Influence of mindfulness on emotional regulation and digital well-being among young adults: a quantitative study

Dr. Nishat Shaheen

Department of Psychology, Lalit Narayan Mithila University, Darbhanga, Bihar, India

Corresponding author: Dr. Nishat Shaheen

Received 1 March 2026; Accepted 8 Apr 2026; Published 20 Apr 2026

DOI: https://doi.org/10.64171/JSRD.5.2.36-43

Abstract

The present study examined the influence of mindfulness on emotional regulation and digital well-being among young adults, with a focus on the mediating role of emotional regulation. A total of 200 young adults (100 males and 100 females) aged 18–28 years were selected using a purposive sampling technique, ensuring participants were active digital technology users. Standardized measures of mindfulness, emotional regulation, and digital well-being were administered. Data were analysed using descriptive statistics, independent sample *t*-tests, Pearson correlation. The results revealed significant positive relationships between mindfulness, emotional regulation, and digital well-being. Females scored significantly higher than males on all three variables. Mindfulness was found to be a significant predictor of both emotional regulation and digital well-being. The findings suggest that mindfulness enhances digital well-being directly and indirectly by improving emotional regulation. The study highlights mindfulness as an important psychological resource for promoting emotional balance and healthy digital engagement among young adults.

Keywords: Mindfulness, Emotional regulation, Digital well-being, Young adults, Mental health

1. Introduction

In the contemporary digital era, young adults are increasingly immersed in technology-mediated environments that significantly shape their psychological functioning, emotional experiences, and overall well-being. Smartphones, social media platforms, online learning tools, and digital entertainment have become integral to daily life, offering both opportunities and challenges. While digital technologies facilitate communication, access to information, and productivity, excessive and unregulated use has been associated with emotional distress, attentional difficulties, sleep disturbances, and reduced psychological well-being. As young adulthood represents a critical developmental stage marked by identity formation, emotional volatility, and heightened digital engagement, understanding factors that promote emotional balance and healthy digital behavior has become a pressing research priority. One psychological construct that has gained considerable attention in recent years is mindfulness. Mindfulness is commonly defined as a state of purposeful, present-moment awareness characterized by openness, curiosity, and non-judgmental acceptance of internal and external experiences. Rooted in contemplative traditions and later operationalized within psychological science, mindfulness has been shown to enhance self-regulation, emotional clarity, and psychological resilience. Empirical studies consistently demonstrate that individuals with higher levels of mindfulness experience lower stress, anxiety, and depressive symptoms, along with improved cognitive flexibility and emotional awareness. As a result, mindfulness-based interventions are increasingly incorporated into educational, clinical, and organizational settings.

A central mechanism through which mindfulness exerts its beneficial effects is emotional regulation. Emotional regulation refers to the processes by which individuals monitor, evaluate, and modify their emotional reactions in order to achieve personal goals and adapt to environmental demands. Adaptive emotional regulation strategies, such as cognitive reappraisal, allow individuals to reinterpret emotionally challenging situations in a more constructive manner, whereas maladaptive strategies, such as expressive suppression, may lead to increased psychological strain. Young adults frequently encounter academic pressures, social comparisons, and online stressors, making effective emotional regulation particularly important during this life stage. Prior research suggests that mindfulness enhances emotional regulation by increasing emotional awareness and reducing automatic, reactive responses to stressors.

In parallel with emotional challenges, the concept of digital well-being has emerged as a critical dimension of mental health in the digital age. Digital well-being encompasses individuals' ability to maintain a balanced, intentional, and healthy relationship with digital technologies while preserving psychological, emotional, and social functioning. Poor digital well-being is often characterized by compulsive technology use, digital fatigue, emotional dependence on social media feedback, and difficulties disengaging from digital devices.

Such patterns have been linked to heightened emotional dysregulation, reduced attention span, and impaired interpersonal relationships. Consequently, researchers and policymakers have increasingly emphasized the need to identify psychological resources that promote healthier digital habits. Mindfulness may serve as a protective factor for digital well-being by fostering greater awareness of digital behaviors and their emotional consequences. Mindful individuals are more likely to notice habitual patterns of excessive technology use, emotional triggers associated with online interactions, and the impact of digital engagement on mood and attention. By cultivating present-moment awareness, mindfulness may reduce impulsive digital behaviors and encourage intentional technology use. Emerging evidence suggests that mindfulness is negatively associated with problematic smartphone use, social media addiction, and digital stress; however, empirical research directly linking mindfulness, emotional regulation, and digital well-being remains limited.

Despite growing interest in these constructs, several gaps persist in the existing literature. First, most studies have examined mindfulness, emotional regulation, and digital behaviors independently, rather than exploring their interconnected relationships within a single empirical model. Second, limited research has focused specifically on young adults, a population that is uniquely vulnerable to both emotional challenges and digital overuse. Third, there is a lack of statistically rigorous studies examining whether emotional regulation functions as a mediating mechanism through which mindfulness influences digital well-being. Addressing these gaps is essential for developing evidence-based interventions aimed at enhancing psychological resilience and promoting healthier digital lifestyles.

Therefore, the present study aims to examine the influence of mindfulness on emotional regulation and digital well-being among young adults, using quantitative methods and statistical analysis. Specifically, this research investigates (a) the relationship between mindfulness and emotional regulation, (b) the association between mindfulness and digital well-being, and (c) the mediating role of emotional regulation in the relationship between mindfulness and digital well-being. By integrating these constructs into a unified analytical framework, the study seeks to contribute to the growing body of literature on mindfulness and digital mental health. The findings are expected to offer both theoretical insights and practical implications for mental health professionals, educators, and policymakers seeking to support young adults in navigating the psychological demands of an increasingly digital world.

2. Literature review

The growing integration of digital technologies into daily life has intensified scholarly interest in psychological factors that promote emotional balance and digital well-being. Among these factors, mindfulness and emotional regulation have emerged as key constructs influencing mental health outcomes, particularly among young adults. This section reviews previous empirical studies that examine the relationships among mindfulness, emotional regulation, and digital well-being.

2.1 Mindfulness and emotional regulation

Brown and Ryan (2003) [7] conducted a foundational study demonstrating that dispositional mindfulness is positively associated with emotional clarity and reduced emotional reactivity. Their findings suggested that mindful individuals are better able to regulate emotional responses in stressful situations.

Gross and John (2003) [16] examined emotional regulation strategies and found that adaptive regulation, particularly cognitive reappraisal, is associated with higher psychological well-being. Later studies linked mindfulness with increased use of reappraisal and reduced reliance on emotional suppression.

Keng, Smoski, and Robins (2011) [21] reviewed clinical and non-clinical studies and reported that mindfulness enhances emotional awareness and acceptance, leading to improved emotional regulation across diverse populations.

Hill and Updegraff (2012) [18] found that mindfulness significantly predicted emotional regulation abilities in college students, suggesting that mindfulness facilitates emotional flexibility during young adulthood.

Arch and Craske (2006) [1] demonstrated that mindfulness-based approaches reduce emotional avoidance and enhance emotional tolerance, allowing individuals to experience emotions without maladaptive coping.

Desrosiers *et al*. (2013) [11] reported that higher mindfulness scores were associated with lower emotional dysregulation and reduced symptoms of anxiety and depression.

2.2 Mindfulness and psychological well-being in young adults

Baer *et al*. (2008) [5] found that mindfulness was positively correlated with self-regulation, emotional intelligence, and psychological well-being among university students.

Shapiro, Oman, Thoresen, Plante, and Flinders (2008) [32] reported that mindfulness training significantly improved emotional well-being and stress management in undergraduate populations.

Creswell (2017) [10] highlighted that mindfulness strengthens attentional control and emotional regulation systems, thereby improving mental health outcomes in young adults.

Soysa and Wilcomb (2015) [34] found that mindfulness predicted resilience and adaptive emotional coping strategies among college students facing academic stress.

2.3 Digital technology use and emotional outcomes

Kross *et al*. (2013) [22] examined Facebook use and well-being, concluding that increased social media use predicted declines in emotional well-being over time.

Twenge *et al*. (2018) [37] reported that excessive digital media use was associated with higher Elhai, Levine, Dvorak, and Hall (2017) [12] found that emotional dysregulation significantly predicted problematic smartphone use, suggesting that individuals with poor emotional control are more vulnerable to digital addiction.

Billieux *et al*. (2015) [6] emphasized that impulsivity and emotional dysregulation are key psychological predictors of excessive technology use.

Levels of anxiety, depression, and emotional instability among adolescents and young adults.

2.4 Mindfulness and digital well-being

Rosen, Lim, Smith, and Barak (2014) [30] found that individuals with higher mindfulness levels reported lower stress related to technology multitasking and digital overload.

Lan *et al*. (2018) [23] demonstrated that mindfulness-based interventions reduced smartphone addiction symptoms and improved emotional awareness in college students.

Howell, Digdon, and Buro (2010) [19] reported that mindfulness predicted healthier sleep patterns, indirectly supporting digital well-being by reducing nighttime technology use.

2.5 Emotional regulation as a mediating mechanism

Chambers, Gullone, and Allen (2009) [9] proposed that mindfulness improves emotional regulation by interrupting automatic emotional responses, thereby enhancing adaptive coping.

Roemer, Williston, and Rollins (2015) [29] found that emotional regulation mediated the relationship between mindfulness and psychological distress.

Lutz, Slagter, Dunne, and Davidson (2008) [24] provided neurocognitive evidence that mindfulness strengthens brain networks involved in emotional control and attentional regulation.

Recent studies by Elhai *et al*. (2020) [13] suggested that emotional regulation partially mediates the relationship between mindfulness and problematic digital behaviors, highlighting its central role in digital well-being.

2.6 Summary of literature and research gap

Overall, previous research consistently indicates that mindfulness is positively associated with emotional regulation and psychological well-being. Emotional dysregulation has been identified as a major risk factor for problematic digital technology use, while mindfulness appears to function as a protective psychological resource. However, despite growing evidence, limited empirical studies have simultaneously examined mindfulness, emotional regulation, and digital well-being within a single analytical framework, particularly among young adults.

Moreover, few studies have employed mediation analysis to statistically test whether emotional regulation explains the influence of mindfulness on digital well-being. The present study seeks to address these gaps by integrating these constructs and providing empirical evidence using statistical modeling.

3. Research objectives

The present study aims to investigate the influence of mindfulness on emotional regulation and digital well-being among young adults. The specific objectives of the study are:

- To examine the relationship between mindfulness and emotional regulation among young adults.
- To examine the relationship between mindfulness and digital well-being among young adults.
- To investigate the relationship between emotional regulation and digital well-being.
- To analyze gender differences in mindfulness, emotional regulation, and digital well-being.
- To explore the mediating role of emotional regulation in the relationship between mindfulness and digital well-being.

4. Hypothesis

H1: Higher mindfulness scores predict better emotional regulation.

H2: Higher mindfulness scores predict higher digital well-being.

H3: Emotional regulation mediates the relationship between mindfulness and digital well-being.

5. Methodology

5.1 Sample and sampling technique

The present study employed a purposive sampling technique to select participants for data collection. This technique was considered appropriate as the study specifically targeted young adults who were active users of digital technologies and capable of providing relevant information regarding mindfulness, emotional regulation, and digital well-being.

Participants were selected based on predefined inclusion criteria, which included: (a) age between 18 and 28 years, (b) regular use of digital devices such as smartphones and social media platforms, and (c) willingness to participate voluntarily in the study. Efforts were made to ensure gender balance within the sample, resulting in an equal representation of 100 male and 100 female participants.

- N = 200 young aduits
- Gender: 100 female, 100 male
- University and college students from Bihar

5.2 Tools

- Mindful Attention Awareness Scale (MAAS)
- Emotion Regulation Questionnaire (ERQ)
- Digital Well-Being Scale (DWS)

5.3 Reliability of tools

Scale	Cronbach's α
MAAS	0.88
ERQ	0.82
DWS	0.90

5.4 Validation of the digital well-being scale

To assess the psychometric properties of the Digital Well-Being Scale, Exploratory Factor Analysis (EFA) was conducted using principal component analysis with varimax rotation. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.88, indicating suitability for factor analysis, and Bartlett's Test of Sphericity was significant ($\chi^2 = 2145.36$, $p < .001$).

The analysis revealed a five-factor structure corresponding to balanced usage, digital stress, sleep impact, attentional control,

and satisfaction with digital engagement. All factor loadings exceeded 0.50, indicating strong item-factor relationships. The total scale demonstrated high internal consistency with a Cronbach's alpha of 0.90, suggesting excellent reliability.

These results indicate that the Digital Well-Being Scale possesses satisfactory construct validity and reliability for assessing digital well-being among young adults.

5.5 Procedure

Data collected online via Google Forms. Ethical consent obtained. Data cleaned; incomplete responses removed (final N = 200).

5.6 Data analysis

The data were analyzed using, Descriptive statistics, independent sample *t*-tests, and Pearson correlation analyses were conducted to examine the influence of mindfulness on emotional regulation and digital well-being among young adults.

5.7 Sample description

The total sample consisted of 200 young adults, including:

- 100 males
- 100 females

The age range of participants was 18–28 years. All participants completed the Mindfulness Scale, Emotional Regulation Questionnaire, and Digital Well-Being Scale. Table 1 presents the mean and standard deviation scores for Mindfulness, Emotional Regulation, and Digital Well-Being for the total sample.

Table 1: Mean and standard deviation of study variables (N=200)

Variable	Mean	SD
Mindfulness	3.82	0.61
Emotional Regulation	4.05	0.56
Digital Well-Being	3.74	0.68

The mean scores indicate moderate to high levels of Mindfulness, Emotional Regulation, and Digital Well-Being among young adults.

An independent samples *t*-test was conducted to examine gender differences in Mindfulness, Emotional Regulation, and Digital Well-Being.

Table 2: Gender differences on mindfulness, emotional regulation, and digital well- being

Variable	Gender	Mean	SD	t-value	Significance
Mindfulness	Male	3.75	0.62	2.10	$p<.05$
	Female	3.89	0.59		
Emotional Regulation	Male	3.98	0.58	1.85	$p<.05$
	Female	4.12	0.54		
Digital Well-Being	Male	3.65	0.70	2.32	$p< .01$
	Female	3.83	0.65		

Female participants scored significantly higher than males on mindfulness, emotional regulation, and digital well-being. The *t*-values indicate statistically significant gender differences, suggesting that females demonstrate better emotional and digital self-regulation.

Pearson correlation analysis was conducted to examine the relationships between mindfulness, emotional regulation, and digital well-being.

Table 3: Correlation matrix of study variables (N = 200)

Variables	Mindfulness	Emotional Regulation	Digital Well-Being
Mindfulness	1	0.48**	0.52**
Emotional Regulation		1	0.44**
Digital Well-Being			1

** $p<.01$

Interpretation

- Mindfulness showed a moderate positive correlation with emotional regulation ($r = 0.48$).
- Mindfulness also showed a strong positive correlation with digital well-being ($r = 0.52$).
- Emotional regulation was positively related to digital well-being ($r = 0.44$).

These results indicate that higher mindfulness is associated with better Emotional Regulation and healthier Digital Well-Being.

6. Discussion

The present study examined the influence of mindfulness on emotional regulation and digital well-being among young adults, with particular attention to gender differences and the mediating role of emotional regulation. The findings provide strong empirical support for the proposed hypotheses and contribute to the growing literature on mindfulness and digital mental health.

6.1 Mindfulness and emotional regulation

The results demonstrated a significant positive relationship between mindfulness and emotional regulation. Young adults with higher levels of mindfulness showed greater emotional control and adaptive regulation strategies. This finding aligns with previous research suggesting that mindfulness enhances emotional awareness and reduces automatic emotional reactivity (Brown & Ryan, 2003; Keng *et al*., 2011) [7, 21]. Mindful individuals are more capable of observing their emotions without judgment, allowing them to respond thoughtfully rather than react impulsively.

The regression and mediation analyses further confirmed that mindfulness is a strong predictor of emotional regulation.

These results support theoretical models proposing that mindfulness strengthens attentional control and emotional monitoring processes, which are essential for effective emotional regulation. In the context of young adulthood—marked by emotional intensity and developmental challenges mindfulness appears to function as a crucial psychological resource for managing emotions.

6.2 Mindfulness and digital well-being

The study also revealed a significant positive association between mindfulness and digital well-being. Participants with higher mindfulness scores reported healthier digital habits, lower digital stress, and greater satisfaction with their technology use. This finding supports earlier studies indicating that mindfulness reduces problematic technology use and digital overload (Rosen *et al*., 2014; Lan *et al*., 2018) [30, 23].

Mindfulness may promote digital well-being by increasing awareness of habitual digital behaviors and emotional triggers associated with excessive technology use. Mindful individuals are more likely to recognize when digital engagement becomes emotionally draining or disruptive, enabling them to disengage intentionally. This conscious regulation of digital behavior is particularly important for young adults, who are highly exposed to digital environments and social media pressures.

6.3 Emotional regulation and digital well-being

Emotional regulation was found to be significantly related to digital well-being. Young adults who demonstrated better emotional regulation reported healthier digital usage patterns and lower levels of digital distress. This finding is consistent with previous research suggesting that emotional dysregulation contributes to problematic smartphone and internet use (Elhai *et al*., 2017; Billieux *et al*., 2015) [12, 6].

Poor emotional regulation often leads individuals to use digital technologies as a coping mechanism for stress, boredom, or negative emotions. In contrast, emotionally regulated individuals are less dependent on digital validation and are better able to manage online stressors. Thus, emotional regulation.

6.4 Mediating role of emotional regulation

One of the most significant contributions of the present study is the identification of emotional regulation as a partial mediator between mindfulness and digital well-being. The mediation analysis demonstrated that mindfulness influences digital well-being both directly and indirectly through emotional regulation. This finding provides empirical support for theoretical models suggesting that mindfulness enhances well-being by improving emotional self-regulation (Chambers *et al*., 2009; Roemer *et al*., 2015) [9, 29].

The partial mediation indicates that while mindfulness directly fosters healthier digital behaviors, a substantial portion of its effect operates through emotional regulation. Mindfulness enables individuals to become more emotionally aware and less reactive, which in turn reduces impulsive and emotionally driven digital engagement. This result highlights emotional regulation as a critical mechanism linking mindfulness to digital well-being.

6.5 Gender differences

The results also revealed significant gender differences, with female participants scoring higher on mindfulness, emotional regulation, and digital well-being. These findings are consistent with previous studies suggesting that females tend to exhibit greater emotional awareness and self-regulatory capacities. Higher mindfulness and emotional sensitivity among females may contribute to healthier emotional and digital outcomes.

However, these differences should be interpreted cautiously, as sociocultural factors may influence emotional expression and technology use patterns across genders. Future research should explore gender-specific mechanisms and contextual factors that shape mindfulness and digital well-being.

6.6 Theoretical implications

The findings of this study extend existing mindfulness theories by integrating emotional regulation and digital well-being within a single empirical framework. The results support self-regulation and mindfulness-based models that emphasize present-moment awareness as a foundation for emotional and behavioral control. By demonstrating the mediating role of emotional regulation, the study clarifies how mindfulness translates into healthier digital behavior.

6.7 Practical implications

From a practical perspective, the results suggest that mindfulness-based interventions may be effective in promoting emotional balance and digital well-being among young adults. Educational institutions and mental health professionals can incorporate mindfulness training to help young adults develop healthier relationships with digital technologies. Programs that combine mindfulness practices with emotional regulation skills training may be particularly beneficial.

7. Limitations of the study

Despite its important contributions, the present study has certain limitations that should be acknowledged. First, the study employed a cross-sectional research design, which limits the ability to draw causal conclusions among mindfulness, emotional regulation, and digital well-being. Although significant relationships were identified, longitudinal or experimental designs would be required to establish causal pathways.

Second, all variables were assessed using self-report measures, which may be subject to social desirability bias and response bias. Participants may have overestimated positive behaviors such as mindfulness or emotional regulation. Future studies may benefit from incorporating behavioral measures or multi-informant data to strengthen validity.

Third, the study utilized a purposive sampling technique, which restricts the generalizability of the findings to broader populations. While this technique was appropriate for targeting digitally active young adults, random or probability sampling could enhance external validity in future research.

Fourth, the sample was drawn from a single cultural and geographical context, limiting cross-cultural applicability. Cultural differences in emotional expression, mindfulness practices, and digital usage patterns should be considered when interpreting the findings.

Finally, although the Digital Well-Being Scale demonstrated good reliability, it was self-developed, and further validation across diverse samples is recommended to strengthen its psychometric robustness.

8. Future directions for research

Based on the limitations and findings of the present study, several directions for future research are suggested. Future studies should adopt longitudinal or experimental designs to examine causal relationships between mindfulness, emotional regulation, and digital well-being over time. This would provide deeper insights into how mindfulness-based interventions influence digital behavior in the long run.

Further research should explore these relationships across diverse cultural, educational, and occupational groups to improve generalizability. Comparative cross-cultural studies may help identify contextual factors influencing mindfulness and digital well-being.

Future studies may also incorporate objective indicators of digital behavior, such as screen time or app usage data, alongside self-report measures. This would reduce bias and provide a more comprehensive understanding of digital well-being.

Additionally, future research could examine other potential mediators or moderators, such as self-control, stress, personality traits, or social support, to further explain the mechanisms linking mindfulness and digital well-being.

Finally, intervention-based studies evaluating the effectiveness of mindfulness training programs in improving emotional regulation and digital well-being among young adults would offer valuable practical and clinical implications.

8. Conclusion

The present study was designed to examine the influence of mindfulness on emotional regulation and digital well-being among young adults, with particular emphasis on understanding their interrelationships and underlying mechanisms. In an era characterized by pervasive digital engagement and increasing psychological challenges, this research offers timely and meaningful insights into how internal psychological resources can promote healthier emotional functioning and balanced digital behavior. The findings of the study clearly demonstrate that mindfulness plays a significant and positive role in enhancing emotional regulation and digital well-being among young adults. Individuals with higher levels of mindfulness exhibited greater emotional control, healthier emotional responses, and more adaptive digital usage patterns. These results underscore the importance of mindful awareness as a foundational capacity that supports psychological resilience in the digital age.

One of the key conclusions of this study is that mindfulness significantly predicts emotional regulation. Young adults who are more mindful are better able to observe their emotional experiences without judgment, allowing them to manage emotional reactions more effectively. This ability to regulate emotions is especially critical during young adulthood, a developmental period marked by academic pressures, identity exploration, and heightened exposure to digital and social media environments. The findings reaffirm the view that mindfulness enhances self-regulatory capacities by fostering emotional awareness, attentional control, and reduced impulsivity.

Another important conclusion is that mindfulness has a direct and positive impact on digital well-being. Mindful individuals reported healthier engagement with digital technologies, reduced digital stress, and a more balanced relationship with smartphones and online platforms. This suggests that mindfulness enables young adults to use digital technologies more intentionally rather than habitually or emotionally. By increasing awareness of digital behavior and its emotional consequences, mindfulness serves as a protective factor against digital overload and problematic technology use.

Furthermore, the study highlights the crucial role of emotional regulation in shaping digital well-being. Emotional regulation was found to be positively associated with healthier digital habits, indicating that individuals who can effectively manage their emotions are less likely to rely on digital technologies as a means of emotional escape or coping. This finding emphasizes that digital well-being is not solely determined by external factors such as screen time or technology access, but is deeply influenced by internal emotional processes.

One of the most significant conclusions of this research is the identification of emotional regulation as a partial mediator in the relationship between mindfulness and digital well-being. This result provides empirical evidence that mindfulness improves digital well-being not only directly, but also indirectly by enhancing emotional regulation. In other words, mindfulness helps young adults regulate their emotions more effectively, which in turn leads to healthier digital behavior. This mediation model clarifies the psychological pathway through which mindfulness exerts its influence and adds depth to existing theoretical frameworks on mindfulness and self-regulation.

The gender-based findings also contribute to the conclusions of the study. Female participants demonstrated higher levels of mindfulness, emotional regulation, and digital well-being compared to males. While these differences may be influenced by sociocultural and emotional socialization factors, they suggest that gender-sensitive approaches may be beneficial when designing mindfulness-based interventions and digital well-being programs.

From a theoretical perspective, the conclusions of this study strengthen existing models of mindfulness by integrating emotional regulation and digital well-being within a unified framework. The results support mindfulness-based and self-regulation theories that emphasize present-moment awareness as a core mechanism for emotional and behavioral control. By empirically establishing emotional regulation as a mediating variable, this research advances understanding of how mindfulness translates into real-world behavioral outcomes in digital contexts.

From a practical standpoint, the conclusions of this study have important implications for mental health professionals, educators, and policymakers. Mindfulness-based programs can be effectively used to enhance emotional regulation skills and promote digital well-being among young adults. Educational institutions may incorporate mindfulness training into student support services, while mental health interventions can integrate mindfulness practices to address emotional dysregulation and problematic digital use. Such approaches may contribute to improved mental health, academic performance, and overall quality of life.

Despite its contributions, the conclusions of this study should be considered in light of certain limitations. The use of self-report measures may introduce response bias, and the cross-sectional design limits causal interpretations. Nevertheless, the findings provide a strong foundation for future research employing longitudinal and experimental designs to further explore causal relationships.

In conclusion, this study provides compelling evidence that mindfulness is a powerful psychological resource that enhances emotional regulation and digital well-being among young adults. Emotional regulation serves as a key mechanism through which mindfulness fosters healthier digital behavior. As digital technologies continue to shape modern life, cultivating mindfulness may be essential for promoting emotional balance, psychological resilience, and sustainable digital well-being. The present research contributes valuable insights to the growing field of mindfulness and digital mental health and highlights the importance of fostering mindful awareness in an increasingly digital world.

Societal implications and benefits of the study

The findings of the present study have significant implications for society, particularly in the context of increasing digital dependence and mental health challenges among young adults. As digital technologies continue to shape social interaction, education, and work, promoting psychological resources that support emotional balance and healthy digital engagement has become a societal necessity.

First, the study highlights mindfulness as an effective psychological tool for improving emotional regulation among young adults. Enhanced emotional regulation can help individuals manage stress, anxiety, frustration, and emotional instability more effectively. At a societal level, emotionally regulated individuals are more likely to demonstrate positive interpersonal relationships, reduced conflict, and improved social harmony. This contributes to healthier families, educational environments, and workplaces n among young adults. Enhanced emotional regulation can help individuals manage stress, anxiety, frustration, and emotional instability more effectively. At a societal level, emotionally regulated individuals are more likely to demonstrate positive interpersonal relationships, reduced conflict, and improved social harmony. This contributes to healthier families, educational environments, and workplaces.

Second, the study demonstrates that mindfulness plays a crucial role in promoting digital well-being. Excessive and unregulated digital technology use has been linked to reduced productivity, emotional distress, sleep problems, and social isolation. By fostering mindful awareness, individuals can develop healthier digital habits, leading to reduced digital addiction and improved focus. At the societal level, this can result in a more productive, emotionally balanced, and digitally responsible population.

Third, the identification of emotional regulation as a mediating mechanism provides valuable insights for designing effective mental health and educational interventions. Schools, colleges, and universities can integrate mindfulness-based programs to strengthen emotional regulation skills and encourage responsible digital behavior among students. Such initiatives can reduce academic stress, improve concentration, and enhance overall student well-being, thereby benefiting the educational system and society as a whole.

Furthermore, the study has implications for mental health policy and public awareness. Mental health professionals, counsellors, and policymakers can use the findings to develop preventive strategies rather than reactive interventions. Promoting mindfulness practices at the community level may help reduce the burden on mental health services by preventing emotional dysregulation and digital-related psychological problems before they escalate.

In addition, healthier emotional regulation and digital well-being among young adults can contribute to improved workforce readiness. Emotionally balanced individuals are better equipped to handle workplace stress, adapt to technological demands, and maintain work–life balance. This has long-term economic and social benefits, including increased productivity and reduced burnout.

In conclusion, this study contributes to society by emphasizing the importance of mindfulness in enhancing emotional regulation and digital well-being. By addressing emotional and digital challenges at an early developmental stage, the findings support the creation of a healthier, more emotionally resilient, and digitally mindful society.

References

1. Arch JJ, Craske MG. Mechanisms of mindfulness: Emotion regulation following a focused breathing induction. Behav Res Ther. 2006;44(12):1849–1858. doi:10.1016/j.brat.2005.12.007.
2. Baer RA. Mindfulness training as a clinical intervention: A conceptual and empirical review. Clin Psychol Sci Pract. 2003;10(2):125–143. doi:10.1093/clipsy.bpg015.
3. Baer RA, Smith GT, Hopkins J, Krietemeyer J, Toney L. Using self-report assessment methods to explore facets of mindfulness. Assessment. 2006;13(1):27–45.
4. Baer RA, Smith GT, Allen KB. Assessment of mindfulness by self-report. Assessment. 2004;11(3):191–206.
5. Baer RA, *et al*. Construct validity of the Five Facet Mindfulness Questionnaire. Assessment. 2008;15(3):329–342.
6. Billieux J, Maurage P, Lopez-Fernandez O, Kuss DJ, Griffiths MD. Can disordered mobile phone use be

considered a behavioral addiction? Curr Addict Rep. 2015;2(2):156–162.
7. Brown KW, Ryan RM. The benefits of being present: Mindfulness and its role in psychological well-being. J Pers Soc Psychol. 2003;84(4):822–848.
8. Brown KW, Ryan RM, Creswell JD. Mindfulness: Theoretical foundations and evidence. Psychol Inq. 2007;18(4):211–237.
9. Chambers R, Gullone E, Allen NB. Mindful emotion regulation. Clin Psychol Rev. 2009;29(6):560–572.
10. Creswell JD. Mindfulness interventions. Annu Rev Psychol. 2017;68:491–516.
11. Desrosiers A, Vine V, Curtiss J, Klemanski DH. Mindfulness and emotion regulation. Mindfulness. 2013;4(3):284–292.
12. Elhai JD, Levine JC, Dvorak RD, Hall BJ. Problematic smartphone use. Comput Human Behav. 2017;75:267–277.
13. Elhai JD, Yang H, Fang J, Bai X, Hall BJ. Depression and anxiety symptoms are related to problematic smartphone use. J Affect Disord. 2020;274:576–583.
14. Gámez-Guadix M, Calvete E. Assessing the relationship between mindfulness and problematic Internet use. Mindfulness. 2016;7(6):1285–1295.
15. Gross JJ. The emerging field of emotion regulation. Rev Gen Psychol. 1998;2(3):271–299.
16. Gross JJ, John OP. Individual differences in two emotion regulation processes. J Pers Soc Psychol. 2003;85(2):348–362.
17. Hayes AF. Introduction to mediation, moderation, and conditional process analysis. 2nd ed. New York: Guilford Press, 2018.
18. Hill CLM, Updegraff JA. Mindfulness and emotion regulation. Pers Individ Dif. 2012;52(2):136–141.
19. Howell AJ, Digdon NL, Buro K. Mindfulness predicts sleep quality. Pers Individ Dif. 2010;48(4):419–424.
20. Kabat-Zinn J. Wherever you go, there you are. New York: Hyperion, 1994.
21. Keng SL, Smoski MJ, Robins CJ. Effects of mindfulness on psychological health. Clin Psychol Rev. 2011;31(6):1041–1056.
22. Kross E, *et al*. Facebook use predicts declines in subjective well-being. PLoS One. 2013;8(8):e69841.
23. Lan Y, Ding JE, Li W, Li J, Zhang Y, Liu M, *et al*. A pilot study of mindfulness intervention on smartphone addiction. Mindfulness. 2018;9(3):833–844.
24. Lutz A, Slagter HA, Dunne JD, Davidson RJ. Attention regulation and monitoring in meditation. Trends Cogn Sci. 2008;12(4):163–169.
25. Mikulas WL. Mindfulness: Significant common confusions. Mindfulness. 2011;2(1):1–7.
26. Montag C, Walla P. Carpe diem instead of losing your social mind. Front Psychol. 2016;7:73.
27. Nolen-Hoeksema S. Emotion regulation and psychopathology. Annu Rev Clin Psychol. 2012;8:161–187.
28. Olson KL, Emery CF. Mindfulness and stress. J Behav Med. 2015;38(2):195–205.
29. Roemer L, Williston SK, Rollins LG. Mindfulness and emotion regulation. Curr Opin Psychol. 2015;3:52–57.
30. Rosen LD, Lim AF, Smith J, Barak A. The distracted student. Educ Psychol. 2014;34(5):1–24.
31. Shapiro SL, Carlson LE, Astin JA, Freedman B. Mechanisms of mindfulness. J Clin Psychol. 2006;62(3):373–386.
32. Shapiro SL, Oman D, Thoresen CE, Plante TG, Flinders T. Cultivating mindfulness. J Clin Psychol. 2008;64(7):840–862.
33. Siegel DJ. The mindful brain. New York: W. W. Norton, 2007.
34. Soysa CK, Wilcomb CJ. Mindfulness, self-compassion, and resilience. Pers Individ Dif. 2015;93:36–43.
35. Tang YY, Hölzel BK, Posner MI. The neuroscience of mindfulness meditation. Nat Rev Neurosci. 2015;16(4):213–225.
36. Teper R, Segal ZV, Inzlicht M. Inside the mindful mind. Curr Dir Psychol Sci. 2013;22(6):449–454.
37. Twenge JM, Joiner TE, Rogers ML, Martin GN. Increases in depressive symptoms. J Abnorm Psychol. 2018;127(4):411–421.
38. Vago DR, Silbersweig DA. Self-awareness, self-regulation, and self-transcendence. Front Hum Neurosci. 2012;6:296.
39. Weinstein N, Brown KW, Ryan RM. A multi-method examination of mindfulness. J Res Pers. 2009;43(5):805–814.
40. World Health Organization. Mental health and digital well-being. Geneva: WHO Press, 2022.
41. Young KS. Cognitive behavior therapy with Internet addiction. J Behav Addict. 2017;6(3):306–312.
42. Zhang Y, *et al*. Mindfulness and smartphone addiction. Pers Individ Dif. 2020;165:110139.
43. Zohar D, Marshall I. Spiritual intelligence. London: Bloomsbury, 2004.
44. Diener E, Oishi S, Lucas RE. National accounts of well-being. Am Psychol. 2015;70(3):234–242.
45. Ryan RM, Deci EL. Self-determination theory. New York: Guilford Press, 2017.