

**SPECIAL COLLECTION: BEHAVIORAL ADDICTION TO TECHNOLOGY****Social Media Use: Attitudes, “Detox,” and Craving in Typical and Frequent Users****David J. Robertson<sup>1</sup>, Johanna Malin<sup>1</sup>, Sophie Martin<sup>1</sup>, Stephen H. Butler<sup>1</sup>, Bev John<sup>2</sup>, Martin Graff<sup>2</sup>, Paul Flowers<sup>1</sup>, and Benedict C. Jones<sup>1</sup>**<sup>1</sup> Faculty of Humanities and Social Sciences, Department of Psychological Sciences and Health, University of Strathclyde<sup>2</sup> Faculty of Life Sciences and Education, School of Psychology, University of South Wales

---

Social media has become a core feature of daily life, with 4.8 billion users worldwide. Research on individual differences in social media use has tended to focus on the effect of differing levels of engagement on specific mental health outcomes. In contrast, few studies have directly investigated users' own perceptions of the impact of their social media use, attempts to regulate their behavior through periods of “detox,” and the drivers that compel them to return to these platforms. Therefore, in this study, we examined users' current attitudes toward their social media use, their awareness of the impact it had on other aspects of their lives, their experiences of self-initiated periods of “detox,” and their reasons for reengagement. A sample of 208 U.K. social media users (aged 18–28), partitioned into typical and frequent user groups using the Social Media Addiction Questionnaire and the Social Media Engagement Questionnaire, were tested on all measures. The findings, derived from both quantitative and qualitative data, showed that users across both groups were aware of the impact of overuse, and they were able to successfully engage in sustained periods of social media detox, from which they derived positive effects (e.g., on sleep, mood, productivity), and the primary driver for continued use was a desire for social connectedness and information rather than a “craving” for social media per se. Taken together, these findings provide novel data on users' perceptions of their social media use and, in particular, evidence in support of the positive benefits of periods of social media “detox.”

---

**Keywords:** social media, detox, abstinence, self-regulation, craving

Social media has become a ubiquitous part of modern life. There are currently 4.8 billion users worldwide (Statista, 2023). Research has shown that engaging with these platforms can provide beneficial effects. These include enhanced feelings of social connectedness and well-being (Allen et al., 2014; Hayes, 2022; Leist, 2013; McDaniel et al., 2012; Orben & Przybylski, 2019), as well as effective information sharing among individuals, groups, and organizations (Ahmed et al., 2019; Chen & Wang, 2021; Majchrzak et al., 2013). In contrast, there are several reports of negative effects on mental health outcomes (e.g., depression; Lin et al., 2016), and this has led to an active debate as to whether excessive social media use might produce the type of adverse consequences that would mirror an addictive behavior (Andreassen


et al., 2016; Griffiths & Kuss, 2017; Vorderer et al., 2016; Zhao, 2021).

In both contexts, whether positive or negative outcomes are reported, one of the key discussion points is the importance of promoting a moderate and self-regulated level of engagement (Primack et al., 2018). To that end, there have been some attempts to promote healthy social media behavior through periods of experimentally restricted use (see Radtke et al., 2022, for a review). However, there has been little focus on whether, and to what extent, users already try to regulate their own engagement with these platforms, their reasons for doing so, and what effects they derive from that process. Therefore, in this study, we focus on examining users' attitudes toward their social media use

---

**Special Collection Editors:** Nick Bowman, Douglas A. Gentile, C. Shawn Green, and Tracy Markle

**Action Editor:** Douglas A. Gentile was the action editor for this article.

**ORCID iD:** David J. Robertson  <https://orcid.org/0000-0002-8393-951X>.

**Funding:** The research reported in this article was not supported by any external funding.

**Disclosures:** The authors declare no competing interests.

**Data Availability:** An open access copy of the data used in the analysis reported in this article is available via the Open Science Framework platform (<https://osf.io/z7nc2/>; Robertson, 2023).

**Open Access License:** This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC-BY-NC-ND). This license permits copying and redistributing the work in any medium or format for noncommercial use provided the original authors and source are credited and a link to the license is included in attribution. No derivative works are permitted under this license.

**Contact Information:** Correspondence concerning this article should be addressed to David J. Robertson, Faculty of Humanities and Social Sciences, Department of Psychological Sciences and Health, University of Strathclyde, Glasgow G1 1QE, United Kingdom. Email: [david.j.robertson@strath.ac.uk](mailto:david.j.robertson@strath.ac.uk)

and their self-initiated experience of a social media “detox” (El-Khoury et al., 2021; Mirbabaie et al., 2022; Nguyen, 2022).

The use of the term “detox” is a relatively recent addition to the digital and information technology lexicon, it is most often placed in the broader term of “digital detox,” which effectively captures anecdotal evidence that some people may feel the need to “abstain,” “disconnect,” or “take a break” from their digital devices (Mirbabaie et al., 2022; Radtke et al., 2022; Vanden Abeele et al., 2022). Such studies have focused on the need to reduce the “technostress” that arises from the inability to “switch off” from digital devices, which prevent clear work–life boundaries (e.g., the need to constantly respond to work emails, outside working hours, using a personal smartphone; Mirbabaie et al., 2022). A recent review of the literature by Radtke et al. (2022) highlighted the diversity in the empirical approach to the concept of digital detox, with some studies restricting the use of all electronic devices (Dunican et al., 2017), some restricting only smartphone use (Eide et al., 2018), while others limited access to individual aspects of the digital world such as texting (Skierkowski & Wood, 2012).

Only a few studies have specifically targeted social media use in this context (e.g., Brown & Kuss, 2020), and many of those have focused only on the restriction of access to individual platforms (e.g., Facebook, Turel et al., 2018; Instagram, Fioravanti et al., 2020). Moreover, these studies have generated mixed findings, with some reporting positive effects (e.g., Brown & Kuss, 2020), negative effects (e.g., Hanley et al., 2019), or no change in relation to mental well-being (e.g., Hall et al., 2021). One reason for this could be that these periods of detox were experimentally induced, rather than self-initiated, and theories of planned behavior suggest that self-generated motivations and intentions are critical in supporting effective behavior change (e.g., Ajzen, 1991; Bosnjak et al., 2020; Michie et al., 2013). Therefore, the findings from such studies, whose central design is based on actively prohibiting access to social media in an experimental setting, may not entirely reflect everyday self-initiated attempts by users to regulate their own social media behavior.

Indeed, to our knowledge, only one study by El-Khoury et al. (2021) has directly investigated users’ reasons for, and experiences of, self-initiated periods of social media detox. The El-Khoury et al. (2021) study provides a robust framework to address the question of interest, and it reports positive effects of social media detox across a variety of cognitive domains. However, it is not clear whether the findings reflect attitudes and behaviors in Western samples (Poushter et al., 2018). In other words, there is a gap in the literature, in which new data are needed to highlight users’ unprompted engagement with a social media detox, their reasons for engaging in such behavior, which platforms they target, how long they last, whether they generate any transient or lasting benefits, and why such periods of restraint come to an end. Such data could yield important insights into how users self-regulate their social media use, and it could support the development of intervention techniques for those who struggle to regulate this behavior.

To that end, here, in an exploratory study, using both a quantitative and qualitative approach, we investigate user experiences of self-initiated periods of social media detox in a sample of young Western (U.K.) participants. To assess whether experiences of detox vary in relation to the level of social media use, we partition the sample into typical users and frequent users using two previously published scales (i.e., the Social Media Addiction Questionnaire [SMAQ], Hawi &

Samaha, 2017; the Social Media Engagement Questionnaire [SMEQ], Przybylski et al., 2013). We examine participants’ current attitudes and awareness toward their social media use; their prior experiences of social media detox; and the effect it had on the key cognitive outcome measures of sleep, mood, anxiety, productivity, and real-world relationships. In addition, while the concept of “craving” is well-established as a prominent driver to reengage with a prohibited behavior (see Heinz et al., 2009; Stohs et al., 2019), it has not yet been widely applied as a potential factor in “relapse” to social media use (see Hormes et al., 2014; Stieger & Lewetz, 2018; Wilcockson et al., 2019). Therefore, here we also examine the extent to which “craving to be on social media” changes across the detox period, whether it is related to the level of social media use, and to what extent it drives reengagement with these platforms.

## Method

### Ethics and Data Availability Statement

This study received concurrent approval from the ethics committees of the University of Strathclyde’s Department of Psychological Sciences and Health and the University of South Wales’ Faculty of Life Sciences and Education. An open access copy of the data used in the analysis reported in this article is available via the Open Science Framework platform (<https://osf.io/z7nc2/>; Robertson, 2023).

### Participants

A sample of 208 U.K. social media users were recruited from the University of Strathclyde ( $N = 201$ ) and the University of South Wales ( $N = 7$ ) undergraduate research participation platforms. Each participant confirmed that they had previously engaged in a self-initiated period of social media detox. In the absence of any well-established criteria for categorizing frequent social media use (see Zende & Bowden-Jones, 2019), we used the SMAQ (see Hawi & Samaha, 2017; SMAQ), which includes items designed to measure the potentially addictive aspects of social media use, and the SMEQ (see Przybylski et al., 2013; SMEQ), which captures users’ current level of social media engagement. The frequent user group ( $N = 54$ ) was selected on the basis that users had scored in the top third of the scale on the SMAQ ( $\geq 37$ ), our primary individual differences measure, and the top quarter of the confirmatory SMEQ scale ( $\geq 30$ ), ensuring regular and recent social media engagement in this group. Those who scored below both thresholds populated the typical user group ( $N = 83$ ). To generate discrete groups, users who scored above/below on one measure but not the other were removed from the sample ( $N = 71$ ). Group demographics are presented in Table 1.

### Measures

#### *Existing Attitudes to Social Media Use*

Participants were presented with eight statements (adapted from El-Khoury et al., 2021) and one question. For each of the eight statements, a response was made using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*) indicating the extent to which they agreed with the content. The final question (Q) asked participants whether their level of social media use had ever prompted them to seek, or think about seeking, medical attention.

**Table 1**  
*Group Characteristics*

Measures	Typical user group <i>N</i> = 83, 75% female			Frequent user group <i>N</i> = 54, 93% female		
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range
Age	20	2	18–28	20	2	18–25
SMAQ	28	6	10–36	42	4	37–52
SMEQ	20	6	5–29	36	3	30–40

*Note.* This table shows summary data for the typical social media user group and the frequent social media user group. SMAQ = Social Media Addiction Questionnaire; SMEQ = Social Media Engagement Questionnaire.

This question was answered with a yes/no response. The statements and question were as follows:

1. You believe that you spend too much time on social media
2. You would like to cut down on the time you spend on social media
3. You have been told that you spend too much time on social media
4. Your social media use negatively affects your academic performance
5. Your social media use negatively affects your level of physical activity
6. You use social media to reduce feelings of anxiety, guilt, helplessness, depression
7. You become restless if you have not been able to access social media
8. You ignore your partner/friends/family because of your social media use

Q. Has your social media use ever concerned you to the extent that you have, or have thought about, seeking advice from a medically trained professional?

### ***Reasons for Initiating a Social Media Detox, Duration, and Platforms***

Participants were asked how long their longest period of social media detox had lasted, how many times they had attempted to detox, which social media platform(s) they tended to target, and which platform(s) they found it most difficult to refrain from using. Following this, participants were then presented with five fixed response options and one “other” open response option. Participants could select more than one response, and if “other” was selected they were encouraged to provide additional detail via an onscreen text box (adapted from El-Khoury et al., 2021). Participants were presented with the following response options:

1. I was checking my social media feeds more often than I wanted to

2. My focus on social media was reducing my likelihood of doing other nonsocial media activities
3. It was becoming difficult to stop checking social media even when I should have been focused on engaging with other people in real life
4. I engaged in online debate via comment sections which turned nasty, and I wanted to distance myself from that experience
5. I just felt a bit overwhelmed with the news and updates in my social media feeds
6. “Other” please provide additional details in the text box provided

### ***During Detox: Effects of Withdrawal***

This section focused on examining the effects during the detox period on five key cognitive and behavioral measures; sleep, mood, anxiety, focus/productivity, and relationships (adapted from El-Khoury et al., 2021). Each measure was paired with a positive or negative response option and “none of the above” to indicate that none of these available options were applicable to them. The available response options were therefore:

1. A positive change in mood
2. A negative change in mood
3. My focus and productivity increased
4. My focus and productivity decreased
5. My relationships with friends/family got better
6. My relationships with friends/family got worse
7. My level of anxiety increased
8. My level of anxiety decreased
9. My sleep improved
10. My sleep got worse
11. None of the above

### ***Craving to Be on Social Media***

Participants were asked to consider their longest period of detox, then to split that period into a beginning, middle, and end, and to rate their level of craving to be on social media at each point in time. Responses were collected via an onscreen slider (0 = *no craving at all*, 100 = *maximum craving*). In relation to craving, participants were then asked which of the following sentences described them at the end of their detox period:

1. My detox ended because my craving to check social media became too strong to overcome.
2. Any craving to be on social media had subsided during the detox and I was in no rush to return to these platforms.

- Any craving to be on social media had subsided during the detox but I was curious to see updates to my social media feeds.

### Postdetox Attitudes

Participants were provided with the opportunity to provide qualitative text responses to questions that asked if they experienced any lasting benefits or negative experiences from their detox:

- Following the end of the social media detox period, did you experience any lasting benefits?
- Following the end of the social media detox period, were there any negative parts of the experience that would stop you from doing another detox in the future?

### Procedure

This study used Qualtrics, a well-established online testing platform, to present the study and collect the data. Participants were presented with an information sheet, and they provided informed consent for the use of their data by selecting the appropriate onscreen response. Each section within the study was presented in a fixed order: existing attitudes to social media use; reasons for initiating a detox; the effects of withdrawal; craving to be on social

media; and postdetox attitudes. Participants then received an onscreen debrief. The time taken to complete the study was approximately 20 min.

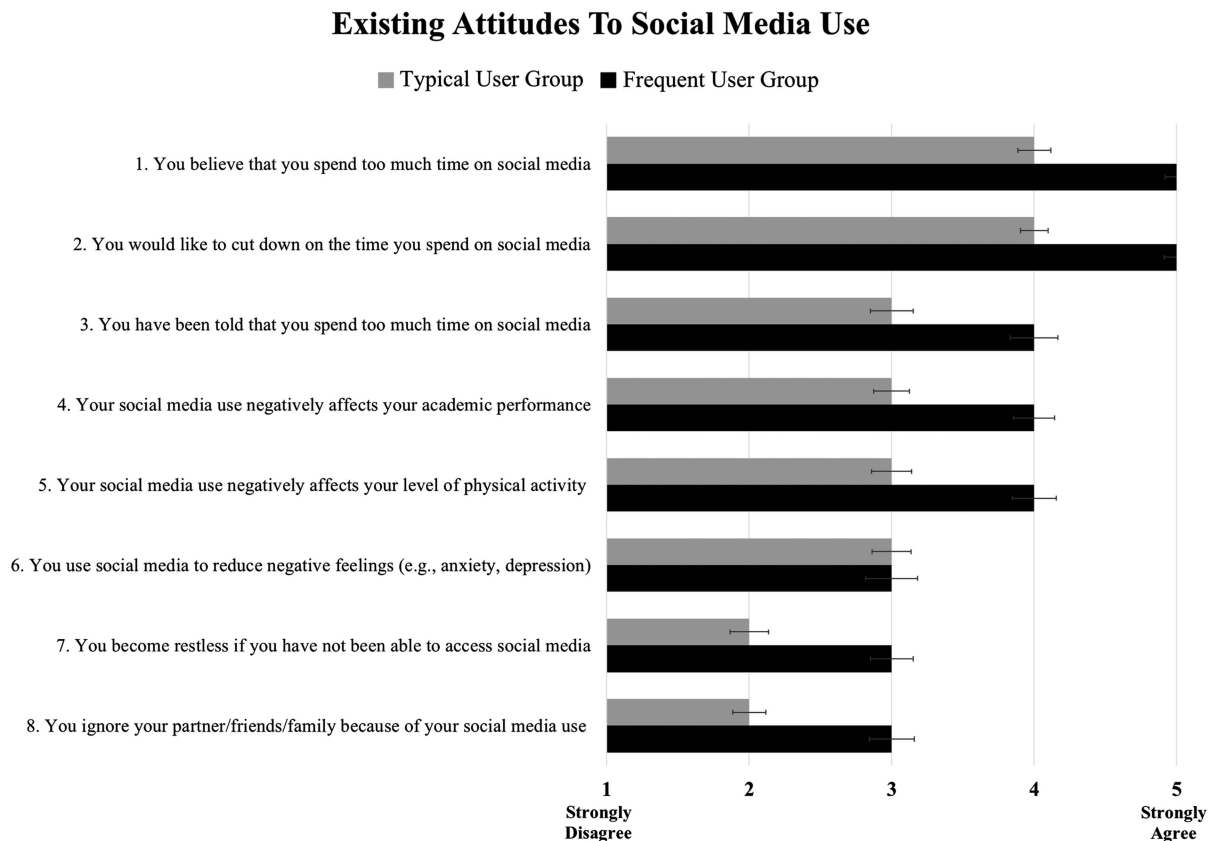
## Results

### Existing Attitudes to Social Media Use

Mean group ratings to the eight statements are shown in Figure 1. Aggregated ratings across these questions were significantly higher for the frequent user group ( $M = 30$ ) compared to the typical user group,  $M = 24$ ;  $t(135) = 7.18$ ,  $p < .001$ ,  $d = 1.26$ . Both the typical and frequent user groups exceeded the midpoint score (i.e., "3"; no firm opinion either way; no overt concern) in relation to perceived overuse (Statement 1) and a desire to reduce the time spent on social media (Statement 2), with more pronounced agreement with these statements for the frequent users compared to typical users. Frequent, but not typical, users continued to exceed the midpoint score for the statements relating to external concerns about their social media use (Statement 3) and having experienced situations in which their level of use had a negative impact on their academic performance (Statement 4) or level of physical activity (Statement 5). As seen in Figure 1, mean group ratings did not exceed the midpoint for the statements relating to the use of social media to reduce negative feelings (Statement 6),

**Figure 1**

*Users' Attitudes Toward Their Current Social Media Use*



*Note.* These are the group mean responses to the current attitude questions (error bars denote the standard error of the mean).

physiological response to restricted or prohibited use (Statement 7), or the effect of use on the level of engagement with their partner/family/friends (Statement 8). In addition, few users indicated that they had sought, or had thought about seeking, medical assistance for their social media use (5% for typical users, 0% for frequent users).

### Reasons for Initiating a Social Media Detox

In line with the findings from the existing attitudes data, the most common reasons for initiating a period of detox were as follows: an awareness that users were checking their social media feeds more often than they wanted to (typical users = 54%; frequent users = 61%), that it was difficult to stop checking social media even when users felt they should be focused on engaging with people in real life (typical users = 27%; frequent users = 54%), and that their focus on social media was reducing their likelihood of doing other non-social media-related activities (typical users = 29%; frequent users = 39%). As seen in the group percentages, responses to each of these statements were more pronounced in the frequent user group compared to the typical user group. However, this pattern was reversed in response to the statement which asked whether the reason for detox was due to feeling overwhelmed with news and updates on their social media feeds, with typical users (34%) citing this reason more often than frequent users (24%). Few participants in either group (typical = 2%; frequent = 7%) initiated a detox after an online exchange had become nasty, and 16% of the sample reported an “other” reason for taking a break from social media (typical = 17%; frequent = 15%). No consistent themes emerged from the “other” text responses, but they did include statements that were not already captured in the existing responses, such as “it encouraged procrastination” and “I wanted to stop comparing myself to others.”

### Detox Duration

While each participant in the sample indicated that they had attempted at least one social media detox prior to the study, the data show that, on average, both frequent and typical users had previously engaged in at least three periods of voluntary withdrawal ( $M = 3$ ,  $SD = 2$ , range = 1–7 for both groups). Fifty-three percent of participants reported that their longest period of social media detox lasted between 1 and 7 days, 42% reported that it lasted longer than 1 week, while 5% of respondents noted that their detox lasted less than 1 day. For the comparison across groups, the notable difference shows that typical users were more likely to engage in longer periods of detox in comparison to their frequent user counterparts (less than 1 day: typical = 2%, frequent = 9%; between 1 and 7 days: typical = 46%, frequent = 65%; longer than 1 week: typical = 52%, frequent = 26%).

### Platforms Targeted

Instagram was the platform that was most frequently targeted for detox (by 56% of users), followed by TikTok (37%), Snapchat (32%), Facebook (21%), and then Twitter (15%); this pattern was the same for both typical and frequent users. TikTok was reported to be the most difficult platform to refrain from using during a period of detox (47%), followed by Instagram (32%), Snapchat (29%),

Facebook (9%), and then Twitter (8%; note that the percentages do not sum to 100% as participants could select more than one platform response). The pattern was similar between the groups, with the exception that frequent users rated Snapchat rather than Instagram as the second most difficult platform from which to sustain a period of detox.

### During Detox: Effects of Withdrawal

As seen in Figure 2, both groups generally experienced positive changes to key cognitive and behavioral metrics during periods of detox. Positivity ratings were greatest for productivity and mood, followed by sleep, anxiety, and relationships. There were small numerical trends for greater improvements to productivity and mood in the typical group compared to the frequent group, while the reverse was true for sleep, anxiety, and relationships. Reductions in anxiety were evident for both groups but this metric also produced the highest percentage of negative responses (i.e., increased anxiety during detox). The overall percentage of users who selected the “none of the above” response, indicating that the fixed response options did not capture their experiences during their detox, was 5%.

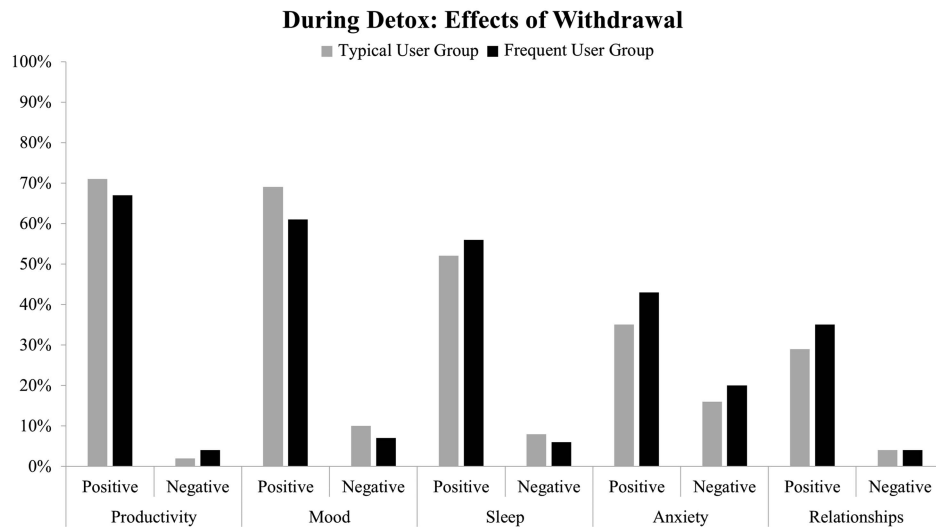
### During Detox: Craving

The mean craving rating for each group at the beginning, middle, and end of their longest period of detox is shown in Figure 3. The scale ran from 0 (*no craving at all*) to 100 (*maximum craving*). A  $2 \times 3$  repeated-measures analysis of variance with the within-subjects factor of time (start, middle, end) and a between-subjects factor of group (typical users, frequent users) revealed a main effect of group,  $F(1, 135) = 31.27$ ,  $p < .001$ ,  $\eta_p^2 = .188$ , with significantly greater levels of overall craving in the frequent user group ( $M = 59$ ,  $SD = 27$ , range = 0–100) compared to the typical user group ( $M = 43$ ,  $SD = 26$ , range = 0–100). There was also a main effect of time,  $F(1.6_{GG}, 217.3_{GG}) = 8.19$ ,  $p = .001$ ,  $\eta_p^2 = .057$ , with significantly higher levels of craving at the beginning ( $M = 56$ ,  $SD = 30$ , range = 0–100) of the detox compared to the middle ( $M = 47$ ,  $SD = 23$ , range = 0–100);  $t(136) = 3.40$ ,  $p = .001$ ,  $d = .290$  for the difference. However, there was no further significant change in craving between the middle and the end of the detox period ( $M = 44$ ,  $SD = 28$ , range = 0–100);  $t(136) = 1.46$ ,  $p = .146$ ,  $d = .13$  for the difference, and this was consistent across typical and frequent users as the Group  $\times$  Time interaction was not significant,  $F(1.6_{GG}, 217.3_{GG}) = 1.06$ ,  $p = .335$ ,  $\eta_p^2 = .008$ .

### Craving as a Driver of Social Media Reengagement

For the typical user group, 57% of users indicated that any craving to be on social media had subsided during detox but that they were curious to see updates to their social media feeds. This was followed by 29% who also indicated that craving had subsided during detox but that they were in no rush to return to their social media platforms. The smallest proportion of the group, 14%, indicated that their detox had ended because their craving to check social media had become too strong to overcome. Most people in the frequent user group also reported that their craving had subsided, but they were curious about updates to their feeds (50%), but in contrast to the typical group, this was followed by a significant proportion who cited the craving option as a reason for their return

**Figure 2**  
Mean Percentage Responses to Positive or Negative Changes Across the Detox Period



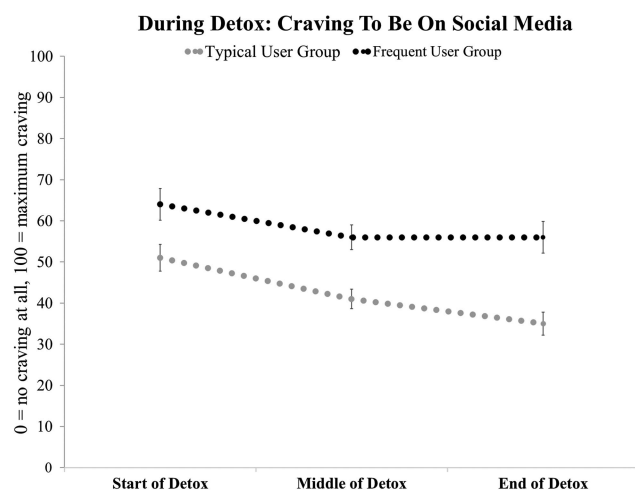
*Note.* Participants were able to select more than one of the options, therefore, the percentages do not sum to 100%.

to social media (42%). Few frequent users (8%) reported that they were in no rush to return to their platforms.

### The Relationship Between Craving and SMAQ/SMEQ Scores

Following the group distinction reported above, if craving is to provide a robust indicator of the extent to which an individual

**Figure 3**  
Mean Craving Ratings at the Start, Middle, and End of a Detox Period



*Note.* Participants were asked to consider their longest period of social media “detox” and to rate the extent to which they craved a return to social media at the start, middle, and end of the period (0 = no craving at all; 100 = maximum craving; error bars denote standard error of the mean).

might find it difficult to refrain from using social media, then we would expect such ratings to associate with the items covered in the SMAQ and the SMEQ. For this analysis, as our grouping criteria removed much of the variability in SMAQ/SMEQ scores in the frequent group, we collapsed the data across all users. We focus on craving at the middle-detox and end-detox points as, having been engaged in the withdrawal period, they are likely to be more indicative of the compulsion to return to social media than cravings reported at the outset. To that end, SMAQ and SMEQ scores were entered into a multiple regression analysis with self-reported craving ratings at the middle and end of the detox period as the dependent measures. Both the model for middle-detox craving,  $F(2, 134) = 17.58, p < .001, R^2 = .208$ , and end-detox craving,  $F(2, 134) = 23.05, p < .001, R^2 = .256$ , were significant, with the SMAQ ( $\beta = .25, p = .043$  for middle-detox;  $\beta = .49, p < .001$  for end-detox), but not the SMEQ ( $\beta = .23, p = .069$  for middle-detox;  $\beta = .01, p = .935$  for end-detox), contributing significantly to each model.

### Postdetox Attitudes

In Table 2, we present qualitative data that provide an insight into the positive benefits and negative aspects that users experienced from and following their detox. These data were generated using an inductive content analysis approach (see Leech & Onwuegbuzie, 2011). For the negative aspects of detox, as seen in Table 2, the most frequently cited results indicated no negative aspects of the experience. However, the remaining results showed that the “fear of missing out” was pervasive, and it related to feeling disconnected from communication with friends, their updates, and news more generally. Additional reasons, cited with lower frequency, also indicated the necessity to engage with social media for some university course information, that users felt bad if they were not

**Table 2**  
*Postdetox Attitudes to the Experience*

Experiences	Example response	Typical users	Frequent users
Negative experiences of detox			
No negatives	“No”	53%	43%
Missed communication with friends	“I can’t easily keep in contact with most of my friends without social media”	18%	17%
Missed out on news/updates	“I felt like I may have been missing out on important updates or news”	12%	7%
Feeling disconnected	“Feeling out of the loop and disconnected from people around me”	6%	11%
Positive lasting benefits of detox			
No lasting benefit	“None”	17%	41%
Less time spent on social media	“I now spend less time on social media than before”	16%	19%
Improved mental health	“I completely deleted Facebook which has resulted in me feeling less anxious”	13%	17%
Change in value placed on social media use	“I realised how unimportant social media is”	11%	9%

*Note.* The percentages reflect the proportion of participants within each group that provided qualitative content that fits each response.

liking and commenting on friends’ posts, and that it was difficult to find other distractions to alleviate periods of boredom.

As seen in Table 2, positive lasting benefits were reported by most participants in both groups, and these included users spending less time on their social media platforms, reduced levels of anxiety, and a reduction in the importance placed on social media use. For some participants, particularly in the frequent user group (41%), the effect of detox may have been transient, or most pronounced during the abstinence period, rather than generating lasting effects. However, regardless of whether users experienced transient or lasting benefits from the detox period, 92% of participants (90% typical, 94% frequent) indicated that they would consider going through a social media detox again in the future, and 98% (96% typical, 100% frequent) indicated that they would recommend periods of detox to others.

## Discussion

Social media has become an integral part of daily life, and research has shown that it can generate both positive (e.g., well-being; Hayes, 2022) and negative (e.g., depression; Lin et al., 2016) outcomes. However, there has been less focus on how users moderate their own behavior to maintain healthy levels of engagement. One such route, known as a social media detox, involves periods of restricted use. While several studies have experimentally induced periods of social media abstinence (see Radtke et al., 2022), here we focused on self-initiated attempts to detox from these platforms (Ajzen, 1991; Bosnjak et al., 2020; Michie et al., 2013). The findings show that all participants, regardless of level of engagement, believed that they spent too much time on social media and wanted to reduce their usage. Frequent users, compared to typical users, were more likely to report negative effects of social media use on their academic performance and engagement in physical activity. Few participants in either group indicated that their level of use might cause them to seek medical attention, and this is likely to reflect the fact that

our sample represents users from the general population rather than those at the problematic or “addictive” end of the scale (see Andreassen et al., 2016; Griffiths & Kuss, 2017; Vorderer et al., 2016; Zendle & Bowden-Jones, 2019; Zhao, 2021). Users, across both groups, indicated that they had initiated more than one detox, on average, for sustained periods of time and that the main drivers for doing so were an awareness of overuse and a desire to reconnect with people and activities in real life. Typical users were more likely to begin a detox as a result of feeling overwhelmed by the content in their news feeds, and to engage in more sustained periods of abstinence, in comparison to those in the frequent user group.

Importantly, during detox, users reported positive effects on levels of productivity, mood, sleep, anxiety, and their relationships. The most pronounced positive effect was for productivity, and there was an interesting effect in relation to anxiety. Frequent users reported a greater increase in anxiety during detox than typical users, but for both groups, the proportions were small in comparison to those who experienced positive reductions in anxiety during the process. Across these measures, the findings on experiences during detox suggest that the distinction between experimentally induced and self-initiated periods of detox may be a salient one. For example, where we find positive effects for sleep, affect, productivity, anxiety, and relationships, several studies using the experimentally induced detox method did not (see Dunican et al., 2017, for sleep; Eide et al., 2018, for positive/negative affect; Wilcockson et al., 2019, for anxiety; Hall et al., 2021, for relationships/loneliness). This distinction suggests that the benefits of digital and social media detox may be most pronounced, in line with theories of planned behavior (e.g., Bosnjak et al., 2020), when the user feels that they have initiated the process of behavior change (e.g., Michie et al., 2013). This will be important for future research studies, which seek to develop detox-based interventions to support healthy levels of social media engagement.

While the findings from this study suggest several positive benefits from engaging in a social media detox, it was important

to examine why users chose to bring such periods of restricted use to an end. Here we focused on the concept of “craving,” which is known to be a prominent driver of relapse to use in other social behaviors (see Heinz et al., 2009; Stohs et al., 2019), but not widely used in relation to social media use (see Hormes et al., 2014; Stieger & Lewetz, 2018; Wilcockson et al., 2019). Our findings show that in comparison to the typical user group, frequent users indicated higher levels of craving to be on social media during detox, and they placed greater emphasis on craving as a driver to reengage. However, in both groups, it was clear that levels of craving were near the midpoint on the scale and tended to level off, rather than increase, over the duration of the detox. This indicates that while periods of restricted use might require active levels of inhibition to prevent a return to social media before the intended end of the detox period, craving is unlikely to play an insurmountable role in maintaining periods of abstinence. However, for those individuals in which craving might be a barrier to maintaining a significant detox period (and we report that SMAQ scores would appear to be a good predictor of such individual differences), researchers should look to develop ways to reduce these urges (see Houghton et al., 2021, for a recent review on the benefits of intranasal oxytocin in this respect).

While we focused on examining whether craving might act as a primary driver to end periods of detox, our qualitative and free-text responses may have indicated a more significant factor in relapse to use—feelings of disconnection (see Roberts & David, 2020; Tandon et al., 2021). This is related to the extent to which users have come to rely on social media for essential information and social connectedness. Some free-text responses indicated that users felt “out of the loop” during detox when it came to essential news and information. Others indicated that they felt disconnected from friendship networks, with one indicating that they felt like “a bad friend” for not liking and commenting on posts by their peers. Given that periods of social media detox do appear to have beneficial effects (e.g., improved mood, reduced anxiety), it is important that such feelings of disconnection from news, critical information (e.g., university/clubs), and friends are reduced during the period of restricted use. There would appear to be several ways to do this. First, for users to indicate to their core social circle that they were taking a break from platform *X* for period of time *Y* and that they could still be reached by alternative apps such as Messenger/WhatsApp (i.e., those without news feeds). Second, where some users appear to rely on their social media feeds for news, they should be directed to access apps by the actual news providers (e.g., British Broadcasting Corporation). Third, it should be the case that any critical university-/work-related information should always be posted in an alternative, nonsocial media, repository. In this way, feelings of disconnection might be reduced, which in turn would sustain the detox period, maximizing the benefits of the break.

While this study focused on social media detox in general, it did generate some platform-specific exploratory data that should be useful in certain contexts as well. For example, both Instagram and TikTok, two platforms in which unrealistic beauty and life standards are the norm among influencers (see Kleemans et al., 2018), were shown to be the platforms most often targeted for detox and most difficult to refrain from using. This fits with the free-text responses that referred to negative effects on self-esteem and self-image as

a reason for initiating the break. While such effects are not new or specific to social media (see Morry & Staska, 2001), it does provide a greater degree of such content to young users than was previously available. Given the negative health outcomes it can generate, this is a platform-specific area that researchers interested in the negative effects of social media should focus on going forward.

While this exploratory study produced consistent patterns of data across the measures and between the groups, there are limitations to our approach which should be addressed by future research. For example, in lieu of a single, normed, widely accepted measure that defines individual differences in social media use, here we chose to partition our groups using high scores on two previously published tests. While this approach did yield group effects, we do not claim to have captured user experiences at the potentially problematic or “addictive” end of the scale, which was beyond the scope of this article. As the debate continues as to whether excessive social media use might constitute a clinically definable behavioral addiction, it should be a priority area of research to construct a new well-validated measure that captures the full range of individual differences in this context. In doing so, and perhaps with a focus on establishing a continuous usage scale (see Rucker et al., 2015), research should seek to examine perceptions toward, and experiences of, social media detox, in those who report excessive levels of engagement.

In addition, while our sample size calculations were guided by *G\*Power* (Faul et al., 2007) and are in line with other studies in this area (see Radtke et al., 2022), our participants largely consisted of young western females, and we used self-report measures and retrospective accounts of craving. Future studies should seek to replicate our findings using a larger and more diverse sample, and objective measures of sleep, mood, anxiety, and craving, for example, during self-initiated periods of detox. While most users indicated that they engaged with detox for periods of days to 1 week, it is important to establish whether there is a minimum period that users should aim for to maximize the effects. In addition, we intentionally recruited participants who had attempted at least one social media detox. Research should now investigate what proportion of users either have not, or have not felt the need to, engage with a period of detox. Such individuals could have alternative strategies for managing their social media use that could further support healthy use interventions. Particular attention should be paid to young users who are accessing smartphones and social media for the first time. If we are to promote healthy social media use, including guidance on how to effectively detox, then such interventions are likely to be most effective during the initial stages of engagement with these platforms.

To conclude, social media is likely to remain an integral and growing part of daily life, and sustained periods of detox could be critical to healthy social media engagement. Following the findings reported in this study, we suggest several areas that should be the focus of further research. These include the development of procedures to optimize social media detox interventions (e.g., through the promotion of self-initiated periods of abstinence), increasing our understanding of the extent to which craving plays a role in relapse to use (and ways to reduce the craving sensation in highly engaged users), and we suggest some initial strategies that could ameliorate feelings of disconnection and fear of missing out during these periods of self-initiated abstinence.



## References

- Ahmed, Y. A., Ahmad, M. N., Ahmad, N., & Zakaria, N. H. (2019). Social media for knowledge-sharing: A systematic literature review. *Telematics and Informatics*, *37*, 72–112. <https://doi.org/10.1016/j.tele.2018.01.015>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Allen, K. A., Ryan, T., Gray, D. L., McInerney, D. M., & Waters, L. (2014). Social media use and social connectedness in adolescents: The positives and the potential pitfalls. *The Educational and Developmental Psychologist*, *31*(1), 18–31. <https://doi.org/10.1017/edp.2014.2>
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, *30*(2), 252–262. <https://doi.org/10.1037/adb0000160>
- Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, *16*(3), 352–356. <https://doi.org/10.5964/ejop.v16i3.3107>
- Brown, L., & Kuss, D. J. (2020). Fear of missing out, mental wellbeing, and social connectedness: A seven-day social media abstinence trial. *International Journal of Environmental Research and Public Health*, *17*(12), Article 4566. <https://doi.org/10.3390/ijerph17124566>
- Chen, J., & Wang, Y. (2021). Social media use for health purposes: Systematic review. *Journal of Medical Internet Research*, *23*(5), Article e17917. <https://doi.org/10.2196/17917>
- Dunican, I. C., Martin, D. T., Halson, S. L., Reale, R. J., Dawson, B. T., Caldwell, J. A., Jones, M. J., Eastwood, P. R., & Eastwood, P. R. (2017). The effects of the removal of electronic devices for 48 hours on sleep in elite judo athletes. *Journal of Strength and Conditioning Research*, *31*(10), 2832–2839. <https://doi.org/10.1519/JSC.0000000000001697>
- Eide, T. A., Aarestad, S. H., Andreassen, C. S., Bilder, R. M., & Pallesen, S. (2018). Smartphone restriction and its effect on subjective withdrawal related scores. *Frontiers in Psychology*, *9*, Article 1444. <https://doi.org/10.3389/fpsyg.2018.01444>
- El-Khoury, J., Haidar, R., Kanj, R. R., Bou Ali, L., & Majari, G. (2021). Characteristics of social media “detoxification” in university students. *The Libyan Journal of Medicine*, *16*(1), Article 1846861. <https://doi.org/10.1080/19932820.2020.1846861>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Fioravanti, G., Prostamo, A., & Casale, S. (2020). Taking a short break from Instagram: The effects on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, *23*(2), 107–112. <https://doi.org/10.1089/cyber.2019.0400>
- Griffiths, M. D., & Kuss, D. (2017). Adolescent social media addiction (revisited). *Education for Health*, *35*(3), 49–52. <http://irep.ntu.ac.uk/id/eprint/31776>
- Hall, J. A., Xing, C., Ross, E. M., & Johnson, R. M. (2021). Experimentally manipulating social media abstinence: Results of a four-week diary study. *Media Psychology*, *24*(2), 259–275. <https://doi.org/10.1080/15213269.2019.1688171>
- Hanley, S. M., Watt, S. E., & Coventry, W. (2019). Taking a break: The effect of taking a vacation from Facebook and Instagram on subjective well-being. *PLOS ONE*, *14*(6), Article e0217743. <https://doi.org/10.1371/journal.pone.0217743>
- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, *35*(5), 576–586. <https://doi.org/10.1177/0894439316660340>
- Hayes, M. (2022). Social media and inspiring physical activity during COVID-19 and beyond. *Managing Sport and Leisure*, *27*(1–2), 14–21. <https://doi.org/10.1080/23750472.2020.1794939>
- Heinz, A., Beck, A., Grüsser, S. M., Grace, A. A., & Wrase, J. (2009). Identifying the neural circuitry of alcohol craving and relapse vulnerability. *Addiction Biology*, *14*(1), 108–118. <https://doi.org/10.1111/j.1369-1600.2008.00136.x>
- Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*, *109*(12), 2079–2088. <https://doi.org/10.1111/add.12713>
- Houghton, B., Kouimtsidis, C., Duka, T., Paloyelis, Y., & Bailey, A. (2021). Can intranasal oxytocin reduce craving in automated addictive behaviours? A systematic review. *British Journal of Pharmacology*, *178*(21), 4316–4334. <https://doi.org/10.1111/bph.15617>
- Kleemans, M., Daalman, S., Carbaat, I., & Anschütz, D. (2018). Picture perfect: The direct effect of manipulated Instagram photos on body image in adolescent girls. *Media Psychology*, *21*(1), 93–110. <https://doi.org/10.1080/15213269.2016.1257392>
- Leech, N. L., & Onwuegbuzie, A. J. (2011). Beyond constant comparison qualitative data analysis: Using NVivo. *School Psychology Quarterly*, *26*(1), 70–84. <https://doi.org/10.1037/a0022711>
- Leist, A. K. (2013). Social media use of older adults: A mini-review. *Gerontology*, *59*(4), 378–384. <https://doi.org/10.1159/000346818>
- Lin, L. Y., Sidani, J. E., Shensa, A., Radovic, A., Miller, E., Colditz, J. B., Hoffman, B. L., Giles, L. M., & Primack, B. A. (2016). Association between social media use and depression among U.S. young adults. *Depression and Anxiety*, *33*(4), 323–331. <https://doi.org/10.1002/da.22466>
- Majchrzak, A., Faraj, S., Kane, G. C., & Azad, B. (2013). The contradictory influence of social media affordances on online communal knowledge sharing. *Journal of Computer-Mediated Communication*, *19*(1), 38–55. <https://doi.org/10.1111/jcc4.12030>
- McDaniel, B. T., Coyne, S. M., & Holmes, E. K. (2012). New mothers and media use: Associations between blogging, social networking, and maternal well-being. *Maternal and Child Health Journal*, *16*(7), 1509–1517. <https://doi.org/10.1007/s10995-011-0918-2>
- Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M. P., Cane, J., & Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine*, *46*(1), 81–95. <https://doi.org/10.1007/s12160-013-9486-6>
- Mirbabaie, M., Stieglitz, S., & Marx, J. (2022). Digital Detox. *Business & Information Systems Engineering*, *64*(2), 239–246. <https://doi.org/10.1007/s12599-022-00747-x>
- Morry, M. M., & Staska, S. L. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, *33*(4), 269–279. <https://doi.org/10.1037/h0087148>
- Nguyen, V. T. (2022). The perceptions of social media users of digital detox apps considering personality traits. *Education and Information Technologies*, *27*(7), 9293–9316. <https://doi.org/10.1007/s10639-022-11022-7>
- Orben, A., & Przybylski, A. K. (2019). Screens, teens, and psychological well-being: Evidence from three time-use-diary studies. *Psychological Science*, *30*(5), 682–696. <https://doi.org/10.1177/0956797619830329>
- Poushter, J., Bishop, C., & Chwe, H. (2018). *Social media use continues to rise in developing countries but plateaus across developed ones* (Vol. 22, pp. 2–19). Pew Research Center. Retrieved June 12, 2023, from <https://www.pewresearch.org/global/2018/06/19/social-media-use-continues-to-rise-in-developing-countries-but-plateaus-across-developed-ones/>
- Primack, B. A., Shensa, A., Sidani, J. E., Bowman, N., Knight, J., Karim, S. A., Bisbey, M., Colditz, J. B., Woods, M. S., & Viera, C. G. E. (2018).

- Reducing risk for mental health conditions associated with social media use: Encouraging “real” communication. In J. Van Hook, S. M. McHale, & V. King (Eds.), *Families and technology* (pp. 155–176). Springer. [https://doi.org/10.1007/978-3-319-95540-7\\_9](https://doi.org/10.1007/978-3-319-95540-7_9)
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, *29*(4), 1841–1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Radtke, T., Apel, T., Schenkel, K., Keller, J., & von Lindern, E. (2022). Digital detox: An effective solution in the smartphone era? A systematic literature review. *Mobile Media & Communication*, *10*(2), 190–215. <https://doi.org/10.1177/20501579211028647>
- Roberts, J. A., & David, M. E. (2020). The social media party: Fear of missing out (FoMO), social media intensity, connection, and well-being. *International Journal of Human–Computer Interaction*, *36*(4), 386–392. <https://doi.org/10.1080/10447318.2019.1646517>
- Robertson, D. J. (2023, August 2). *Social media use: attitudes, “detox,” and craving in typical and frequent users* [Summary data]. <https://osf.io/z7nc2/>
- Rucker, D. D., McShane, B. B., & Preacher, K. J. (2015). A researcher’s guide to regression, discretization, and median splits of continuous variables. *Journal of Consumer Psychology*, *25*(4), 666–678. <https://doi.org/10.1016/j.jcps.2015.04.004>
- Skierkowski, D., & Wood, R. M. (2012). To text or not to text? The importance of text messaging among college-aged youth. *Computers in Human Behavior*, *28*(2), 744–756. <https://doi.org/10.1016/j.chb.2011.11.023>
- Statista. (2023). *Social media usage worldwide*. Retrieved June 12, 2023, from <https://www.statista.com/study/12393/social-networks-statista-do-ssier/>
- Stieger, S., & Lewetz, D. (2018). A week without using social media: Results from an ecological momentary intervention study using smartphones. *Cyberpsychology, Behavior, and Social Networking*, *21*(10), 618–624. <https://doi.org/10.1089/cyber.2018.0070>
- Stohs, M. E., Schneekloth, T. D., Geske, J. R., Biernacka, J. M., & Karpyak, V. M. (2019). Alcohol craving predicts relapse after residential addiction treatment. *Alcohol and Alcoholism*, *54*(2), 167–172. <https://doi.org/10.1093/alcalc/agy093>
- Tandon, A., Dhir, A., Almgren, I., AlNemer, G. N., & Mäntymäki, M. (2021). Fear of missing out (FoMO) among social media users: A systematic literature review, synthesis and framework for future research. *Internet Research*, *31*(3), 782–821. <https://doi.org/10.1108/INTR-11-2019-0455>
- Turel, O., Cavagnaro, D. R., & Meshi, D. (2018). Short abstinence from online social networking sites reduces perceived stress, especially in excessive users. *Psychiatry Research*, *270*, 947–953. <https://doi.org/10.1016/j.psychres.2018.11.017>
- Vanden Abeele, M. M. P., Halfmann, A., & Lee, E. W. J. (2022). Drug, demon, or donut? Theorizing the relationship between social media use, digital well-being and digital disconnection. *Current Opinion in Psychology*, *45*, Article 101295. <https://doi.org/10.1016/j.copsyc.2021.12.007>
- Vorderer, P., Krömer, N., & Schneider, F. M. (2016). Permanently online—Permanently connected: Explorations into university students’ use of social media and mobile smart devices. *Computers in Human Behavior*, *63*, 694–703. <https://doi.org/10.1016/j.chb.2016.05.085>
- Wilcockson, T. D. W., Osborne, A. M., & Ellis, D. A. (2019). Digital detox: The effect of smartphone abstinence on mood, anxiety, and craving. *Addictive Behaviors*, *99*, Article 106013. <https://doi.org/10.1016/j.addbeh.2019.06.002>
- Zendle, D., & Bowden-Jones, H. (2019). Is excessive use of social media an addiction? *The BMJ*, *365*, Article 12171. <https://doi.org/10.1136/bmj.12171>
- Zhao, L. (2021). The impact of social media use types and social media addiction on subjective well-being of college students: A comparative analysis of addicted and non-addicted students. *Computers in Human Behavior Reports*, *4*, Article 100122. <https://doi.org/10.1016/j.chbr.2021.100122>

Received August 15, 2022

Revision received August 2, 2023

Accepted August 3, 2023 ■