Breaking the Loop, Finding the Balance: Predictors of Social Media Detox among Graduate Students

JM Shalani Dilinika[a] and Kuo-Ting Huang[a]

[a] School of Computing and Information, University of Pittsburgh, USA

shj91@pitt.edu, timhuang@pitt.edu

ABSTRACT

Social media detox is recognized as an effective strategy for mitigating the negative impacts of excessive social media usage. This study explores the factors influencing graduate students' decisions to engage in social media detox. Factors related to social media overload and general social media experience were examined as potential predictors. Data were collected using an online survey from 179 graduate students who are active on social media. The results of the study revealed a high prevalence of social media overload among graduate students, with information overload emerging as the strongest predictor of social media detox. This suggests that effectively managing the constant influx of information on social media platforms is crucial for reducing stress and promoting digital well-being among graduate students. The study provides practical implications and further research directions for promoting digital well-being and enhancing information management skills.

ALISE RESEARCH TAXONOMY TOPICS

social media; information use; information needs; education.

AUTHOR KEYWORDS

social media overload; digital detox; social media detoxification; social media use; well-being.

INTRODUCTION

Social media has become an integral element of daily life, offering unprecedented opportunities for connectivity, information creation and dissemination, and self-expression. The widespread use of electronic devices and smartphones has fueled its popularity, influencing user engagement. Recent studies on social media usage reveal that around 3 billion people globally are currently communicating through various social media platforms (Chen & Xiao, 2022). Despite the benefits of social media platforms in different perspectives, such as social support (Yue et al., 2023), academic achievement (Ishak et al., 2023) and healthcare (Kanchan & Gaidhane, 2023), excessive utilization of social media poses a substantial threat to the well-being of users.

In recent years, many studies have revealed that excessive usage of social media is linked to negative impacts on users' well-being, including depression, anxiety, self-efficacy, and sociocultural relations (El-Khoury et al., 2021; Radtke et al., 2021; Tran & Chen, 2023). In response to growing concerns about the negative impacts of excessive social media use, researchers and practitioners emphasize the effectiveness of unplugging from electronic devices and social media platforms as a coping strategy to enhance cognitive health and well-being (Price et al., 2018; Shlain, 2019; Syvertsen, 2017; Tran & Chen, 2023).

The term "Digital Detox" is defined in the Oxford Dictionary (2019) as a "period of time during which a person refrains from using their electronic devices, such as smartphones, regarded as an opportunity to reduce stress or focus on social interaction in the physical world." The practice of taking a break specifically from social media platforms to enhance well-being is referred to as "Social Media Detoxification" (Detox). Meier & Reinecke (2020) proposed a more detailed definition of social media detox, highlighting selective disengagement from specific electronic devices (e.g., laptops, smartphones, tablets), particular social media applications (e.g., Facebook, Instagram), and certain features or interactions within these platforms, such as messaging or chat functions (Nguyen, 2022).

The concept of social media detox, aligned with the broader digital detox movement, has recently gained significant attention from researchers, who often use the terms "Digital Detox" and "Social Media Detox" interchangeably (El-Khoury et al., 2021; Nguyen, 2022; Radtke et al., 2022). Numerous studies have been conducted to identify how the phenomenon of unplugging from social media and electronic devices, or voluntary attempts at disconnecting, can impact various aspects of an individual's life, including health and well-being (Liao, 2019.; Radtke et al., 2022), cognitive and physical performance (Turel et al., 2018), self-control (Liao, 2019), life satisfaction (Fioravanti et al., 2021) and social relationships (Brown & Kuss, 2020; Miksch & Schulz, 2018).

Given the effectiveness of digital detox as a coping strategy for excessive social media use and to improve well-being, the objective of this study is to examine the determinants that influence social media users' awareness and need for a social media detox, specifically focusing on graduate students. The factors, including general social media experience and dimensions of social media overload are examined as predictors influencing users' awareness of and need for social media detox. Understanding these determinants is crucial for developing strategies and tools that support social media users in creating a healthier online environment. To this end, we investigate the

influence of social media experience and different types of overloads on users' inclination towards social media detox.

RELATED LITERATURE AND RESEARCH HYPOTHESES

Social media experience refers to the users' regular utilization of social media platforms. In comprehending regular social media utilization, the factors, including "the number of connections, the number of hours users spend on social media, and the number of years they have been using social media," are at the core (Kaye, 2021). Recently, multiple studies have been conducted covering different perspectives including, but not limited to, psychological, healthcare, and educational, to examine how the increase of aforementioned factors can have an impact on individuals. Researchers emphasize that excessive or overindulgence in social media leads to Social media overload (Tran & Chen, 2023; Yu et al., 2019). Therefore, Social media overload can be identified as an intense level of regular social media experience, whereby individuals may feel stressed or fatigued due to prolonged and overwhelming engagement with online platforms.

Recent research suggests a three-dimensional framework for understanding social media overload: 1) Information overload, 2) Communication overload, and 3) Social overload (Wu & Pei, 2022). "Information overload" arises when individuals encounter an excessive and unmanageable volume of information, leading to fatigue and stress (Lee et al., 2016). "Communication overload" occurs as individuals encounter communication demands beyond their cognitive processing capacity, leading to exhaustion and feeling overwhelmed (Cao & Sun, 2018). "Social overload" occurs when individuals experience prolonged engagement with social media networks and intense interactions, resulting in exhaustion and regret (Cao & Sun, 2018; Meier & Reinecke, 2021).

Building upon the literature, the current study proposes the following hypotheses and a conceptual model (see Figure 1).

H1: The social media experience, including (a) the number of years graduate students have been using social media, (b) the number of hours they spend per day, and (c) the number of social media connections, will positively predict graduate students' social media overload.

H2: The social media experience, including (a) the number of years graduate students have been using social media, (b) the number of hours they spend on social media per day, and (c) the number of social media connections, will positively predict graduate students' social media detox awareness of and need for a social media detox.

H3: Social media overload, including (a) Information overload, (b) Communication overload, and (c) Social overload, will positively predict graduate students' awareness of and need for a social media detox.

Figure 1:

The proposed conceptual model
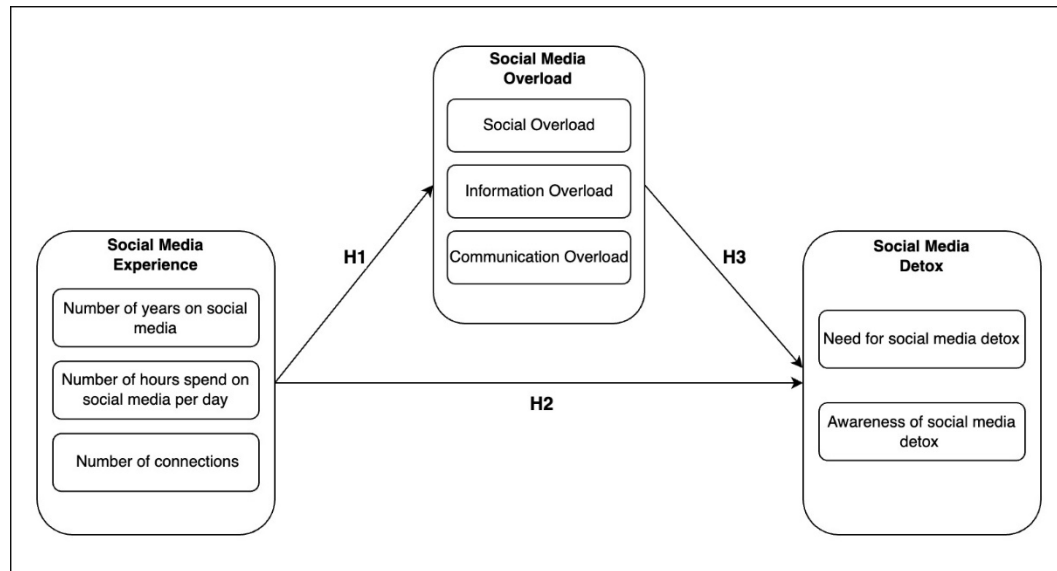
METHOD

Participants and Data Collection

The study included a convenience sample of 200 graduate students from an American public university, and data collection was carried out through an online survey. Inclusion criteria included individuals over 18 who were active social media users, defined as those who regularly engage with and interact through various social media platforms. Email invitations were sent to graduates using the institutional emailing system, requesting voluntary participation. The invitation email included an information sheet and study details. The university granted ethical approval for this study (ID: STUDY23050131). In total, the study received 179 valid responses.

Instrument Development

The study employs a Qualtrics-based online survey instrument to gather data from social media users. The questionnaire consisted of four sections. The first section collected demographic information, including gender, age, and mode of study (e.g., online or on-campus), which served as control variables in the analysis. This section aimed to provide a contextual background for the respondents' social media usage patterns and experiences.

In the second section, the survey explored participants' social media experience. This part of the questionnaire focused on assessing the extent of their social media usage, including the number of years they have been active on social media platforms, the average number of hours they spend on social media per day, and the number of social media connections they have.

The third section of the survey was dedicated to examining social media overload. This section was further subdivided into three sub-sections, each addressing a different dimension of

social media overload: information overload, social overload, and communication overload. The survey items for this section were based on existing literature and adapted from validated questionnaires used in previous research studies. Specifically, the three dimensions of social media overload were adapted from the study conducted by Cao and Sun (2018). Responses in this section were recorded on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

The final section of the questionnaire focused on examining participants' awareness of and needs for social media detox. To measure the factors motivating graduates to engage in social media detox, the "Social Media Use and Detoxification Scale," developed and validated by El-Khoughry et al. (2021), was employed. Some items from this scale were modified to better fit the context of the current study.

Analytic Tools

We employed descriptive statistics and ordinary least squares (OLS) regression for our analysis. Descriptive statistics were used to summarize the characteristics of the variables, including those related to social media detox. OLS regression was utilized to examine the hypotheses concerning the effects of social media experience and social media overload on the outcomes of awareness and need for social media detox. All statistical analyses were performed using SPSS version 29.

RESULTS

Descriptive Analysis

The descriptive analysis covered demographic, general social media, and social media detox variables. Among the 179 participants, 65.9% were female, 31.8% male, and 2.2% undisclosed. The majority (48.0%) were aged 25-30, and 90.5% were on-campus students. Regarding general social media usage, 81.6% had over 7 years of experience, 50.8% spent 1-3 hours daily, and 29.6% had 100-300 connections. Regarding social media detox, 76.5% respondents were aware of the concept, and most (73.7%) reported the need for social media detox (see Table 1).

Among the dimensions of social media overload, information overload had the highest mean score of 3.61 (SD=1.05), indicating significant challenges in managing information on social media. Communication overload scored moderately at 2.84 (SD=1.07), reflecting difficulties in managing communication demands. Social overload had a lower score of 2.21 (SD=0.98), suggesting less impact (see Table 2).

Table 1

The Demographic characteristics of the participants (N=179)

Variable	Type	Frequency	Percentage
	Male	57	31.8
Gender	Female	118	65.9
	Prefer not to say	4	2.2
Age	18-24	35	19.6
	25-30	86	48
	31-35	40	22.3
	36-40	8	4.5
	41-45	9	5
	50+	1	0.6
Mode of study	Online Student	17	9.5
	On-campus student	162	90.5
Number of years graduate students have been	Less than 1 year	3	1.7
using social media	1-3 years	5	2.8
	3-5 years	12	6.7
	5-7 years	13	7.3
	More than 7 years	146	81.6
Number of hours graduate students spend on	Less than 1 hour	40	22.3
social media per day	1-3 hours	91	50.8
	3-5 hours	38	21.2
	More than 5 hours	10	5.6
Number of social media connections	Less than 100	28	15.6
	100-300	53	29.6
	300 -500	31	17.3
	500 -1000	37	20.7
	More than 1000	30	16.8
Awarness of social media detox	Yes	137	76.5
	No	42	23.5
Need for social media detox	Yes	132	73.7
	No	47	26.3

Table 2

Descriptive analysis of social media overload among graduate students

Factor	Mean	Std. Deviation	Example
Information Overload (numbers of items: 3, α = .849	3.6108	1.04963	I am overwhelmed by the amount of information that I process on a daily basis from social media
Communication Overload (number of items: 5, α = .848	2.8391	1.07056	I receive too many messages from friends (or acquaintances) through social media.
Social Overload (number of items: 5, α = .879	2.2134	0.98451	I deal with my friends' problems on social media too much.

Regression Analysis

      Three Multiple linear regression analyses were performed to test predictors for social media overload and graduate students' engagement in social media detox. To answer the first hypothesis, the first analysis tested variables related to social media experience on the variables related to social media overload. The results indicated that the number of years graduates have been using social media is a significant predictor for communication overload (B=-.216, p= .026) and social overload (B= -.322, p = <.001). Additionally, the number of hours spent on social media per day and the number of social media connections significantly predicted social overload (B=.260, p=.003, B=.193, p=<.001). However, no variable related to individuals' regular social media experience predicted information overload. Therefore, Hypothesis 1 is partially supported (see Table 3).

Table 3

Social media experience variables and social media overload variables

	Information Overload	Communication Overload	Social Overload
Age	-.068	.047	.124
Gender	-.044	-.026	-.207
Mode of study	-.280	-.025	-.619
Number of years graduate students have been using social media	-.191	-.216*	-.322***
Number of hours they spend per day	.169	.041	.260**
Number of social media connections	.036	.075	.193***
N	179	179	179
F	1.596	1.059	8.401***
R^2	.053	.036	.227

Note. p < .05*, p < .01**, p < .001***

      The second analysis was performed to test variables related to graduates' regular social media experience on the need for a social media detox and social media detox awareness. None of the variables related to graduate students' regular social media experience predicted social media detox. However, the results revealed that the number of years graduate students have been using social media is a highly significant predictor of social media detox awareness (B= -.109, p = .004). Therefore, hypothesis 2 was partially supported (see Table 4).

Table 4

Social media experience variables and the need for social media detox and awareness

	Need for Social Media Detox	Awareness of Social Media Detox
Age	.018	.018
Gender	.076	-.113
Mode of study	-.087	.103
Number of years graduate students have been using social media	-.063	-.109**
Number of hours they spend per day	-.029	-.048
Number of social media connections	.024	-.011
N	179	179
F	.957	3.454**
R^2	.032	.108

Note. $p < .05$*, $p < .01$**, $p < .001$***

In the final analysis, variables related to social media overload were tested as predictors of the need for social media detox and awareness. The findings indicated that information overload significantly predicted the need for a social media detox (B = .089, p =.016), whereas communication overload or social overload did not exhibit any significance as predictors. None of the variables related to social media overload predicted social media detox awareness. Therefore, hypothesis 3 was partially supported (see Table 5). The revised conceptual model is illustrated in Figure 2.

Table 5
Social media overload variables and need for social media detox and awareness.

	Need for Social Media Detox	Awareness of Social Media Detox
Age	.028	.008
Gender	.069	-.123
Mode of study	-.043	.115
Information Overload	.089*	-.011
Communication Overload	.019	-.049
Social Overload	.014	.056
N	179	179
F	2.338	1.896
R^2	.075	.062

Note. $p < .05$*, $p < .01$**, $p < .001$***

Figure 2
Revised conceptual model
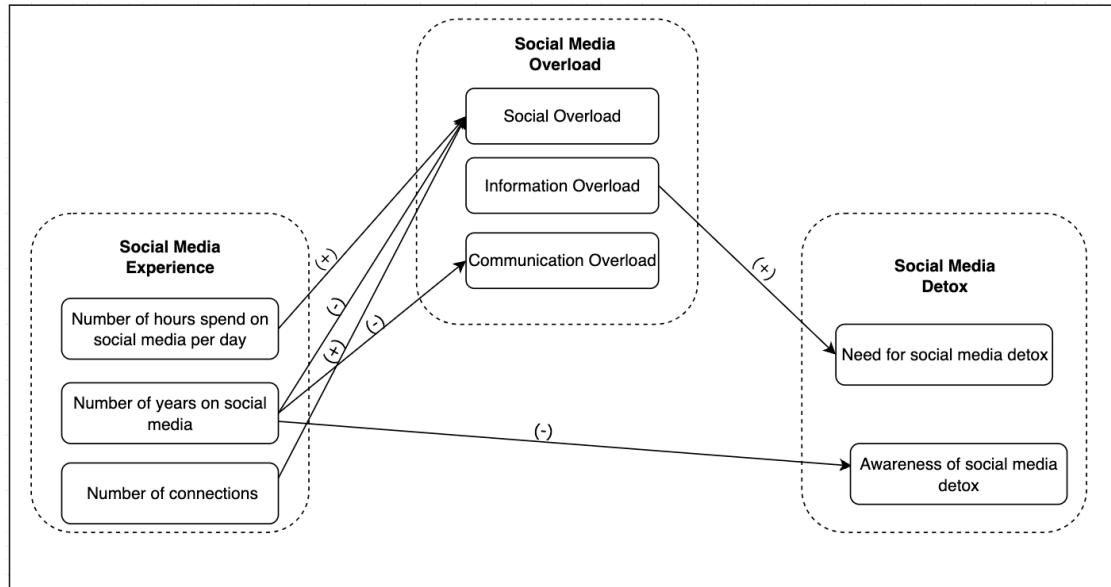
DISCUSSION

Summary of Findings

This study revealed a high prevalence of social media overload among graduate students, characterized by information overload, communication overload, and social overload. It was observed that an increase in the number of hours spent on social media per day and the number of social media connections exacerbates social and communication overload. Specifically, information overload emerged as a significant predictor of graduate students' engagement in social media detox, suggesting that managing information flow is critical for reducing stress related to social media. However, social and communication overload did not significantly influence social media detox behavior. Similarly, regular social media experience, measured by the number of years of use, daily usage hours, and the number of connections, did not significantly predict the need for social media detox. This finding indicates that the quality of social media interactions may be more relevant than the quantity in determining the need for social media detox.

Interpretation of Findings

The findings highlight the critical role of information overload in driving the need for social media detox among graduate students, underscoring the importance of effective information management to alleviate social media-related stress. This finding is also consistent with prior research that emphasizes the cognitive burden imposed by information overload, leading to exhaustion and prompting users to disconnect from social media (Cao & Sun, 2018; Li & Li, 2023). The lack of significant impact of social and communication overload on social media detox behavior suggests that individuals may possess greater self-control and autonomy in managing communication demands. Moreover, the widespread awareness of social media detox among

students indicates a potential openness to adopting such practices. Therefore, the development of targeted interventions focusing on information management and stress reduction is essential to support digital detox efforts and promote digital well-being among graduate students.

Practical Implications and Future Directions

To combat the challenges of social media overload, it is crucial to implement educational and institutional strategies that promote effective information management and digital well-being. Universities should partner with educators and academic librarians to develop specialized workshops that provide training on digital literacy, focusing on managing information overload and setting healthy digital boundaries. Additionally, integrating these topics into the graduate curriculum can prepare students to better handle the demands of digital communication. Initiating university-wide digital wellness campaigns can also support students in taking proactive steps towards achieving a balanced online-offline lifestyle, enhancing their overall academic experience and mental health.

Future research should explore longitudinal effects of social media detox to understand its long-term benefits on students' well-being and academic performance. Collaborative studies between disciplines such as information science, psychology, and educational technology could yield richer insights into the multifaceted impact of social media use. Moreover, the development of AI-driven tools to manage information intake and minimize overload presents a promising avenue for technological intervention. Investigating how social media detox strategies vary across different cultures and demographic groups will also be critical in tailoring interventions to meet diverse needs.

CONCLUSION

This study provides insights into the predictors of social media detox among students, emphasizing the widespread issue of excessive social media use and its impact on well-being. A high prevalence of social media overload was observed, with information overload being a key predictor of engagement in social media detox. The results also showed students' openness to social media detox practices, as indicated by the significance of social media detox awareness. Educators and librarians can play a crucial role by developing workshops and modules on information management and stress reduction, empowering students to navigate the digital world effectively.

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