

ORIGINAL ARTICLE

The Mediating Role of Self-Esteem Between Meaning in Life and Social Media Addiction

Berhan Akdağ¹, Cansu Ünsal²

¹Department of Child and Adolescent Psychiatry, Silifke State Hospital, Mersin, Türkiye

²Department of Psychiatry, Silifke State Hospital, Mersin, Türkiye

ORCID IDs of the authors: B.A. 0000-0002-5203-403X, C. Ü. 0000-0002-9891-4278.

Main Points

- The advent of digital technologies has revolutionized interpersonal interactions and communication methods.
- The alluring features of social media (e.g., instantaneous notifications and one-click access to information) can result in overuse and addictive behaviors.
- The present findings revealed a negative relationship between the presence of meaning in life and social media addiction, and this relationship was entirely mediated by self-esteem.
- The current study proposes actionable interventions aimed at reducing social media addiction by enhancing both meaning in life and self-esteem.

Abstract

The advent of digital technologies has markedly transformed human interactions and communication. While social media platforms facilitate connectivity and information sharing, their compelling features, such as instant notifications and one-click information access, can induce unregulated usage and addictive behaviors. Social media addiction, a form of behavioral addiction, has been associated with multiple psychological determinants. Despite this, the role of meaning in life—a key construct in existential psychology that is pivotal for psychological well-being—remains underexplored in the context of social media addiction. This study investigates this gap by examining the relationship between the presence of meaning in life and social media addiction and the mediating effect of self-esteem in this relationship. The findings revealed a negative correlation between the presence of meaning and social media addiction, as well as between self-esteem and social media addiction. Mediation analysis indicated that the link between the presence of meaning and social media addiction was entirely mediated by self-esteem. This study proposes actionable interventions aimed at reducing social media addiction by enhancing both meaning in life and self-esteem. Further studies are necessary to elucidate the relationship between meaning in life and social media addiction.

Keywords: Meaning in life, problematic social media use, self-esteem, social media addiction, youth

Corresponding Author:

Berhan Akdağ,
drberhanakdag@gmail.com

Received: November 28, 2023

Accepted: February 9, 2024

Publication Date: March 21,
2024

Introduction

Social Media Addiction

The advent of digital technologies has revolutionized interpersonal interactions and communication methods. Social media platforms facilitate connectivity and content sharing for individuals. However, the alluring features of social media, such as instantaneous notifications and one-click access to information, can result in overuse and addiction-like behaviors. Social media addiction

is characterized by compulsive usage that detrimentally affects mental health, interpersonal relationships, and daily functioning (Weinstein, 2023; Bányai et al., 2017). The prevalence of social media addiction among young people varies according to study design, geographic location, and specific criteria for defining and measuring addiction (Bányai et al., 2017). Nevertheless, there is a consensus that a substantial portion of youth globally exhibit problematic use of social media platforms.



Copyright © Author(s) –
Available online at <https://www.addicta.com.tr/EN>.

Content of this journal is
licensed under a Creative
Commons Attribution (CC BY)
4.0 International License.

Cite this article as: Akdağ, B., & Ünsal, C. (2024). The mediating role of self-esteem between meaning in life and social media addiction. *Addicta: The Turkish Journal on Addictions*, 11(1), 99-104.

The etiology of social media addiction is multifaceted, encompassing psychological, social, and environmental determinants. Psychological factors contributing to social media addiction include the activation of the brain's reward system, the pursuit of escapism, and experiences of social isolation. Specifically, social media platforms are engineered to stimulate the brain's reward mechanisms through various forms of engagement, such as likes, comments, and shares (Sherman et al., 2016). These platforms can also serve as a social outlet for individuals experiencing loneliness or disconnection, thereby encouraging excessive time spent online (Uyaroğlu et al., 2022). Moreover, social media offers a diversion from real-world stressors and challenges, offering transient respite from negative emotional states (Caplan, 2010).

An additional psychological factor associated with social media addiction is self-esteem. Self-esteem refers to an individual's evaluation of their own self-worth and has been linked to enhanced psychological well-being (Du et al., 2017). However, the relationship between self-esteem and social media addiction is intricate. Previous studies have indicated that individuals with low self-esteem are more inclined to frequent social media platforms to augment their self-image and self-worth (Andreassen et al., 2017). Conversely, high self-esteem can serve as a protective factor against social media addiction, as individuals with elevated self-esteem are less prone to seeking excessive validation, engaging in unfavorable social comparisons, or using social media to escape real-world challenges (Peris et al., 2020). Yet, receiving positive feedback on digital content can positively influence self-esteem and overall well-being (Burrow & Rainone, 2017).

Meaning in Life

The concept of the meaning of life has been examined from diverse perspectives, including philosophical, scientific, and theological viewpoints. Despite this, there remains a lack of consensus and clear definitions. To address this ambiguity, it is helpful to differentiate between two related but distinct concepts: the meaning of life and meaning in life. The former deals primarily with existential and philosophical inquiries, while the latter is a subjective mental state or experience (King & Hicks, 2021). The concept of meaning in life is particularly pertinent to psychology, as it focuses on what imbues an individual's life with a sense of purpose or value.

Although defining meaning in life (MIL) has proven to be a challenging task, scholars generally agree that MIL encompasses three core elements: comprehension (or coherence), purpose, and existential mattering (or significance) (Martela & Steger, 2016). Comprehension, sometimes referred to as coherence, pertains to the ability to discern patterns and maintain a consistent understanding of life events. Purpose acts as the guiding force behind an individual's actions and goals. Existential mattering, or significance, refers to the sense of value and worth one attaches to their own life (King & Hicks, 2021). In summary, the presence of meaning is defined by the degree to which an individual perceives their life as having a clear purpose, value, or significance. This presence of meaning is often associated with an understanding of life's purpose and a sense that life is coherent (Martela & Steger, 2016).

Empirical research has demonstrated that the presence of meaning is a significant factor in psychological well-being (Ho et al., 2010). Theoretical frameworks from existential psychology underscore the universal need for meaning as foundational for mental health and emotional resilience (King & Hicks, 2021). Individuals who perceive their lives as meaningful are generally less susceptible to psychological distress and maladaptive behavior patterns (Barnett et al., 2019). Conversely, the absence of perceived meaning may predispose individuals to negative mental health outcomes, such as depression and suicidal ideation (Sun et al., 2022). A positive correlation has also been observed between the presence of meaning and self-esteem (Barnett et al., 2019). Individuals who find their lives meaningful are more likely to exhibit a strong sense of self-worth. Furthermore, a sense of purpose can provide motivation and direction, fostering accomplishments that further elevate self-esteem (George & Park, 2016).

The Present Study

As previously noted, MIL can act as a protective factor against mental health issues. Existing literature indicates that a sense of meaning is inversely related to the propensity for addiction, including alcohol and substance abuse (Csabonyi & Phillips, 2020). Viktor Frankl, the originator of logotherapy, posited that a lack of meaning can lead to an "existential vacuum," and efforts to circumvent this vacuum may involve temporary distracting behaviors such as addictive actions (Frankl, 1984). Additionally, addictive behaviors are used to cope with emotional distress, and individuals possessing a sense of meaning demonstrate greater resilience and lower vulnerability to addiction (Csabonyi & Phillips, 2020).

Previous studies suggest a complex interplay between social media addiction (or use) and MIL. For example, one study conducted amid the pandemic indicated that social media use could indirectly predict increased MIL via reduced existential and social isolation; conversely, it could also be associated with diminished MIL due to heightened emotional loneliness in active social media users (Helm et al., 2022). Additional research proposes that individuals may utilize social media platforms to seek meaning (Harren & Walburg, 2023). Indeed, MIL can arise from various sources, such as positive emotions, social connections, beliefs, memories, and future objectives (King & Hicks, 2021), and social media can facilitate this by offering avenues for spiritual enrichment, self-enhancement, and entertainment, as well as fostering a sense of community (Harren & Walburg, 2023).

In the context of the digital age, gaining insight into the psychological determinants influencing online behaviors is imperative. Accordingly, this study aims to investigate the relationship among the presence of meaning, self-esteem, and social media addiction. We propose the following hypotheses:

- H₁: The presence of meaning exhibits a positive correlation with self-esteem.
- H₂: Self-esteem is inversely correlated with social media addiction.
- H₃: The presence of meaning is inversely correlated with social media addiction.
- H₄: Self-esteem acts as a mediator in the relationship between the presence of meaning and social media addiction.

Material and Methods

Power Analysis

To determine the required sample size for the study, we conducted an a priori power analysis and compared it with two established conventions (Murray et al., 2021). Utilizing common software, we selected the F test family specific to linear multiple regression, as it is the most analogous to mediation analysis. We set the parameters to a medium effect size ($f^2 = 0.15$), included two predictor variables, aimed for a statistical power of 0.80, and specified an α level of 0.05. This power analysis indicated a minimum sample size of 68 participants. Additionally, established conventions for determining sample size in mediation studies recommended 66 participants ($N = 50 + 8K$) for multiple correlations and 106 participants ($N = 104 + K$) for partial correlations, where K represents the number of predictors and N is the number of participants (Green, 1991). Based on these analyses, we concluded that the minimum required sample size for this study would be 106 participants.

Participants and Procedure

A cross-sectional design utilizing an online questionnaire was employed to examine the study variables of interest. The questionnaire was distributed through a freely available instant messaging application during a defined sampling window from July 1 to July 30, 2023. Respondents accessed the study by clicking a dedicated link, and after reviewing an informational sheet and providing informed consent, proceeded to complete the questionnaire.

The study targeted youth aged 18 – 24 years residing in Türkiye. To optimize participant recruitment, a snowball sampling strategy was implemented via the same instant messaging application. Out of 198 individuals who accessed the study link, 164 completed the questionnaire, yielding a response rate of 82.8%. In the initial section of the survey, participants filled out a demographic questionnaire. The data for these 164 respondents are summarized in Table 1.

The average age of the participants was 21.07 (SD = 1.07), with 74.4% identifying as female. Among the respondents, 70.7% were

enrolled in university, 16.5% had completed high school but had not pursued further education, and 9.1% held university degrees. Additionally, 9.8% ($n = 16$) reported having a chronic physical health condition, whereas 6.1% ($n = 10$) indicated a pre-existing mental health condition. Permission was obtained from the Toros University Scientific Research and Publication Ethics Committee (approval number: 20.03.2023/38), and Helsinki Declaration rules were followed to conduct this study. All participants provided informed consent.

Measures

The Meaning in Life Questionnaire (MLQ-10) serves as an instrument for measuring two distinct dimensions of meaning in life: the *presence of meaning* and the *search for meaning* (Steger et al., 2006). The presence of meaning dimension quantifies the degree to which respondents perceive their lives as meaningful, purposeful, or valuable. Conversely, the search for meaning dimension assesses the extent to which individuals actively pursue meaning or seek to comprehend the purpose of their lives (Steger et al., 2006). Comprising ten items, the MLQ allocates five items to each dimension. Sample items include, “I understand my life’s meaning” and “I am searching for meaning in my life.” Items are rated on a 7-point Likert scale, with endpoints labeled as “1 = absolutely untrue” and “7 = absolutely true.” Scores for each subscale can vary from 5 to 35, where higher scores denote elevated levels of either the presence of meaning or the search for meaning. The MLQ has been utilized across diverse research contexts and has undergone translation into multiple languages, including Turkish; it is deemed both reliable and valid for assessing meaning in life within Turkish populations (Boyraz et al., 2013).

The Rosenberg Self-esteem Scale (RSES) was developed to evaluate an individual’s overall sense of self-worth, also known as global self-esteem (Rosenberg, 1965). While some researchers argue for a bifactorial structure, the scale is generally applied as a unidimensional measure. The RSES contains ten items, such as, “I take a positive attitude toward myself” and “I certainly feel useless at times,” which are rated on a 4-point Likert scale ranging from “strongly agree” to “absolutely disagree.” The Turkish adaptation of the RSES was carried out in an adolescent sample by Çuhadaroğlu (1986). Prior research has confirmed that the RSES is a reliable and valid tool for evaluating self-esteem in Turkish samples.

The Social Media Addiction Scale (SMAS) is an instrument developed to assess the extent of social media addiction among adolescents (Özgenel et al., 2019). Comprising nine items, the SMAS employs a 5-point Likert scale that ranges from “1 = never” to “5 = always.” Example items include, “I use social media more to feel happy” and “When I don’t use social media, I get angry, anxious, or sad.” The total score can vary from 9 to 45, with no items being reverse-scored. Higher scores indicate elevated levels of social media addiction. In a study examining its validity and reliability, the scale demonstrated an internal consistency coefficient of 0.90 (Özgenel et al., 2019).

Statistical Analysis

Descriptive statistics were performed using SPSS 28.0 (IBM SPSS Corp.; Armonk, NY, USA) software to characterize the variables under study. Data normality was evaluated through skewness and kurtosis values, as well as visual inspection of box plots and

Table 1.

Sociodemographic Characteristics of the Participants (n = 164)

Age (Years), Mean (SD)	21.07 (1.95)
Gender, n (%)	
Female	122 (74.4)
Male	42 (25.6)
Educational level, n (%)	
University graduate	15 (9.1)
University students	116 (70.7)
High school graduate	27 (16.5)
Others	6 (3.7)
Chronic disease, n (%)	
No	148 (90.2)
Yes	16 (9.8)
Psychiatric disease, n (%)	
No	154 (93.9)
Yes	10 (6.1)

histograms. Skewness and kurtosis values at ± 1.0 are generally deemed acceptable for psychometric evaluations. All assumptions for regression analyses, including normality, absence of multicollinearity, and homoscedasticity, were verified. Pearson’s correlation was applied to examine the associations among the variables.

The final stage of our analysis involved developing a mediation model (model 4) utilizing the PROCESS macro in SPSS (Hayes, 2013). This model examined the association between the presence of meaning and social media addiction while considering the mediating influence of self-esteem. Given the complex relationship between the presence of meaning and the search for meaning, the latter was included as a covariate in the analysis. Non-parametric bootstrapping with 10000 samples was used to test for indirect effects. The indirect effect was deemed significant if zero was not included in the 95% CIs.

Results

Table 2 presents the means, standard deviations, and inter-correlations among the variables. A significant inverse correlation was observed between RSES and SMAS scores ($r = -0.320, p < .001$). Additionally, a statistically significant negative association emerged between the presence of meaning scores and SMAS scores ($r = -0.200, P = .010$). In contrast, a significant positive relationship was detected between the presence of meaning and RSES scores ($r = 0.584, p < .001$).

Mediation Analyses

To examine the relationships among the presence of meaning, social media addiction, and the potential intermediary role of self-esteem, a mediation analysis was conducted. The findings are graphically depicted in Figure 1.

A significant positive correlation was found between the presence of meaning and self-esteem among youth ($\beta = 0.50, 95\% \text{ CI } [0.39, 0.61], p < .001$). Concurrently, a significant negative correlation was observed between self-esteem and social media addiction ($\beta = -0.37, 95\% \text{ CI } [-0.59, -0.16], p < .001$).

The total effect of the presence of meaning on social media addiction was significant ($\beta = -0.22, 95\% \text{ CI } [-0.38, -0.06], p = .007$). However, the direct effect did not reach statistical significance ($\beta = -0.04, 95\% \text{ CI } [-0.22, 0.15], p = .714$). Importantly, the pathway from the presence of meaning to social media addiction, mediated by self-esteem, was statistically significant ($\beta = -0.19, 95\% \text{ CI } [-0.30, -0.08]$).

Discussion

The present study examined the interrelationship between the presence of meaning in life and social media addiction, while also exploring the mediating role of self-esteem in this association. The negative correlation between the presence of meaning and social media addiction was statistically significant, and this association was mediated by self-esteem. These results extend the conceptual framework of the MIL construct by demonstrating a positive relationship between the presence of meaning and self-esteem, thereby corroborating previous research (Barnett et al., 2019). Conversely, our findings revealed a negative association between the presence of meaning and social media addiction, which can be explained by various theoretical frameworks. For instance, Caplan’s cognitive-behavioral model and Compensatory Internet Use theory propose that individuals under psychological distress might develop maladaptive beliefs and online behaviors, such as problematic social media use, as coping mechanisms for their emotional and psychological needs (Caplan, 2010; Li et al., 2023). Individuals who report a higher sense of meaning in life are better

Table 2.
Correlations Among Variables

Variables	1	2	3	Mean	SD	Skew.	Kurt.	α
1. The presence of meaning (MLQ-10)	–			23.51	6.75	–0.650	0.062	0.87
2. Self-esteem (RSES)	0.584***	–		29.29	5.77	–0.259	–0.167	0.88
3. Social media addiction (SMAS)	–0.200*	–0.320***	–	19.48	6.95	0.412	–0.436	0.87

Kurt, kurtosis; SD, standard deviation, Skew, skewness.

* $p < .05$, Pearson correction analysis.

** $p < .01$.

*** $p < .001$.

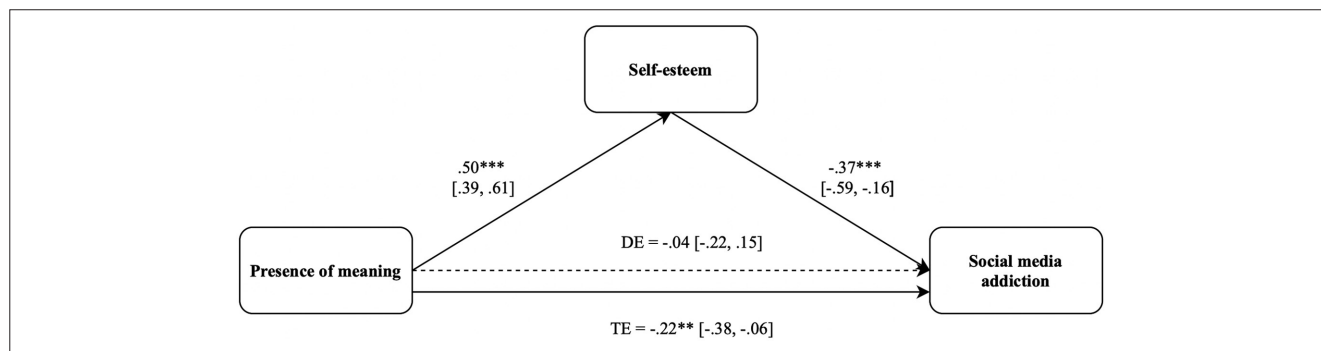


Figure 1. Conceptual and Statistical Diagram.

equipped to manage emotional distress and are consequently less prone to addictive behaviors (Barnett et al., 2019).

Second, a sense of meaning in life may bolster self-worth, making individuals less reliant on external validation via social media platforms. Andreassen et al. (2017) found that addictive social media use is often driven by ego gratification and attempts to ward off negative self-assessment. Similarly, Savci et al. (2021) showed that the need for social approval and the desire for validation positively correlate with social media addiction. Third, there is a positive correlation between social support and meaning in life; hence, meaningful real-life interactions could mitigate the need for virtual connections (Zuo et al., 2021). Corroborating this idea, Aksoy (2018) noted that social media addiction occurs in 2 phases: the initiation phase, characterized by the individual's use of social media due to a deficit in socialization, and the maintenance phase, in which the individual persists in social media use to sustain social connections and meet social obligations.

The current study revealed a negative association between self-esteem and social media addiction, a relationship whose direction remains a subject of debate in existing literature. For example, Miljeteig and von Soest (2022) observed that women with initially low self-esteem were more frequent users of social media. In line with this, multiple studies have reported a negative association between heavy social media usage and various facets of self-esteem, including identity integration and self-control (Errasti et al., 2017; Staniewski & Awruk, 2022). Another study showed that an increase in social media usage correlates with a decline in self-esteem among individuals prone to upward social comparison on these platforms (Jan et al., 2017). Conversely, social media usage has been shown to improve self-esteem and overall well-being by meeting a range of needs, such as self-expression and self-presentation (Gonzales & Hancock, 2011; Wilcox & Stephen, 2013). In summary, the impact of social networking site usage on self-esteem appears to be contingent upon whether users partake in social comparison, receive affirmative social feedback, or use the platform for introspection (Krause et al., 2021).

Limitations and Directions/Suggestions for Future Research

This study offers valuable insights, expanding our understanding of the intricate interplay between the presence of meaning and social media addiction. However, it is imperative to recognize certain limitations. First, the cross-sectional design of the study precludes the assessment of longitudinal relationships among the variables. Second, the relatively small sample size could potentially affect the generalizability of the results. Finally, the study did not take into account the mental health issues of the participants, such as depression and anxiety disorders. Existing theories propose that individuals with mental health challenges might engage in maladaptive behaviors, like problematic social media usage, as a coping mechanism for their emotional difficulties.

The present findings indicate a negative association between meaning in life and self-esteem with social media addiction. Given the pervasive influence of social media in daily life, it is crucial to comprehend the underlying causes of its excessive use and addictive qualities. This study not only furthers our understanding of these intricate relationships but also offers practical interventions for fostering healthier digital engagement. Encouraging individuals to find meaning in their lives appears

to be an effective approach for mitigating social media addiction. Consistent with this, Li et al. (2023) have highlighted the potential efficacy of stress and meaning-focused interventions in addressing problematic social media usage. Moreover, engagement in leisure activities such as sports, playing an instrument, or painting can serve as a valuable tool to counter maladaptive behaviors like excessive social media use. Further research is warranted to fully elucidate the relationship between meaning in life and susceptibility to social media addiction.

Ethics Committee Approval: Ethical committee approval was received from the Toros University Scientific Research and Publication Ethics Committee (approval number: 20.03.2023/38).

Informed Consent: Informed consent was obtained from the participants who agreed to take part in the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – B.A., C.Ü.; Design – B.A., C.Ü.; Supervision – B.A., C.Ü.; Funding – B.A.; Materials – B.A.; Data Collection and/or Processing – B.A., C.Ü.; Analysis and/or Interpretation – B.A.; Literature Review – B.A., C.Ü.; Writing – B.A., C.Ü.; Critical Review – B.A., C.Ü.

Declaration of Interests: The authors have no conflict of interest to declare.

Funding: The authors declared that this study has received no financial support.

References

- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors, 64*, 287 – 293. [\[CrossRef\]](#)
- Barnett, M. D., Moore, J. M., & Garza, C. J. (2019). Meaning in life and self-esteem help hospice nurses withstand prolonged exposure to death. *Journal of Nursing Management, 27*(4), 775 – 780. [\[CrossRef\]](#)
- Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., Andreassen, C. S., & Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PloS One, 12*(1), e0169839.
- Boyraz, G., Lightsey Jr., O. R., & Can, A. (2013). The Turkish version of the Meaning in Life Questionnaire: Assessing the measurement invariance across Turkish and American adult samples. *Journal of Personality Assessment, 95*(4), 423 – 431.
- Burrow, A. L., & Rainone, N. (2017). How many likes did I get?: Purpose moderates links between positive social media feedback and self-esteem. *Journal of Experimental Social Psychology, 69*, 232 – 236. [\[CrossRef\]](#)
- Caplan, S. E. (2010). Theory and measurement of generalized problematic Internet use: A two-step approach. *Computers in Human Behavior, 26*(5), 1089 – 1097. [\[CrossRef\]](#)
- Csabonyi, M., & Phillips, L. J. (2020). Meaning in life and substance use. *Journal of Humanistic Psychology, 60*(1), 3 – 19. [\[CrossRef\]](#)
- Çuhadaroğlu, F. (1986). Adölesanlarda benlik saygısı. *Uzmanlık Tezi, Hacettepe Üniversitesi tıp Fakültesi psikiyatri Anabilim Dalı, Ankara*.
- Du, H., King, R. B., & Chi, P. (2017). Self-esteem and subjective well-being revisited: The roles of personal, relational, and collective self-esteem. *PLOS ONE, 12*(8), e0183958. [\[CrossRef\]](#)
- Emin, M. E. (2018). A qualitative study on the reasons for social media addiction. *European Journal of Educational Research, 7*(4), 861 – 865. [\[CrossRef\]](#)

- Errasti, J., Amigo, I., & Villadangos, M. (2017). Emotional uses of Facebook and Twitter: Its relation with empathy, narcissism, and self-esteem in adolescence. *Psychological Reports, 120*(6), 997 – 1018. [\[CrossRef\]](#)
- Frankl, V. E. (1984). *Search for meaning*. Milwaukee, WI: Mount Mary College.
- George, L. S., & Park, C. L. (2016). Meaning in life as comprehension, purpose, and mattering: Toward integration and new research questions. *Review of General Psychology, 20*(3), 205 – 220. [\[CrossRef\]](#)
- Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior and Social Networking, 14*(1–2), 79 – 83. [\[CrossRef\]](#)
- Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research, 26*(3), 499 – 510. [\[CrossRef\]](#)
- Harren, N., & Walburg, V. (2023). Studying the relationship between addictive beliefs about Internet use, meaning in life, and problematic social media use. *Journal of Technology in Behavioral Science, 8*(1), 10 – 26. [\[CrossRef\]](#)
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
- Helm, P. J., Jimenez, T., Galgali, M. S., Edwards, M. E., Vail III, K. E., & Arndt, J. (2022). Divergent effects of social media use on meaning in life via loneliness and existential isolation during the coronavirus pandemic. *Journal of Social and Personal Relationships, 39*(6), 1768 – 1793. [\[CrossRef\]](#)
- Ho, M. Y., Cheung, F. M., & Cheung, S. F. (2010). The role of meaning in life and optimism in promoting well-being. *Personality and Individual Differences, 48*(5), 658 – 663. [\[CrossRef\]](#)
- Jan, M., Soomro, S. A., & Ahmad, N. (2017). Impact of social media on self-esteem. *European Scientific Journal, ESJ, 13*(23), 329 – 341. [\[CrossRef\]](#)
- King, L. A., & Hicks, J. A. (2021). The science of meaning in life. *Annual Review of Psychology, 72*, 561 – 584. [\[CrossRef\]](#)
- Krause, H.-V., Baum, K., Baumann, A., & Krasnova, H. (2021). Unifying the detrimental and beneficial effects of social network site use on self-esteem: A systematic literature review. *Media Psychology, 24*(1), 10 – 47. [\[CrossRef\]](#)
- Li, Y., Mu, W., Xie, X., & Kwok, S. Y. C. L. (2023). Network analysis of internet gaming disorder, problematic social media use, problematic smartphone use, psychological distress, and meaning in life among adolescents. *Digital Health, 9*. [\[CrossRef\]](#)
- Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *Journal of Positive Psychology, 11*(5), 531 – 545. [\[CrossRef\]](#)
- Miljeteig, K., & von Soest, T. (2022). An experience sampling study on the association between social media use and self-esteem. *Journal of Media Psychology, 34*(6), 373 – 382. [\[CrossRef\]](#)
- Murray, C. V., Jacobs, J. I. L., Rock, A. J., & Clark, G. I. (2021). Attachment style, thought suppression, self-compassion and depression: Testing a serial mediation model. *PloS one, 16*(1), e0245056.
- Özgenel, M., Canpolat, Ö., & Ekşi, H. (2019). Ergenler için sosyal medya bağımlılığı ölçeği (ESMBÖ): Geçerlik ve güvenilirlik çalışması [in Turkish]. *Addicta: The Turkish Journal on Addictions, 3*, 631 – 664. [\[CrossRef\]](#)
- Peris, M., de la Barrera, U., Schoeps, K., & Montoya-Castilla, I. (2020). Psychological risk factors that predict social networking and internet addiction in adolescents. *International Journal of Environmental Research and Public Health, 17*(12), 4598. [\[CrossRef\]](#)
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Savci, M., Turan, M. E., Griffiths, M. D., & Ercengiz, M. (2021). Histronic personality, narcissistic personality, and problematic social media use: Testing of a new hypothetical model. *International Journal of Mental Health and Addiction, 19*(4), 986 – 1004. [\[CrossRef\]](#)
- Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The power of the like in adolescence: Effects of peer influence on neural and behavioral responses to social media. *Psychological Science, 27*(7), 1027 – 1035. [\[CrossRef\]](#)
- Staniewski, M., & Awruk, K. (2022). The influence of Instagram on mental well-being and purchasing decisions in a pandemic. *Technological Forecasting and Social Change, 174*, 121287. [\[CrossRef\]](#)
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*(1), 80 – 93. [\[CrossRef\]](#)
- Sun, F. K., Wu, M. K., Yao, Y., Chiang, C. Y., & Lu, C. Y. (2022). Meaning in life as a mediator of the associations among depression, hopelessness and suicidal ideation: A path analysis. *Journal of Psychiatric and Mental Health Nursing, 29*(1), 57 – 66. [\[CrossRef\]](#)
- Uyaroğlu, A. K., Ergin, E., Tosun, A. S., & Erdem, Ö. (2022). A cross-sectional study of social media addiction and social and emotional loneliness in university students in Turkey. *Perspectives in Psychiatric Care, 58*(4), 2263 – 2271. [\[CrossRef\]](#)
- Weinstein, A. M. (2023). Problematic Social Networking Site use-effects on mental health and the brain. *Frontiers in Psychiatry, 13*, 1106004.
- Wilcox, K., & Stephen, A. T. (2013). Are close friends the enemy? Online social networks, self-esteem, and self-control. *Journal of Consumer Research, 40*(1), 90 – 103. [\[CrossRef\]](#)
- Zuo, B., Yang, K., Yao, Y., Han, S., Nie, S., & Wen, F. (2021). The relationship of perceived social support to feelings of hopelessness under COVID-19 pandemic: The effects of epidemic risk and meaning in life. *Personality and Individual Differences, 183*, 111110. [\[CrossRef\]](#)