

Association between mental health and social media addiction: Systematic review

Asociación entre salud mental y adicción a las redes sociales: Revisión sistemática

Diana B. Bustamante-Aguilar^a, Jennifer Lira-Mandujano^b, Mariana Núñez-Lauriano^c & Sara E. Cruz-Morales^d

Abstract:

Excessive social media (SM) use is associated with negative mental health consequences in young adults and adolescents. Therefore, the objective of this review is to systematize information from articles published in the last 5 years on the mental health consequences of social media addiction in adolescents and young adults. Articles published between 2019 and 2025, in English and Spanish, with adolescent and young adult populations were analyzed. The results showed that for adolescents, the mental health consequences were anxiety, depression, nomophobia, behavioral problems mainly with parents and relatives, sleep problems, and difficulties interacting in person. For young adults, the results showed decreased sleep quality, depression symptoms, anxiety, low self-esteem, negative self-comparison, stress, feelings of loneliness, and low perception of subjective well-being. In conclusion, it is important to continue research in this area, focusing on the long-term consequences of social media addiction. It is also important to understand the specific characteristics of social media that lead to continued uncontrolled use and to propose interventions that help improve management of social media use to avoid negative consequences.

Keywords:

Social media, mental health, young adults, adolescents

Resumen:

El uso excesivo de Redes Sociales (RS) está asociado a consecuencias negativas en la salud mental de adultos jóvenes y adolescentes por lo que el objetivo de la presente revisión es sistematizar la información de artículos publicados en los últimos 5 años sobre consecuencias en la salud mental de la adicción de redes sociales en adolescentes y adultos jóvenes. Se analizaron artículos publicados del 2019 al 2025, idioma inglés/español, con población adolescente y jóvenes adultos. Como resultados, en el caso de los adolescentes, las consecuencias relacionadas a la salud mental fueron ansiedad, depresión, nomofobia, problemas de conducta principalmente con sus padres y familiares, problemas para dormir y dificultad para interactuar en persona. En cuanto a los adultos jóvenes, disminución en la calidad del sueño, síntomas de depresión, ansiedad, baja autoestima, comparación negativa de sí mismo, estrés, sentimiento de soledad y baja percepción de bienestar subjetivo. En conclusión, es importante continuar con la investigación en esta línea enfocada en las consecuencias a largo plazo de la adicción a las RS así como conocer cuáles son las características específicas de las RS que promueve que se mantenga su uso descontrolado y proponer intervenciones que ayuden a tener mayor gestión de su uso para no presentar consecuencias negativas.

Palabras Clave:

Redes sociales, salud mental, adultos jóvenes, adolescentes

^aAutor de Correspondencia, Facultad de Estudios Superiores Iztacala, Universidad Nacional Autónoma de México, Estado de México, México. <https://orcid.org/0000-0002-9230-3492> Email: diana.berenice11@hotmail.com

^b Facultad de Estudios Superiores Iztacala, Universidad Nacional Autónoma de México, Estado de México, México., <https://orcid.org/0000-0002-7331-4735>, Email: iramjenn@comunidad.unam.mx

^c Facultad de Estudios Superiores Iztacala, Universidad Nacional Autónoma de México, Estado de México, México., <https://orcid.org/0009-0000-6058-187X> Email: marianane753@gmail.com

^d Facultad de Estudios Superiores Iztacala, Universidad Nacional Autónoma de México, Estado de México, México., <https://orcid.org/0000-0001-6299-255X>, Email: saracruz@unam.mx

INTRODUCTION

With the advancements in technology and the arrival of the internet, the use of mobile applications to facilitate the communication with other people has increased, providing benefits in daily activities for the general public by sharing information immediately, expressing ideas and opinions, as well as keeping in contact with any individual regardless of the distance (Hermann et al., 2019; Hugo et al., 2020; Valencia et al., 2023).

It has been observed that around 69.4% of the world population has access to a mobile device, 66.2% has internet access, and there are around 5.04 billion social media profiles, which account for 62.3% of the global population (Global Overview Report, 2024).

According to Arias and Orio (2023) social networks (SNS) are interactive technological applications mediated by fixed or mobile electronic devices that facilitate the interaction, exchange of ideas and interests such as WhatsApp, Facebook, Instagram, Twitter, TikTok, and YouTube.

However, it has been identified that the excessive use of such applications can result in negative consequences in different life functioning areas of an individual, such as: low self-esteem, body dissatisfaction, depression symptoms, anxiety, sleep difficulties, the development of eating disorders, low work or academic performance, and isolation (Carbonell & Juliá, 2023; Díaz et al., 2023; Han et al., 2017; Limas & Vargas, 2019; Mahapatra, 2019; Martínez-Líbano et al., 2022; Padilla & Ortega, 2017; Portillo-Reyes, et al., 2021; Ruiz et al., 2023; Valencia et al., 2023).

Some authors consider that the excessive use of SNS could be considered a behavioral addiction, defined as a condition in which a problematic behavior is repeated in a high frequency despite significant negative consequences, in addition to a recurrent failure to control said behavior (Carbonell et al., 2021; Goodman, 1990). Within the social media behavioral addiction indicators, we can find the increase of time spent on social media (SM) regarding what was originally intended, a recurrent desire to use SM, that their use results in difficulties or failure to perform daily tasks, continued use despite negative consequences, ceasing or reducing important activities, presenting withdrawal symptoms when SM is not being used, mood alterations, and relapses (Hodann-Caudevilla et al., 2023; Kuss & Griffiths, 2011; Roncero et al., 2023).

Nonetheless, there is a theoretical debate concerning the development of a behavioral addiction to social media. Martín and Medina (2021) explain that the addiction to social media could be generated by the immediacy of a positive reinforcer when receiving a response such as an interaction or comment; thus, every reaction produces a consequence that allows people to obtain a set of satisfaction micro-incentives, which causes problems in several life areas when people are logged on for large periods of time.

Despite the debate around the concept of addiction to SM, the consequences of the excessive use of SM are real. Research studies have been conducted to identify the relationship between SM addiction and its consequences in mental health. A study by Carrillo et al. (2023) with 454

medicine students found a significant association between high SM addiction levels and mental health problems such as anxiety, depression, and stress. On the other hand, Guzmán and Gélvez (2023) made a systematic review on the implications of the use of social networks in teenagers for their health. Their main findings were that social media addiction is associated with the risk of developing an eating disorder, increased depression symptoms, and substance use. In addition, Ergün et al. (2025) assessed the association between social media addiction and depression, anxiety, and stress with a sample of 603 young adults. The authors found that greater social media addiction is related to poorer mental health. Moreover, these results were constant even after controlling for gender, age, the frequency of internet use, the frequency of social media use, and the frequency of cellphone use.

Some researchers have suggested that teenagers and young adults are more vulnerable to social media addiction due to their increased frequency of use of these apps (Global Overview Report, 2024; Gunes, et al., 2018).

Internet and social media are part of people's daily life, hence the time destined to these websites is increasing, given that they are constantly updating to cover needs in all areas –academic, work, health, and social. There is evidence that the excessive use of SM is linked to negative consequences in young adults and adolescents' mental health. Therefore, the purpose of the present review is to systematize the information of papers published in the last 5 years on the consequences in mental health of social media addiction in adolescents and young adults.

METHOD

The protocol of this review was registered in PROSPERO with number: CRD420250653749. The review of the literature was made based on the PRISMA protocol (2020).

Inclusion criteria

Papers published between 2019 and 2025, in English/Spanish, with adolescent and young adult populations.

Exclusion criteria

Qualitative studies, systematic reviews, book chapters, clinical essays, that were focused on a specific social network, included populations with specific comorbidities such as substance use, depression, theoretical articles, single case studies, and studies that considered social media addiction as a secondary variable.

A literature search was performed in *Scopus*, *Science Direct* and *Public Health Data Base*, entering the following search term: ("social media" OR facebook OR instagram OR snapchat OR "tiktok" OR whatsapp OR telegram) AND "behavioral addiction" AND "mental health"

The search was done with the selected keywords, discarding the articles that did not satisfy the inclusion criteria in their title and abstract; this process was performed by two researchers to prevent bias in the selection of articles. Finally, in the inclusion phase, all the studies that met all the criteria were selected and the critical appraisal phase began.

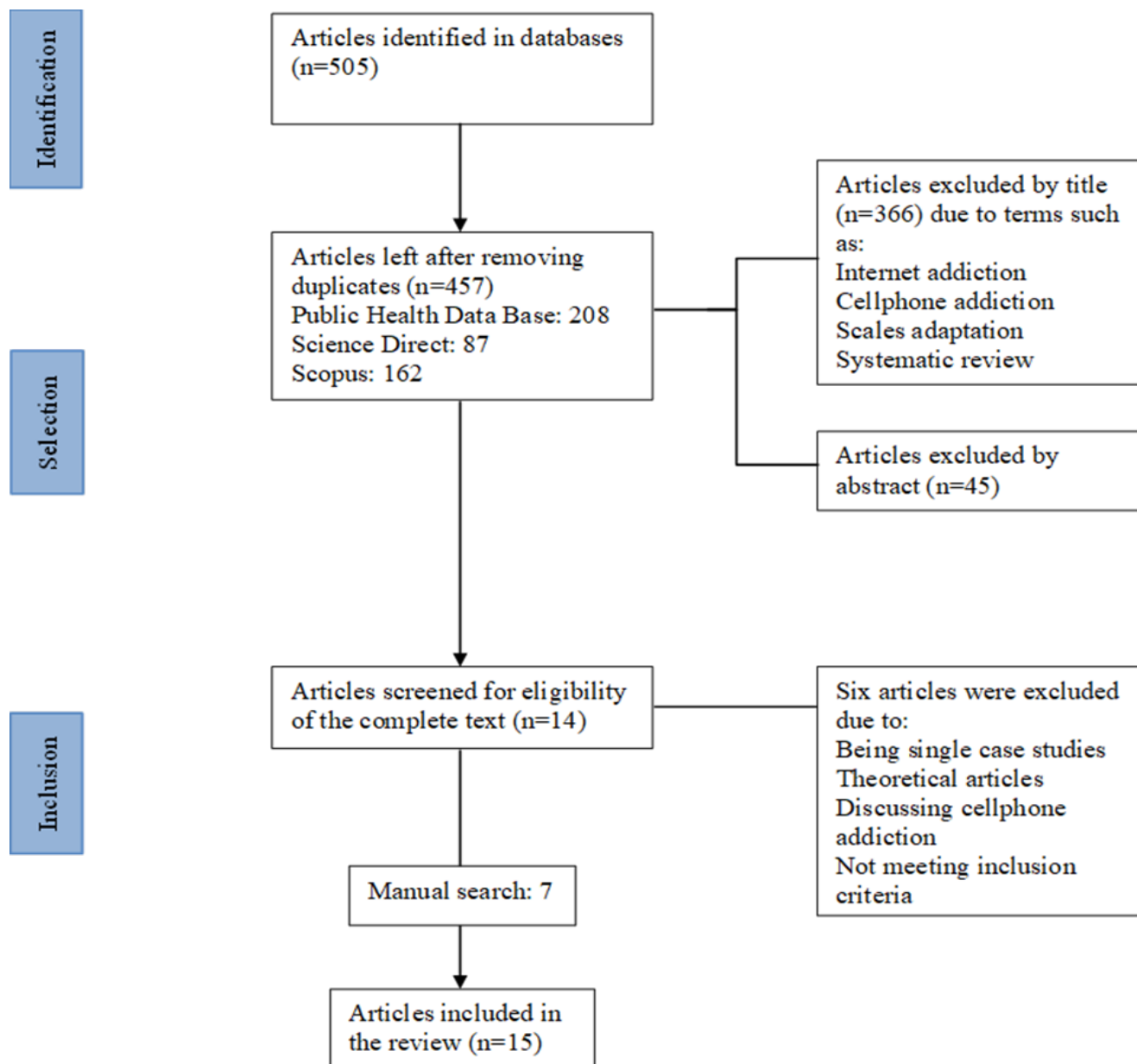


Figure 1. Selection of studies flow diagram

RESULTS

Characteristics of the included studies

Out of the 15 analyzed studies, four focused on the adolescent population between 13 and 15 years old (Abbas et al. 2023; Lin et al., 2021; Sümen y Evgin, 2021; Xiao et al., 2022), and 11 focused on young adults between 18 and 44 years old (Chen et al., 2022; Feng et al., 2025; Haand & Shuwang, 2020; Landa-Blanco et al., 2024; Leung et al., 2021; Piko et al., 2024; Portillo-Reyes et al., 2021; Samra et al., 2022; Vera et al., 2024; Zhao, 2021; Zhu et al., 2023).

Regarding the analyzed country, six studies were conducted in China (Chen et al., 2022; Feng et al., 2025; Leung et al., 2021; Xiao et al., 2022; Zhao, 2021; Zhu et al., 2023), and one in Iran (Lin et al., 2021), Afghanistan (Haand & Shuwang, 2020), Australia (Samra et al., 2022), Turkey (Sümen & Evgin, 2021), Hungary (Piko et al., 2024), Mexico (Portillo-Reyes et al., 2021), Peru (Vera et al., 2024), and Honduras (Landa-Blanco et al., 2024). The selected studies analyzed samples ranging from 144 to 19105 participants (see Table 1).

Table 1.*Sociodemographic data from the studies.*

Authors	Country	Sample size	Age range	Design
Haand & Shuwang (2020)	Afghanistan	384	18 to 25 years $\underline{x} = 21.6$	Cross-sectional
Leung et al. (2021)	China	347	18 to 28 years $\underline{x} = 20.27$	Cross-sectional
Lin et al. (2021)	Iran	1065	13 to 19 years, $\underline{x}=15.5$	Longitudinal
Portillo-Reyes et al. (2021)	Mexico	100	18 to 44 years $\underline{x}= 21.5$	Cross-sectional
Sümen & Evgin (2021)	Turkey	1274	$\underline{x} = 15.22$	Cross-sectional
Zhao (2021)	China	370	17 to 25 years	Cross-sectional
Chen et al. (2022)	China	19105	College students.	Cross-sectional
Samra et al. (2022)	Australia	144	$\underline{x}= 20$	Cross-sectional
Xiao et al. (2022)	China	1022	Adolescents $\underline{x} = 15.2$	Cross-sectional
Abbas et al. (2023)	Pakistan	272	13 to 18 years	Cross-sectional
Zhu et al. (2023)	China	2744	18 to 30 years $\underline{x} = 20.08$	Cross-sectional
Landa-Blanco et al. (2024)	Honduras	412	18 to 43 years $\underline{x} = 22.22$	Cross-sectional
Piko et al. (2024)	Hungary	201	$\underline{x} = 21.8$	Cross-sectional
Vera et al. (2024)	Peru	172	17 to 27 years	Cross-sectional
Feng et al. (2025)	China	432	23 to 39 years $\underline{x} = 27.34$	Cross-sectional

Notes: $\underline{x}$ = mean.*Mental health variables associated with social media addiction*

The identified variables were anxiety, depression, sleep, and self-esteem. Specifically, some studies analyzed other factors, such as loneliness feelings, social support, subjective wellbeing, and behavioral problems (see Table 2).

Mental health consequences in adolescents

Regarding the studies that assessed the consequences in the adolescents' mental health, Lin et al. (2021) found a relationship between nomophobia, insomnia, and social media addiction, and explained that nomophobia is defined as the concern or irrational fear of not using internet or interacting in social networks, which they consider to be related to insomnia, given that the adolescents who presented sleep difficulties used their cellphone for approximately two hours while trying to sleep. Moreover, this behavior persisted in those with social media addiction. Other consequences associated with this addiction were behavioral problems, specifically having a difficult relationship with their parents and relatives, emotional hardships, and poor sleep quality; these were identified by

Sümen and Evgin (2021), mainly in 70% of their sample of girls with social media addiction, who had been using social media for 7 years on average.

Xiao et al. (2022) and Abbas et al. (2023), identified as main consequences mental health difficulties, such as anxiety and depression; the authors explain that the use of social media hinders focus and produces difficulties in the interaction of adolescents in real life.

Finally, Samra et al. (2022) and Xiao et al. (2022) were the only studies in which a comparison between male and female participants was made regarding social media addiction, and both studies found that women presented greater addiction levels than men.

Mental health consequences in young adults

Most of the reviewed studies were performed on the young adult population. Regarding social media addiction and its consequences on mental health, Zhu et al. (2023) found sleep quality to be of great importance, since there was a significant association between sleep quality and social media addiction, where young adults who only used social media for academic tasks showed lower levels of social media addiction and better sleep quality.

On the other hand, Chen et al. (2022), Leung et al. (2021), and Haand and Shuwang (2020) identified an association between social media addiction and greater depression symptoms, by replacing in-person interaction with friends, relatives, and classmates with online interactions. Furthermore, the authors explain that this can result in feelings of loneliness and general dissatisfaction. In addition, Samra et al. (2022) found that social media addiction is also associated with low self-esteem, which they suggest that can also explain the depression symptoms linked to social media addiction, given that they identified that women in particular tend to compare their personal image with social network profiles, usually comparing themselves more negatively, which promoted low self-esteem and depression. In this regard, Landa et al. (2024) stated that the association between depression symptoms and social media addiction could also be accounted for the type of content that is consumed by young people, the longing for social approval in the form of *likes*, and the comments in their posts.

In the same vein, Portillo-Reyes et al. (2021)'s results support that social media addiction is related to low self-esteem in young people. Similarly, Piko et al. (2024) found that low self-esteem is linked to social comparison and

feelings of loneliness, explaining that social media can foster negative comparisons and decrease social support from others, given that social media addiction decreases face-to-face interaction.

Feng et al. (2025), Landa-Blanco et al. (2024), and Vera et al. (2024) found a significant relationship between social media addiction and anxiety and stress symptoms, specifically in college students. The authors agree that young people with social media addiction had greater difficulties concentrating in academic tasks or study periods due to spending long periods of time watching short videos in social networks, specifically making use of Instagram and TikTok (Landa-Blanco et al., 2024), which would lead them to delay their pending academic tasks. Additionally, they identified that delaying these activities would result in anxiety symptoms.

Regarding the measurement of the mental health variable, it was found that each study assessed mental health-related variables, mainly anxiety and depression symptoms and sleep quality, considering the presence of these symptoms as mental health indicators; some other studies included other variables such as self-esteem, feelings of loneliness, subjective wellbeing, and stress

Table 2.

Main findings of the included articles.

Author	Objective	Social media addiction assessment	Mental health related variables assessment	Main findings
Haand & Shuwang (2020)	To analyze the relationship between social media addiction and depression in college students.	Internet Addiction Test	The Centre for Epidemiologic Studies Depression Scale (CES-D)	A significant relationship between social media addiction and depression symptoms was found ($r=0.426$, $p<0.000$).
Leung et al. (2021)	To analyze the mechanism by which social media are related to depression symptoms.	Report of the time spent in social media	Rosenberg Scale Center for Epidemiologic Studies Depression Scale (CES-D)	There is a relationship between time spent on social media and depression (0.42 , 95% CI [0.02 , 0.86]).
Lin et al. (2021)	To assess the temporal relationship between nomophobia, social media addiction, and insomnia in Iranian adolescents.	Nomophobia Questionnaire Bergen Social Media Addiction Scale (BSMAS)	Insomnia Severity Index	An association between insomnia and nomophobia ($B = 0.20$; $p < 0.001$) and social media addiction ($B = 0.49$; $p < 0.001$) was found.
Portillo-Reyes et al. (2021)	To establish a relationship between social media addiction, self-esteem, and anxiety in college students.	Social media addiction questionnaire (Escurrea y Salas, 2014)	Adult Manifested Anxiety Scale Rosenberg Self-Esteem Scale	Inverse statistically significant correlations between self-esteem and social media addiction were found ($r = -0.399$, $p<0.05$).
Sümen & Evgin (2021)	To examine the relationship between social media addiction, sleep quality, and psychological problems in high school students.	Social Media Addiction Scale for Adolescents (SMASA).	Strengths and Difficulties Questionnaire (SDQ) Sleep Quality Scale and Sleep Variables Questionnaire (SQS-SVQ)	Positive correlations between social media addiction and behavioral problems ($r = 0.29$; $p= 0.001$), emotional difficulties ($r = 0.34$; $p = 0.001$), and sleep quality ($r = -0.19$; $p= 0.001$) were found.

Author	Objective	Social media addiction assessment	Mental health related variables assessment	Main findings
Zhao (2021)	To explore the relationship between social media addiction and subjective wellbeing.	The Social Use Scale The Bergen Social Media Addiction Scale	Subjective Well-being Scale	Social media addiction is related to low subjective wellbeing levels ($r = -0.324$; $p = 0.01$).
Chen et al. (2022)	To assess the relationships between problematic social network use, social support, violence in social networks, and loneliness.	A modified version of the Facebook Addiction Scale	Center for Epidemiological Studies Depression Scale (CESD-20) Perceived Social Support Scale Loneliness Scale (ULS-8) Social Media Violence	Higher social media addiction scores were related to increased depression symptoms ($\beta = 0.18$, $p < 0.001$). The perception of social support, violence in social networks, and feelings of loneliness were significantly associated with the problematic use of social networks and depression symptoms (model fit: RMSEA = 0.065, GFI = 0.984, CFI = 0.982).
Samra et al. (2022)	To determine if social comparisons mediate the relationship between the problematic use of social media and depression.	Frequency of social media use The Bergan Social Media Addiction Scale (BSMAS)	The short Promis 8b (depression) Two Social Comparisons on social media The Rosenberg Self-Esteem Negative Social Media Comparison Scale	The problematic use of social media had a moderate association with depression symptoms ($r = 0.47$, $p < 0.001$), low self-esteem ($r = 0.35$, $p < 0.001$), and the tendency to compare themselves negatively ($r = 0.44$, $p < 0.001$). Women obtained higher scores in the problematic use of social networks than men ($\bar{x} = 18.05$, $SD = 5.68$; $t(140) = 2.26$, $p = 0.025$).
Xiao et al. (2022)	To evaluate the effects of social media addiction on depression and underlying mechanisms.	The Chinese Social Media Addiction Scale (Liu & Ma, 2018) Mobile Phone Addiction Type Scale	Attention to Positive and Negative Information Scale Delaware Social and Emotional Competencies Scale-Student (DSECS-S) Generalized Anxiety Disorder Test (GAD-7) Center for Epidemiological Studies Depression Scale (CES-D)	Social media addiction was negatively correlated with emotional competence ($r = -0.1$; $p < 0.001$) yet positively correlated with anxiety ($r = 0.32$; $p < 0.001$) and depression ($r = 0.32$; $p < 0.001$). Women showed a higher social media addiction score than men ($p < 0.001$).
Abbas et al. (2023)	To describe the effect of social media addiction on mental health in middle school students.	Scale elaborated by the authors.	Scale elaborated by the authors.	A moderate positive relationship was found between social media addiction and mental health ($r = 0.674$) with a 66% explained variance.
Zhu et al. (2023)	To assess the relationship between social media use, fatigue, social media addiction, sleep duration, fear of missing out (FOMO), and sleep quality in college students in China.	Social Media Addiction (Liu & Ma, 2018)	Pittsburgh Sleep Quality Index (PSQI) Sleep duration Social Media Fatigue Fear of Missing Out (FOMO)	Sleep quality was positively associated with social media use fatigue (OR = 1.387, 95% CI: 1.103~1.743) and social media addiction (OR = 1.415, 95% CI: 1.118~1.791).

Author	Objective	Social media addiction assessment	Mental health related variables assessment	Main findings
Landa-Blanco et al. (2024)	To analyze social media addiction and its effect on academic performance, considering self-esteem, depression, and anxiety and mediating variables.	Bergen Social Media Addiction Scale (BSMAS)	Patient Health Questionnaire	A statistically significant relationship between levels of social media addiction and anxiety ($r = 0.42$; $p < 0.01$) and depression symptoms ($r = 0.44$; $p < 0.01$) was found.
Piko et al. (2024)	To examine the model to understand the relationship between social comparison and social media addiction while examining online social support and self-esteem.	Bergen Social Media Addiction Scale (BSMAS)	Online Social Support Scale Iowa Netherlands Comparison Orientation Measure (INCOM) Rosenberg Self-Esteem Scale (RSE) UCLA Loneliness Scale	Social media addiction was positively correlated to social comparison scores ($r = .29$; $p = .001$) and feelings of loneliness ($r = .15$; $p = .01$), and negatively with self-esteem ($r = -.27$; $p = .001$).
Vera et al. (2024)	To determine the relationship between social media addiction and mental health in human medicine college students in Peru.	Social media addiction questionnaire (Escurra y Salas, 2014)	Depression Anxiety and Stress Scale (DASS-21)	Significant correlation between social media addiction and anxiety and stress, 0.0310 and < 0.0001 , respectively. There was no evidence of a significant relationship between social media addiction and depression ($p = 0.164$).
Feng et al. (2025)	To explore the main symptoms of social media addiction, mental health problems (anxiety, depression, stress).	Bergen Social Media Addiction Scale (BSMAS)	Depression Anxiety and Stress Scale (DASS-21)	An association between social media addiction and stress was found ($BEI = 0.14$), as well as with depression symptoms, ($BEI = 0.44$), and anxiety ($BEI = 0.23$).

Definition of addiction

Regarding the definition of social media addiction, it was found that Lin et al. (2021), and Chen et al. (2022) define it as a type of internet addiction and as a behavioral addiction in which a compulsive use is continued despite the negative consequences experienced by the person. Correspondingly, Haad and Shuwang (2020) and Abbas et al. (2023) explain that social media addiction is a type of behavioral addiction that is characterized by a constant worry to be online on social networks, an uncontrollable urge to use social networks, and spend a lot of time on social media, which obstructs spending it in other important activities. Piko (2024), Feng et al. (2025) and Sümen y Evgin (2021) define social media addiction as the difficulty to control the urgency of using social media, which results in impairments in the academic and professional performance, as well as in social relationships.

Zhao (2021) defines addiction as the excessive use of social networks that damages a person's life areas by not having control over the time they use social networks. The author explains that this addiction develops by producing satisfaction to the users through a diversity of interactions with others, sharing content, posting and reacting to posts of their friends or the people they follow. Landa-Blanco et al. (2024) also share this definition, and they add that the users can generate the need to be logged on social networks, which interferes with their daily activities, producing sleep and emotional difficulties, as well as hindering social interaction. Finally, Samra et al. (2022) and Zhu et al. (2023) are the only authors that employ the concept of problematic and compulsive use of social media, and they define it as the repetitive use regardless of the negative consequences in mental health and interpersonal relationships.

Scales used to measure social media addiction

Different scales used to assess social media addiction were identified.

The Bergen Social Media Addiction Scale (Andreassen et al., 2016) was used in six studies (Feng et al., 2025; Landa-Blanco et al., 2024; Lin et al. 2021; Piko et al. 2024; Samra et al. 2022; Zhao, 2021). This instrument measures social media addiction using six items in a Likert-like scale from 1 to 5; the highest score is 30, and a higher score reflects higher social media addiction. This scale has a Cronbach alpha of 0.84.

Social Media Addiction Scale for Adolescents (Özgenel et al., 2019) is a scale that measures social media addiction in adolescents; it was used by Sümen and Evgin (2021). The scale has nine items in a Likert-like scale from 1 to 5, in which a higher score reflects higher levels of social media addiction. Its Cronbach alpha is 0.880.

The Facebook Addiction Scale is the questionnaire used by Chen et al., (2022), has eight items that evaluate social media addiction indicators, such as: cognitive and behavioral salience, conflict with other activities, euphoria, relapse and reinstatement, withdrawal, and loss of control. Social media addiction is measured with a Likert-like scale ranging between 1 and 5, with scores between 8 and 40, in which a higher score means greater social media addiction levels. This scale has a Cronbach alpha of 0.80.

The Chinese Social Media Addiction (Liu & Ma, 2018) was used by Zhu et al. (2023) and Xiao et al. (2022). This scale measures social media addiction through 17 items divided in five dimensions: salience, social gain, compulsive use, withdrawal, and relapse. It uses a Likert-like scale in which a higher score correlates with a higher social media addiction level. This instrument's Cronbach alpha is 0.907.

The Social Media Addiction Questionnaire (Escurra & Salas, 2014) has a Cronbach alpha of 0.94 and is composed of 24 Likert-like items that go from 0 to 4. The total score indicates: no addiction (0-24), low (25-49), moderate (50-74), and high (75-99) levels. This scale was used by Portillo-Reyes et al. (2024) and Vera et al. (2024).

The Internet Addiction Test (Young, 1998) is composed of 20 Likert-like items ranging between 0 and 5. The obtained total score corresponds to normal levels (0-30), mild addiction (31-49), moderate addiction (50-79), and severe addiction (80-100). This scale was used on Haand and Shuwang's (2020) study.

DISCUSSION

The main purpose of this study was to systematize the information of articles published in the last five years on the mental health consequences of social media addiction in adolescents and young adults. The primary findings were that, in the case of adolescents, the main mental health consequences were anxiety, depression, nomophobia, behavioral problems especially with parents and relatives, sleep issues, and difficulties with in-person interaction. Regarding young adults, sleep quality was a measured variable in most of the studies, and it was proposed as a consequence of social media addiction. Furthermore,

depression symptoms, anxiety, low-self-esteem, negative comparison of oneself, stress, feelings of loneliness, and low subjective wellbeing perception were found.

The results of this research concur with The US Surgeon General's Advisory (2023), that explains that the access to technology and social networks eases people's lives, yet may deter mental health by promoting anxiety, depression, sleep difficulties, low self-esteem, among others.

The results are also consistent with Martínez-Libano, et al. (2022), who found in college students that anxiety and depression symptoms related to social media addiction. Another review by Colonio (2023) in teenagers found that some of the main mental health consequences were poor focus and behavioral problems, being women who reported a greater addiction level compared to men.

On the scales used to measure social media addiction, there was a considerable variety of instruments, yet the most used one was *The Bergen Social Media Addiction Scale* (Andreassen et al., 2016). This scale included four criteria of addiction similar to those for psychoactive substances according to the DSM V: excessive use of social media, a strong desire to use social media, failed attempts to decrease its use, and experiencing negative consequences of its use. *The Social Media addiction scale for adolescents* includes more addiction criteria considering the ones on the DSM V for substance use, given that it measures the amount of time spent on social media, the recurrent desire to use them, difficulties with others, reduction or abandonment of other activities, and withdrawal symptoms.

Each scale had different addiction criteria; however, none of them included the continued use of social media despite the risk of physical harm.

Finally, it is worth noticing the limitations of this review: considering that most of these studies were of a cross-sectional nature, to broaden the number of reviewed articles and databases for future reviews would be advisable. Moreover, it is suggested for future research to analyze the prevalence of social media addiction in men and women, given that some studies identified higher addiction levels in the latter. In addition, it is recommended to analyze the negative consequences for mental health depending on the used social network, suggestion that stems from studies that associate the use of Instagram to self-esteem and eating problems, mostly in women, as well as developing studies on the use of TikTok, due to the recent increase of users, positioning itself as the most used social network (Wang & Guo, 2023).

CONCLUSION

Social networks can facilitate communication and interactions with others; nonetheless, the accessibility and development of strategies such as algorithms and short videos of some social networks can result in excessive use and negative mental health consequences, mainly in adolescents and young adults, who are the most common users of social media. Hence, it is important to continue research on this topic focused on the long term consequences of social media addiction, as well as to identify the specific characteristics of the social networks that promotes its

unregulated use, as well as to recommend interventions that enhance social media use management to prevent negative consequences, also considering prevention strategies for social media addiction given that, as found by Sümen and Evgin (2021), the adolescents with greater social media addiction were the ones to started using them earlier in their lives.

Acknowledgements

This research was supported by a doctorate program grant conferred to the first autor by the Secretaría de Ciencia, Humanidades, Tecnología e Innovación (SECIHTI), with CVU number 1002009

Conflicts of interest

The authors declare not having any conflicts of interest.

REFERENCES

- Abbas, Z., Arshad, M. & Sadiqa, M. (2023). Impact of Media Addiction on Mental Health of Secondary School Students. *Journal of Asian Development Studies*, 12(4), 754-762. <http://doi: 10.7759/cureus.42990>.
- Andreassen, C., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252–262. <https://doi.org/10.1037/adb0000160>
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). American Psychiatric Publishing
- Arias, F. & Orio, L. (2023). Guía clínica sobre adicciones comportamentales basada en evidencia. *Sociedad Científica Española de Estudios sobre Alcohol, el Alcoholismo y otras Toxicomanías*. <https://socidrogalcohol.org/proyecto/guia-clinica-sobre-adicciones-comportamentales/>
- Carbonell, F. G., & Juliá, S. R. (2023). Influencias de las redes sociales en la autoestima, imagen corporal y satisfacción corporal de adolescentes y jóvenes. *Metas de Enfermería*, 26(2), 58-69. <https://doi.org/10.35667/MetasEnf.2023.26.1003082058>
- Carbonell, X., Calvo, F., Panova, T. & Beranuy, M. (2021). Consideración Crítica de las adicciones digitales. *Digital Education Review*, 39, 4-22. <https://doi.org/10.1344/der.2021.39.4-22>
- Carrillo, F., Picoy, P. R. & Rojas, R. (2023). Impacto de la adicción a redes sociales en la salud mental de los estudiantes de medicina humana, en tiempos de Covid-19. *Revista de la Facultad de Medicina Humana*, 23(4), 62-72. <https://doi.org/10.25176/rfmh.v23i4.5920>
- Chen, Y., Liu, X., Chiu, D. T., Li, Y., Mi, B., Zhang, Y., Ma, L., & Yan, H. (2022). Problematic Social Media Use and Depressive Outcomes among College Students in China: Observational and Experimental Findings. *International journal of environmental research and public health*, 19(9), 1-17. <https://doi.org/10.3390/ijerph19094937>
- Colonio, J. (2023). Revisión sistemática sobre la adicción a las redes sociales en adolescentes latinoamericanos entre el 2020-2022. *Propósitos y Representaciones*, 11(2), e1759, <https://doi.org/10.20511/pyr2023.v11n2.1759>
- Díaz, M. A., Bonilla, I., & Chamorro, A. (2023). Comparación social negativa: la influencia de la ansiedad, la regulación emocional y el uso problemático de las redes sociales. *Ansiedad y Estrés*, 29(3), 181-186. <https://doi.org/10.5093/anyes2023a22>
- Ergün, N., Özkan, Z., & Griffiths, M. D. (2025). Social media addiction and poor mental health: Examining the mediating roles of internet addiction and phubbing. *Psychological Reports*, 128(2), 723-743. <https://doi.org/10.1177/00332941231166609>
- Escurrea M. y Salas E. (2014). Construcción y validación del cuestionario de Adicción a Redes Sociales. *Liberabit*, 20(1), 73-91.
- Feng, T., Wang, B., Mingdi, M., Ren, L. Wu, L. Wang, Hui, Liu, X. & Wang, W. (2025). The relationships between mental health and social media addiction, and between academic burnout and social media addiction among Chinese college students: A network analysis. *Heliyon*, 11(3), <https://doi.org/10.1016/j.heliyon.2025.e41869>
- Global Overview Report (2024). <https://datareportal.com/reports/digital-2024-global-overview-report>
- Gunes, H., Tanidir, C., Adaletli, H., Kilicoglu, A.G., Mutlu, C., Bahali, M.K., Topal, M., Bolat, N. & Uneri, O. (2018). Oppositional defiant disorder/conduct disorder cooccurrence increases the risk of Internet addiction in adolescents with attention deficit hyperactivity disorder. *Journal of Behavior Addiction*, 7, 284–291. <https://doi.org/10.1556/2006.7.2018.46>
- Guzmán, V. A. & Gélvez, L. E. (2023). Adicción o uso problemático de las redes sociales online en la población adolescente. Una revisión sistemática. *Psicoespacios*, 17(51), 1-22. <http://doi.25057/21452776.1511>
- Han, D.H., Kim, S.M., Bae, S., Renshaw, P.F. & Anderson, J.S. (2017). Brain connectivity and psychiatric comorbidity in adolescents with Internet gaming disorder. *Addiction Biology*, 22, 802–812. <https://doi.org/10.1111/adb.12347>
- Haand, R., & Shuwang, Z. (2020). The relationship between social media addiction and depression: a quantitative study among university students in Khost, Afghanistan. *International Journal of Adolescence and Youth*, 25(1), 780–786. <https://doi.org/10.1080/02673843.2020.1741407>
- Hermann, A., Apolo, D. y Molano, M. (2019). Reflexiones y Perspectivas sobre los Usos de las Redes Sociales en Educación. Un Estudio de Caso en Quito-Ecuador. *Información Tecnológica*, 30(1), 215-224. <http://dx.doi.org/10.4067/S0718-07642019000100215>
- Hodann-Caudevilla, R. M., Roncero, R. M., Molina, M. & Pérez, L. (2023). Protocolo de tratamiento de las adicciones comportamentales. *Programa de Formación Médica Continuada Acreditado*, 13(85), 5041-5045. <https://doi.org/10.1016/j.med.2023.08.015>
- Hugo, F. J., Jiménez, C. E., Holovatyi, M. y Lara, P. E. (2020). El impacto de las redes sociales en la administración de las empresas. *Revista Científica de la Investigación y el Conocimiento*, 4(1), 173-182. <https://dialnet.unirioja.es/servlet/articulo?codigo=7402200>
- Kuss, D. J. & Griffiths, M. D. (2011). Online social networking and addiction-A review of the psychological literature. *International Journal of Environment Research and Public Health*, 8(9), 3528–3552. doi: <http://dx.doi.org/10.3390/ijerph8093528>
- Landa-Blanco M., García Y.R., Cortés-Ramos A. & Paz-Maldonado E. (2024). Social media addiction relationship with academic engagement in university students: The mediator role of self-esteem, depression, and anxiety.

- Heliyon. 10(2),1-10, <http://doi:10.1016/j.heliyon.2024.e24384>.
- Leung, A.N.M., Law, W., Liang, Y.Y., Au, A.C.L., Li, C. & Ng, H.K.S. (2021). What Explains the Association between Usage of Social Networking Sites (SNS) and Depression Symptoms? The Mediating Roles of Self-Esteem and Fear of Missing Out. *International Journal of Environmental Research and Public Health*, 18, 1-11. <https://doi.org/10.3390/ijerph18083916>
- Limas, S. J. y Vargas, S. (2019). Redes sociales como estrategia académica en la educación superior: ventajas y desventajas. *Educación y Educadores*, 23(4), 559-574. <https://doi.org/10.5294/edu.2020.23.4.1>
- Lin, C. Y., Potenza, M. N., Ulander, M., Broström, A., Ohayon, M. M., Chattu, V. K., & Pakpour, A. H. (2021). Longitudinal Relationships between Nomophobia, Addictive Use of Social Media, and Insomnia in Adolescents. *Healthcare (Basel, Switzerland)*, 9(9), 1-10. <https://doi.org/10.3390/healthcare9091201>
- Liu, C., & Ma, J. (2018). Development and validation of the Chinese social media addiction scale. *Personality and Individual Differences*, 134, 55–59. <https://doi.org/10.1016/j.paid.2018.05.046>
- Mahapatra, S. (2019). Smartphone addiction and associated consequences: role of loneliness and self regulation. *Behavior and information technology*, 38(8), 833-844, <https://doi.org/10.1080/0144929X.2018.1560499>
- Martín, D. M. y Medina, M. (2021). Redes sociales y la adicción al like de la generación z. *Revista de Comunicación y Salud*, 11, 55-76. <https://doi.org/10.35669/rcys.2021.11.e281>
- Martínez-Libano, J., González, N. y Pereira, J. I. (2022). Las Redes Sociales y su Influencia en la Salud Mental de los Estudiantes Universitarios: Una Revisión Sistemática. *Revista Electrónica de Investigación y Docencia Creativa*, 11(4), 44-57.
- Özgenel, M., Canpolat, O. & Eksi, H. (2019). Social Media Addiction Scale for Adolescents: Validity and Reliability Study. *ADDICTA: The Turkish Journal on Addictions*, 6(3), 631. link.gale.com/apps/doc/A660847453/AONE?u=anon~d186a4f7&sid=googleScholar&id=faf6d4d3.
- Padilla, C. & Ortega, J. (2017). Adicción a las redes sociales y sintomatología depresiva en universitarios. *Revista de Investigación y Casos en Salud*, 2(1), 47-53.
- Piko, B., Kiss, H., Hartmann, A., Hamvai, C. & Fitzpatrick, K. (2024). The role social comparison and online social support in social media addiction mediated by self-esteem and loneliness. *European Journal of Mental Health*, 19, 1-11. <https://doi.org/10.5708/EJMH.19.2024.0019>
- Portillo-Reyes, V., Ávila-Amaya, J. A. & Capps, J. W. (2021). Relación del Uso de Redes Sociales con la Autoestima y la Ansiedad en Estudiantes Universitarios. *Enseñanza e Investigación en Psicología*, 3(1), 139-149.
- PRISMA, 2020. Consideraciones. Retrieved from <https://www.prisma-statement.org/prisma-2020>
- Roncero, M., Hodann-Caudevilla, R. M., Alberdi Páramo, I. & Molina-Ruiz, R. M. (2023). Adicciones sin sustancia o adicciones comportamentales. *Programa de Formación Médica Continuada Acreditado*, 13(85), 4998-5009, <https://doi.org/10.1016/j.med.2023.08.011>.
- Ruiz, D. D., Onishi, D. A., & Armoa, A. (2023). El impacto de las redes sociales en la salud mental de los adolescentes. *Revista Latinoamericana de Ciencias Sociales y Humanidades*, 4(2), 1198-1206. <https://doi.org/10.56712/latam.v4i1.677>
- Samra, A., Warburton, W.A. & Collins, A.M. (2022). Social comparisons: A potential mechanism linking problematic social media use with depression. *Journal of Behavioral Addictions*, 11(2), 607-614. <https://doi:10.1556/2006.2022.00023>
- Sümen, A., & Evgin, D. (2021). Social Media Addiction in High School Students: A Cross-Sectional Study Examining Its Relationship with Sleep Quality and Psychological Problems. *Child indicators research*, 14(6), 2265–2283. <https://doi.org/10.1007/s12187-021-09838-9>
- The US Surgeon General's Advisory. (2023). Social Media and Youth Mental Health. *The US Surgeon General's Advisory-Public Health Service*. <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf?valencia>
- Valencia, R., Garay, U. & Cabero, J. (2023). Uso problemático de las redes sociales: el caso de estudiantes en México. *Alteridad, Revista de Educación*, 18(1), 23-33. <https://doi.org/10.17163/alt.v18n1.2023.02>
- Vera, A. O., Vigo, D. M., Pajares, E., Bazualdo, E. R. & Urquiaga, T. (2024). Adicción a las redes sociales y salud mental en estudiantes de medicina en Perú. *Revista Vive*, 7(20), 475-486. <https://doi.org/10.33996/revistavive.v7i20.315>
- Wang, X., & Guo, Y. (2023). Motivations on TikTok addiction: The moderating role of algorithm awareness on young people. *Profesional De La información*, 32(4). <https://doi.org/10.3145/epi.2023.jul.11>
- Xiao, W., Peng, J. & Liao, S. (2022). Exploring the Associations between Social Media Addiction and Depression: Attentional Bias as a Mediator and Socio-Emotional Competence as a Moderator. *International Journal of Environmental Research and Public Health*, 19(20) <https://doi:10.3390/ijerph192013496>.
- Young, K. S. (1998). Internet Addiction Test manual. *Center of Internet Addiction Recovery*, 1-10. <http://netaddiction.com/internet-addiction-test/>
- Zhao, L. (2021). The impact of social media use types and social media addiction on subjective well-being of college students: A comparative analysis of addicted and non-addicted students. *Computers in Human Behavior Reports*, 4(21), 1-6. <https://doi.org/10.1016/J.CHBR.2021.100122>
- Zhu, X., Zheng, T., Ding, L., Zhang, X., Li, Z. & Jiang, H. (2023). Exploring associations between social media addiction, social media fatigue, fear of missing out and sleep quality among university students: A cross-section study, *PLOS One* 18(10) <http://doi:10.1371/journal.pone.0292429>.