q.* 1997;21:173-206. doi: 10.1111/j.1471-6402.1997. tb00108.x
- 27. Moscatelli S, Golfieri F, Tomasetto C, Bigler RS. Women and #MeToo in Italy: Internalized sexualization is associated with tolerance of sexual harassment and negative views of the #MeToo movement. *Curr Psychol.* 2021;40(12):6199-6211. doi: 10.1007/s12144-021-01350-1
- 28. Faelens L, Hoorelbeke K, Cambier R, *et al*. The relationship between Instagram use and indicators of mental health: A systematic review. *Comput Hum Behav Rep.* 2021;4:100121. doi: 10.1016/j. chbr.2021.100121