
INTENSIVE USE OF SOCIAL MEDIA AND EMOTIONAL WELL-BEING IN UPPER SECONDARY STUDENTS: THE MEDIATING ROLE OF DIGITAL SELF-REGULATION

INTENSIVE USE OF SOCIAL MEDIA AND EMOTIONAL WELL-BEING IN UPPER SECONDARY STUDENTS: THE MEDIATING ROLE OF DIGITAL SELF-REGULATION

Álvarez Machado Ernesto Alonso

National Technological Institute of Mexico/ I.T.
Los Mochis <https://orcid.org/0009-0004-9014-3263>
ernesto.am@mochis.tecnm.mx

Flores Zamorano Jesús Antonio

National Technological Institute of Mexico/ I.T.
Los Mochis <https://orcid.org/0000-0003-1725-7112>
jesus_afz@hotmail.com

Ruiz López Edgar Ramón

Agricultural Technology High School 81
manuelruizvalenzuela@hotmail.com

Arce López Luis Roberto

National Technological Institute of Mexico/I.T.
Los Mochis <https://orcid.org/0009-0009-0218-2470>
luisarceitlm06@gmail.com

Duarte Inzunza Carmen Teresa

National Technological Institute of Mexico/I.T.
Los Mochis <https://orcid.org/0009-0006-8623-7501X>
carmen.di@mochis.tecnm.mx

DOI: <https://doi.org/10.61273/neyart.v4i1.172>

Received: 12/17/2025 | Accepted: 02/28/2026 | Published: 03/30/2026

This work is
licensed under an
international
Creative Commons Attribution 4.0.



Abstract-- The intensive use of social media has become a structural phenomenon in the lives of adolescents, sparking a scientific debate about its implications for youth mental health. Although recent literature acknowledges mixed effects, there remains a need for empirical evidence specific to the Mexican high school context. The present study aimed to analyze the relationship between time spent on social media and perceptions of emotional well-being among high school students in Los Mochis, Sinaloa.

A mixed-methods study with a predominantly quantitative approach and a cross-sectional design was conducted, applying a structured questionnaire to 45 students. The results show that more than 60% exhibit prolonged digital exposure, associated with ambivalent emotional experiences, particularly anxiety and stress. Likewise, the majority acknowledge that social media use intermittently influences their mental health.

The findings confirm that the relationship between social media and adolescent well-being is not linear but is mediated by contextual factors and digital self-regulation processes. It is concluded that intensive use may constitute a psychosocial risk factor when there are no educational strategies to promote critical digital literacy and socio-emotional strengthening. The study provides contextualized evidence for the design of preventive educational interventions in Mexican high schools.

Keywords-- social media, mental health, adolescents, digital self-regulation, upper secondary education.

Abstract --The intensive use of social media has become a structural phenomenon in adolescent life, generating sustained scientific debate regarding its implications for youth mental health. Although recent literature acknowledges its ambivalent effects, there remains a need for contextualized empirical evidence within Mexican upper secondary education settings. This study aimed to analyze the relationship between daily social media use and perceived emotional well-being among fifth-semester students in upper secondary school in Los Mochis, Sinaloa.

A mixed-methods approach with a quantitative focus and a cross-sectional design was employed. A structured questionnaire was administered to 45 students to identify usage patterns, emotional perceptions, and perceived psychosocial risks. Results indicate that more than 60% of participants reported prolonged daily exposure to social media, which was associated with ambivalent emotional experiences, particularly anxiety and stress. Most students acknowledged that social media use influences their mental health intermittently rather than consistently.

Findings suggest that the relationship between social media use and adolescent well-being is not linear but is mediated by contextual factors and processes of digital self-regulation. The study concludes that intensive use may constitute a psychosocial risk factor when educational strategies aimed at critical digital literacy and socio-emotional development are absent. This research provides contextualized evidence to inform preventive educational interventions within Mexican upper secondary education.

Keywords—social media, mental health, adolescents, digital self-regulation, upper secondary education.

INTRODUCTION

Digital social media has established itself as one of the primary spaces for adolescent socialization, influencing communication, identity formation, and emotional regulation processes. In the contemporary context, these platforms function not only as technological tools but also as permanent sociocultural environments that shape youth interaction and social validation (INEGI, 2023; ONTSI, 2023).

Various recent studies show that the impact of social media on adolescent mental health is ambivalent. While they can foster social connection and personal expression, they are also associated with higher levels of anxiety, stress, social comparison, and depressive symptoms when their use is intensive or unregulated (Campos et al., 2021; Guzmán Brand & Gélvez García, 2023; Espinoza-Ponce & Hernández Junco, 2024).

In the Latin American context, recent studies have identified a significant relationship between problematic social media use and variables such as low self-esteem, perceived loneliness, and academic stress (Chávez Arizala et al., 2022; Chingay et al., 2023). Furthermore, systematic reviews indicate that prolonged exposure to digital environments can act as a modulating factor on

emotional well-being, especially when dynamics of constant social comparison and the search for external validation are involved (Colonio Caro, 2023; Lozano-Muñoz et al., 2022).

Furthermore, research conducted in the Ibero-American context indicates that adolescents themselves recognize that social media use influences their emotional state, particularly when they experience social pressure, a need for acceptance, or constant exposure to idealized standards of living. In this regard, Moreira de Freitas et al. (2021) note that adolescents' perceptions of social media range from relational benefits to psychological effects, emphasizing that the impact depends largely on their level of emotional maturity and the family and school contexts in which they are embedded.

In Mexico, official data from the Cyberbullying Module (MOCIBA) show that a significant proportion of adolescents experience risky situations in digital environments, underscoring the need to address the issue from an educational and preventive perspective (INEGI, 2024). Similarly, international organizations have warned of the rise in problems associated with the intensive use of digital technologies among adolescents, underscoring the importance of strengthening social-emotional skills and digital self-regulation (PAHO, 2023).

In this context, the present study analyzes the impact of social media use on high school students in Los Mochis, Sinaloa, with the aim of generating contextualized empirical evidence that contributes to the academic and educational debate on youth emotional well-being.

DEVELOPMENT

Methodology

This study was conducted using a mixed-methods approach with a quantitative focus, descriptive scope, and cross-sectional design, aimed at analyzing the relationship between social media use and the perception of emotional well-being among high school students. This design allowed for a contextualized characterization of the phenomenon at a specific point in the school year, without manipulation of variables.

The sample consisted of 45 high school students from Los Mochis, Sinaloa. The selection was non-probabilistic and based on convenience, taking into account the group's accessibility and its relevance within the institutional context. Although this type of sampling limits the

statistical generalization of the results, it is suitable for exploratory and descriptive studies in specific educational contexts.

A structured questionnaire consisting of closed-ended, multiple-choice, and Likert-scale questions was administered. The instrument was designed based on conceptual categories grounded in recent literature on problematic social media use, adolescent emotional well-being, and digital self-regulation (Campos et al., 2021; Guzmán Brand & Gélvez García, 2023; Espinoza-Ponce & Hernández Junco, 2024). The dimensions assessed included: daily usage time, emotions associated with digital interaction, perception of the impact on mental health, and habits linked to exposure in virtual environments.

The survey was administered in person during school hours, following institutional authorization and with the informed consent of the participants. The confidentiality and anonymity of the responses were guaranteed, as was the voluntary nature of participation, in accordance with basic ethical principles in educational research with adolescents.

Data analysis was conducted using descriptive statistics, including absolute frequencies, percentages, and graphical representations. Subsequently, the results were interpreted in light of recent scientific literature on adolescent mental health and social media use, which allowed for the establishment of analytical relationships between the empirical findings and current theoretical frameworks (ONTSI, 2023; INEGI, 2024).

Social Media Use

The results show that social media use is a widespread practice among the students analyzed, confirming the centrality of the digital environment in their daily lives and forms of social interaction. This finding is consistent with national data indicating high penetration of internet and social media use among the Mexican adolescent population (INEGI, 2023).

The data show that 33% of students use social media between two and four hours a day, while 29% report using it for more than four hours a day. Taken together, these figures indicate that more than 60% of the sample exhibits a high level of digital exposure. In contrast, only 11% of students use social media for less than one hour a day, and 27% use it for between one and two hours.

Figure 1. *Daily social media usage time.*



Note. Source: Author’s own analysis based on data from the survey administered to high school students. The values represent the percentage of hours spent per day on social media.

The high proportion of students with prolonged exposure is significant from a psychosocial perspective, as screen time serves as an indirect indicator of the degree of immersion in digital ecosystems characterized by constant stimulation, immediate feedback, and continuous social evaluation. Several studies have indicated that intensive use may be associated with higher levels of anxiety, difficulties with self-regulation, and negative effects on subjective well-being, especially when it exceeds three or four hours per day (Campos et al., 2021; Guzmán Brand & Gélvez García, 2023). Likewise, recent systematic reviews caution that the impact of exposure time should not be analyzed in isolation, but rather in interaction with variables such as the type of content consumed, patterns of social comparison, and the level of parental supervision (Colonio Caro, 2023; Lozano-Muñoz et al., 2022). In this regard, the frequency of use observed in the sample suggests that social media do not function solely as tools for occasional communication, but rather as structural environments for digital socialization that influence the organization of daily life and adolescent relational dynamics.

In line with the above, recent literature reviews emphasize that the impact of social media on adolescent mental health must be analyzed from a multidimensional perspective that takes individual, social, and technological factors into account in an integrated manner. Troya-Fernández et al. (2023) argue that there is no direct and uniform causal relationship between social media use and psychological distress,

, but rather a complex interaction mediated by variables such as frequency of use, type of digital interaction, and prior emotional vulnerability.

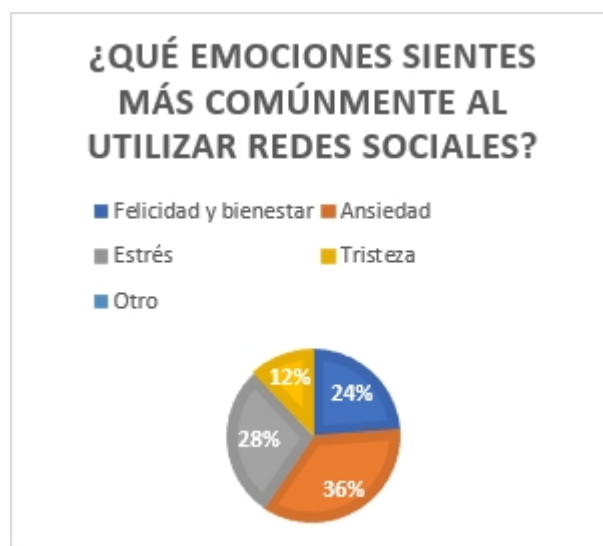
From an educational perspective, these findings reinforce the need to promote digital literacy strategies aimed not only at technological competence but also at the development of self-regulation skills and mindful time management in virtual environments (ONTSI, 2023; PAHO, 2023).

Emotions associated with use

The results show that most students recognize some degree of influence of the digital environment on their psychological well-being, which reinforces the hypothesis proposed in the study.

In percentage terms, 64% of students believe that social media use affects their mental health “sometimes,” while 22% indicate that this impact occurs “rarely.” In contrast, 10% report that they have “never” experienced any negative effects, and only 4% feel that the impact occurs “always.”

Figure 2. *Emotions associated with social media use.*



Note. Source: Author’s own analysis based on data from the survey administered to high school students. The values represent the percentage of emotions reported during social media use. The predominance of the “sometimes” category is particularly significant, as it indicates that the impact is not perceived as constant, but rather as a recurring experience in the daily life

of adolescents. This finding aligns with recent studies that describe the relationship between social media and mental health as a nonlinear phenomenon, mediated by contextual and personal variables (Guzmán Brand & Gélvez García, 2023).

From a psychosocial perspective, the intermittent perception of the impact can be interpreted as a reflection of the ambivalent nature of digital platforms. These function simultaneously as spaces for socialization, entertainment, and personal expression, but also as environments that can generate social pressure, constant comparison, and emotional overexposure (Espinoza-Ponce & Hernández Junco, 2024; Campos et al., 2021).

Likewise, adolescents' own recognition of this impact constitutes a relevant indicator of subjective awareness regarding their emotional well-being. Recent research has indicated that when young people identify emotional effects associated with digital use, a window of opportunity opens for educational interventions aimed at developing self-regulation and critical thinking in the virtual environment (ONTSI, 2023; PAHO, 2023).

In this regard, the results of the present study suggest that the relationship between social media and mental health in adolescents should not be interpreted exclusively in clinical or pathological terms, but rather as a dynamic process involving subjective perceptions, identity formation, and social validation dynamics. This understanding broadens the analysis beyond the mere quantification of screen time, incorporating qualitative dimensions of adolescent well-being.

Perception of the Impact on Mental Health

The results show that most students recognize some degree of influence from the digital environment on their psychological well-being, which reinforces the hypothesis proposed in the study.

In percentage terms, 64% of students believe that social media use affects their mental health “sometimes,” while 22% indicate that this impact occurs “rarely.” In contrast, 10% report that they have “never” experienced any effects, and only 4% perceive that the impact occurs “always.”

Figure 3. *Perception of the impact of social media use on mental health.*



Note. Source: Author’s own analysis based on data from a survey administered to high school students. The values represent the percentage of time spent on social media.

The predominance of the “sometimes” category is particularly significant, as it indicates that the impact is not perceived as constant, but rather as a recurring experience in adolescents’ daily lives. This finding aligns with recent studies that describe the relationship between social media and mental health as a nonlinear phenomenon, mediated by contextual and personal variables (Guzmán Brand & Gélvez García, 2023).

From a psychosocial perspective, the intermittent perception of impact can be interpreted as a reflection of the ambivalent nature of digital platforms. These platforms function simultaneously as spaces for socialization, entertainment, and personal expression, but also as environments that can generate social pressure, constant comparison, and emotional overexposure (Espinoza-Ponce & Hernández Junco, 2024; Campos et al., 2021).

Likewise, adolescents’ own recognition of this impact constitutes a relevant indicator of subjective awareness regarding their emotional well-being. Recent research has indicated that when young people identify emotional effects associated with digital use, a window of opportunity opens for educational interventions aimed at developing self-regulation and critical thinking regarding the virtual environment (ONTSI, 2023; PAHO, 2023).

In this regard, the results of the present study suggest that the relationship between social media and mental health in adolescents should not be interpreted exclusively in clinical or pathological terms, but rather as a dynamic process involving subjective perceptions, identity processes, and social validation dynamics. This understanding broadens the analysis beyond the mere quantification of usage time, integrating qualitative dimensions of youth well-being.

CONCLUSIONS

This study suggests that the use of social media during adolescence is a complex psychosocial phenomenon, whose impact on mental health cannot be interpreted in a linear or exclusively negative manner. The findings show that, while digital platforms serve as important spaces for socialization and identity formation, their intensive use is associated with ambivalent emotional experiences and, in a significant proportion of cases, with manifestations of anxiety and stress.

The high level of digital exposure identified in over 60% of the sample confirms the central role that social media plays in adolescents' daily lives, consistent with recent national data (INEGI, 2023, 2024). This level of immersion suggests that digital platforms have ceased to be merely complementary tools and have instead become structural environments for youth social interaction.

Likewise, the prevalence of emotions such as anxiety and stress aligns with research indicating an association between problematic social media use and emotional distress, particularly when processes of social comparison and the search for external validation are involved (Campos et al., 2021; Espinoza-Ponce & Hernández Junco, 2024; Guzmán Brand & Gélvez García, 2023). However, the fact that most students perceive the impact as "occasional" indicates that the relationship between social media and emotional well-being is mediated by contextual, personal, and educational factors, as suggested by recent systematic reviews (Colonio Caro, 2023).

From an educational perspective, the findings underscore the need to move beyond reductionist approaches that view social media solely as a risk or as an individual student's problem. Instead, the study proposes understanding social media as part of the contemporary educational ecosystem, which implies integrating its analysis into institutional strategies for well-being, social interaction, and critical digital literacy (ONTSI, 2023; PAHO, 2023).

In theoretical terms, the study provides evidence contextualized within the Mexican secondary education system, contributing to an understanding of the role that social media plays in adolescent emotional regulation processes. While the cross-sectional design limits causal inference, the results allow for the identification of relevant trends that can guide future research with longitudinal designs and larger samples.

Finally, the approach to social media use among adolescents should focus on preventive and educational strategies rather than restrictive ones, prioritizing the development of digital self-regulation skills, critical thinking regarding media content, and the strengthening of socio-emotional skills that enable balanced interaction with the digital environment.

FUTURE WORK

While this study provides contextualized evidence on the relationship between social media use and emotional well-being among high school students, its descriptive scope and cross-sectional design limit the ability to establish causal relationships. In this regard, future research could incorporate longitudinal designs that allow for the analysis of how the digital environment impacts adolescent mental health over time, identifying patterns of change and potential risk or protective factors (Colonio Caro, 2023).

Likewise, it is pertinent to expand the sample size and diversity, including different school contexts, socioeconomic levels, and educational modalities, in order to strengthen the external validity of the findings and facilitate inter-institutional comparisons. The incorporation of probabilistic sampling would contribute to improving statistical representativeness and the generalizability of results.

From a methodological standpoint, it is recommended to integrate validated psychometric instruments for the specific measurement of anxiety, digital self-esteem, problematic social media use, and adolescent subjective well-being, such as the Social Media Addiction Questionnaire (ARS) validated in the Latin American population (Rosero et al., 2022; González et al., 2021). This would allow for a more in-depth correlational and multivariate analysis of the phenomenon.

Similarly, future research could adopt an ecological approach by integrating family, school, and contextual variables—such as the socioemotional climate of the classroom, styles of digital parental mediation, and academic performance—with the aim of understanding social media use within a system of interrelated influences (Chingay et al., 2023; ONTSI, 2023).

It is suggested to explore the design and implementation of educational interventions aimed at developing digital self-regulation skills and social-emotional literacy, evaluating their impact through quasi-experimental studies. This type of approach would allow us to move beyond a mere description of the phenomenon and advance toward evidence-based proposals for action, in accordance with the recommendations of international organizations regarding adolescent mental health (PAHO, 2023).

REFERENCES

- Campos Gómez, R., Albornoz, C. U., Espinoza Vidal, R., Riveros Opazo, J., Portugal, O., Rivera Alul, M., Urzua Bolaños, L., Cossio, M., & Méndez Cornejo, J. (2021). Social media use, anxiety, depression, and indicators of body adiposity in adolescents. *Salud(i)Ciencia*, 24(6), 327-332. https://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S1667-89902021000200327
- Chávez Arizala, J. F., Moreno García, M. A., & Azañedo, C. (2022). Social media addiction and academic stress in students: A correlational study. *Apuntes Universitarios*, 12(3). <https://doi.org/10.17162/au.v12i3.1101>
- Chingay Yaipén, H. Y., Farro Zapata, E., & Dávila Cisneros, J. D. (2023). Family social climate and social media addiction among secondary school students. *Praxis Pedagógica*, 23(35), 52-68. <https://doi.org/10.26620/uniminuto.praxis.23.35.2023.52-68>
- Colonio Caro, J. D. (2023). Systematic review of social media addiction among Latin American adolescents between 2020 and 2022. *Propósitos y Representaciones*, 11(2), Article e1753. <https://dialnet.unirioja.es/servlet/articulo?codigo=10498953>
- Espinoza Ponce, C. A., & Hernández Junco, V. (2024). Perceptions of loneliness and social media addiction among adolescents. *Chakiñan, Journal of Social Sciences and Humanities*, (24), 13-32. <https://doi.org/10.37135/chk.002.24.01>
- González Alcántara, K. E. G., Corominas Tortolero, R., & Silva, C. (2021). Psychometric evaluation of the Social Media Addiction Questionnaire (ARS) in Mexican adolescents. *Journal of Clinical Psychology with Children and Adolescents*, 8(3), 26-34. <https://doi.org/10.21134/rpcna.2021.08.3.3>
- Guzmán Brand, V. A., & Gélvez García, L. E. (2023). Addiction or problematic use of online social media among adolescents: A systematic review. *Psicoespacios*, 17(31), 1-22. <https://doi.org/10.25057/21452776.1511>

- National Institute of Statistics and Geography (INEGI). (2023). Module on Cyberbullying (MOCIBA) 2023. <https://www.inegi.org.mx/programas/mociba/2023/>
- National Institute of Statistics and Geography. (2024). *Module on Cyberbullying (MOCIBA) 2023: Results*. <https://www.inegi.org.mx/contenidos/saladeprensa/boletines/2024/MOCIBA/MOCIBA2023.pdf>
- Lozano-Muñoz, N., et al. (2022). Influence of social media on anorexia and bulimia nervosa in adolescents: A review. *Spanish Journal of Human Nutrition and Dietetics*. https://scielo.isciii.es/scielo.php?pid=S1137-66272022000200011&script=sci_arttext
- Moreira de Freitas, R. J., Carvalho Oliveira, T. N., Lopes de Melo, J. A., do Vale e Silva, J., de Oliveira e Melo, K. C., & Fontes Fernandes, S. (2021). Adolescents' perceptions of social media use and its influence on mental health. *Global Nursing*, 20(64), 324–343. https://scielo.isciii.es/scielo.php?pid=S1695-61412021000400324&script=sci_arttext
- National Observatory on Technology and Society (ONTSI). (2023). *Impact of increased Internet and social media use on the mental health of youth and adolescents* (Policy brief). National Observatory on Technology and Society. <https://www.ontsi.es/sites/ontsi/files/2023-10/policybriefredesocialesaludmentaljoyenesyadolescentes.pdf>
- Pan American Health Organization (PAHO). (2023). *PAHO seeks input from adolescents and young people to address the mental health crisis in the Americas*. Pan American Health Organization. <https://www.paho.org/es/noticias/17-7-2023-ops-busca-voz-adolescentes-jovenes-para-abordar-crisis-salud-mental-americas>
- Rosero Bolaños, A. D., Eraso Meléndez, J. S., Villalobos Galvis, F. H., & Herrera López, H. M. (2022). *Validation of the Social Media Addiction Questionnaire (ARS) in a sample of Colombian adolescents*. *Psychological*. <https://revistas.upb.edu.co/index.php/informespsicologicos/article/download/7909/6942/15721>
- Troya-Fernández, J. C., Perrián-Sotelo, N., & Sánchez-Movellán-Pérez, P. (2023). The impact of social media on health mental mental: Literature literature review. *SANUM*, 7(1), 18–28. https://revistacientificasanum.com/wp-content/uploads/vol7n1/Vol7n1-Articulos-PDF/sanum_v7_n1_ImpactoRedesSociales.pdf

TABLE COLLABORATIVE WORK

Role	Author(s)
Research Director	Ernesto Alonso Álvarez Machado
Contributor to the preparation of Research	Jesús Antonio Flores Zamorano
Contributor to the preparation of Research	Edgar Ramón Ruiz López
Contributor to the preparation of Research	Luis Roberto Arce López
Contributor to the preparation of Research	Carmen Teresa Duarte Inzunza
Data curation	Jesús Antonio Flores Zamorano, Carmen Teresa Duarte Inzunza
Writing - Preparation of the original draft	Ernesto Alonso Álvarez Machado
Writing - Review and editing	Edgar Ramón Ruiz López, Jesús Antonio Flores Zamorano
Visualization	Ernesto Alonso Álvarez Machado, Jesús Antonio Flores Zamorano, Edgar Ramón Ruiz López, Luis Roberto Arce López, Carmen Teresa Duarte Inzunza
Supervision	Ernesto Alonso Álvarez Machado, Luis Roberto Arce López