



EXAMINING THE EFFECTS OF A DIGITAL DETOX ON RECLAIMING FOCUS AND WELL-BEING IN A HYPER CONNECTED WORLD IS CRUCIAL FOR MODERN MENTAL HEALTH

Sonali S Deshbhratar^{1*}

^{1*}Head, Dept of Psychology, SNDT College of Arts and SCB College of Com. & Sci. for Women, Mumbai:400020

***Corresponding Author:** Sonali S Deshbhratar

*Head, Dept of Psychology, SNDT College of Arts and SCB College of Com. & Sci. for Women, Mumbai:400020

Abstract

The idea of a “digital detox” has gained considerable attention in mental health studies during a time when digital connectedness is widespread. This study examines the effects of digital detoxes on focus and overall well-being in a culture that is highly networked. Using a mixed-methods approach, we analysed both quantitative and qualitative data from a heterogeneous sample of 150 individuals between the ages of 18 and 65. Participants underwent a one-week period of abstaining from non-essential digital media and instead participating in offline activities, in what is commonly referred to as a digital detox. Pre- and post-detox surveys were conducted to evaluate mental health, cognitive function, and sleep quality. These surveys included standardised measures such as the Generalised Anxiety Disorder 7-item (GAD-7) scale, Pittsburgh Sleep Quality Index (PSQI), and Attention Network Test (ANT). The findings revealed notable enhancements in mental health indicators, as seen by a decrease in GAD-7 scores and improved sleep quality indicated by PSQI scores. The ANT assessment revealed improved cognitive performance, characterised by heightened attention and decreased reaction times. The qualitative data indicated that there was an increase in mindfulness, improved social relations, and a heightened feeling of tranquilly. Subsequent assessments conducted one month after detoxification revealed continued decreases in the use of digital media and long-lasting enhancements in mental well-being and sleep quality. The results indicate that even short periods of abstaining from digital devices can result in substantial improvements in mental well-being and cognitive abilities, underscoring their potential as effective measures in modern mental healthcare. Further research should investigate extended detoxification periods, greater sample sizes, and objective measurements to authenticate and build upon these discoveries. Additionally, it should examine the varying effects across diverse demographic and cultural settings.

Keywords: Digital Detox, Mental Health, Cognitive Function, Well-being, Digital Media.

Introduction

Amidst the widespread digital connectivity of today's world, the notion of a “digital detox” has been a significant focus of investigation in the field of mental health research. The ubiquity of digital gadgets and the internet has fundamentally transformed the way people communicate, work, and

amuse them, resulting in a highly interconnected global society. Nevertheless, this constant and uninterrupted interconnection has also given rise to substantial worries over its influence on mental health, namely in terms of concentration and overall state of being. The occurrence of digital overload, marked by continuous exposure to social media, emails, and instant messaging, is associated with heightened stress, anxiety, and diminished attention spans (Reinecke et al., 2017). Therefore, it is crucial to comprehend the possible advantages of digital detoxes, which are deliberate periods of disconnecting from digital devices, in order to develop techniques to reduce these negative consequences. The term “digital detox” denotes a deliberate and brief abstention from digital gadgets, aimed at diminishing stress and augmenting mental clarity and concentration (Parra-López et al., 2016). This method has become more popular as a way for individuals and society to address the difficulties caused by excessive digital exposure (Oksanen et al., 2014; Reyns et al., 2013). Studies suggest that continuous involvement with digital devices might cause attention to become fragmented and cognitive abilities to decrease, resulting in what is commonly referred to as “digital distraction” or “techno-stress” (Lupton, 2017). By abstaining from using electronic displays, individuals can potentially undergo a reconfiguration of focus and a reinstatement of mental balance, therefore fostering enhanced cognitive performance and emotional fortitude. To fully understand the effectiveness of digital detoxes, it is important to thoroughly analyse their psychological and physiological effects (Hinde, 2015). Initial research indicates that engaging in digital detoxes can result in notable enhancements in mood, sleep quality, and cognitive performance. In addition, a digital detox can enhance awareness and presence, promoting a stronger connection with the actual surroundings and interpersonal connections (Fish, 2017; Michaels, 2016). The significance of digital detoxes in improving mental health in an era characterised by digital interactions is emphasised by these possible advantages.

This research paper seeks to analyse the impact of digital detoxes on the restoration of concentration and overall well-being in a highly interconnected society. This study aims to clarify the ways in which digital detoxes impact mental health outcomes by conducting a thorough examination of existing literature and empirical data. The purpose of this study is to add to the existing research on digital detoxes and provide practical suggestions for individuals and policymakers who want to promote healthier digital habits and improve overall well-being in the digital era.

Literature Review

(Fish, 2017) perceives digital detox camps as a strategic manoeuvre employed by corporations to tackle digital addiction at an individual level, rather than advocating for wider governmental or social media company regulations aimed at reducing the addictive nature of online platforms. These camps are part of a growing industry that provides services to assist individuals in disconnecting from technology (Steers, 2016). Nevertheless, they also uphold the paradoxical rhetoric of detachment, as criticised by (Jearey-Graham & Macleod, 2015), wherein digital experiences are perceived as less genuine and influential. In his work, (Bullinger & Vie, 2017) emphasises the concept of “disconnections rhetoric,” drawing a comparison between online life and luxurious and unhealthy cuisine. He argues that offline activities are more difficult but ultimately more fulfilling, and encourages individuals to resist the temptations of the digital world.

Studies on voluntary and purposeful disconnection from digital media investigate several ways in which individuals reject, avoid, quit, or forsake social media. According to (Skeggs & Yuill, 2016), choosing not to use Facebook is a performativity action that communicates a chosen identity. Certain users may discontinue their usage of platforms while retaining the possibility of resuming their activity on these platforms (Chen, 2017; Fox & Ralston, 2016). Research conducted on Grindr users revealed that individuals commonly stopped using the app for several reasons, such as wanting to avoid distractions, feeling that the app was no longer necessary after entering into a committed relationship, or simply losing interest over a period of time (Dush et al., 2011). Departure is a non-linear process that can be reversed as a result of societal forces. (Ribak & Rosenthal, 2015) contend

that media ambivalence is prevalent, characterised by transient and context-specific media practices that are susceptible to modification, adapting to fluctuating routines and behaviours.

Smartphones have numerous benefits, including the ability to stay in touch with friends at all times, offering entertaining leisure activities, providing access to a wide range of information on the internet, and enabling the exchange of knowledge (Dayapoglu et al., 2016; Omar et al., 2016). Nevertheless, the utilisation of these tools can have adverse effects on individuals' overall state of being, a matter that is being increasingly emphasised by both the general population and scholars. Research suggests that the utilisation of smartphones can have negative effects on health, performance, and social connections. Research has established a correlation between smartphone usage and increased rates of depression and anxiety (Olf, 2015), sleep disturbances (Samaha & Hawi, 2016). Moreover, a significant number of empirical studies indicate a detrimental relationship between smartphone usage and academic achievement (Duke & Montag, 2017). These findings are consistent with the notion that excessive smartphone use is linked to reduced productivity and involvement in job tasks (Duke & Montag, 2017). Furthermore, research has demonstrated that the usage of smartphones can lead to heightened negative emotions or stress and can negatively impact the quality of social interactions when persons are preoccupied with their phones, a phenomenon referred to as phubbing (David & Roberts, 2017; McDaniel & Coyne, 2016).

Researchers are increasingly studying the physiological effects of digital detoxes to gain insight into the potential physical health benefits of limiting screen time (Shulman & Connolly, 2013). An important area of investigation in this study is the impact of digital detoxes on sleep habits. Excessive use of electronic devices, especially before going to bed, has been associated with low-quality sleep, decreased length of sleep, and disrupted sleep patterns (Borghese et al., 2015). Studies often assess sleep metrics prior to, during, and following periods of digital detoxification in order to obtain a thorough comprehension of these alterations. Reducing screen time often results in increases in sleep quality, duration, and regularity (Christofaro et al., 2016).

Methodology

A mixed-methods approach was used to look at how a digital detox can help people regain focus and health in a world where everyone is always linked. The study used both oral and quantitative methods to get a full picture of how digital detoxes affect mental health, brain function, and daily life.

Sampling & Procedure

A sample of 150 individuals; ranging in age from 18 to 65, were enlisted via social media platforms, university bulletin boards, and community centres. The sample was divided into distinct groups based on age, gender, occupation, and patterns of digital media usage in order to achieve a diverse representation. Participants had finished an initial survey that evaluated their starting point mental health, cognitive abilities, amount of time spent on screens, and habits related to using digital media. The poll incorporated standardised measures such as the Generalised Anxiety Disorder 7-item (GAD-7) scale, the Pittsburgh Sleep Quality Index (PSQI), and the Attention Network Test (ANT). The participants had completed a one-week digital detox, during which they refrained from using non-essential digital media. They were prompted to participate in offline pursuits such as reading, outdoor activities, and in-person social contacts. During the detoxification period, participants consistently kept daily notebooks to record their feelings, emotions, and any alterations in their concentration and overall state of being. The qualitative data provide valuable insights into the individual and environmental factors that impact the detoxification process. Following the detox week, subjects underwent a second administration of the identical standardised questionnaires and surveys to assess alterations in mental well-being, sleep efficacy, and cognitive performance. In addition, they filled out a qualitative questionnaire regarding their detox experiences and their perceived advantages or difficulties. One month after the detox, participants were given a follow-up survey to measure the durability of any reported advantages and to assess the long-term effects on digital media habits and well-being.

Analysis

The results of the pre- and post-detox survey were analysed using paired t-tests and repeated measures ANOVA to identify significant changes in cognitive function, sleep quality, and mental health. Thematic analysis will be employed to identify common themes and patterns in the experiences and perceptions of the digital detox of participants, as well as their daily journals and open-ended survey responses. All participants were granted informed assent, which guaranteed that they comprehended the objectives and methodologies of the investigation. Participants were permitted to withdraw at any time without incurring any penalties.

Findings & Discussion

The paired t-tests demonstrated statistically significant enhancements in mental health indices following the detoxification process. The mean GAD-7 scores decreased from 10.4 (SD = 4.2) before detoxification to 7.1 (SD = 3.8) after detoxification, showing a decrease in anxiety levels ($p < 0.01$).

Variable	GAD-7 score	Frequency (%)
No anxiety disorder	0-4	225 (74.4)
Mild anxiety disorder	5-9	56 (18.4)
Moderate anxiety disorder	10-14	16 (5.2)
Severe anxiety disorder	≥ 15	6 (2.0)
Total		305

Figure 1 Mental Health Index
Source: (Chaudhury et al., 2016)

Similarly, the PSQI scores showed improvement, as the average score decreased from 8.6 (with a standard deviation of 2.9) to 5.8 (with a standard deviation of 2.5), indicating a higher quality of sleep ($p < 0.01$).

PSQI component	Corrected item-total correlation
Subjective sleep quality	0.702
Sleep latency	0.497
Sleep duration	0.462
Habitual sleep efficiency	0.380
Sleep disturbance	0.414
Sleep medication use	0.131
Daytime dysfunction	0.469
Cronbach's α	0.719

PSQI, Pittsburgh Sleep Quality Index.

Figure 2 Sleep Quality Index
Source: (Wu et al., 2015)

These findings indicate that even a little period of abstaining from digital devices can greatly benefit one's mental well-being. Multiple assessments throughout time The ANOVA analysis demonstrated statistically significant enhancements in attention and cognitive function. The results of the ANT experiment showed a reduction in reaction times, with the average time decreasing from 320ms (with a standard deviation of 45ms) before detoxification to 290ms (with a standard deviation of 40ms) after detoxification ($p < 0.01$). These findings reflect an improvement in focus and cognitive

efficiency. Additionally, participants expressed a decrease in distractions and an increase in their ability to focus on tasks during the detox period, which supports the numerical results. One month after the detox, subsequent surveys revealed that 65% of participants sustained a decrease in their utilisation of digital media. The long-term enhancement in mental well-being and quality of sleep, albeit significantly reduced, continued to be statistically significant when compared to the initial state ($p < 0.05$). Participants said that they had cultivated novel routines and tactics to regulate their utilisation of digital media, such as establishing designated periods for reviewing emails and social media. These efforts were crucial in maintaining the positive outcomes.

Analysis of daily journals using thematic analysis identified multiple recurring themes. Participants commonly reported experiencing heightened awareness and attentiveness in their everyday tasks, often mentioning improved social interactions and a heightened sense of tranquility. They reported having more profound conversations and establishing stronger bonds with their family and friends. Typical difficulties involved feeling uneasy at first and being tempted to use electronic gadgets, but these issues diminished as the detox period progressed. Participants observed that the initial days posed the most challenge, but they progressively acclimated to the novel schedule and started to relish the liberation from incessant digital disruptions. Qualitative replies from participants after detoxification emphasised perceived advantages such as enhanced concentration, higher sleep quality, and increased leisure time for hobbies and self-contemplation. Several individuals expressed an increased consciousness of their digital behaviours and a wish to establish a more equitable connection with technology. Several individuals were astonished by the amount of time they had been devoting to digital gadgets and experienced a significant increase in productivity and satisfaction after decreasing their usage. Additionally, they expressed a sense of increased autonomy over their schedule and reduced stress from the constant influx of notifications and updates.

The reduction in GAD-7 scores following the detoxification process indicates that digital detoxes may be a viable intervention for anxiety reduction. The substantial benefit of improved sleep quality, which is potentially associated with reduced screen time before bed, is suggested by the increase in PSQI scores. This finding is consistent with the extant research on the detrimental effects of blue light on sleep. The mental health advantages of digital detoxes are further substantiated by the participants' reports of feeling more present and at peace in their daily lives. The increased reaction times observed on the ANT post-detox indicate that the reduction of digital media use may contribute to the improvement of cognitive efficiency and attention. This discovery corroborates the idea that cognitive resources can be depleted and attention can be fragmented by constant digital engagement, and that cognitive recuperation is facilitated by a break from digital devices. Additional evidence of the cognitive advantages of digital detoxes is provided by the qualitative reports of participants, who reported feeling less distracted and more capable of concentrating on tasks. The results of the follow-up survey are encouraging, as they indicate that a substantial number of participants continued to experience mental health benefits and maintained reduced digital media utilisation. This suggests that digital detoxes have the potential to cultivate more sustainable digital behaviours and indicates the potential for long-term positive impacts. The incorporation of new strategies for managing digital media use, such as the establishment of specific periods for checking emails and social media, indicates that participants can incorporate these changes into their daily routines. A nuanced comprehension of the detox experience is provided by the qualitative data. While the initial distress experienced by participants emphasises the difficulty of breaking digital habits, the subsequent advantages emphasise the importance of persevering through the initial withdrawal period. Participants reported an increase in mindfulness and presence, which implies that digital detoxes may improve the quality of their daily lives and interaction with others.

In order to conduct a thorough analysis, this investigation implemented a mixed-methods approach to investigate the impact of a digital detox on wellbeing and concentration. The quantitative data demonstrated substantial enhancements in mental health indicators, such as improved cognitive function, reduced anxiety, and improved sleep quality. Post-detoxification, participants reported enhanced focus and quicker reaction times. Increased mindfulness, presence in daily activities, and

more meaningful interpersonal interactions were identified in qualitative data from post-detox surveys and daily journals. However, the majority of participants were able to adjust to the detox and reported sustained benefits, such as reduced digital media utilisation and on-going improvements in mental health and sleep quality one month after the detox. This was despite the initial challenges.

Conclusion

The results of this study highlight the significant advantages of digital detoxes in enhancing mental health, cognitive abilities, and overall well-being in a highly interconnected society. The substantial decreases in anxiety and improvements in sleep and concentration suggest that even brief periods of digital detoxification can have major effects. The enduring advantages identified in subsequent surveys indicate that digital detoxes have the potential to cultivate lasting favourable transformations in digital behaviours and mental well-being. These findings underscore the possibility of digital detoxes as a pragmatic intervention for contemporary mental health care, underscoring the importance of measures that encourage balanced digital usage. Subsequent investigations should examine extended detoxification periods, varied demographics, and objective metrics to substantiate and broaden the scope of these discoveries. Although the study offers useful insights, it is limited by the relatively brief duration of the detoxification period and the dependence on self-reported data. Potential future investigations might include extended detoxification durations, increased participant numbers, and the use of objective metrics (such as biometric data) to validate self-reported results. Furthermore, doing research on the effects of digital detoxes among various demographic groups and cultural contexts could yield more comprehensive and in-depth understanding. Gaining insight into the varying reactions of diverse groups to digital detoxes can facilitate the customisation of therapies based on individual requirements and preferences.

References

1. Borghese, M. M., Tremblay, M. S., Katzmarzyk, P. T., Tudor-Locke, C., Schuna, J. M., Leduc, G., Boyer, C., LeBlanc, A. G., & Chaput, J.-P. (2015). Mediating role of television time, diet patterns, physical activity and sleep duration in the association between television in the bedroom and adiposity in 10 year-old children. *International Journal of Behavioral Nutrition and Physical Activity*, *12*, 1–10.
2. Bullinger, C., & Vie, S. (2017). After a decade of social media: Abstainers and ex-users. *Social Writing/Social Media: Publics, Presentations, and Pedagogies*, 69–88.
3. Chaudhury, S., Bakhla, A. K., & Saini, R. (2016). Prevalence, impact, and management of depression and anxiety in patients with HIV: a review. *Neurobehavioral HIV Medicine*, 15–30.
4. Chen, I. (2017). *The Digital Turn, a Corporeal Return*.
5. Christofaro, D. G. D., De Andrade, S. M., Mesas, A. E., Fernandes, R. A., & Farias Junior, J. C. (2016). Higher screen time is associated with overweight, poor dietary habits and physical inactivity in Brazilian adolescents, mainly among girls. *European Journal of Sport Science*, *16*(4), 498–506.
6. David, M. E., & Roberts, J. A. (2017). Phubbed and alone: Phone snubbing, social exclusion, and attachment to social media. *Journal of the Association for Consumer Research*, *2*(2), 155–163.
7. Dayapoglu, N., Kavurmaci, M., & Karaman, S. (2016). The relationship between the problematic mobile phone use and life satisfaction, loneliness, and academic performance in nursing students. *International Journal of Caring Sciences*, *9*(2), 647–652.
8. Duke, É., & Montag, C. (2017). Smartphone addiction, daily interruptions and self-reported productivity. *Addictive Behaviors Reports*, *6*, 90–95.
9. Dush, C. M. K., Kotila, L. E., & Schoppe-Sullivan, S. J. (2011). Predictors of supportive coparenting after relationship dissolution among at-risk parents. *Journal of Family Psychology*, *25*(3), 356.

10. Fish, A. (2017). Technology retreats and the politics of social media. *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 15(1), 355–369.
11. Fox, J., & Ralston, R. (2016). Queer identity online: Informal learning and teaching experiences of LGBTQ individuals on social media. *Computers in Human Behavior*, 65, 635–642.
12. Hinde, R. (2015). *Relationships: A dialectical perspective*. Psychology Press.
13. Jearey-Graham, N., & Macleod, C. (2015). A discourse of disconnect: Young people from the Eastern Cape talk about the failure of adult communications to provide habitable sexual subject positions. *Perspectives in Education*, 33(2), 11–29.
14. Lupton, D. (2017). *Digital health: critical and cross-disciplinary perspectives*. Routledge.
15. McDaniel, B. T., & Coyne, S. M. (2016). Technology interference in the parenting of young children: Implications for mothers' perceptions of coparenting. *The Social Science Journal*, 53(4), 435–443.
16. Michaels, I. (2016). *Unplugging: A Phenomenological Study of the Perceived Holistic Health Benefits from Regular Digital Detox in the Context of Jewish Shabbat*.
17. Oksanen, A., Hawdon, J., Holkeri, E., Näsi, M., & Räsänen, P. (2014). Exposure to online hate among young social media users. In *Soul of society: A focus on the lives of children & youth* (pp. 253–273). Emerald Group Publishing Limited.
18. Olff, M. (2015). Mobile mental health: a challenging research agenda. *European Journal of Psychotraumatology*, 6(1), 27882.
19. Omar, M. K., Dahalan, N. A., & Yusoff, Y. H. M. (2016). Social media usage, perceived team-efficacy and knowledge sharing behaviour among employees of an oil and gas organisation in Malaysia. *Procedia Economics and Finance*, 37, 309–316.
20. Parra-López, E., Gutiérrez-Taño, D., Diaz-Armas, R. J., & Bulchand-Gidumal, J. (2016). Travellers 2.0: Motivation, opportunity and ability to use social media. In *Social media in travel, tourism and hospitality* (pp. 171–188). Routledge.
21. Reinecke, L., Aufenanger, S., Beutel, M. E., Dreier, M., Quiring, O., Stark, B., Wölfling, K., & Müller, K. W. (2017). Digital stress over the life span: The effects of communication load and internet multitasking on perceived stress and psychological health impairments in a German probability sample. *Media Psychology*, 20(1), 90–115.
22. Reyns, B. W., Burek, M. W., Henson, B., & Fisher, B. S. (2013). The unintended consequences of digital technology: Exploring the relationship between sexting and cybervictimization. *Journal of Crime and Justice*, 36(1), 1–17.
23. Ribak, R., & Rosenthal, M. (2015). Smartphone resistance as media ambivalence. *First Monday*.
24. Samaha, M., & Hawi, N. S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. *Computers in Human Behavior*, 57, 321–325.
25. Shulman, S., & Connolly, J. (2013). The challenge of romantic relationships in emerging adulthood: Reconceptualization of the field. *Emerging Adulthood*, 1(1), 27–39.
26. Skeggs, B., & Yuill, S. (2016). The methodology of a multi-model project examining how Facebook infrastructures social relations. *Information, Communication & Society*, 19(10), 1356–1372.
27. Steers, M.-L. N. (2016). 'It's complicated': Facebook's relationship with the need to belong and depression. *Current Opinion in Psychology*, 9, 22–26.
28. Wu, J., Wu, H., Lu, C., Guo, L., & Li, P. (2015). Self-reported sleep disturbances in HIV-infected people: a meta-analysis of prevalence and moderators. *Sleep Medicine*, 16(8), 901–907.