The Impact of Digital Detox on the Mental Well-Being of Active Social Media Users: A Systematic Literature Review

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Abstract. Social media use has become an integral part of almost everyone's daily life. The concept of digital detox or a period of time away from using digital devices and social media has emerged as a potential intervention to address these negative impacts. This study aims to explore the impact of digital detox on various aspects of mental well being, including anxiety, depression, stress, and sleep quality using the systematic literature review (SLR) method, researchers reviewed literature obtained from the scopus, proquest and springer link database with a range of publication years 2019-2024. from the search results, there were 5 relevant journals to be reviewed and analyzed further. The results showed that social media use has a complex impact on individuals mental health and well being. However, it is important to remember that all individuals has different social media needs and usage habits.

Keywords: Social media, psychology well being, systematic literature review

Introduction

In today's digital age, the use of social media has become an integral part of the daily lives of many people around the world. Data from Statistics shows that by 2023, the number of social media users worldwide has reached 4.9 billion, with the average user spending around 2 hours 31 minutes per day on these platforms. Social media offers various benefits, such as ease of communication, access to information, and means of entertainment. However, overuse of social media has also raised concerns regarding its negative impact on users' mental health. The significant growth in the daily use of social media, especially amongst the younger generation, reflects an event that we should explore further. While social media can provide benefits, overuse can have negative impacts, especially on mental health and quality of life.

Previous research has linked social media use to various mental health problems. A study by Twenge found that adolescents who spent more than three hours a day on social media had a

higher risk of experiencing mental health problems such as anxiety and depression [8]. Shensa also reported that intensive social media use was associated with increased symptoms of depression and anxiety in the young adult population [6]. However, there is a lack of literature on appropriate interventions to address the negative impact of social media use.

One concept related to intervening in the negative impacts of social media use is Digital Detox, or a period of abstinence from using digital devices or social media. Digital detox is expected to help individuals reduce stress, improve sleep quality, and increase overall emotional stability. Research by Lahue entitled *Intermittent Digital Fasting: The Mental Health Benefits of a One Hour Daily Social Media Hiatus* showed that participants who followed the digital detox program for two weeks reported significant improvements in sleep quality and reductions in stress levels [3].

While there have been many studies linking social media use to mental health problems, it remains unclear how interventions such as digital detox can effectively reduce these negative effects. This study was conducted with the aim of filling this gap in the literature by exploring the effectiveness of digital detox among adolescents who use social media intensively. The main research question that became the focus of the study was "Does digital detox significantly reduce symptoms of anxiety and depression and improve sleep quality in adolescents who use social media?".

Research Methods

This research uses the *Systematic Literature Review* (SLR) method which aims to recognize, review, and evaluate all relevant research so that it answers the questions of a research set [7]. this research consists of several stages, namely the formulation of research questions, literature search, literature search, determination of inclusion and exclusion criteria, literature selection, data presentation, data processing and conclusion drawing.

Phase One: This **research** formulated research questions using the PICO method to help provide an overview of the scope and limits of the SLR. For more details, the PICO method will be presented in the following table:

Table 1. Table PICO

Intervention (i)	Comparison (c)	Outcomes (o)
program digital detox	usage media social with out intervantion	welfare mental (quality sleep, stress levels, life satisfaction)
		program digital detox usage media social

The research questions to be answered in this journal are presented in the following table:

Table 2. Table Research Questions

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#	Research Question
RQ1	How does the digital detox program impact mental well-being user media social media active compared to with those who continued to use social
	media without intervention?

Second Step: After determining the content in the PICO method and the research questions, the second step is to search the literature studies that will be conducted in the data center with a predetermined search strategy, including literature sources, search keywords, year of publication, and type of literature. The search strategy will be presented in the following table:

Table 3. Search Strategy

Source	Search Keywords	Year	Type		
Library	•	Published	Library		
Google Scholar	"digital detox" OR "social media detox" OR "digita break" OR "media hiatus" OR "technology detox" AND "mental well-being" OR "mental health" OR "psychological well-being" OR "psychological health" OR "emotional well-being" OR "emotional well-being" OR "emotional health" AND "social media users" OR "social media" OR "active users" OR "heavy users" AND "impact" OR "effect" OR "influence" OR "outcome"	2019 – 2024	International Journal		

Stage Three: After obtaining a wide range of literature, papers will be selected based on the inclusion and exclusion criteria described in the following table:

Table 4. Selection Criteria (Inclusion and Exclusion)

Inclusion Criteria	Exclusion Criteria	
Articles published in 2019 –	Journal-type literature	
2024		
Focusing on digital	English language library	
detox, well-being, social media	Library is open access	
user; Quantitative, qualitative,		
mixed method research, and		
experiments		

Fourth stage: The literatures obtained were selected and analyzed based on the inclusion and exclusion criteria. Data obtained from *scopus, springer link and proquest* with predetermined search keywords found a total of 170 articles in proquest, in scopus 5 articles, and in springer link 4 articles. The articles were then selected based on the inclusion and exclusion criteria into 5 articles. The selected articles will be listed in tabular form and the researcher will review and examine the article intensely and comprehensively in the research results section.

Stage Five: Data from the 5 selected articles will be presented and processed to identify key findings. The researcher will compare the findings of the articles to draw conclusions relevant to the research questions.

Stage Six: At the end of the study, the researcher will summarize the results of the article analysis and provide recommendations for a digital detox intervention as a potential solution to address the negative impact of social media use on mental well-being.

Result and Discussion

Based on the stages in the *Systematic Literature Review*, the researcher found the results, namely 5 journals that passed the selection for analysis which will be described in the table below:

Table 5. Result

Table 5. Result				
Researcher and Year	Title	Journal Name/ Type	Review of the Journal	
Josephine B. Schmitt ,Johannes Breuer ,Tim Wulf	From cognitive overload to digital detox: Psychological implications of telework during the COVID-19 pandemic	Computers in	This study examines the psychological effects of increased digital tool usage during telework, particularly during the COVID-19 pandemic, focusing on cognitive overload and its impact on well-being and work performance population consists of 403 respondents from Germany who were working remotely during the COVID-19 lockdown in April and May 2020. The participants were selected from a non-probability online access panel and were also recruited through social media platforms like Facebook and Twitter.he research employed an online survey to gather data on participants' use of digital work tools, feelings of cognitive overload, perceived work	

performance, and well-being. The survey included validated scales to measure cognitive overload, work performance, well-being, along with open-ended questions to identify digital detox strategies. The data were analyzed using path models test the hypothesized relationships between the use of digital tools, cognitive overload, digital detox measures, and their effects on well-being and work performance. The study found that the increased use of text-based digital tools, such as Slack and Trello, was positively with associated cognitive which overload, in negatively affected well-being. However, video conferencing tools did not show the same effect. The concept of "digital detox," which involves taking deliberate breaks from digital devices, was identified as a useful strategy to mitigate the negative effects of cognitive overload on well-being.

Juan F. Arenas-Escaso, Jose A. Folgado-Fernand ez and Pedro R. Palos-Sánchez Internet interventions and therapies for addressing the negative impact of digital overuse: a focus on digital free tourism and economic sustainability

Public

BMC

Health

this study explores the impact of excessive use of digital devices online platforms on individuals' mental and physical health, and introduces Digital Free Tourism (DFT) as a solution to mitigate these effects. The study employed a quantitative research approach through an online survey distributed to 426 potential travelers in Spain. The survey was designed to assess their attitudes and motivations toward participating in DFT, with a focus on behavioral intentions influenced by social and family engagement, connectedness, and health relaxation. The data collected were analyzed using statistical tools like IBM SPSS and Smart PLS 4 to validate the proposed theoretical model. The study highlights that excessive digital

use, particularly during vacations, can lead to cognitive overload, stress, and a decline in overall well-being. DFT is proposed as a therapeutic solution to this problem, offering opportunities for tourists to disconnect from technology and reconnect with nature and family. The study concludes that DFT not only enhances tourists' well-being by offering a break from digital overload but also serves as a driver of economic sustainability in the tourism sector. The findings are valuable for tourism service providers looking to develop more efficient and sustainable offerings that cater to the growing demand for digital detox experiences.

Lea C. de Hesselle and Christian Montag

Effects of a 14-day BMC social media abstinence Health on mental health and well-being: results from an experimental study

Public The study's primary aim was to investigate whether a break from social media could lead to significant improvements in areas such as problematic smartphone use (PSU), depression, anxiety, fear of missing out (FoMO), screentime, loneliness, and body image.

> The study was conducted with 196 participants, though the final analysis focused on 86 female participants who were divided into a control group and a social media abstinence group. The participants were assessed using variety of validated questionnaires that measured different mental health factors at multiple points—before the intervention, during the 14-day period, and after the intervention. The findings of the study were revealing. Problematic smartphone use, a condition associated with negative outcomes like depression, anxiety, and FoMO, was found to decrease significantly during the of period social media abstinence, particularly in the group that abstained from social

media. Similarly, screentime, a broad measure that reflects time spent on various smartphone activities, including social media, also showed a significant reduction in the abstinence group. In addition to the reduction in PSU and screentime, the study observed that symptoms of depression and anxiety decreased notably over the course of the intervention. These improvements were most pronounced in the group that abstained from social media, suggesting that taking a break from these platforms can have a positive impact on emotional well-being.

Another important finding was the improvement in body image satisfaction among those who abstained from social media. Given that social media often fosters social comparison, particularly regarding physical appearance, reducing exposure to these platforms likely contributed to a more positive self-perception among the participants.

Andrew Przybylski, Thuy-vy Nguyen · Wilbert on Law Netta Weinstein

Does Taking a Short Journal Break from Social Media Technology T. Have a Positive Effect Behavioral Science Well-being? Evidence from Three Preregistered Field Experiments

In this paper, we test this proposition. Participants in three preregistered field experiments (ntot = 600) were randomly assigned to receiving each of two conditions on each of two different days: a normal-use day or an abstinence day. Outcomes (social relatedness, positive and negative affect, day satisfaction) were measured on each of the two evenings of the study. Results did not show that abstaining from social media has positive effects on daily well-being (in terms of social relatedness, positive and negative affect, day satisfaction) as suggested by the extant literature. Participants reported similar well-being on days when they used social media and days when

they did not. Evidence indicated that abstinence from social media had no measurable positive effect on well-being, and some models showed significant deficits in social relatedness and satisfaction with one's day.

Sammy Wrede, Claassen, Dominique Rodil dos Anjos, Jan P. Kettschau and Horst C. Broding

Impact of digital stress Health Psychology Kevin on negative emotions and and physical complaints in the home office: a follow up study

Behavioral Medicine

The research employed longitudinal design, utilizing an online survey to collect data from employees of three municipal administrations in North Rhine-Westphalia, Germany, who were working from home at least occasionally. The study was conducted in two phases: the first survey took place in 2020 and the second in 2022, allowing the researchers to observe changes over time. The survey was part of the "Health and Digital Change" project, which adhered to ethical guidelines and received approval from the Ethics Committee of Witten/Herdecke University.

The surveys included questions about digital stress, negative emotions, physical complaints, demographic variables (such as age, gender, and income), and work conditions. Digital stress was measured using a set of seven items that assessed the participants' experiences with digital applications, the impact of digitization on health, and stress related to constant screen work and the need to be available through various communication channels.

То identify employees experiencing digital stress, the researchers used a hierarchical agglomerative cluster analysis. This statistical method grouped employees based on their distinguishing responses, between those who were digitally stressed and those who were not. The cluster analysis employed Euclidean distances to measure similarity and grouped individuals into clusters based on

their levels of digital stress.

For data analysis, multivariate Ordinary Least Squares (OLS) regression models were applied to examine the relationships between digital stress, negative emotions, and physical complaints. The models included age, gender, and income as control variables. To assess changes between the two survey phases, the researchers used a first-difference approach, which helps address potential biases and omitted variable problems by focusing on changes over time rather than static comparisons.

The regression analysis was conducted at the departmental level, meaning that data was aggregated by department rather than analyzed on an individual level. This approach aimed to reflect the average departmental experience and mitigate the influence of department size on the results. The models were evaluated adjusted using R-squared values, which indicate proportion of variance explained by the model, adjusted for the number of predictors included.

Overall, the methodology was designed to capture the evolving impact of digital stress over time and explore its potential effects on employees' negative emotions and physical complaints in a remote work context. However, the study acknowledged some limitations, such as the potential variability in sample composition between the two phases and the reliance self-reported on measures, which may affect the generalizability and precision of the findings.

Based on the results of the 5 journals that have been found and reviewed previously, basically, this study highlights the importance of a deep understanding of social media use and its impact

on individual mental health and well being. from the studies conducted, we can see that social media user, especially among the younger generation, tend to experience negative impacts from using social media.

Excessive. High workloads, increased screen usage, and social media addiction can contribute to a decline in mental health and well-being. The results show that digital detoxification can benefit individuals, especially in terms of life satisfaction, mindfulness, autonomy, competence, and self-esteem. By limiting digital media use, individuals can experience significant improvements in well-being. However, there was also an interesting finding that not using social media did not necessarily correlate with improved day-to-day well-being. Some participants even reported a decrease in social connectedness and life satisfaction when they were not using social media.

The findings from these studies show that awareness of the impact of excessive social media use is important. Most users, especially the younger generation, realize that overusing social media can negatively impact various aspects of life, such as sleep, mood and productivity. Therefore, a social media detox is an important step to improve well-being and quality of life.

In addition, the results also highlight the importance of social engagement and information for social media users. Despite awareness of the negative impacts, many users remain engaged due to the desire for social connectedness and access to information. This shows that social media has become an important part of everyday life, and regulating healthy and balanced use is key to preventing negative impacts.

However, it cannot be denied that social media use also has a positive impact. Some studies show that social media can help expand social networks, open up career opportunities, and be an easily accessible source of information. Therefore, it is not the social media itself that is the problem, but how users manage and control its use so that it does not have a negative impact on well-being.

In conclusion, social media use does have a complex impact on individuals' mental health and well-being. A digital detox and limiting social media use can provide great benefits to individuals, especially in terms of emotional and psychological well-being. However, it is important to remember that each individual has different needs and social media usage habits.

In addition, awareness of the impact of social media use needs to be raised, both among users and at the policy level. Policy makers need to take steps to educate users about healthy and responsible use, while social media companies need to play a greater role in creating an environment that supports users' well-being.

Conclusions and Suggestions

Social media use does have a complex impact on an individual's mental health and well-being. A digital detox and limiting social media use can have great benefits for individuals, especially in terms of emotional and psychological well-being. However, it is important to remember that each individual has different needs and social media usage habits.

Conflict of Interest

The authors declare that there is no conflict of interest related to this research. This research was conducted independently without influence from any external party that could affect the results or interpretation of this research.

References

- [1] Arenas-Escaso, J. F., Folgado-Fernández, J. A., & Palos-Sánchez, P. R. (2024). Internet interventions and therapies for addressing the negative impact of digital overuse: a focus on digital free tourism and economic sustainability. *BMC Public Health*, 24(1), 1–13. https://doi.org/10.1186/s12889-023-17584-6
- [2] De Hesselle, L. C., & Montag, C. (2024). Effects of a 14-day social media abstinence on mental health and well-being: results from an experimental study. *BMC Psychology*, 12(1), 1–20. https://doi.org/10.1186/s40359-024-01611-1
- [3] LaHue, A., Gaskin, J., & Daniel, K. (2024). *Intermittent Digital Fasting: The Mental Health Benefits of a One-Hour Daily Social Media Hiatus*.
- [4] Przybylski, A. K., Nguyen, T. T., Law, W., & Weinstein, N. (2021). Does taking a short break from social media have a positive effect on well-being? Evidence from three preregistered field experiments. *Journal of Technology in Behavioral Science*, 6, 507-514.
- [5] Schmitt, J. B., Breuer, J., & Wulf, T. (2021). From cognitive overload to digital detox: Psychological implications of telework during the COVID-19 pandemic. *Computers in Human Behavior*, 124(August 2020), 106899. https://doi.org/10.1016/j.chb.2021.106899
- [6] Shensa, A., Sidani, J. E., Dew, M. A., Escobar-Viera, C. G., & Primack, B. A. (2018). Social media use and depression and anxiety symptoms: A cluster analysis. *American Journal of Health Behavior*, 42(2), 116-128.
- [7] Triandini, E., Jayanatha, S., Indrawan, A., Putra, G. W., Iswara, B., & others. (2019). Systematic literature review method for identifying information system

- development platforms and methods in Indonesia. *Indonesian Journal of Information Systems*, 1(2), 63-77.
- [8] Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among US adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), 3-17.
- [9] Wrede, S. J. S., Claassen, K., Rodil dos Anjos, D., Kettschau, J. P., & Broding, H. C. (2023). Impact of digital stress on negative emotions and physical complaints in the home office: a follow up study. *Health Psychology and Behavioral Medicine*, 11(1), 1–23. https://doi.org/10.1080/21642850.2023.2263068