



Review Article

Unplugging beyond the workplace: A scoping review of non-work digital detox strategies

Ema Štánerová^{*} , Eva Rošková , Milica Schraggeová , Nina Urukovičová , Jozef Smoroň 

Comenius University in Bratislava, Faculty of Arts, Department of Psychology, Slovakia

ARTICLE INFO

Keywords:

Digital detox

Non-work strategies

ICT

Well-being

ABSTRACT

Background: The pervasive use of information and communication technologies (ICTs) has extended into personal time, making it difficult for working adults to disconnect beyond their professional responsibilities. Digital detox, defined as the intentional break from ICTs, serves as a potential solution to counteract the constant connectivity. However, non-work digital detox strategies, understood as methods and activities deliberately performed outside work settings to reduce ICT use, remain underexplored. To date, existing research lacks a comprehensive review and classification of these strategies, particularly in a way that distinguishes between methods (practices enabling disconnection) and activities (alternative engagements during detox).

Objective: This scoping review aimed to map and categorize existing non-work digital detox strategies for working adults. Specifically, it sought to answer the following research questions: (1) What methods are used for non-work digital detox among working adults? (2) What alternative activities are practiced during these detox periods?

Methods: This scoping review adhered to PRISMA-ScR guidelines. Studies were systematically searched in PubMed, Scopus, and Web of Science up to August 12, 2024. Eligible studies examined digital detox methods and/or activities suitable for adults in a working population, specifically those applicable outside the workplace. Two independent researchers screened abstracts, reviewed full texts, extracted data, and assessed methodological quality.

Results: A total of 12 studies, comprising 3040 participants, were included, spanning the years 2019–2024. Six categories of detox methods (e.g., device restriction and app control) and seven categories of activities (e.g., physical and social activities) were identified. The heterogeneity of study designs and measured outcomes precluded a definitive evaluation of the effectiveness of these strategies.

Conclusion: The findings provide a structured framework for digital detox interventions, allowing for the individualized combination of methods and activities. Future research should prioritize evaluating the effectiveness of these strategies using standardized designs and outcomes to enhance their applicability and evidence base.

1. Introduction

In recent years, the proliferation of information and communication technologies (ICTs) has fundamentally reshaped modern life (Marsh et al., 2022). While the roots of digital development can be traced back to earlier decades, the most rapid and transformative expansion of ICTs occurred in the 20th century, setting the foundation for today's hyper-connected society (Castells, 2010). This trajectory was accelerated by the COVID-19 pandemic, which necessitated a shift to digital platforms in both professional and personal domains (Kraus et al., 2023;

Marsh et al., 2022). On the one hand, ICTs offer numerous benefits such as improved connectivity, productivity, and unprecedented access to information (de Wet & Koekemoer, 2016; Magsamen-Conrad et al., 2014; Quan-Haase et al., 2021), facilitating how individuals work, communicate, and engage with the world around them. On the other hand, a growing body of evidence highlights the potential adverse side of ICTs. Research has documented increased stress levels, decreased well-being, performance and challenges related to work-life balance (de Wet & Koekemoer, 2016; Jena, 2015; Marsh et al., 2022; Salepaki et al., 2025; Tarafdar et al., 2007). Consequently, ICTs have emerged as a

^{*} Corresponding author. Comenius University in Bratislava, Faculty of Arts, Gondova 2, P.O.BOX 32, 811 02, Bratislava, Slovakia.

E-mail addresses: stanerova1@uniba.sk (E. Štánerová), eva.roskova@uniba.sk (E. Rošková), milica.schraggeova@uniba.sk (M. Schraggeová), urukovicova1@uniba.sk (N. Urukovičová), smoron1@uniba.sk (J. Smoroň).

<https://doi.org/10.1016/j.ssaho.2025.101812>

Received 7 February 2025; Received in revised form 10 June 2025; Accepted 17 July 2025

Available online 22 July 2025

2590-2911/© 2025 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

pressing social concern (Gui & Büchi, 2021).

Incorporation of ICTs into professional roles is a key aspect of contemporary work (Kraus et al., 2023). However, the integration of digital tools into modern work practices often extends beyond formal working hours (Gadeyne et al., 2018; Marsh et al., 2022). As many occupations now require constant connectivity, employees may struggle to disengage from ICTs even during their leisure time, leading to prolonged cognitive activation and reduced opportunities for mental detachment (Sonntag & Fritz, 2015). Therefore, disconnection from ICTs outside of work is increasingly recognized as a vital component of psychological recovery for working adults (Sonntag et al., 2017).

The dependency on ICTs has catalysed interest in the concept of “digital detox” (Hager et al., 2023; Mirbabaie et al., 2020, 2022b; Nassen et al., 2023; Radtke et al., 2022; Syvertsen & Enli, 2019; Umasankar et al., 2022). The term “detox” itself, while widely used, is inconsistently defined in the literature, with alternative terms such as abstinence, break, disconnection, time-out, or unplugging often used interchangeably (Hager et al., 2023; Radtke et al., 2022). Despite these terminological variations, the underlying principle remains consistent: taking intentional time away from digital devices (Nassen et al., 2023; Syvertsen & Enli, 2019). This indicates that digital detox does not necessarily require a radical switch-off of ICTs but rather seeks to encourage individuals to find a sustainable balance that supports their well-being. Other motivations for digital detox include addressing personal overuse, enhancing social interactions, productivity, privacy, and feeling of perceived own usefulness (Nassen et al., 2023). This highlights the growing recognition of digital detox as a nuanced concept, emphasizing the need to move beyond mere disconnection and explore adaptable detox strategies (Mirbabaie et al., 2022b; Salepaki et al., 2025).

Despite growing scholarly interest, the ambiguity in defining and operationalizing digital detox is mirrored by gaps in understanding how to implement it. First, the current literature lacks an identification of *digital detox methods* or practices individuals can adopt to initiate and maintain digital detox. These methods—which we define as intentional adjustments aimed at reducing or eliminating the use of digital technologies—are essential for understanding the practical mechanisms by which individuals disengage from ICTs. Existing research has focused on tactics done by individuals, such as turning off digital devices or disabling notifications (Schmitt et al., 2021). However, the field lacks a framework that systematically presents potential methods.

Second, an equally critical oversight is the absence of *digital detox activities* or exploration what individuals can get engaged in during digital disconnection. While the importance of disconnecting is often emphasized (Nassen et al., 2023; Radtke et al., 2022), research rarely explores what individuals can do during these offline periods. Participating in offline activities, such as reading, exercising, or spending time in nature, can serve as alternatives to screen time (Anandpara et al., 2024; Pensar & Mäkelä, 2023; Sharma & Sharma, 2024). Providing clear options for offline engagement remains absent, limiting the potential of targeted interventions (Ramadhan et al., 2024).

Finally, an issue lies in the methodological inconsistencies of two key dimensions: level of detox and time horizon. The “level of detox” refers to the scope of the restriction of digital disengagement, which can range from complete disconnection (e.g., cessation of all ICT use) to selective avoidance (e.g., abstaining solely from social media). Similarly, the “time horizon” encompasses variations in the duration and frequency of disengagement periods. Studies often fail to address or standardize these dimensions, complicating the interpretation of findings and making it difficult to compare studies effectively (Radtke et al., 2022; Ramadhan et al., 2024).

These shortcomings are particularly relevant when evaluating the effectiveness of digital detox interventions. Radtke et al. (2022) captured mixed results in their systematic review, with most studies reporting no effect, but of those that did find a significant effect, it was predominantly favourable. For example, the most consistent findings

emerged in the reduction of depression (Radtke et al., 2022), supported by another meta-analysis (Ramadhan et al., 2024). Along with several methodological differences across studies included (e.g., different participant samples, lengths of digital detox, instruments for capturing outcome variables), we argue that the effectiveness of such interventions likely depends on two core components: the methods used to disconnect from technologies, and the activities undertaken during the detox period. Distinguishing between these two components is important, as both may differentially contribute to the outcomes of a detox intervention.

In this scoping review, we exploratory focus on non-work digital detox strategies – methods (what individuals can do to detoxify) and activities (what they can engage in during detox periods) that can be adopted outside the workplace. Unlike organizational-level interventions (e.g., corporate policies, mandated disconnection protocols; Eurofound, 2023; Mirbabaie et al., 2022b; Piszczek, 2017), that are often top-down and structurally enforced, non-work strategies remain understudied despite their critical role in supporting psychological recovery (Sonntag et al., 2017). Given the increasing digitalization of the workplace (Kraus et al., 2023) and its intrusion into personal time (Reimann et al., 2023; Vayre & Vonthron, 2019), disconnecting during working hours is often impractical due to job demands (Kraus et al., 2023; Marsh et al., 2022). Consequently, promoting digital detox strategies that are feasible during leisure time may offer a more accessible approach.

By systematically analysing existing literature, we aim to identify and classify non-work digital detox methods and activities, thereby providing a conceptual framework. We address these research questions (RQ).

RQ1: What are the non-work digital detox methods identified in the existing literature?

RQ2: What are the non-work digital detox activities highlighted in the existing literature?

2. Methods

The present scoping review was conducted and reported according to the *Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews* (PRISMA-ScR; Tricco et al., 2018).

2.1. Eligibility criteria

The studies included in the review were selected based on specific criteria, structured in line with the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, Research Type), which is considered suitable for mixed-methods research (Cooke et al., 2012).

- *Sample*: Only studies focusing on adult working population (i.e., individuals aged 18 or older and employed in any occupational sector) were eligible. Studies had to provide data on sample size and type. This sample was selected in line with the review’s conceptual grounding in workplace digitalization and its spillover into personal time, which creates a need to explore non-work digital detox strategies.
- *Phenomenon of Interest*: The review included studies providing non-work digital detox strategies, defined as specific methods (e.g., turning off devices, disabling notifications) or activities (e.g., reading, exercising) employed by individuals to intentionally reduce their use of ICTs outside the workplace. To ensure conceptual clarity, detox practices performable during working hours or within organizationally initiated interventions (e.g., email-free hours at work, company-mandated disconnection policies) were excluded. This decision stems from our aim to investigate personally initiated strategies that are feasible during leisure time.

- **Design:** Included studies had to present empirical findings, encompassing qualitative, quantitative, or mixed-methods designs. Grey literature, conceptual papers, editorials, and opinion pieces were excluded. Furthermore, studies that re-analysed existing datasets or presented duplicated data were excluded to avoid overlap.
- **Evaluation:** No restrictions were imposed on the types of outcome variables assessed, to allow for the inclusion of a wide spectrum indicators. Any outcomes were acceptable, although they had to be clearly stated.
- **Research Type:** Both interventional and non-interventional empirical studies were eligible, provided they reported on at least one digital detox method or activity as defined above. Studies focused solely on work-based interventions without any non-work component were excluded.

2.2. Information sources and search strategy

Two independent researchers conducted systematic electronic searches for relevant studies in each of the three databases: PubMed, Scopus, and Web of Science. The search terms were identified from previously published studies and derived from two key terms: “technology” and “detox”. The logical operators “OR” and “AND” were used to combine the terms, splitting the word string into two parts – one that focused on technology and another that focused on detox. The following word string was then used for the search: (*technology OR digital OR media OR device OR phone OR “digital overload” OR “technological overload” OR “digital stress” OR “technological stress”*) AND (*detox OR disconnect OR timeout OR unplug*).

We identified all studies that were indexed in the above databases and contained the terms in the title or abstract and were published in English in the last 10 years up to the date of the search, i.e., August 12, 2024. We achieved this by using the search filters “Title/Abstract” and “English” and limiting the publication date to “from 2014 to present (10 years)”. This range was implemented to capture the most recent evidence during a period characterized by rapid expansion of ICTs and the beginning of the recognition of digital detox as a concept, aligning with other systematic reviews in the field (e.g., [Pothuganti, 2024a](#); [Ramadhan et al., 2024](#)). Only peer-reviewed journal articles were considered; grey literature was excluded to ensure the methodological quality of included studies. This aligns with recommendations to prioritize peer-reviewed sources in literature reviews ([Pothuganti, 2024b](#)).

2.3. Selection process

We imported the studies identified in the search into the Covidence software, a screening and data extraction tool for conducting systematic reviews and meta-analyses. Duplicates were automatically removed. Two researchers then independently screened the titles and abstracts of all retrieved articles (referred to as *Title and Abstract Screening*) and assessed studies for eligibility. If a study met the pre-specified inclusion criteria, it was then passed on to the more detailed analysis (*Full Text Review*); if not, it was excluded. During the full-text reading, each study was again assessed against the inclusion criteria, and reasons for exclusion were recorded for all studies deemed unsuitable. Appropriate studies were referred for data extraction. In cases of disagreement between the two researchers at any stage of the selection process, a third researcher was consulted to make the final decision on inclusion or exclusion.

2.4. Data collection and items

Two researchers independently extracted data from the studies using the digital data collection form in Covidence. Any disagreements were assessed by a third researcher to reach a consensus. The extracted data could be divided into the following categories: (1) general information (e.g., author, year, country), (2) characteristics of included studies (e.g.,

aim, design, sample details, digital detox strategies, outcomes), and (3) final issues. The third category was used to document additional observations made by reviewers during the extraction but did not fit elsewhere. For the whole data extraction template see [Table S1](#) of the Supplementary material.

2.5. Study risk of bias assessment

To evaluate the risk of bias in the included studies, we utilized the Mixed Methods Appraisal Tool (MMAT; [Hong et al., 2018](#)). The MMAT begins with two screening questions to determine basic eligibility. Studies that pass this screening are assessed on five design-specific criteria for qualitative studies, quantitative randomized controlled trials, quantitative non-randomized studies, and quantitative descriptive studies. For mixed-methods studies, the appraisal extends to 15 items: five for the qualitative component, five for the quantitative component, and five additional items assessing the integration of the two methodologies.

The quality appraisal was conducted by two independent reviewers, with discrepancies resolved through consultation with a third researcher. Following MMAT guidelines, we avoided calculating overall scores and instead reported the proportion of criteria met for each study. This approach ensured a comprehensive assessment while maintaining the methodological diversity of the studies included. All studies that met the initial screening criteria were included in the review regardless of overall quality, in line with the inclusive nature of scoping reviews ([Tricco et al., 2018](#)). However, we noted quality concerns during interpretation.

2.6. Synthesis methods

We used descriptive and thematic synthesis approach, appropriate for scoping reviews covering a diverse body of literature ([Arksey & O'Malley, 2005](#); [Levac et al., 2010](#)). Quantitative, quantitative and mixed-methods studies that passed the selection process were processed using a segregated approach, treating each type of evidence separately during the initial synthesis and then combining data to construct a comprehensive classification of digital detox strategies ([Sandelowski et al., 2006](#)).

Descriptive synthesis was applied to summarize study characteristics, including general characteristics, design, sample, aim, outcomes measured, and presence of effect data.

Thematic synthesis was used to extract and categorize the digital detox strategies. This included inductive coding of detox-related content (methods and activities), development of preliminary codes, and grouping into overarching categories. The coding and categorization process was consensus-based, with team discussions to refine classifications and ensure internal consistency.

No statistical meta-analysis was conducted; therefore, methods for addressing heterogeneity or performing sensitivity analyses were not applied as the review aimed to map and classify digital detox strategies rather than assess their statistical robustness. All data were organized into text and tables for clarity and ease of comparison.

3. Results

3.1. Study selection

As illustrated in [Fig. 1](#), a total of 6122 studies were retrieved, of which 1455 were duplicates and 4629 studies were excluded after screening titles and abstracts. After full text review, 26 studies were excluded for not meeting the inclusion criteria (see [Fig. 1](#) for the reasons). Subsequently, 12 studies were moved to the extraction or final scoping review section. These studies were the most relevant to our objective – they contained non-work digital detox methods and/or activities for the adult working population.

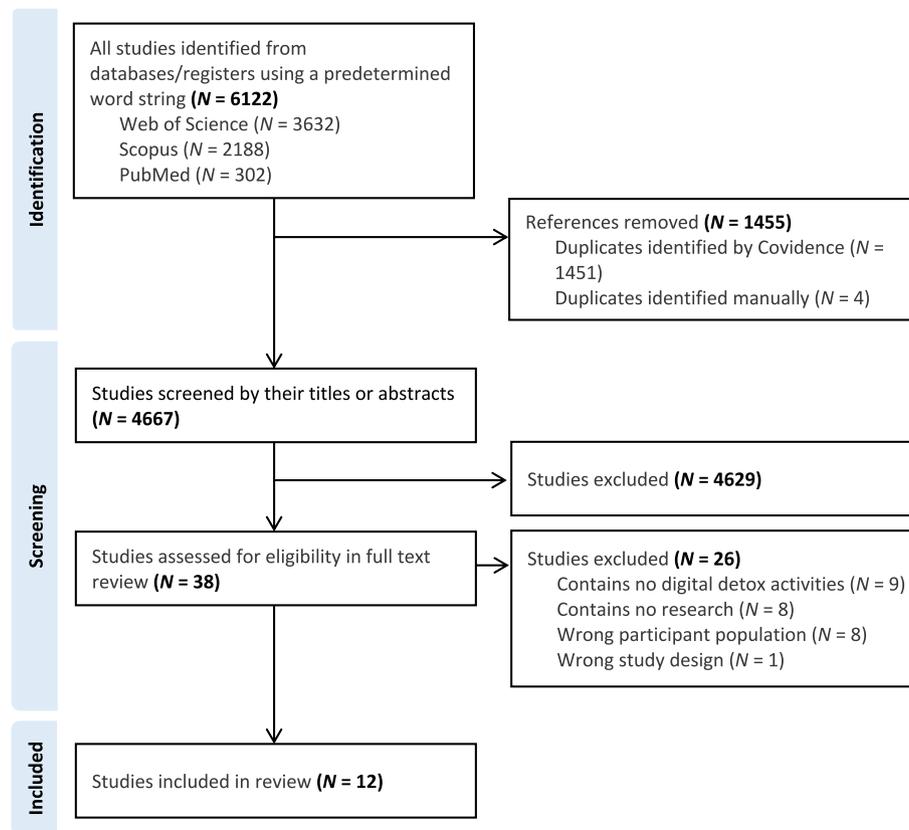


Fig. 1. Flow diagram.

3.2. Study characteristics

General information. All studies were published between 2019 and 2024. Five studies were conducted in Germany (Keller et al., 2021; Marx et al., 2022; Mirbabaie et al., 2022a; Schmitt et al., 2021; Schmuck, 2020), two studies each in Australia (Gill et al., 2019; Paris et al., 2022) and Belgium (Vanden Abeele & Nguyen, 2023; Verlinden et al., 2024) and one each in the United Kingdom (Brown & Kuss, 2020), The Netherlands (Nguyen & Hargittai, 2023), and Norway (Syvertsen, 2022).

Study designs. Six studies were quantitative, three were qualitative, and three utilized mixed methods. Among the quantitative studies, four were quantitative descriptive, one employed a non-randomized controlled trial design, and one was a randomized controlled trial.

Research samples. The total research sample size across studies was 3040 participants, with individual study sample sizes ranging from 7 to 1000 participants. The mean age was 32.59 years ($SD = 9.89$). However, four studies did not report participants' age, therefore the calculated mean age reflects the remaining studies with available data. Gender distribution was noted, with women representing 58 % of the total sample. One study did not provide information about gender, which may result in minor imprecision in the overall gender distribution. Samples included diverse groups such as knowledge workers, teleworkers, artists, and spiritual retreat attendees, offering broad insights into digital detox interventions.

Main outcome variables and results. Outcomes measured across studies can be categorized into several key domains. Regarding specific psychological variables, well-being was evaluated in six studies. However, only one of these explicitly assessed effects pre- and post-intervention. Fear of missing out was addressed in two studies, with one confirming pre- and post-intervention data collection. The relaxed mental state was investigated in one study which provided also pre- and post-intervention data. Other psychological variables, such as stress, social connectedness,

detachment or concentration, were also assessed, but no effect data were provided.

Workplace-related outcomes included planning, self-efficacy, job performance, job satisfaction, cognitive overload, work/home protection preference, polychronicity, responsiveness, availability demands, and work-to-home interference. Among these, work performance was assessed in two studies, though only one provided data on effects. Notably, effects were also measured for planning, self-efficacy, and job satisfaction.

Technology-related behaviours, such as social media use, smartphone use, ICT availability demands, and the use of digital device tools, were explored across multiple studies using diverse approaches. However, these outcomes were often conceptualized and labelled differently, making it challenging to harmonize findings and draw consistent conclusions. Among these variables, problematic smartphone use was the only one assessed in two studies, with one of them also providing pre- and post-intervention data. For the remaining variables, see Table 1.

3.3. Results of individual studies

The relevant data of individual studies, charted in alignment with the review objectives, are presented in Table 1. For additional details regarding specific digital detox strategies from each study, as well as all extracted data, refer to Table S2 (Supplementary material).

3.4. Synthesis of results

The synthesis of digital detox methods is presented in Table 2. Method examples extracted from the included studies were classified into six categories. Each category represents a group of comparable practices that can be utilized to implement a digital detox.

The synthesis of digital detox activities is illustrated in Table 3. This includes seven categories containing activity examples that can be

Table 1
Characteristics of the studies included.

Study	Design	Sample	Aim	Measures	Effect data
Brown and Kuss (2020)	mixed methods	$N = 61$ (67.21 % women) Specifics: general population Age: $M = 24.4$; $SD = 4.95$	to compare the effects of social media abstinence on fear of missing out, mental well-being, and social connectedness, measuring social media use with smartphone applications	<ul style="list-style-type: none"> • social media use • smartphone use • other device social media use • fear of missing out • mental well-being • social connectedness 	yes
Gill et al. (2019)	mixed methods	$N = 268$ (33 % women) Specifics: spiritual retreats attendees Age: mostly aged over 50	(1) to identify the environmental attributes, activities and experiences that lead to immediate restorative outcomes during the retreat, and (2) to identify whether they predict continuing effects two weeks after the retreat, and (3) to explore the impact of post-retreat level of stress on the restorative outcomes	<ul style="list-style-type: none"> • retreat activities • retreat experiences • immediate restorative outcomes (relaxation, recovery, reflection) • relaxed mental state (RMS) • attention recovery and reflection • perceived stress 	yes, for RMS
Keller et al. (2021)	quantitative	$N = 232$ (88.36 % women) Specifics: general population Age: $M = 29.62$; $SD = 8.09$	(1) to evaluate the effectiveness of the intervention condition in decreasing problematic smartphone use, daily smartphone unlocks, and time of daily smartphone use, and (2) to explore the psychological mechanisms of the intervention (self-efficacy and planning) through comparison with the active control condition	<ul style="list-style-type: none"> • problematic smartphone use • daily smartphone unlocks • daily minutes of smartphone use • planning • self-efficacy • perceived impact of the program 	yes
Marx et al. (2022)	qualitative	$N = 10$ (70 % women) Specifics: knowledge workers Age: $M = 28.8$; $SD = 3.43$	to identify motivators of knowledge workers to conduct digital detox in knowledge workers	<i>motivators for digital detox</i>	no
Mirbabaie et al., (2022a)	quantitative	$N = 43$ (81.4 % women) Specifics: knowledge workers Age: $M = 23.86$; $SD = 4.05$	to identify the impact of digital detox on ICT availability demands, job performance and job satisfaction in knowledge workers	<ul style="list-style-type: none"> • ICT availability demands • job performance • job satisfaction 	yes
Nguyen and Hargittai (2023)	quantitative	$N = 105$ (68.6 % women) Specifics: general population Age: $M = 40.10$; $SD = 13.10$	(1) to examine how disconnection practices relate to well-being and, (2) to assess how those are dependent on people's digital skills	<ul style="list-style-type: none"> • disconnection • well-being 	no
Paris et al. (2022)	qualitative	$N = 7$ (100 % women) Specifics: art educators or artists Age: not mentioned	to employ a "Digital Sabbath" intervention (a practice of regularly unplugging from all technology) to increase well-being in arts teachers	<ul style="list-style-type: none"> • well-being 	no
Schmitt et al. (2021)	quantitative	$N = 403$ (64.27 % women) Specifics: teleworkers Age: $M = 38.93$; $SD = 17.49$	to analyse the relationships between the use of digital work tools, the feeling of cognitive overload, digital detox measures, perceived work performance, and well-being	<ul style="list-style-type: none"> • use of digital work tools • cognitive overload • perceived work performance • digital detox • well-being 	no
Schmuck (2020)	quantitative	$N = 500$ (57.8 % women) Specifics: young adults Age: $M = 22.37$; $SD = 3.47$	to investigate the relationships between using social networking sites, problematic smartphone use, and well-being	<ul style="list-style-type: none"> • mobile use of social networking sites • problematic smartphone use • well-being • digital detox app use 	no
Syvertsen (2022)	qualitative	$N = 10$ (% of women not mentioned) Specifics: initiatives that design opportunities for others to go offline Age: not mentioned	to contribute to a nuanced understanding of how offline initiatives are framed in various domains and the complex relationship between individual and collective action (what observations and problem definitions trigger participants to act, how are offline activities linked to fundamental values and motivational narratives, which paths are prescribed for action, and to what degree do participants see their actions as part of a common cause)	<i>offline activism perspectives</i>	no
Vanden Abeele and Nguyen (2023)	quantitative	$N = 1000$ (51.5 % women) Specifics: general population Age: 18–65, almost equally distributed	to understand how individuals experience and navigate the challenge of digital well-being (to what extent do people experience digital well-being, practice digital disconnection, whether is digital disconnection associated with digital well-being, to what extent can we identify different groups of people in their experience of digital well-being, and how do these groups differ in terms of socio-demographics, personality characteristics and device ownership and media use)	<ul style="list-style-type: none"> • digital well-being • individual disconnection strategies • group- and institution-level disconnection strategies • device ownership and use • fear of missing out 	no
Verlinden et al. (2024)	mixed methods	$N = 401$ (61 % women) Specifics: employees with heterogeneous profiles in terms of occupational background Age: $M = 41$; $SD = 12$	to validate the Employee Digital Disconnection Scale (EDDS), a multifaceted measurement tool that captures various disconnective behaviours	<ul style="list-style-type: none"> • home and work protection preference • polychronicity • responsiveness • availability demands • work-to-home interference • psychological detachment • concentration 	no

Table 2
Categorization of digital detox methods enabling disconnection from ICTs.

Category	Methods examples	Supporting studies
device restriction methods	mobile phone-free day; no smartphone; not using computers; offline mode device; offline weeks; place devices screen down; put a phone on silent mode; screen-free weeks; switch off devices; the digital sabbath intervention; turn the device off; turn off the internet (disable internet connection)	Marx et al. (2022); Nguyen and Hargittai (2023); Paris et al. (2022); Schmitt et al. (2021); Syvertsen (2022); Vanden Abeele and Nguyen (2023); Verlinden et al. (2024)
app control	abstinence from social media; avoiding social media; close programs/apps; remove time-consuming apps	Brown and Kuss (2020); Nguyen and Hargittai (2023); Schmitt et al. (2021); Vanden Abeele and Nguyen (2023); Verlinden et al. (2024)
notifications management	mute the notifications; turn off (disable) notifications; use absence messages; use status features (“unavailable”)	Marx et al. (2022); Mirbabaie et al. (2022a); Nguyen and Hargittai (2023); Vanden Abeele and Nguyen (2023); Verlinden et al. (2024)
time management methods	clearly defined intervals of media use; no technologies during breaks; set a fixed time in a calendar when not to be disturbed	Marx et al. (2022); Mirbabaie et al. (2022b); Nguyen and Hargittai (2023); Schmitt et al. (2021); Vanden Abeele and Nguyen (2023)
self-regulation and agreements	communicate; create digital detox moments to deliberately distance from devices; deliberately reading email only a few times a day take a break from digital media; do not check email/messages/phone calls after working hours; ignore notifications/links; inform others; leave phone out of the bedroom; leave the phone unattended; limit digital media without any specific approach; make agreements; put technologies away; tell yourself not to use/look at the digital media	Mirbabaie et al. (2022a); Nguyen and Hargittai (2023); Schmitt et al. (2021); Vanden Abeele and Nguyen (2023); Verlinden et al. (2024)
monitoring tools	digital detox app (e.g., OS Screen Time, Android Digital Well-Being, Moment, Forest etc.); Hold app (smartphone app); Not Less But Better (smartphone app); Remarkable (a tablet defined to feel like papier with minimal distractions); screen time monitoring app	Keller et al. (2021); Schmuck (2020); Syvertsen (2022); Vanden Abeele and Nguyen (2023)

undertaken during a digital detox. Some of these examples were derived from the included studies, while others were proposed based to enrich the variety and scope of examples.

3.5. Quality assessment

The methodological quality assessment, with ratings for each criterion based on the MMAT (Hong et al., 2018), is presented in Table S3 (Supplementary material). Overall, the studies demonstrated high quality. For quantitative studies ($N = 6$), four achieved full compliance with all MMAT criteria. The remaining two studies exhibited limitations, specifically in controlling for confounders (Mirbabaie et al., 2022a) and ensuring blinded outcome assessors (Keller et al., 2021). Among the qualitative studies ($N = 3$), all consistently met the criteria. In the case of

mixed methods studies ($N = 3$), one study fulfilled all MMAT criteria, while the other two showed limitations in the quantitative component. Specifically, these studies lacked sufficient information to determine whether the sample was representative of the target population (Brown & Kuss, 2020; Gill et al., 2019).

4. Discussion

The present scoping review aimed to map digital detox strategies performable outside of work, as the existing literature underscores the importance of incorporating non-work practices into digital detox interventions. For instance, Sonnentag and Fritz (2015) emphasized the need for recovery experiences during non-work hours, such as physical detachment from work-related technologies, in reducing stress and enhancing well-being. Addressing this, digital detox programs that prioritize non-work strategies offer individuals opportunities for genuine restoration beyond the workplace. Based on clearly defined criteria, we identified 12 studies that included methods and/or activities for digital detox. All studies were conducted between 2019 and 2024, highlighting the timeliness and relevance of the research topic (Syvertsen & Enli, 2019) as well as the novelty of this review.

To the best of our knowledge, this represents the first review of digital detox strategies in their unique combination – methods and activities. While considerations of such conceptualizations have been indicated in prior literature, a comprehensive classification has not been presented until now. Mirbabaie et al., (2022b) framed digital detox options as coping strategies in line with the transactional theory of stress (Lazarus & Folkman, 1984), categorizing them as either emotion-focused or problem-focused strategies. While this approach is valuable as it aligns with literature on technostress (Pothuganti, 2024a; Sonnentag & Fritz, 2015), we contend that the term “strategies” remains too broad and necessitates further specification. In the case of Mirbabaie et al., (2022b), methods and activities are combined under the same umbrella term, which may complicate future evaluations of their effectiveness due to differing construct influences on the execution of digital detox. Similarly, Anandpara et al. (2024) or Pensar and Mäkelä (2023) in their categorizations did not distinguish between the methods and activities we proposed, leaving the constructs insufficiently delineated. This lack of differentiation poses challenges for the conceptual clarity and subsequent assessment of digital detox interventions.

4.1. Digital detox methods

The categorization of digital detox methods into six groups offers a practical framework for various approaches to managing technology use. Each category reflects a unique aspect of behaviour modification and technological interaction. *Device restriction methods* focus on physical or systemic limitations to access, such as turning off devices or implementing offline periods (e.g., Marx et al., 2022; Syvertsen, 2022), directly targeting digital availability. This method has been investigated in interventions like the “digital sabbath” (Paris et al., 2022), which showed promise in enhancing well-being. In contrast, *app control* emphasizes selective engagement by reducing the use of specific applications or platforms. For example, Brown and Kuss (2020) in their quantitative study part captured a significant decrease in fear of missing out and a significant increase in mental well-being and social connectedness after social media abstinence. *Notifications management*, including turning off push-notifications, addresses the disruptive nature of real-time alerts, aiming to minimize interruptions and enhance focus. *Time management methods*, such as setting boundaries during breaks, encourage intentional scheduling to balance digital and offline activities. *Self-regulation and agreements*, such as not checking emails after work, rely on individual commitments and social norms to foster discipline and mindful use. These three kinds of methods have been examined in the study by Mirbabaie et al., (2022a) who found out that these methods by themselves were able to predict job performance

Table 3
Categorization of digital detox activities which can be carried out during the digital detox period.

Category	Activities examples	Supporting studies
physical activities	biking; cycling ^a ; dancing ^a ; hiking; indoor sports (e.g., badminton, football, tennis etc.) ^a ; outdoor activities/sports; pilates ^a ; running ^a ; swimming ^a ; weight training ^a ; yoga ^a	Gill et al. (2019); Schmitt et al. (2021); Syvertsen (2022)
social activities	meeting friends or family in person ^a ; offline camps ^b ; offline trips ^b ; playing board games; talking to people; visiting a café or restaurant in the company of other people ^a	Brown and Kuss (2020); Gill et al. (2019); Schmitt et al. (2021); Syvertsen (2022)
creative activities	being creative; cooking; drawing ^a ; embroidering ^a ; gardening; handcrafting ^a ; housework; needlepoint ^a ; painting ^a ; writing ^a	Gill et al. (2019); Paris et al. (2022); Schmitt et al. (2021)
relaxation and lifestyle	deep breathing ^a ; long bath ^a ; massages ^a ; meditation; mindfulness; reflection; solitary activities; spiritual activities; wellness ^a	Gill et al. (2019); Schmitt et al. (2021)
stay with nature	bird watching ^a ; offline camps ^b ; offline trips ^b ; spending time in nature; picnics ^a ; time with pets ^a ; walks in the fresh air	Gill et al. (2019); Paris et al. (2022); Syvertsen (2022)
personal growth	mental activities; participating in workshops ^a ; personal development activities; reading books; studying from printed sources ^a	Brown and Kuss (2020); Gill et al. (2019)
cultural entertainment	entertainment; visiting a festival ^a ; gallery ^a ; historical places ^a ; museum ^a ; theatre ^a	Gill et al. (2019)

Note.

^a Additional activity suggestions.

^b Indicates the same activity listed in multiple categories.

significantly. Lastly, *monitoring tools* leverage technological solutions, such as digital detox apps or features, to track and regulate screen time. Keller et al. (2021) indicated that using such an app was useful in lowering problematic smartphone use as well as time spent with the smartphone. Similarly, Schmuck (2020) suggested that this can serve as a prevention of harmful relationships between using social networking sites, problematic smartphone use, and well-being.

Additional studies – although not included in this review due to broader scope or differing eligibility criteria – indicate the relevance of digital detox methods for enhancing well-being among the working adult population in non-work contexts. Device restriction has been linked to increased psychological detachment. For example, Lanaj et al. (2014) found that smartphone use for work during night-time increased depletion the next morning via its effects on sleep. Restricting mobile phone use before bedtime might help, as it can reduce sleep latency and pre-sleep arousal, while increasing sleep duration, sleep quality, positive affect, and working memory (He et al., 2020). In this regard, restricting device use outside of work hours may support more restorative recovery.

Another category is app control, most applied on social media. In the context of work, Yue's (2022) demonstrated that after-hours work-related social media use can both enhance organizational identification and work engagement, but also increase work-family conflict, which negatively influenced engagement. From this perspective, app control targeting work-related platforms outside work hours can help protect psychological boundaries. However, when applied more broadly—such as in general social media abstinence—findings remain mixed. A meta-analysis by Lemahieu et al. (2025) found only small and inconsistent effects on affective well-being and life satisfaction, suggesting that blanket restrictions may not benefit all users equally. Nevertheless, app control should not be limited to social media, but can be relevant for other digital content sources such as news apps to reduce information overload (Volk et al., 2025), which makes it still a relevant method for digital detox and its applicability should be considered.

Notifications management, time management, and self-regulation all share a common focus, as these methods aim to minimize the constant connectivity. Kushlev and Dunn (2015) demonstrated the effectiveness of such approaches, showing that participants who limited checking notifications to three designated times per day reported significantly lower stress levels and higher well-being compared to those who responded to notifications as they arrived. This finding highlights how intentional structuring of one's digital environment—whether through silencing notifications, allocating tech-free time slots, or adhering to personal or collective agreements (e.g., no emails after work)—can facilitate psychological recovery (Brockmeier et al., 2025; Tedone, 2022).

Monitoring tools, such as screen time tracking apps, represent

another method that can support digital detox. Evidence suggests that such tools can reduce screen time, which has been linked to positive psychological outcomes. For example, Schraggeová and Bisaha (2025) found that participants using the MinimalistPhone app—a tool designed to disrupt automatic smartphone use by increasing cognitive effort and removing habitual triggers—demonstrated reductions in both habitual use and overall screen time over a 14-day period. While the intervention did not significantly influence affective states, it highlights the potential of monitoring tools. This is particularly important given findings by Anderl et al. (2023), who showed that higher smartphone use predicted lower psychological well-being and decreased social connectedness. Taken together, these additional studies underscore the relevance of various digital detox methods as approaches for reducing digital overload and supporting well-being among working adults in non-work contexts.

4.2. Digital detox activities

The categorization of digital detox activities into seven groups provides a structured framework for understanding the general types of offline behaviours individuals tend to engage in during digital detox periods. The identified categories include physical activities, social activities, creative activities, relaxation and lifestyle practices, stay with nature, personal growth, and cultural entertainment. Many of the proposed activities have been shown to promote well-being or work-related outcomes (Aziz et al., 2023; Brailovskaia et al., 2024; Brossoit et al., 2024; Dallmeyer et al., 2023; Sonnentag & Fritz, 2015; Sonnentag et al., 2017). For instance, leisure-time physical activity has been shown to have a positive effect on job satisfaction, with health improvements acting as a mediating mechanism, and work stress as a moderator (Dallmeyer et al., 2023). Supporting this, Brailovskaia et al. (2024) experimentally demonstrated that reducing daily non-work-related smartphone use and/or increasing physical activity for one week improved employees' work satisfaction, motivation, work-life balance, and mental health, while also reduced depressive symptoms, work overload, and problematic smartphone use. Aziz et al. (2023) found that participation in leisure activities such as mindfulness, physical activity, or vacation served to buffer the relationship between workaholism and work stress. These findings indicate that non-work digital detox activities can produce spillover effects into the occupational domain.

Gill et al. (2019) addressed all these categories in their study, though they referred to them collectively as “retreat activities.” Their findings showed that social activities were the strongest predictors of continuing restorative outcomes. Including such activities in digital detox programs is particularly important, given their potential to counteract unintended consequences of detox interventions, such as increased fear of missing

out (Radtke et al., 2022). For example, participating in face-to-face social activities, such as playing board games, can counterbalance this effect by fostering social connectedness (Brown & Kuss, 2020). Furthermore, Gill et al. (2019) found that engaging in spiritual and reflective practices – categorized here as “relaxation and lifestyle activities” – were the strongest predictors of immediate restorative outcomes. This finding supports the assumption that activities grouped within a single category often exhibit comparable effects, underscoring the utility of this classification system in guiding digital detox strategies.

4.3. Heterogeneity

Heterogeneity represents a significant difficulty in synthesizing findings from studies on digital detox strategies. Potential sources of heterogeneity include differences in the methods employed for detox, varying from self-directed strategies such as time management and app restrictions (e.g., Keller et al., 2021; Mirbabaie et al., 2022a) to more guided approaches like digital detox retreats (e.g., Syvertsen, 2022). Additionally, the types of activities participants engage in during detox periods – such as physical exercise or social interactions – can differ substantially, influencing the outcomes observed (Gill et al., 2019).

Another source of heterogeneity lies in the level of detox, which varied from complete disconnection from all digital technologies (e.g., Mirbabaie et al., 2022a; Paris et al., 2022) to selective abstention from specific platforms or devices (e.g., Brown & Kuss, 2020; Schmitt et al., 2021). Comprehensive detoxes, which require total disconnection, may lead to more pronounced changes in well-being but are often challenging to implement in modern, technology-reliant lifestyles (Kraus et al., 2023). In contrast, selective detoxes allow participants to target specific sources of digital stress while maintaining access to essential or less disruptive tools, potentially making these approaches more feasible (Radtke et al., 2022).

A further notable dimension of heterogeneity is the time horizon of the detox, encompassing both the duration and frequency of the intervention. Duration refers to the length of each detox session, which ranged from brief periods, such as 1-h time-outs over 20 days (Keller et al., 2021), to extended periods like 1 whole week without social media (Brown & Kuss, 2020). Frequency captures how often detox interventions are implemented, whether daily, weekly, or sporadically. These variations contribute to differing outcomes. For instance, Radtke et al. (2022) highlighted that studies addressing these factors often reported mixed results, with longer and more frequent detoxes being more likely to show a positive effect, though these effects may depend on the specific context, constructs and population studied (Ramadhan et al., 2024).

4.4. Effectiveness of digital detox strategies

Evaluating the effectiveness of digital detox strategies remains challenging. One key issue lies in the diversity of measured outcomes across studies, which rarely overlapped, making it difficult to draw consistent conclusions about effectiveness. Well-being emerged as the most measured outcome, appearing in six studies; however, only one employed a design capable of rigorously assessing the effectiveness. This points to the need for more robust, standardized methodologies in future research to enable meaningful comparisons.

None of the included studies directly examined the effect of detox activities, highlighting a critical gap in the existing literature. For instance, while Brown and Kuss (2020) provided pre- and post-intervention data, the digital detox activities mentioned were reported in the qualitative part of their study and referenced by only one participant, making it difficult to draw conclusions about their effectiveness. However, the number of digital detox strategies used may influence their observed effects. Schmitt et al. (2021) found that the number of strategies moderated the relationship between perceived cognitive overload and perceptions of work demands among users of

videoconferencing tools. This suggests that a more comprehensive application of strategies might enhance their overall effectiveness, underscoring the need for further empirical investigation in this area.

4.5. Methodological quality

The methodological quality of the included studies, evaluated using the MMAT (Hong et al., 2018), was generally high, indicating a solid foundation for the findings. However, potential biases were primarily identified in the quantitative studies. Specifically, the lack of control for confounding variables and the absence of blinding in outcome assessment were notable limitations, which align with methodological challenges reported in prior reviews of digital detox interventions (Radtke et al., 2022). In mixed-methods studies, these issues were similarly observed within the quantitative components, particularly regarding insufficient detail on participant representativeness. These gaps highlight the importance of improving methodological rigor and transparency, especially in quantitative designs, to minimize bias and strengthen the evidence base for evaluating digital detox strategies.

4.6. Limitations

It is essential to consider the limitations of our review alongside those of the studies included. One limitation of the review lies in its focus on categorization rather than direct evaluation of the effectiveness of digital detox strategies. While the review provides a robust framework for digital detox methods and activities, it does not empirically test their impact on key outcomes such as well-being, productivity, or stress reduction. Second limitation is the categorization was based on qualitative synthesis, which might introduce subjective bias in the classification process. Third is the inability to systematically analyse how different digital detox levels (e.g., complete vs. selective) or time horizons influence results due to the methodological diversity and varying outcomes hindered. Although evidence suggests that more extensive, longer and more frequent interventions may yield stronger benefits (Radtke et al., 2022; Ramadhan et al., 2024), the lack of standardized study designs limits definitive conclusions.

Regarding the limitations of the included studies, one key issue is the absence of a consistent methodological approach. Many lacked experimental designs, with only one study implementing randomization, complicating to assess the effectiveness of digital detox strategies. Most studies relied on self-reported data, which is prone to biases. Additionally, the effectiveness was often inferred indirectly or discussed qualitatively, with no standardized metrics to evaluate outcomes. Finally, variability in study settings, participant demographics, and the operationalization of “digital detox” creates challenges for cross-study comparisons and the development of universally applicable recommendations (Hager et al., 2023; Radtke et al., 2022).

In terms of the scope of included studies, we acknowledge that a broader dataset may allow for more nuanced insights. However, the inclusion of only 12 studies was a result of applying clearly defined eligibility criteria focused on adult working population and the presence of identifiable digital detox methods or activities. Including additional studies that did not meet these core criteria would have diluted the specificity and comparability of the findings. Nevertheless, we addressed this by incorporating a richer contextual discussion and drawing on relevant evidence from outside the final sample.

4.7. Implications and further research

A key contribution of this review is the categorization of digital detox strategies into distinct groups, including both methods of disconnection and complementary offline activities. This typology provides an evidence-informed framework that can guide the design of both individual practices and future interventions. In line with recent theoretical work by Marx et al. (2025), which highlights the need for integrated

frameworks for studying digital detox, our classification offers a foundation for systematically examining which strategies are most effective.

The relevance of digital detox strategies is further supported by recent findings on the negative impact of digital environments on employee well-being (Marsh et al., 2022), including phenomena such as digital harassment (Pothuganti, 2025). While our focus lies outside of the workplace setting, our review contributes to this broader discourse by highlighting individual-level approaches that may serve as protective factors against digital strain.

While this review did not directly evaluate the effectiveness of digital detox strategies, existing literature suggests their positive effects on well-being and workplace-related outcomes (Anandpara et al., 2024). A critical finding of this review is the importance of not only promoting disconnection from ICTs but also providing participants with activity options during detox periods. Without offline alternatives, the impact of digital detox interventions may be limited (Pensar & Mäkelä, 2023; Ramadhan et al., 2024).

Finally, future research should aim to expand the evidence base. Broader reviews may be warranted to explore cross-population dynamics, intervention designs or long-term outcomes. Our classification system may serve as a starting point for such efforts and for developing theoretically grounded, empirically testable intervention models.

5. Conclusion

This scoping review provides a structured overview of non-work digital detox strategies, distinguishing between methods (intentional approaches to disconnecting) and activities (alternative engagements during detox periods). Our synthesis highlights the diversity of approaches and the current lack of conceptual clarity in the field. By offering a novel categorization framework, this review lays the groundwork for practical applications and future empirical research aimed at enhancing digital well-being.

CRedit authorship contribution statement

Emilia Štánerová: Writing – original draft, Methodology, Formal analysis, Conceptualization, Writing – review & editing, Resources, Investigation, Data curation. **Eva Rošková:** Supervision, Investigation, Formal analysis, Conceptualization, Writing – review & editing, Methodology, Funding acquisition, Data curation. **Milica Schrageová:** Supervision, Investigation, Formal analysis, Conceptualization, Writing – review & editing, Methodology, Funding acquisition, Data curation. **Nina Urukovićová:** Writing – review & editing, Investigation, Conceptualization, Methodology, Data curation. **Jozef Smoroň:** Writing – review & editing, Investigation, Methodology, Data curation.

Funding

This work was supported by the Scientific Grant Agency Ministry of Education, Science, Research and Sport of the Slovak Republic and Slovak Academy of Sciences [contract no. VEGA – 1/0566/24]; and the Interreg Central Europe [grant number CE0200521].

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssaho.2025.101812>.

References

- Anandpara, G., Kharadi, A., Vidja, P., Chauhan, Y., Mahajan, S., & Patel, J. (2024). A comprehensive review on digital detox: A newer health and wellness trend in the current era. *Cureus*, 16(4), Article e58719. <https://doi.org/10.7759/cureus.58719>
- Anderl, C., Hofer, M. K., & Chen, F. S. (2023). Directly-measured smartphone screen time predicts well-being and feelings of social connectedness. *Journal of Social and Personal Relationships*, 41(5). <https://doi.org/10.1177/02654075231158300>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory & Practice*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Aziz, S., Meier, B., Wuensch, K., & Dolbier, C. (2023). Take a break! leisure participation moderates the workaholism-work stress relationship. *The Career Development Quarterly*, 71(4), 315–329. <https://doi.org/10.1002/cdq.12336>
- Brailovskaia, J., Siegel, J., Precht, L. M., Friedrichs, S., Schillack, H., & Margraf, J. (2024). Less smartphone and more physical activity for a better work satisfaction, motivation, work-life balance, and mental health: An experimental intervention study. *Acta Psychologica*, 250, Article 104494. <https://doi.org/10.1016/j.actpsy.2024.104494>
- Brockmeier, L. C., Keller, J., Dingler, T., Padaszyska, N., Luszczynska, A., & Radtke, T. (2025). Planning a digital detox: Findings from a randomized controlled trial to reduce smartphone usage time. *Computers in Human Behavior*, 168, Article 108624. <https://doi.org/10.1016/j.chb.2024.108624>
- Brossoit, R. M., Crain, T. L., Leslie, J. J., Fisher, G. G., & Eakman, A. M. (2024). Engaging with nature and work: Associations among the built and natural environment, experiences outside, and job engagement and creativity. *Frontiers in Psychology*, 14, Article 1268962. <https://doi.org/10.3389/fpsyg.2023.1268962>
- 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), 4566. <https://doi.org/10.3390/ijerph17124566>
- Castells, M. (2010). *The rise of the network society* (2nd ed.). Wiley. <https://doi.org/10.1002/9781444319514>
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10), 1435–1443. <https://doi.org/10.1177/1049732312452938>
- Dallmeyer, S., Wicker, P., & Breuer, C. (2023). The relationship between leisure-time physical activity and job satisfaction: A dynamic panel data approach. *Journal of Occupational Health*, 65(1), Article e12382. <https://doi.org/10.1002/1348-9585.12382>
- de Wet, W., & Koekemoer, E. (2016). The increased use of information and communication technology (ICT) among employees: Implications for work-life interaction. *South African Journal of Economic and Management Sciences*, 19(2). <https://doi.org/10.4102/sajems.v19i2.1328>. Article a1328.
- Eurofound. (2023). *Right to disconnect: Implementation and impact at company level*. Publications Office of the European Union. <https://www.eurofound.europa.eu/en/publications/2023/right-disconnect-implementation-and-impact-company-level>.
- Gadeyne, N., Verbruggen, M., Delanoëije, J., & De Cooman, R. (2018). All wired, all tired? Work-related ICT-use outside work hours and work-to-home conflict: The role of integration preference, integration norms and work demands. *Journal of Vocational Behavior*, 107, 86–99. <https://doi.org/10.1016/j.jvb.2018.03.008>
- Gill, C., Packer, J., & Ballantyne, R. (2019). Spiritual retreats as a restorative destination: Design factors facilitating restorative outcomes. *Annals of Tourism Research*, 79, Article 102761. <https://doi.org/10.1016/j.annals.2019.102761>
- Gui, M., & Büchi, M. (2021). From use to overuse: Digital inequality in the age of communication abundance. *Social Science Computer Review*, 39(1), 3–19. <https://doi.org/10.1177/0894439319851163>
- Hager, N., Stangl, F. J., & Riedl, R. (2023). *Digital detox research: An analysis of applied methods and implications for future studies*. Germany: International Conference on Wirtschaftsinformatik, Paderborn [Conference paper] <https://aisel.aisnet.org/wi2023/5>.
- He, J. W., Tu, Z. H., Xiao, L., Su, T., & Tang, Y. X. (2020). Effect of restricting bedtime mobile phone use on sleep, arousal, mood, and working memory: A randomized pilot trial. *PLoS One*, 15(2), Article e0228756. <https://doi.org/10.1371/journal.pone.0228756>
- Hong, Q. N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O' Cathain, A., Rousseau, M.-C., & Vedel, I. (2018). *Mixed Methods Appraisal Tool (MMAT), version 2018*. Registration of Copyright (#1148552), Canadian Intellectual Property Office. *Industry Canada*.
- Jena, R. K. (2015). Technostress in ICT enabled collaborative learning environment: An empirical study among Indian academician. *Computers in Human Behavior*, 51(Part B), 1116–1123. <https://doi.org/10.1016/j.chb.2015.03.020>
- Keller, J., Roitzheim, C., Radtke, T., Schenkel, K., & Schwarzer, R. (2021). A mobile intervention for self-efficacious and goal-directed smartphone use in the general population: Randomized controlled trial. *JMIR mHealth and uHealth*, 9(11), Article e26397. <https://doi.org/10.2196/26397>
- Kraus, S., Ferraris, A., & Bertello, A. (2023). The future of work: How innovation and digitalization re-shape the workplace. *Journal of Innovation & Knowledge*, 8(4), Article 100438. <https://doi.org/10.1016/j.jik.2023.100438>
- Kushlev, K., & Dunn, E. W. (2015). Checking email less frequently reduces stress. *Computers in Human Behavior*, 43, 220–228. <https://doi.org/10.1016/j.chb.2014.11.005>
- Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the workday yet already depleted? Consequences of late-night smartphone use and sleep. *Organizational Behavior and Human Decision Processes*, 124(1), 11–23. <https://doi.org/10.1016/j.obhdp.2014.01.001>

- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Lemahieu, L., Vander Zwalm, Y., Mennes, M., Koster, E. H. W., Vanden Abeele, M. M. P., & Poels, K. (2025). The effects of social media abstinence on affective well-being and life satisfaction: A systematic review and meta-analysis. *Scientific Reports*, 15(1), 7581. <https://doi.org/10.1038/s41598-025-90984-3>
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5, 69. <https://doi.org/10.1186/1748-5908-5-69>
- Magsamen-Conrad, K., Billotte-Verhoff, C., & Greene, K. (2014). Technology addiction's contribution to mental wellbeing: The positive effect of online social capital. *Computers in Human Behavior*, 40, 23–30. <https://doi.org/10.1016/j.chb.2014.07.014>
- Marsh, E., Perez Vallejos, E., & Spence, A. (2022). The digital workplace and its dark side: An integrative review. *Computers in Human Behavior*, 128, Article 107118. <https://doi.org/10.1016/j.chb.2021.107118>
- Marx, J., Braun, L. M., & Mirbabaie, M. (2022). Motivators of Knowledge Workers to Conduct Digital Detox. *ICIS 2022 Proceedings*, 14. https://aisel.aisnet.org/icis2022/user_behavior/user_behavior/14
- Marx, J., Mirbabaie, M., & Turel, O. (2025). Digital detox: A theoretical framework and future research directions for information systems. *Information & Management*, 62(1), Article 104068. <https://doi.org/10.1016/j.im.2024.104068>
- Mirbabaie, M., Braun, L. M., & Marx, J. (2022a). Knowledge work 'unplugged' - Digital detox effects on ICT demands, job performance and satisfaction. *International conference on Wirtschaftsinformatik, Nürnberg, Germany* [Conference paper].
- Mirbabaie, M., Marx, J., Braun, L. M., & Stieglitz, S. (2020). Digital detox – Mitigating digital overuse in times of remote work and social isolation. In *Australasian conference on information systems*. Wellington, New Zealand <https://aisel.aisnet.org/acis2020/87/>.
- Mirbabaie, M., Stieglitz, S., & Marx, J. (2022b). Digital detox. *Business & Information Systems Engineering*, 64(2), 239–246. <https://doi.org/10.1007/s12599-022-00747-x>
- Nassen, L.-M., Vandebosch, H., Poels, K., & Karsay, K. (2023). Opt-out, abstain, unplug: A systematic review of the voluntary digital disconnection literature. *Telematics and Informatics*, 81, Article 101980. <https://doi.org/10.1016/j.tele.2023.101980>
- Nguyen, M. H., & Hargittai, E. (2023). Digital disconnection, digital inequality, and subjective well-being: A mobile experience sampling study. *Journal of Computer-Mediated Communication*, 29(1), Article zmad044. <https://doi.org/10.1093/jcmc/zmad044>
- Paris, L., Morris, J., & Bailey, J. (2022). The digital sabbath and the digital distraction: Arts-based research methods for new audiences. *Qualitative Report*, 27(2), 427–447. <https://doi.org/10.46743/2160-3715/2022.5203>
- Pensar, H., & Mäkelä, L. (2023). Roads to recovery in remote working. Exploration of the perceptions of energy-consuming elements of remote work and self-promoted strategies toward psychological detachment. *Employee Relations*, 45(7), 140–161. <https://doi.org/10.1108/ER-09-2022-0431>
- Piszczek, M. M. (2017). Boundary control and controlled boundaries: Organizational expectations for technology use at the work–family interface. *Journal of Organizational Behavior*, 38(4), 592–611. <https://doi.org/10.1002/job.2153>
- Pothuganti, K. S. (2024a). Technostress: A comprehensive literature review on dimensions, impacts, and management strategies. *Computers in Human Behavior Reports*, 16, Article 100475. <https://doi.org/10.1016/j.chbr.2024.100475>
- Pothuganti, S. K. (2024b). Workplace cyberbullying: A systematic literature review on its definition, theories, and the role of HRD. *Cogent Business & Management*, 11(1), Article 2408443. <https://doi.org/10.1080/23311975.2024.2408443>
- Pothuganti, S. K. (2025). Digital harassment in the workplace: The impact of cyberbullying on employee well-being and engagement. *Asia Pacific Journal of Information Systems*, 35(1), 73–100. <https://doi.org/10.14329/apjis.2025.35.1.73>
- Quan-Haase, A., Harper, M. G., & Wellman, B. (2021). The role of communication technology across the life course: A field guide to social support in East York. *Journal of Social and Personal Relationships*, 38(12), 3497–3517. <https://doi.org/10.1177/02654075211056898>
- 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>
- Ramadhan, R. N., Rampengan, D. D., Yumanisha, D. A., Setiono, S. B., Tjandra, K. C., Ariyanto, M. V., Idrisov, B., & Empitu, M. A. (2024). Impacts of digital social media detox for mental health: A systematic review and meta-analysis. *Narra J*, 4(2), Article e786. <https://doi.org/10.52225/narra.v4i2.786>
- Reimann, L. E., Binnewies, C., Ozimek, P., & Loose, S. (2023). I do not want to miss a thing! consequences of employees' workplace fear of missing out for ICT use, well-being, and recovery experiences. *Behavioral Sciences*, 14(1), 8. <https://doi.org/10.3390/bs14010008>
- Salepaki, A., Zerva, A., Kourkouridis, D., & Angelou, I. (2025). Unplugging youth: Mobile phone addiction, social impact, and the call for digital detox. *Psychiatry International*, 6(1), 4. <https://doi.org/10.3390/psychiatryint6010004>
- Sandelowski, M., Voils, C. I., & Barroso, J. (2006). Defining and designing mixed research synthesis studies. *Research in the Schools: A Nationally Refereed Journal Sponsored by the Mid-south Educational Research Association and the University of Alabama*, 13(1), 29.
- 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, Article 106899. <https://doi.org/10.1016/j.chb.2021.106899>
- Schmuck, D. (2020). Does digital detox work? Exploring the role of digital detox applications for problematic smartphone use and well-being of young adults using multigroup analysis. *Cyberpsychology, Behavior, and Social Networking*, 23(8), 526–532. <https://doi.org/10.1089/cyber.2019.0578>
- Schrageová, M., & Bisaha, D. (2025). The effect of digital detox through digital minimalism using the MinimalistPhone app on the behavior of young users and their emotional experience. *Computers in Human Behavior Reports*, 18, Article 100699. <https://doi.org/10.1016/j.chbr.2025.100699>
- Sharma, A. K., & Sharma, R. (2024). Detox for success: How digital detoxification can enhance productivity and well-being. In S. Grima, S. Chaudhary, K. Sood, & S. Kumar (Eds.), *Business drivers in promoting digital detoxification* (pp. 71–90). IGI Global. <https://doi.org/10.4018/979-8-3693-1107-3.ch006>
- Sonnetag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(Suppl 1), S72–S103. <https://doi.org/10.1002/job.1924>
- Sonnetag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology*, 22(3), 365–380. <https://doi.org/10.1037/ocp0000079>
- Syvertsen, T. (2022). Framing digital disconnection: Problem definitions, values, and actions among digital detox organisers. *Convergence: The International Journal of Research Into New Media Technologies*, 29(3). <https://doi.org/10.1177/13548565221122910>
- Syvertsen, T., & Enli, G. (2019). Digital detox: Media resistance and the promise of authenticity. *Convergence: The International Journal of Research Into New Media Technologies*, 26(5–6). <https://doi.org/10.1177/1354856519847325>
- Tarafard, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301–328. <https://doi.org/10.2753/MIS0742-1222240109>
- Tedone, A. M. (2022). Keeping up with work email after hours and employee wellbeing: Examining relationships during and prior to the COVID-19 pandemic. *Occupational Health Science*, 6(1), 51–72. <https://doi.org/10.1007/s41542-021-00107-3>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garrity, C., Lewin, S., ... Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- Umasankar, M., Boopathy, S., Padmavathy, S., Fukey, L. N., & Singh, R. (2022). Disconnect to reconnect: Employee wellbeing through digital detoxing. *Journal of Positive School Psychology*, 6(2), 4463–4473.
- Vanden Abeele, M. M. P., & Nguyen, M. H. (2023). Digital media as ambiguous goods: Examining the digital well-being experiences and disconnection practices of Belgian adults. *European Journal of Communication*, 39(2). <https://doi.org/10.1177/0267323123120148>
- Vayre, E., & Vontrou, A. M. (2019). Identifying work-related internet's uses-at work and outside usual workplaces and hours-and their relationships with work-home interface, work engagement, and problematic internet behavior. *Frontiers in Psychology*, 10, 2118. <https://doi.org/10.3389/fpsyg.2019.02118>
- Verlinden, A., Baillien, E., Notelaers, G., & Verbruggen, M. (2024). Always on? Development and validation of the employee digital disconnection scale (edds). *Work & Stress*. Advance online publication. <https://doi.org/10.1080/02678373.2024.2364597>
- Volk, S. C., Schulz, A., Blassnig, S., Marschlich, S., Nguyen, M. H., & Strauß, N. (2025). Selecting, avoiding, disconnecting: A focus group study of people's strategies for dealing with information abundance in the contexts of news, entertainment, and personal communication. *Information, Communication & Society*, 28(1), 21–40. <https://doi.org/10.1080/1369118X.2024.2358167>
- Yue, C. A. (2022). The paradox of using public social media for work: The influence of after-hours work communication on employee outcomes. *Journal of Business Research*, 149, 748–759. <https://doi.org/10.1016/j.jbusres.2022.05.079>