



Is opting-out so hard? Emerging adults on the techniques and barriers to digital disconnection during the COVID-19 pandemic

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Abstract

Despite the COVID-19 pandemic being a past, the concern for digital balance remains relevant. Digital devices accompany people constantly, and young users are especially vulnerable to the harmful effects of their usage. Considering the problem's relevance, we focus on digital disconnection (DD) among emerging adults during the COVID-19 pandemic. We use a mixed methodology combining two qualitative approaches: story completion and the content analysis. We identify and systemize barriers and techniques of DD and we answer whether these practices are stable. We present four groups of categories of barriers: obstacles, the functionality of the digital world, the design of the digital world, and the problem of displacement. We also outline techniques for DD: human-centric actions, temporal solutions, technological support, and activities outside the online world.

Keywords: digital disconnection, emerging adults, disconnection barriers, disconnection techniques, media technology.

Introduction

The pandemic is a "turning point in human interaction with digital technology" (Rywczyńska et al., 2022, p.6), as it compelled citizens to engage deeper in the online world. Grzega observes (2021, pp.355-356) that since then, "the evolutionary process of digitalization [...] has gained greater momentum". Some researchers argue (Matias et al., 2020; Gross et al., 2022) that during the pandemic, the Internet facilitated the satisfaction of all needs once identified by Maslow (1970). Other scholars (Afify, 2022) believe it has brought about new needs, like entertainment. Rao et al. (2022, p.3) look at the pandemic hierarchy of needs holistically, viewing technology as a "requisite basic survival need among various age groups". Although they do not focus on one age cohort, they recognize that the youngest (including "emerging adults"- hereinafter EA) shifted their lives to the online world most often. Thus, they felt the effects of accelerated digitization the most intensely (Ukani et al., 2021; Jupowicz-Ginalska et al., 2021).

As a result, the scale of Fear of Missing Out (FOMO) increased, as well as information overload and infodemic (Jupowicz-Ginalska et al., 2021). Pandya and Lodha (2021, p.n.a.) write about "experiences of irritability, corona-anxiety, sleep problems, emotional exhaustion, isolation, social media fatigue and screen fatigue". The pandemic impeded efforts to balance the online and offline worlds, too. It challenged digital self-regulation, especially in internet use (Király et al., 2020; Wiederhold, 2020). Enforced "embracing screens to a larger extent than before the lockdown" brought an ambiguous effect. Young people have adapted to digital circumstances. Still, at the same time, they were "tired of their devices" (Gregersen et al., 2023,

p.967). In the face of the crisis, digital hygiene has gained importance (Ptaszek et al., 2020). Maintaining it was possible through "digital disconnection", hereinafter EA (Syvertsen and Enli, 2020), defined as a "prime form of choice at times of hyperconnected modernity" (Kaun, 2021, p.1574).

Despite the pandemic officially belonging to the past, the concern for digital balance remains relevant. After all, digital devices accompany people constantly, and young users are the most vulnerable to the effects of their usage (Jupowicz-Ginalska et al., 2022). Considering the scale of the problem, every study analyzing digital hygiene is valuable. Particularly interesting are works presenting users who found ways to disconnect, the more that DD practices are "the potential routes towards a more sustainable life" (Vanden Abeele & Nguyen, 2022, p.na). We focus on this thread, aiming to present barriers to and techniques for DD among EA during the pandemic.

Literature review

Digital Disconnection: Definitions and Strategies

DD is an "intentional withdrawal from connective digital media" (Fast et al., 2021, p.61), conscious voluntary non-usage of technologies (Woodstock, 2014) or temporary restrictions in digital connectivity (Syvertsen & Enli, 2020; Vanden Abeele et al., 2022). It involves time, place, circumstances, media types, and mediated activities. It does not refer to a forced or unconscious opting out, linking more to unplugging (Jansson and Adams, 2021) and avoiding digital technologies (Bozan & Treré, 2023). Syvertsen and Enli (2020) see it as an individual resistance against temporary overload resulting from constant connectivity, which aims to counteract the loss of the true self. Jorge (2019) underlines the regaining of time and social relations. Nassen et al. (2023, p.9) see it as "a deliberate (...) form of non-use of devices, platforms, features, interactions, and messages that occurs with higher or lower frequencies, and for shorter or longer periods, after the initial adoption of these technologies, and to restore or improve one's perceived overuse, social interactions, psychological well-being, productivity, privacy and perceived usefulness".

Initial DD research spans around the reasons for giving up media technologies (Birnholtz, 2010), how people do it (Woodstock, 2014; Baumeret al., 2015) and what paradoxes it associates (Ribak & Rosenthal, 2015). Nowadays, researchers narrow their analyses to social media and mobile devices (Hallet al., 2021; Ross & Bayer, 2021). As proved, overuse of both results in excessive online presence, making DD difficult (Park & Kaye, 2019; VandenAbeele & Nguyen, 2022). According to Bucher (2020), DD is partial because people produce data passively. Internet users are becoming aware of digital threats. They take a task-based or strategic approach to counteract. In the first one, they implement specific actions, i.e. "detox" programs, seeking help from loved ones, increasing physical activity, muting notifications, and using access-restricting applications (Brown & Kuss, 2020; Kopecka-Piech, 2024; Natale & Treré, 2020; Pandya & Lodha, 2021). Kaun (2021, pp.1577-1578) includes them in the conscious "specific micro-practices of disconnecting, incorporated in ideas of self-care and optimization", particularly important during the COVID-19 pandemic. In the second case, Nassen et al. (2023, pp.11-14) list DD strategies: quitting, break-taking, use-reducing and assistive tool use.

DD is a non-trivial challenge. Nguyen (2023) discusses its social, practical, and societal barriers. The first includes concerns about losing information, relationships and recognition on the internet. In addition to the FOMO, participants fear both ostracism and societal pressure, encouraging them to return to social media. Practical limitations connect with difficulties deleting or deactivating social media accounts and longing for

scrolling as a boredom-killing activity. Technology is a constant element of life in the third area, so giving it up may have negative consequences.

Emerging Adults, Pandemic and Digital Disconnection

Before the pandemic, scholars studied how EA disconnect. For example, Birnholtz (2010) investigated reasons for starting and stopping using messengers. Study by Kaun and Schwarzenegger (2014) indicated that connection and disconnection are renegotiated processes, which change according to circumstances. Rosenberg (2019) analyzed EA' avoidance of mobile phones while Baumer et al. (2015) explained why users who withdraw from social media return to it. Sas (2019) underlined that disconnection experiences are complex and nuanced.

Studies focusing on EA during the pandemic indicate harmful effects of social media fatigue (Liu et al., 2021), while others explain no relationship between the frequency of virtual social interactions and well-being (Towner et al., 2021). Kopecka-Piech (2021) concludes that EA face a challenge in limiting technology (i.e., they confirm abandoning pre-pandemic DD strategies). It means that they practiced DD minimally during the pandemic, although they knew they overused media technologies.

Agai (2022, pp.7-8) states that the EA had a positive attitude towards disconnection. However, she emphasizes that "disconnectivity practices were mentioned as tricky regardless of how much they were desired", proving that "opting out is unrealistic". Concerns regarding the consequences of disconnection were behind this, such as FOMO. For this reason, the participants aimed for moderate connectivity, divided into general and focused disconnection. The first case involves planned screen time limitations, constituting a gradual "process of reconsideration of the connectivity norm" (ibid.). The second case entails spontaneous interventions, such as deleting invasive applications. Similarly, Martinho (2002) describes the DD practices, categorizing them into forced and voluntary (radical actions, self-regulation without erasing devices, and gradually reducing connectivity). With this in mind, we outline existing academic gaps:

- research on EA and DD during COVID-19 is sparse (Agai, 2022);
- most studies focus on disconnection practices, while obstacles preventing such practices take a back seat (no study combines obstacles and strategy to implement DD). Meanwhile, identifying them is essential in regaining digital balance in post-pandemic times.

In response to the gaps, we form the research questions: RQ1) What are the barriers to DD practices?; RQ2) What are the DD practices?; RQ3) Is DD a stable solution?

Methodology

We aim to capture the connections between barriers and practices of DD among emerging adults during the pandemic. We form the following goals: RG1) identification of barriers in the DD practices; RG2) identification of DD practices; RG3) identification of factors influencing the stability of DD. We use a mixed methodology to adopt a separate method for each of the two phases of our research.

First Phase: Story Completion

Sharing Nassen et al.'s (2023, p.n.a.) approach, asserting that "future research should pay more attention to personal interests regarding voluntary disconnection of the individual", we implemented a story completion method with a list of short stories to finish by participants as a research tool. Social sciences rarely use this qualitative approach. It is nonintrusive, allowing the participants to express their third-person opinions and enabling them to avoid social expectations for self-reporting participants. It unleashes creativity, manifested in a richness of perspectives. As it moves the participant into the hypothetical situation of a third party, it unlocks thoughts that participants are unaware of (Clarke et al., 2017, 2019).

Here, participants (authors of the stories) built narratives around the digital world. We asked them to develop narratives about fictional characters using technology differently: (1) excessively, (2) self-reflectively, (3) restrictively, and (4) avoidantly. Every story consisted of 6 to 10 sentences to be completed.

- *Anna's story: a 24/7 smartphone-and-apps-oriented user*
She is 23 years old. She uses her smartphone constantly. She has at least a dozen apps installed. She receives many notifications. She often looks at apps. She checks content on her smartphone even at night. Increasingly, she feels overwhelmed by the presence of the smartphone in her daily life. A friend asked her why she didn't cut it down.
- *Wojtek's story: a pondering multi-device technology user*
He is 24 years old. Recently, he has been thinking a lot about the effects of intensive use of technology. He has several devices. He uses many different applications. He spends many hours a day in front of a screen. A friend asked him what his dilemmas with technology are and what he thinks about so intensely.
- *Tomek's story: self-aware digital disconnection apprentice*
He is 21 years old. Lately, he has been reading a lot about the harmful effects of technology on health, emotional condition and interpersonal relationships. He decided he would try to implement the principles of a DD. He has given up using his tablet. He uses the computer for studying and work. He removed most of the apps from his smartphone. He gave up social media. He decided that every Saturday, he would not use any media technology. The first week of the detox has passed. Tomek's sister asks him what he thinks of the past seven days.
- *Ewa's story: non-user on the verge*
She is 26 years old. She has never set up a social media account against fashion and social pressure. Sometimes, she experiences discrimination. She is curious about virtual life on social media. A colleague asked her why she shies away from it and how she plans her future in this regard (describe two variants: A] Ewa changes her mind and creates social media accounts, and B] she decides to persevere with DD).

After developing the stories, we recruited participants among Polish media and communication students from the EA population (19-26 years). The cohort comprised 19 individuals (6 females and 12 males). Informed, voluntary, and written consent for the use of data provided by participants for academic research endeavors was obtained through the completion of the relevant consent within the online platform, with the stipulation that such consent could be revoked at any moment.

All data were rendered anonymous, thus eliminating the possibility of identifying any individual participant. Participants were not remunerated financially for their participation in the study; nevertheless, they were granted academic credit for the project they submitted, which contributed to an optional university course. The formulation of the project served as an educational exercise, and the decision to consent to the use of data for research purposes did not affect the academic evaluation received.

Finally, Each form contained instructions encouraging creativity, spontaneity and no value-laden expression. Participants completed one to four stories over three months via an online Google formⁱⁱ (writing at least ten sentences per each). We sent the stories as links at intervals of 2-3 weeks, giving us a chance to reflect. We conducted the research between March and May 2021 and encrypted the participants' names via pattern: name of story_number of the participant.

Second Phase: Content Analysis

We subjected all stories to essentialist reading to extract the participants' perceptions from the data. We explored horizontal patterning across the data set (Clarke et al., 2017, 2019) according to identified DD barriers, practices and processes categories.

Then, we implemented a qualitative content analysis, which, according to Stemler (2001:1), is a "replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding."

We used Mayring's (2014:79-82) Inductive Category Formation, aiming at "summarizing categories coming from the material itself". We used open coding. After working with 40% of the material, we checked the system and revised it. After that, the logic of the categories became clear (Table 1). We conducted content analysis in April-May 2023 and performed a cross-check in June 2023.

Table 1: Categories and subcategories for content analysis

Content analysis	Categories	Subcategories
Barriers	obstacles	FOMO, necessity to use, social proof, difficult to reach
	usability of the digital world	work and study, physical and mental comfort
	designing the digital world	n.a.
	denial	n.a.
	source of support	external/internal help
Techniques	temporal solutions	contemporary/permanent
	technological support	abandoning unused elements, silent treatment, "watch dog" apps
	alternative activities	n.a.
	no return	n.a.
Final decision	return to DD	new habits, digital recidivism
	the aftermath of DD (Ewa's B story)	general attitude, aversion to the digital world, satisfaction with life

Source: Own source

Results

The following number of participants completed the stories: *Anna's story*: 12, *Wojtek's story*: 16, *Tomek's story*: 17, *Ewa's A story*: 16, and *Ewa's B story*: 15. We collected 59 documents: seven participants delivered all stories, seven participants: three stories; five participants: two.

Barriers

As Table 2 presents, stories of Wojtek, Anna, and Tomek illustrate barriers in DD. Ewa's story stands out in this set, especially the version where she decides to resign from the digital world.

Table 2: Barriers: a quantitative data (categories).

Story of	Obstacles	Usability of the digital world	Designing the digital world	Denial
Anna	13	2	1	1
Wojtek	14	8	2	1
Tomek	14	0	0	0
Ewa A	8	3	1	1
Ewa B	6	0	0	0

Source: Own source

Engagement in digitalization links with a number of obstacles. The greater it is, the more limitations there are for DD. In the case of Wojtek's and Anna's stories, the design of the digital environment and the denial are noticed, too. This is where examining the details of each category is necessary (Table 3).

Table 3: Barriers: a quantitative data (subcategories).

Story of	Obstacles			Usability of the digital world			Designing the digital world	Denial
	FOMO	necessity to use	difficult to reach	social proof	physical & mental comfort	work & study	n.a.	n.a.
Anna	5	5	4	1	1	1	1	1
Wojtek	4	6	2	2	5	3	2	1
Tomek	7	2	4	0	0	0	0	0
Ewa A	3	2	2	1	2	1	1	1
Ewa B	3	0	0	3	0	0	0	0

Source: Own source

Obstacles

As seen in table 3, FOMO appears in all stories. Here are some example quotes related to this phenomenon.

- "Anna feels like the world around her moved almost entirely to the web. Her friends, family, school, job. To keep connected, she needs to check on those things. Without her smartphone, she wouldn't have anything to discuss. She fears that something might happen in time she's away from her phone" (Anna_9);
- "More often, she doesn't know what her friends are talking about; she feels excluded" (Ewa B_5).

Participants, as another subcategory of obstacles in DD, point out the necessity to use (15 times).

- "The life of a modern person is impossible without a smartphone. Especially during a pandemic" (Anna_3)
- "Tomek had to control himself, sometimes he caught himself in not doing so" (Tomek_16).

It is evident that DD is a challenge. Participants emphasize this 12 times, i.e.:

- "She would love to do it, but she feels like it is not possible or easy to achieve" (Anna_2);
- "He was bored and was crushed by his struggle. When a person has no external stimuli, his inner demons are triggered, which he didn't learn to fight because he always had some technological toy at hand" (Tomek_1).

The third subcategory is social proof. Participants refer to it seven times, for example:

- "Her whole group from studies communicates via social media" (Anna_13);
- "A colleague replied: take into account that even my boss contacts us through Facebook, it will happen to you, too" (Ewa A_1).

Usability of the Digital World

Participants emphasize the sense of psychological and physical comfort and pragmatic utility of the digital world. These elements do not appear in the stories of individuals considering DD or not using social media. Access to the internet provides a sense of physical comfort.

Authors put attention on convenience and simplification of life. They write about psychological comfort, security, peace, and happiness.

Anna's story is poignant, as the stream of notifications appears to be a positive aspect of digital life, compensating for hurts experienced in the real world, fulfilling the need for relationships with people, and identifying with anyone. Here, the awareness of not being alone seems more robust than the perceived threats. In this story, Anna builds a sense of her worth based on notifications, i.e.:

- "Having a lot of apps that every one of them sends her multiple notifications gives her a feeling of belongingness (...). On the Internet, you can always find people with similar interests who won't judge you for what you are (...). That gives a feeling of belonging somewhere. Apps that bombard you with notifications can give you the feeling of being someone important" (Anna_1);
- "It would also make my work life simpler" (Ewa A_11).

Participants point out the usefulness of the digital world in work and education:

- "And as we know fame -> sponsorship offers -> money" (Anna_18);

"His work is directly related to social networks. Half of his day he holds in the phone or laptop earning money" (Wojtek_3).

Design of the Digital World

Participants mention the impact of digital media design on DD. They underline its construction to retain users for as long as possible. They maintain that users are aware of the role of design in reducing redundancy in the use of the digital world:

- "People designing those applications and devices had made it addictive in mind. The layout, the interfaces, and even the sound of a notification are tailored to make a person spend as much time with them as possible. You scroll down a page and see other things you're going to like, so you scroll down more" (Wojtek_16);
- "She started checking out popular people, not because she was interested in them but because the app suggested that she might like them based on their current popularity" (Ewa A_10).

Denial

Participants mention it as follows:

- "When asked, Anna initially reacted defensively. After all, she doesn't use the phone that much at all, and it's nobody's problem what she does in her free time" (Anna_6);
- "His friend decided that Wojtek simply did not see the problem and denied everything; that he became addicted" (Wojtek_10).

Techniques

Table 4 presents the categories of DD techniques. Participants write about attempts to limit digital media. In Ewa's and Wojtek's stories, there are more references to technological solutions, while in Tomek's, one focus is on time-related methods, with less emphasis on technology. Ewa's stories discuss this topic on a mostly minor scale.

Table 4: Techniques: a quantitative data (major categories).

Story of	Source of support	Temporal solutions	Technological support	Alternative activities
Anna	2	3	3	1
Wojtek	3	3	5	1
Tomek	1	9	3	4
Ewa A	0	2	1	1
Ewa B	0	3	2	0

Source: Own source

The identified subcategories presents Table 5.

Table 5: Techniques: a quantitative data (subcategories)

Story of	Source of support		Temporal solutions		Technological support			Alternative activities	
	external	internal	contemporary	permanent	abandoning unused elements	silent treatment	"watch dog" apps	n.a.	
Anna	0	2	3	0	0	2	1	1	
Wojtek	1	2	3	0	2	2	1	1	
Tomek	0	1	7	2	2	1	0	4	
Ewa A	0	0	1	1	0	0	1	1	
Ewa B	0	0	3	0	0	2	0	0	

Source: Own source

Source of Support

We identify external and internal categories here. The first associates with institutionalized assistance provided by, for example, addiction therapy centers (in our research, it appears once). It connects with internal support offered by close individuals (here: mother). In other examples, friends also appear:

- "Resigned, the girl asked her friend what to do" (Anna_6);
- "his friend decides to help him with this problem" (Wojtek_10).

Temporal Solutions

They focus on the time of using or not using the digital world. It is possible to distinguish periodic (long/momentary) and complete disconnection. In the first case, participants use the term "partial detox," and in the second case "detox" or even "rehab". Both phrases appear directly (resignation from the digital environment) or indirectly (limiting consumption). In our stories, characters opt for temporary restrictions:

- "Last time she turned off her smartphone completely" (Anna_2);
- "Tomek had to control his habits not to pick up any media" (Tomek_16).

Technological Support

We distinguish the elimination of unused elements (applications), "quiet days" (intentionally leaving devices at home, staying out of range, muting notifications), and "watchdog app" (measuring usage time). The substitution of smartphones with less advanced devices also appears (it implies fewer applications and, consequently, less attention). Their use guarantees minimal contact with the digital world:

- "She (...) only leaves messages and calls, like you now, phones used to work in the old times" (Anna_2);
- "She plans to use an app to track time spent on social media to control herself better" (Ewa A_13).

Alternative Activities

They appear in the stories of all characters. Participants engage them in specific substitute actions (i.e., reading books, knitting, sports) or discuss the general need to find non-digital activities. They express the necessity of detachment, emphasizing the significant effort required to succeed. They mention planning activities, changing mindset and life routines, and replacing bad habits with new ones, which is better for health:

- "I always wanted to learn how to knit. I also have five books waiting for me on my shelf" (Anna_19);
- "With time, he found new ways to make himself entertained. Hobby" (Tomek_18).

Final Decisions Concluding DD Processes

Anna's Story

The authors mention complete disconnection in one of the 12 stories ("After *the detox*, she has changed beyond recognition, and when she received a smartphone again, she no longer needed it", Anna_7). In one of the remaining stories, Anna returns to the digital world in changed conditions ("She spent about an hour on her phone", Anna_19). However, in most of the stories, her return to the digital world is the predominant outcome:

- the difficulty of DD ("It was a terrible experience, so she didn't try it again," Anna_2);
- multiple failures ("She tried many times to do it, but it never worked," Anna_2);
- no offline alternatives ("She has no real interests outside of the virtual world," Anna_9);

some participants try to justify Anna's decision ("You can't escape technology," Anna_2) or downplay it ("There is nothing wrong with that. Humanity should keep pace with progress," Anna_3).

Wojtek's Story

Only one out of 16 stories concludes with his disconnection from the digital world ("they switch off their phones and go back to their lives with a feeling of intellectual fulfilment," Wojtek_6). However, the author of this story suggests that discussions about DD are over-intellectualized.

Only one participant presents new rules for using the digital world ("After a year of therapy, Wojtek used the internet only when he really needed it," Wojtek_1). Other stories portray Wojtek as someone who:

- lost control ("The next morning the first thing he did was to check his smartphone," Wojtek_9);
- failures in previous attempts to achieve digital balance ("I have no idea what could help," Wojtek_11);
- does not identify with DD ("without modern technologies did not represent his life," Wojtek_3).

attributes difficulties to pandemic circumstances ("In current times it is important to have at least a phone," Wojtek_2).

Tomek's Story

Four of the 17 stories about Tomek revolve around his decision to resign from the digital world. One is optimistic ("he doesn't miss his previous lifestyle," Tomek_2), while the others emphasize the perceived discomfort and unhappiness. At the same time, they see the purpose in such actions and expect positive

outcomes ("One week into my detox, I have to say that it was one of the best decisions of my life," Tomek_15, "It's been an uphill battle. He is determined to stop wasting time, so he keeps going" Tomek_16). Several stories do not answer what Tomek ultimately decides. They underline the initial effort, discussing the hero's dilemmas and noting that none of the binary decisions is the best path. According to participants, the ideal approach is the digital balance, which does not cut off from friends or current events but also does not take control of life ("This situation can't be solved one way or another. It's all about finding that healthy balance", Tomek_7). Some authors write about Tomek's return to digital life on new terms, with temporary limitations on social media or using them for self-development purposes ("He decided to start using social media again but this time to promote his work and ask others what do they think about his photos," Tomek_18).

Participants twice depict a situation where the character accepts his weakness towards technology ("He decided that he would accept all the harmful effects of technology. It's the price he can pay. He installed all the apps again. He looked into all of his social media. It was such a relief. He is a happy person now," Tomek_12).

Ewa's A Story

Character Ewa A contemplates the decision to create profiles on social media. She has doubts that she consults with friends. She claims that she "can't fully convince herself" because she "loses something by not using Facebook and the like, but is it essential for her?" (Ewa A_1). According to participants, Ewa A first learns about the threats of using the Internet to "understand whether she needs it because now she is simply wasting her energy on these dilemmas" (Ewa A_3). In Ewa A's stories, she asks for help creating a profile but adopts a policy of small steps because she "doesn't want to be thrown into the deep water" (Ewa A_4).

Participants outline two paths regarding her relationship with the digital world: returning to the original state (quitting social media) or maintaining a digital connection. The first option forms an interesting narrative: initial satisfaction diminishes over time and is replaced by awareness of the necessity of permanent online presence, loss of time, disappointment, and even envy or sadness related to comparing herself to virtual friends. As participants write, Ewa_A "did not find on the Internet what she thought she would find" (Ewa A_4), so she "decided to quit before it gets to be her daily routine" (Ewa A_8) because "she doesn't need it" (Ewa A_18).

In eight stories, the protagonist chooses to stay on the internet. The authors write about self-control, which Ewa A praises for her new reality. The protagonist strengthens social relationships, develops hobbies, and earns as an influencer. Participants believe that Ewa A is aware of the dangers and susceptibility to the influence of digital media ("She was sucked into a black hole of endless scrolling, meaningless content and fake people. By the time she knew the system has taken control of her and her time," Ewa A_10). In Ewa A's stories, there are suggestions to counteract the consequences of using digital media: learning responsible internet use, using time control apps, limiting online use, using social media to carry out real-life activities, and maintaining offline habits.

Ewa's B Story

About situations where the protagonist decides to stay outside the digital realm, authors write in general terms, such as "she continues living her life the way it was" (Ewa B_7) or "She is not going to do this" (Ewa

B_12). There are also stories in which participants talk about her aversion to the digital world, emphasizing the negative consequences that arise from it (uncontrolled usage, time loss, and artificiality):

- "And what do I need it for? Life is here, right in front of me (...) Why inject myself with another dose of negative emotions?" (Ewa B_1);
- "Ewa is aware of the dangers of social media, so she decided to keep things as they were" (Ewa B_8).

In several stories the protagonist is happy with her current life and does not want to change anything ("Ewa doesn't feel like belonging in current trends, and she feels happy" (Ewa B_8). Participants endow her with a mission to save others. In the story Ewa B_4, the author writes, "maintaining such a state is exceptional. She doesn't know anyone on social media who 'doesn't exist'. In this way, she wants to set an example that she hopes will make someone reflect." (Ewa B_11).

Some participants believe that friends can inform Ewa about current events (they "keep her up to date with everything that's happening online, so she doesn't miss out on anything", Ewa B_19).

Discussion

Most barriers hindering DD appear in stories of individuals immersed in the digital world and those who attempted to implement digital detox. We identified four categories here:

- obstacles: factors that distract, divert attention, and demotivate individuals striving for digital freedom (FOMO, compulsive usage, social proof, and difficulty in achieving goals);
- functionalities of the digital world: the benefits offered by the digital world (aiding in work and education or ensuring physical-psychological comfort);
- the design of the digital world: the appearance and technical aspects of digital applications and media;
- the denial of the problem.

We have also outlined techniques for DD:

- human-centric actions: support comes from close relationships (internal) or institutions (external);
- temporal solutions: permanent or intermittent
- technological support: uninstalling unused elements, having "quiet days" with digital devices, and installing applications that monitor usage time;
- engaging in alternative activities outside the online world.

The Barriers and Techniques

The authors of the stories correctly understand the phenomenon of FOMO, which is defined as "the pervasive fear that others are having more satisfying experiences than I am" (Przybylski et al., 2013). This phenomenon is now associated with the digital world, mainly social media and devices (Gioia et al., 2021). The lack of a constant connection carries negative consequences. Researchers mention not keeping up with novelties, falling out of the loop, and social exclusion (Alt, 2018; Barry et al., 2017). Highlighting the role of interpersonal relationships, including reference groups, appears particularly significant (Gil et al., 2015; Franchina et al., 2018). Young people need solid social bonds, and the college years are a time for establishing lasting relationships and connections. The pandemic, occurring during this education period, shifted social life online – hence, the fear of losing friends was intensified (Jupowicz-Ginalska et al., 2021).

In other words, voluntarily restricting digital life could mean voluntary self-exclusion (and this self-exclusion often occurs in the participants' stories).

FOMO and excessive use of the digital world are interconnected (Jupowicz-Ginalska et al., 2021), as the fear of disconnection is linked to the concern of missing out. Since continuous access to technology provides access to a stream of knowledge and contacts, FOMO-individuals need to connect to monitor what is happening around them. Therefore, our participants identified the necessity to use as another obstacle in DD. In the stories, two types of necessity are observed: a pragmatic one (facilitates functioning in pandemic reality) and an excessive one (associated with the untamable need to use). For the latter, there are tools to examine the extent of device-compulsive usage (Karadağ et al., 2015) or fear of not having them around (Yildirim & Correia, 2015).

Our participants identify notifications as instinctive distractions that hinder physical and mental disconnection from the digital environment. They acknowledge that DD is challenging, sometimes even impossible. Specific costs of the effort can be highlighted:

- psychological: feelings of being overwhelmed or anxious;
- physical: fatigue, powerlessness, valuable stimulation (Modrzyński, 2021).

As Nguyen (2023) points out, "opting out of social media may also present challenges that make it demotivating or more difficult to disconnect" (n.a.). One of these barriers is the continuous connection with others (Whiting & Williams, 2013). This plays a crucial role, especially for individuals within a close circle of acquaintances. The fear of weakening bonds with friends reinforces the desire to use digital devices. Participants also refer to social proof as an explanation for excessive entry into the digital world (Lervik-Olse et al., 2023). It saves energy invested in the potentially stressful decision-making process about DD, and the sense of belonging reassures the correctness of their actions.

Among the features related to the comfort of using the digital world is influencer marketing. Participants emphasize that a noticeable presence on social media leads to business cooperation, which translates into financial benefits (Bradley, 2023). Importantly, thinking about such a career path is characteristic of the youngest internet users (e.g., Kozłowska, n.a.). It is not surprising that participants mention it, so the temptation and the promise of success seem too significant to give up.

The design of the digital media is challenging, too. The participants emphasize their addictive function and point out mechanisms that prevent escaping from excessive use (notifications, content personalization, suggestions for additional materials to view). All of these lead to prolonging the time spent in the digital environment. Researchers confirm that digital media design makes users spend as much time in them as possible (Alutaybi et al., 2019; Vanden Abeele et al., 2022). It is not just about visualization but also algorithmic mechanisms of operation, offering content tailored to the needs of internet users. This allows digital media creators to derive specific financial benefits (microtransactions, advertisements).

In the stories, individuals intensely engaged in the digital world downplay or deny the issue related to the excessiveness of their usage. Their reactions can be described as defensive, mocking, or dismissive—each leading to questioning suspicions of compulsive internet use. However, denial does not eliminate the problem; instead, it serves as a way to escape the difficulty of treatment (Shaffer & Simoneau, 2001).

The Barriers and Techniques

DD connects with two groups of individuals: experts and close ones. Both groups play a crucial role in enhancing digital hygiene. In the first case, the importance of an independent therapist is emphasized, guiding the patient through reducing the use of digital media. The second case revolves around the need

for belonging, which motivates individuals to achieve digital balance. Family and friends play a significant role in combating digital excessiveness. Involving them is necessary for treatment's or prevention's success (Buksa, 2023). The EA confirm that their closest ones are crucial for maintaining digital balance (Jupowicz-Ginalska et al., 2021, 2022).

Our participants point out additional actions taken by the stories' protagonists. They fit into the methods of restoring digital balance, such as manipulating the usage time. This aligns with the concept of DD as "intentional self-regulation (...), ranging from explicit nonuse to the less absolute ways where one places limits on one's connectivity" (Nguyen & Hargittai, 2023, p.495). As it turns out, the binary approach (to use or not to use) is typical for the earliest research on DD (ibid.). Subsequent years bring more nuanced techniques, spanning the scale of partial nonuse, favoured by younger internet users (Nguyen et al., 2022). As Nguyen and Hargittai (2023) explain, detachment can last for minutes, hours, or weeks. In this sense, DD approaches the concept of NEMO (Nearly but not entirely Missing Out; Bhatt & Bureau, 2018). The choice of behaviour may impact the success of DD. The strategy selection should be influenced by the individual's personality, motivation for change, and practical capabilities. Vanden Abeele (2021, p.7) believes that achieving digital balance "is a subjective individual experience of optimal balance between the benefits and drawbacks obtained from mobile connectivity".

According to our participants, paradoxically, technology can help in this regard. They suggest uninstalling unused applications, focusing only on selected ones, and using applications that measure time in the digital world. Researchers confirm it: people who extensively use smartphones believe that applications assist them in maintaining digital well-being (Jupowicz-Ginalska et al., 2021, 2022).

In our studies, the theme of alternative activities (sports, developing interests) also emerges. Experts and researchers often recommend these as a way to achieve digital balance. These activities can provide relaxation, focus on fulfilling activities, build offline relationships, and create distance from digital information (Baumer et al., 2013; Kopecka-Piech, 2024; Chia et al., 2021).

This research identifies barriers to DD and the techniques the stories' protagonists employ to achieve digital balance. The narratives' authors discuss the characters' process, contemplation, and internal struggles. They constantly negotiate the detachment, which is challenging and not consistently successful. More often than not, participants talk about a return to digital presence rather than complete DD. However, there is a particular distinction between adopting new habits and reverting to old ones. It is most challenging for those deeply immersed in digital life – they are most likely to opt out of the DD path. In the case of hesitant individuals, the closest ones play a significant role in detachment or conscious reattachment.

Conclusions

It is important to emphasize that the protagonists' stories do not always end successfully. The outcome depends on their initial state and the need for change, motivation, or knowledge. In the Anna's and Wojtek's stories, digital compulsivity appears, while in Tomek's and Ewa's narratives, attempts to break free are made. Participants assume that the former return to their habits and accept them. In the case of Tomek's story, excessiveness is replaced with balanced principles of using the digital world. Similarly, participants construct a narrative about Ewa A. Her initial doubts about entering the digital world result in the implementation digital balance rules. On the other hand, among the reasons for resigning from digital presence (Ewa B's story), participants mention issues of time, productivity, and sense of happiness in life.

Our paper refers to the relationships between media, digital devices, and young people. It confirms earlier research but also deepens so-far knowledge through a holistic approach to digital hygiene and focusing on emerging adults (who are not yet a thoroughly researched age group). Another study's advantage is the discussion on decisions about DD or its absence. Thus our research provide narratives about people grappling with difficulties in the context of the pandemic reality. The use of mixed methodology, especially story completion, is a strength of this research, too. The fictional stories reflect the digital practices of EA, their fluctuations, choices, barriers to DD, and techniques for coping with them.

The study indicates a knowledge regarding techniques for the DD. Participants indicate numerous opportunities, both technology-based and non-technology-based. The first category is made up of working on oneself, digital change, and relationships. The second one is made up of methods that involved exerting control over technology and those in which users relied on technological solutions to guide them. This adds up to a coherent model of a holistic approach to digital disconnection in everyday life, from analysis, planning, to detachment, consistency and support. Our study indicates a high potential for success in DD, which is conditioned by numerous barriers. The participants feel too determined by the overpowering presence of technology in all areas of life, which breeds negativity and apathy.

It is surprising that external circumstances (technological progress and the pandemic conditions), were not the dominant factors. The thought of DD rose feelings of threat, emptiness, sadness, fear of exclusion, FOMO, and other unpleasantness that would be experienced by participants if they used digital media less. Simultaneously, although they needed the order or self-control, they feared of the self-limitation difficulties. Thus, they rationalized the problem, defining their generation as too entangled in technologies to be able to implement DD consistently. This conclusion prompts further interdisciplinary research on the phenomenon and gives rise to a recommendation of a practical nature. Knowledge, ideas, the availability techniques may be insufficient in the face of blockages that bind contemporary emerging adults in their inability to regulate their digital lives independently. They have the impression of being blocked, yet are aware of the situation and reflective, so there is a likelihood of 'lagging resistance' in their case (Baumer et al., 2013). This requires realizing that everyone has the "right to disconnect" (Hesselberth, 2018). It is important to note that there is no 'one-size-fits-all approach' (Vanden Abeele, 2021) to disconnection due to individual variation, differences in technologies used and contexts. Further research is needed on who benefits and who loses from practicing DD (Radtke et al., 2022). For DD studies, this means constant examining of this population. Looking at the issue of DD from the perspective of opportunities, barriers and effects, provides a direction of future research, including comparative research between diverse populations.

Our research has limitations. The pandemic context may introduce uncertainty about the relevance of the data, so it is important to note that COVID-19 has not disappeared, and its effects will be assessed over the coming years. Another limitation is the qualitative aspect of the research (we presented no statistical analyses or representative). However, that was not our goal, as mentioned at the beginning of this work.

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ⁱ People 18-25 years old who are not entirely independent as they do not have sufficient income. Still, they can explore different life options (Arnett, 2000). They belong to Generation Z, rooted in technology they integrate into their lives (Turner, 2015).

ⁱⁱ The remote method's implementation offers an openness and self-disclosure of opinions (Reid and Reid, 2005).