



Cyberstalking and Harmony in Life: Serial mediation by Social Media Addiction and Digital Well-Being

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Título: Ciberacoso y armonía en la vida: mediación serial a través de la adicción a las redes sociales y el bienestar digital.

Resumen: *Antecedentes:* El rápido crecimiento de la interacción digital ha incrementado la vulnerabilidad a las amenazas en línea, incluido el ciberacoso, que representa una amenaza significativa para la salud mental. A pesar de la creciente evidencia que vincula las conductas digitales problemáticas con un menor bienestar, la investigación sobre cómo el ciberacoso afecta indicadores más amplios del equilibrio vital, como la armonía en la vida, es limitada. *Objetivo:* Examinar el impacto del ciberacoso en la armonía en la vida y explorar cómo la adicción a las redes sociales y el bienestar digital median esta relación. *Métodos:* Se empleó un diseño transversal con 427 participantes de entre 18 y 60 años. Los participantes completaron cuestionarios validados sobre ciberacoso, adicción a las redes sociales, bienestar digital y armonía en la vida. Se realizó un análisis de mediación en serie mediante procedimientos de remuestreo (10000 remuestras) con el modelo 6 de PROCESS para examinar los efectos indirectos. *Resultados:* El ciberacoso predijo significativamente mayores niveles de adicción a las redes sociales ($a1 = 0.27, p < 0.001$) y menores niveles de bienestar digital ($a2 = -0.06, p < 0.05$). Tanto la adicción a las redes sociales como el bienestar digital mediaron la relación entre el ciberacoso y la armonía en la vida, lo que indica que los efectos adversos del ciberacoso en la salud mental pueden manifestarse a través de una mayor participación en las redes sociales y una disminución del bienestar digital. La relación directa entre el ciberacoso y la armonía en la vida dejó de ser significativa al controlar estos mediadores, lo que indica una mediación completa. *Conclusión:* Los hallazgos resaltan la necesidad de intervenciones específicas dirigidas a mejorar el bienestar digital y abordar la adicción a las redes sociales para promover la armonía en la vida de las personas afectadas por el ciberacoso.

Palabras clave: Ciberacoso. Armonía en la vida. Adicción a las redes sociales. Bienestar digital. Mediación serial.

Abstract: *Background:* The swift growth of digital engagement has heightened vulnerability to online threats, including cyberstalking, which poses significant threats to mental health. Despite growing evidence linking problematic digital behaviors to reduced well-being, limited research has examined how cyberstalking disrupts broader indicators of life balance such as harmony in life. *Objective:* To examine the impact of cyberstalking on harmony in life and explore how social media addiction and digital well-being mediate this relationship. *Methods:* A cross-sectional design was employed with 427 participants aged 18–60. Participants completed validated measures of cyberstalking, social media addiction, digital well-being, and harmony in life. Serial mediation analysis was conducted using bootstrapping procedures (10,000 resamples) via PROCESS Model 6 to examine indirect effects. *Results:* Cyberstalking significantly predicted higher levels of social media addiction ($a1 = 0.27, p < .001$) and lower levels of digital well-being ($a2 = -0.06, p < .05$). Both social media addiction, and digital well-being mediated the relationship between cyberstalking and harmony in life, indicating that cyberstalking's adverse effects on mental health can manifest through increased social media engagement and diminished digital well-being. The direct relationship between cyberstalking and harmony in life became nonsignificant when controlling for these mediators, indicating full mediation. *Conclusion:* The findings highlight the necessity for targeted interventions aimed at enhancing digital well-being and addressing social media addiction to promote harmony in life among individuals affected by cyberstalking.

Keywords: Cyberstalking. Harmony in life. Social media addiction. Digital well-being. Serial mediation.

Introduction

Harmony in life is a multidimensional construct that represents a sense of balance, alignment, and congruence across various domains of an individual's life. It emphasizes the cognitive and psychological mechanisms that allow individuals to perceive themselves and their environment in a balanced manner, fostering peace and well-being (Kjell et al., 2016). Unlike life satisfaction, which is often tied to an evaluative process comparing one's life against expectations, harmony in life reflects a more holistic experience where acceptance, psychological flexibility, and mindfulness play critical roles (Kjell et al., 2013). Rather than reflecting momentary pleasure, harmony in life represents an enduring inner equilibrium characterized by low internal conflict and psychological coherence. In this sense, harmony in life extends beyond immediate gratification and hedonic well-being, in-

volving long-term emotional stability and resilience (Dambrun & Ricard, 2011; Garcia et al., 2014).

Research has shown that harmony in life is deeply connected to cognitive processes such as mindfulness, psychological flexibility, and altruistic mental commitment (Kashdan & Rottenberg, 2010; Kabat-Zinn, 2005). Dambrun and Ricard (2011) propose that well-being depends on two modes of self-functioning: self-centered functioning, associated with defensiveness and instability, and selfless functioning, associated with emotional balance and connectedness. Within this framework, harmony emerges when individuals operate from a less defensive and more integrated mode of self-regulation, allowing them to maintain stability despite external stressors. Additionally, concepts such as secondary control, which is defined as adjusting oneself to fit environmental demands rather than attempting to change external circumstances, have been shown to contribute to well-being by enhancing acceptance and perceived relatedness (Morling & Evered, 2006). Within the broader framework of harmony in life, such adaptive regulatory processes are particularly relevant because harmony depends not on the absence of

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stress, but on the ability to maintain psychological balance despite changing external conditions. Recent research continues to emphasize that mindfulness, psychological flexibility, and adaptive self-regulation play central roles in sustaining harmony in life, as individuals who cultivate these capacities are better able to navigate life's challenges without losing their sense of internal equilibrium (Carreno et al., 2021; Paquette et al., 2022; Kashdan et al., 2020; Kabat-Zinn, 2023). These regulatory capacities allow individuals to respond to stressors in a measured and flexible manner, thereby preserving coherence between internal experiences and external realities.

On the contrary, disruptions to this regulatory balance, whether through negative life events, psychological strain, or relational stress, can undermine harmony by increasing emotional reactivity and reducing self-regulatory capacity (Dambrun & Ricard, 2011; Kjell et al., 2016). In contemporary society, digital environments have become a central context in which such disruptions may occur (Büchi et al., 2019). Persistent and unwanted online monitoring or intrusive digital interactions, conceptualized in this study as cyberstalking (CS), may function as ongoing stressors that challenge individuals' ability to maintain psychological equilibrium (Dreßing et al., 2014; Worsley et al., 2017; Stevens et al., 2021; Fissel & Reyns, 2020).

At the same time, individuals' behavioral responses within digital platforms may play a decisive role in shaping broader psychological functioning. Higher levels of cyberstalking behavior may intensify engagement with social media environments (Dreßing et al., 2014; Worsley et al., 2017), and when such engagement becomes compulsive rather than regulated, it may evolve into social media addiction (SMA). In turn, diminished control over digital behavior may undermine digital well-being (DWB), reflecting difficulties in maintaining a balanced and healthy relationship with technology (Büchi et al., 2019; Malas et al., 2025). Because harmony in life depends on psychological coherence and regulatory stability (Dambrun & Ricard, 2011; Kjell et al., 2016), disruptions in digital self-regulation may extend beyond the online context and influence overall life harmony.

Accordingly, the present study proposes a serial mediation model in which social media addiction and digital well-being sequentially explain the relationship between cyberstalking (CS) and harmony in life (HL).

Cyberstalking and Harmony in Life

Cyberstalking, characterized by persistent, unwanted, and threatening online behaviors, can significantly disturb an individual's emotional and psychological equilibrium. Cyberstalking behavior refers to repeated digital monitoring, harassment, surveillance, impersonation, or intrusive communication directed toward others via electronic technologies (Dreßing et al., 2014; Maple et al., 2012). These experiences can have profound consequences on one's sense of harmony in life, as the persistent threat and intrusion from cyberstalk-

ing may disrupt daily routines, relationships, and emotional stability. The technological affordances of digital platforms, such as constant accessibility, anonymity, and the persistence of online content, can facilitate repetitive monitoring behaviors and sustained digital pursuit (Stevens et al., 2021). Engagement in persistent online monitoring and intrusive digital behaviors may reflect dysregulated patterns of online interaction and difficulties in maintaining healthy interpersonal boundaries within digital environments (Dreßing et al., 2014). Because harmony in life involves psychological balance, coherence, and adaptive self-regulation, involvement in repetitive and intrusive digital behaviors may indicate broader challenges in maintaining regulatory stability across life domains.

Recent research indicates that individuals who engage in cyberstalking behaviors often exhibit low self-control, frequent digital engagement, and persistent intrusive contact patterns (Weekes et al., 2025). These behaviors, which include unwanted and repeated online messaging or surveillance tactics, reflect dysregulated digital engagement and difficulties maintaining adaptive boundaries in online contexts, processes that are theoretically incompatible with the psychological balance central to harmony in life. Additionally, emerging findings suggest that lower self-control and compulsive traits are associated with increased likelihood of cyberstalking perpetration (Randa et al., 2026), further underscoring the linkage between intrusive digital behaviors and impaired regulatory functioning.

Thus, cyberstalking behavior can be understood not only as digital aggression but as a pattern of persistent, regulation-oriented surveillance that may signal cognitive rigidity, emotional dysregulation, and impaired boundary maintenance, mechanisms that are theoretically at odds with the psychological balance and coherence central to harmony in life.

Social Media Addiction and Harmony in Life

Social media addiction, defined as excessive and compulsive use of social media platforms, is increasingly recognized as a threat to mental health. It has been linked to numerous negative outcomes, such as lower life satisfaction, increased anxiety, and impaired daily functioning (Andreassen et al., 2016). Beyond these outcomes, recent research conceptualizes problematic social media use as a form of digital life imbalance, reflecting difficulties in maintaining harmony between online and offline domains (Duradoni et al., 2025; Malas et al., 2025). Social media addiction can disrupt harmony in life by interfering with individuals' capacity to maintain balanced lifestyles. Excessive social media use often leads to neglect of important life domains, such as work, education, and personal relationships, contributing to feelings of disconnection and imbalance (Kircaburun et al., 2020). Empirical evidence demonstrates that higher levels of problematic social media use are negatively associated with digital life balance and life satisfaction, while positively related to internet addiction and avoidance behaviors, indicating

broader disruptions in psychosocial functioning (Malas et al., 2025). Research by Blachnio et al. (2016) found that individuals addicted to social media are more likely to experience lower life satisfaction and higher levels of emotional distress, both of which are critical indicators of disharmony in life. Furthermore, dysfunctional technology use has been associated with maladaptive personality traits and emotion regulation difficulties, suggesting that compulsive engagement with social media may serve compensatory psychological functions that ultimately undermine long-term well-being and harmony in life (Duradoni et al., 2025). As social media addiction consumes increasing amounts of time and mental energy, it can erode one's sense of fulfillment and overall well-being, preventing individuals from achieving a harmonious and well-balanced life.

Digital Well-Being and Harmony in Life

Digital well-being refers to the healthy management of digital technologies and their effects on an individual's psychological and emotional health, which requires mindful engagement with digital tools, balancing online interactions with offline activities, and regulating one's emotional responses to digital stimuli (Burr et al., 2020). When individuals have poor digital well-being, which is characterized by overuse, stress, and negative emotional experiences, it can negatively impact their harmony in life by increasing feelings of anxiety, distraction, and disconnection from real-life experiences (Kostyrka-Allchorne et al., 2023; Wasie, 2024). High digital well-being, on the other hand, supports life satisfaction and emotional balance, promoting greater harmony in life. Recent research further underscores these associations. For instance, Büchi (2024) demonstrated that digital practices simultaneously produce "harms" (e.g., stress, overload) and "benefits" (e.g., connection, efficiency), and that well-being depends on an individual's ability to regulate these competing digital demands, suggesting that digital imbalance may undermine broader psychological coherence and life harmony. Similarly, Nguyen et al. (2022) showed that everyday disconnection difficulties, such as feeling compelled to stay online or experiencing cognitive overload, reduce individuals' capacity to maintain focus and emotional stability, illustrating how weakened digital boundaries can interfere with attempts to sustain a balanced life. Additionally, Vanden Abeele and Nguyen (2024) described digital media as "ambiguous goods," noting that constant connectivity often generates simultaneous feelings of connection and strain; this duality can complicate efforts to maintain psychological steadiness and, by extension, harmony in life. Further, Twenge (2019) reported that higher daily screen exposure is associated with lower psychological well-being in adolescents, linking digital overuse to reduced emotional functioning, which is an outcome that parallels reduced harmony in life. Also, studies suggested that when individuals experience higher digital well-being, they report improved psychological health, reduced stress, and enhanced control over their lives,

contributing positively to life satisfaction and emotional balance (Marsh et al., 2024; Faulhaber et al., 2023). These findings highlight the role of digital well-being as a potential buffer against the negative impacts of excessive online use and digital stress on harmony in life.

The Present Study

Building on the existing literature, this study aimed to investigate the serial mediating role of social media addiction and digital well-being in the relationship between cyberstalking and harmony in life. While previous research has explored the individual effects of cyberstalking on psychological well-being (Fissel & Reyns, 2020), and the negative impact of social media addiction on life satisfaction (Blachnio et al., 2016), the combined role of these factors in affecting harmony in life has not been fully examined. This study seeks to address this gap by integrating these variables into a serial mediation model, examining how cyberstalking leads to diminished harmony in life through increased social media addiction and reduced digital well-being. Recent research highlights that individuals who engage in cyberstalking behaviors often exhibit lower self-control, heightened digital preoccupation, and persistent monitoring tendencies, all of which reflect difficulties in emotional and behavioral regulation (Weekes et al., 2025). These regulatory difficulties provide a theoretical basis for expecting cyberstalking behavior to relate to broader disruptions in psychological balance, including harmony in life.

Studies have shown that individuals who experience cyberstalking often suffer from increased psychological distress and anxiety, which can contribute to maladaptive coping behaviors, such as compulsive social media use (Dreßing et al., 2014; Reyns et al., 2012). This compulsive use, when it becomes addictive, has been linked to negative outcomes such as reduced life satisfaction and impaired emotional well-being (Andreassen et al., 2016). Additionally, social media addiction is often associated with lower digital well-being, as excessive online engagement can lead to heightened stress, emotional fatigue, and difficulty maintaining healthy online-offline boundaries (Kircaburun et al., 2020; Burr et al., 2020). Empirical work on digital well-being further supports these mechanisms: persistent digital overuse and difficulty disengaging from online environments have been shown to undermine emotional balance, increase cognitive overload, and reduce the capacity to sustain a coherent and integrated life experience (Nguyen et al., 2022; Büchi, 2024; Vanden Abeele & Nguyen, 2024). Research has further indicated that poor digital well-being can negatively impact individuals' overall life satisfaction and their ability to maintain harmony in life (Kostyrka-Allchorne et al., 2023).

Integrating these findings, our research model proposes that cyberstalking behavior may contribute to higher levels of social media addiction because repetitive digital monitoring and intrusive engagement reflect patterns of compulsive online behavior. In turn, elevated social media addiction may

impair digital well-being by intensifying digital overload, reducing boundary control, and increasing emotional strain that can be considered as conditions inconsistent with the psychological stability required for harmony in life.

In summary, the current study proposed that the relationship between cyberstalking and harmony in life is serially mediated by both social media addiction and digital well-being, forming a comprehensive pathway through which dysregulated digital behaviors can impair well-being.

Method

Participants and Procedure

A power analysis was conducted to determine the required sample size. Using G*Power 3.1.9.7 software, a priori power analysis indicated that a sample size of 107 would be sufficient for a medium effect size ($f^2 = 0.15$; $\alpha = 0.05$; power = 0.95). Since no similar study providing effect size was found in the literature, the sample size was calculated according to the moderate effect size suggested by Cohen (1988). The study was conducted with a total of 427 participants, 314 of whom were male (73.5%) and 113 were female (26.5%). Participants ranged in age from 18 to 60, with a mean age of 22.88 ($SD = 6.27$) years. The average time they reported spending aimlessly on the internet daily was 4.10 ($SD = 2.12$) hours, and the average length of social media account ownership was 8.22 ($SD = 3.54$) years. The participants had an average of 3.18 ($SD = 1.50$) social media accounts. The data were obtained through voluntary convenience sampling using online forms distributed to university students between August 15 and November 15, 2024. All participants provided informed consent, and the study was conducted in line with the Declaration of Helsinki. Approval for the study was granted by the Social and Human Sciences Ethics Committee of Sakarya University (18.07.2024-E.380475). The online surveys were designed to allow participants to withdraw at any time. Individuals under the age of 18, as well as those who did not have a social media account or did not actively use one, were not included in the study. Participants with any psychiatric diagnosis, particularly those with a diagnosis related to addiction and undergoing treatment, were also excluded. A total of 450 responses were collected, with 23 incomplete or incorrectly filled forms excluded, leaving 427 responses for analysis.

Measures

The Bergen Social Media Addiction Scale

The Bergen Social Media Addiction Scale, developed by Andreassen et al. (2016) and adapted for Turkish culture by Demirci (2019), was used to assess social media addiction. The scale is a 5-point Likert-type measure with 6 items on a single dimension. An analysis of the scale's factor suitability yielded a KMO value of 0.80, and the Bartlett's test of spher-

icity was significant ($\chi^2 = 28.48$, $df = 15$, $p < 0.001$). The Exploratory Factor Analysis (EFA) indicated that the single-factor structure accounted for 52.83% of the total variance. The Confirmatory Factor Analysis (CFA) results further supported the validity of the scale ($\chi^2 = 10.80$, $df = 9$, $p = 0.290$; CFI = 0.99; TLI = 0.99; SRMR = 0.031; RMSEA = 0.039). The internal consistency coefficient (α) of the scale was found to be 0.82, with a Cronbach's alpha of 0.73 in this study.

Harmony in Life Scale

The Harmony in Life Scale (HLS), developed by Kjell et al. (2016) and adapted into Turkish by Satici and Göçet-Tekin (2017), consists of five items (e.g., "I accept different circumstances in my life"). Responses are measured on a seven-point Likert scale, from 1 (strongly disagree) to 7 (strongly agree), resulting in scores that can range between 5 and 35. Higher scores indicate greater harmony in life. The original scale's reliability, measured by Cronbach's alpha, was reported as 0.78, and the same reliability coefficient (0.78) was found in the current study.

Cyberstalking Scale

The Cyberstalking Scale, originally developed by Silva Santos et al. (2023) and adapted to Turkish by Koçak et al. (2023), is a Likert-scale instrument designed for individuals aged 18 and older, containing 10 items with no reverse-coded items. Higher scores represent a greater level of cyberstalking behaviors. Psychometric evaluations indicate a KMO value of .83 and a significant Bartlett's test ($p < .01$). EFA results showed that the items explain 58.47% of the total variance, while confirmatory factor analysis (CFA) demonstrated acceptable model fit indices ($\chi^2/df = 1.63$, CFI = .95, GFI = .93, AGFI = .89, RMSEA = .06, SRMR = .05). The scale's reliability was found to be .77 and .76 in past studies, and the current study yielded a Cronbach's alpha of .81.

Digital Well-Being Scale

The Digital Well-Being Scale, created by Öztürk (2018), consists of 10 items across two dimensions: "managing digital platforms" (eight items) and "sharing personal information for official purposes" (two items). This self-report scale uses a five-point Likert format (1 = Strongly Disagree to 5 = Strongly Agree). The scale demonstrates solid psychometric properties, with a KMO value of .83 and a significant Bartlett's test ($p < .01$). Exploratory factor analysis (EFA) indicated that the items account for 54.11% of the total variance. Criterion validity was confirmed through a positive correlation with the subjective well-being scale ($r = .25$, $p < .01$). The overall Cronbach's alpha reliability coefficient is .80, with a coefficient of .75 specifically for managing digi-

tal platforms. In this study, internal consistency for managing digital platforms dimension was calculated as .71.

Analysis

Prior to testing the variables, linearity, univariate and multivariate normality, and multicollinearity were examined (Ulman, 2015). The skewness and kurtosis values for univariate normality ranged from 0.31 to 1.97, falling within acceptable limits (Bachman, 2004). The scatterplot matrix showed elliptical shapes, confirming the assumptions of multivariate normality and linearity. Multicollinearity tests indicated that the VIF values (1.10–1.32) were below 10, and tolerance values (.768–.908) were above .10, suggesting no multicollinearity issues (Çokluk et al., 2018). Autocorrelation between the variables was tested with the Durbin-Watson statistic, yielding a value of 1.83, which falls within acceptable limits (Küçükşille, 2014). After confirming these assumptions, serial multiple mediation analysis was conducted to examine the relationships among the variables using a serial multiple mediation model. Data were analyzed using SPSS with the Hayes PROCESS Macro (Hayes, 2012), which employs a non-parametric bootstrapping method. In this study, 10,000 bootstrap samples and 95% confidence intervals (CIs) were generated. The effect of the independent variable on the dependent variable was calculated in terms of direct, indirect, and total effects. The significance of the mediation effect was determined by the bootstrapped CI. Mediation was confirmed if the lower and upper limits of the CI (BootLLCI-BootULCI) did not cross zero, indicating no "0" value within the range. Full mediation was indicated if the independent and dependent variable relationship became nonsignificant, while partial mediation was indicated if the relationship remained significant but reduced. This bootstrapping method strengthens the analysis by reducing the likelihood of Type II errors (Preacher & Hayes, 2008). Gender and age were included as control variables before proceeding with the analyses.

Results

Table 1

Descriptive statistics and correlations between all variables

	M/Ss	S/K	HL	SSstalk	SMA	DWB
HL	26.09/5.07	-.813 /-.447	1	-.136**	-.213**	.314**
CS	27.61/7.18	.031/-.268		1	.437**	-.210**
SMA	17.59/4.56	.155/-.351			1	-.290**
DWB	31.24/4.04	-.682/1.97				1

Note. ** $p < .01$, HL: Harmony in Life, CS: Cyberstalking, SMA: Social Media Addiction, DWB: Digital Well-Being

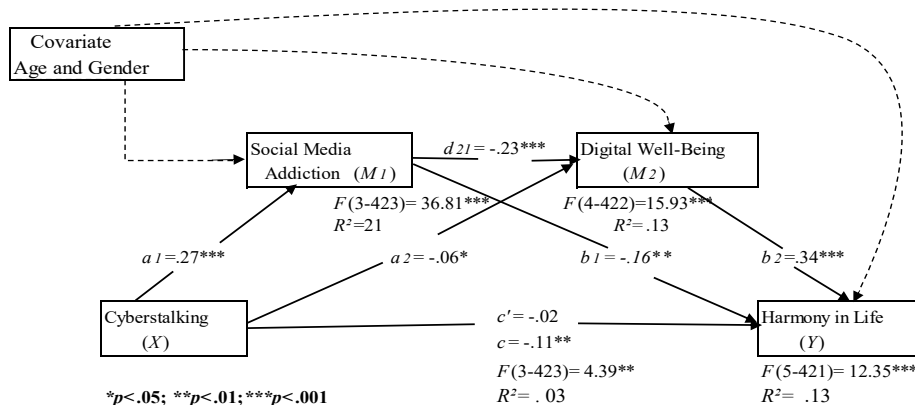
According to Table 1, harmony in life showed a negative relationship with cyberstalking ($r = -.136, p < .01$) and social media addiction ($r = -.213, p < .01$), but a positive relationship with digital well-being ($r = .314, p < .01$). Cyberstalking was positively correlated with social media addiction ($r = .437, p < .01$) and negatively correlated with digital well-being ($r = -.210, p < .01$). Additionally, social media addiction was negatively associated with digital well-being ($r = -.290, p < .01$).

Serial Multiple Mediation Analysis

The serial mediation effect of social media addiction and digital well-being on the relationship between cyberstalking and harmony in life was tested using a serial multiple mediation model (Hayes Model 6). In this model, the direct and indirect effects of cyberstalking (independent variable) on harmony in life (dependent variable) were examined. Furthermore, the effect of the first mediator, social media addiction (M1), on the second mediator, digital well-being (M2), was analyzed in relation to harmony in life. This approach enabled the testing of three distinct mediation pathways in one analysis: “ $X \rightarrow M1 \rightarrow Y$,” “ $X \rightarrow M2 \rightarrow Y$,” and “ $X \rightarrow M1 \rightarrow M2 \rightarrow Y$.” The results of the serial mediation model, controlling for gender and age, are presented in Figure 1.

Figure 1

Unstandardized coefficients for the serial multiple mediation model



As shown in Figure 1, cyberstalking negatively predicted harmony in life (c coeff = $-.11^{**}$, 95% CI $[-.17; -.04]$). When the mediators were added to the model simultaneously, the relationship between cyberstalking and harmony in life became nonsignificant (c' coeff = $-.02$, 95% CI $[-.09; .05]$), indicating full mediation. Additionally, cyberstalking positively predicted social media addiction ($a_1 = .27^{***}$, 95% CI $[.21; .32]$) and negatively predicted digital well-being ($a_2 = -.06^*$,

95% CI $[-.12; -.01]$). Harmony in life was negatively predicted by social media addiction ($b_1 = -.16^{**}$, 95% CI $[-.27; -.04]$) and positively predicted by digital well-being ($b_2 = .34^{***}$, 95% CI $[.22; .46]$).

The statistical significance and 95% confidence intervals of the indirect effects in the serial multiple mediation model, along with bootstrapping results, are presented in Table 2.

Table 2

The findings of bootstrapping coefficients and confidence intervals

Effect	Bootstrap Coefficient ^a	SE	<i>t</i>	<i>p</i>	Lower Limit b	Upper Limit b
Total effect	-.106	.034	-3.10	<.01	-.173	-.039
Direct effect	-.022	.036	-.617	>.05	-.093	.049
Total indirect effect	-.084				-.120	-.050
Indirect effect ($X \rightarrow M_1 \rightarrow Y$)	-.042				-.074	-.014
Indirect effect ($X \rightarrow M_2 \rightarrow Y$)	-.021				-.042	-.002
Indirect effect ($X \rightarrow M_1 \rightarrow M_2 \rightarrow Y$)	-.021				-.037	-.010

Note. ^a Unstandardized; Based on 10000 bootstrap samples, ^b %95 confidence intervals

Table 2 shows three distinct indirect effects. The first indirect effect reveals that cyberstalking significantly impacts harmony in life through social media addiction (bootstrap coeff = $-.042$, 95% CI $[-.074; -.014]$). The second indirect effect indicates that cyberstalking affects harmony in life via digital well-being ($-.021$, 95% CI $[-.042; -.002]$). Finally, the serial mediation effect of social media addiction and digital well-being on the relationship between cyberstalking and harmony in life was also found to be significant ($-.021$, 95% CI $[-.037; -.010]$).

Discussion

This study aimed to examine the serial mediating roles of social media addiction (SMA) and digital well-being (DWB) in the relationship between cyberstalking (CS) and harmony in life (HL). Our findings contribute to a growing body of research indicating that maladaptive digital behaviors such as cyberstalking, have a cascading effect on individuals' psychological health, which, in turn, influences harmony in life through both SMA and DWB. This section contextualizes our results within the literature, elaborates on the theoretical implications, and discusses limitations and future research directions.

Our results align with previous research highlighting the detrimental impact of cyberstalking on emotional and psychological well-being. Our results showed that engaging in cyberstalking behavior predicted higher levels of social media addiction. This aligns with previous research showing that individuals who repeatedly monitor or intrude into others' digital spaces display regulatory difficulties, heightened digital preoccupation, or low self-control (Weekes et al., 2025). Such characteristics may predispose individuals to broader compulsive digital behaviors, making SMA a plausible consequence of cyberstalking involvement. These underlying difficulties may create a vulnerability toward compulsive forms of online engagement, such as SMA. In this

sense, cyberstalking behavior may not be an isolated online action but part of a broader pattern of dysregulated digital involvement.

Although few studies have linked cyberstalking perpetration directly to SMA, research on digital compulsion demonstrates that emotionally driven or impulse-based online behaviors often generalize into addictive digital habits (Duradoni et al., 2025), offering indirect support for the mechanism observed in the current study. Our results extend this understanding by showing that cyberstalking behavior itself may be linked to such compulsive tendencies, positioning SMA as a key mechanism through which intrusive digital actions affect individuals' broader psychological functioning.

The mediating role of SMA highlights how compulsive online activity can interfere with life balance. Social media addiction disrupts routines, intrudes into relationships, and diminishes emotional stability (Andreassen et al., 2016; Kircaburun et al., 2020). Blachnio et al. (2016) similarly showed that individuals with high SMA report lower life satisfaction and higher emotional distress. Our findings expand on this body of work by demonstrating that SMA is also associated with diminished harmony in life, a construct reflecting inner steadiness and a sense of congruence across different life domains (Garcia et al., 2014). In this context, SMA appears to be more than a digital habit; it may weaken the psychological integration required to feel balanced and grounded.

Digital well-being emerged as a crucial factor in maintaining harmony in life, serving as a secondary mediator in the pathway from CS to HL via SMA. High digital well-being, characterized by the mindful and intentional use of digital tools, has been linked to reduced stress, improved emotional health, and a sense of control (Burr et al., 2020; Marsh et al., 2024). In contrast, poor digital well-being is often characterized by digital overuse, stress, and adverse emotional responses, all of which can detract from harmony in life by increasing anxiety, distraction, and detachment from

real-life experiences (Kostyrka-Allchorne et al., 2023; Wasie, 2024). The significant mediating role of DWB in our study aligns with existing literature that emphasizes the importance of healthy digital engagement for psychological well-being (Marsh et al., 2024). Our findings suggest that improving digital well-being may act as a protective factor, buffering individuals from the negative impacts of excessive social media use and, ultimately, fostering a more balanced life experience.

Furthermore, this study's results align with Dambrun & Ricard's (2011) theoretical framework, which distinguishes between self-centered functioning, focusing on immediate gratification, and selfless functioning, fostering long-term well-being. SMA, often driven by immediate gratification, reflects a self-centered mode that undermines long-term harmony by encouraging a dependence on digital environments. In contrast, DWB aligns with the selfless functioning model, as it involves digital practices that prioritize mental health and balance, fostering a stable and harmonious life (Kabat-Zinn, 2005; Kashdan & Rottenberg, 2010). Our findings suggest that DWB can counteract the self-centered tendencies of SMA, promoting a shift toward practices that support enduring harmony.

These findings underscore the need for interventions that target both digital well-being and social media addiction to mitigate the effects of cyberstalking on harmony in life. Interventions focusing on enhancing digital literacy, mindful digital engagement, and emotional regulation may empower individuals to use social media healthily, potentially reducing the impact of cyberstalking on their overall balance in life. Recent intervention-oriented research suggests that enhancing digital boundary control and promoting intentional "digital disconnection" practices can significantly improve emotional balance and overall digital well-being (Vanden Abeele et al., 2024; Dennis & Ziliotti, 2023). Future studies could explore whether such practices also reduce intrusive digital behaviors like cyberstalking. Further research could explore interventions aimed specifically at improving digital well-being, which might include promoting awareness of SMA's impact, fostering mindfulness practices, and enhancing self-regulatory skills to encourage healthier digital habits (Kabat-Zinn, 2023; Carreno et al., 2021).

Limitations

Despite its contributions, this study has limitations that should be addressed in future research. The cross-sectional design limits causal inferences, and longitudinal studies could better elucidate the temporal relationship between cyberstalking, social media addiction, digital well-being, and harmony in life. Additionally, the study relied on self-reported measures, which may introduce bias; future studies could in-

corporate objective measures of digital activity to validate these findings. Finally, while this study focused on adolescents and young adults, examining diverse populations could offer insights into how age, cultural background, and digital literacy levels influence the relationships among cyberstalking, social media addiction, digital well-being, and harmony in life.

Conclusion

In this study, our findings offered a detailed insight into the relationship between cyberstalking, social media addiction, and digital well-being, highlighting their collective impact on harmony in life. Our results demonstrate that SMA and DWB operate as sequential mechanisms explaining how engaging in cyberstalking behavior can indirectly diminish harmony in life. These findings advance the literature by integrating three crucial dimensions of digital functioning, maladaptive online behavior, compulsive platform use, and digital well-being, into a unified explanatory model. Identifying this pathway highlights opportunities for prevention and intervention. Efforts to promote digital well-being, reduce compulsive social media use, and support healthier digital boundaries may contribute to restoring balance, stability, and coherence in individuals' lives. Future research should continue exploring this pathway using longitudinal or experimental designs to clarify causality. In addition, examining cyberstalking behavior across different cultural, age, and digital literacy groups may help identify populations most at risk of falling into maladaptive patterns of digital engagement. As digital technologies continue to shape everyday life, developing mindful and regulated digital practices will be essential for supporting individuals' ability to maintain a harmonious and well-balanced life.

Complementary information

Abbreviations:

SMA: Social media addiction

DWB: Digital well-being

CS: Cyberstalking

HL: Harmony in life

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