Millennials: Digitally Connected never Unplugged?

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KEYWORDS

Digital wellbeing; unplugging; digital connectivity; millennials.

ABSTRACT

The appeal of online connectivity has led to increased screen culture particularly among millennials, but their digital unplugging practices have been less explored. This paper reports on an online survey with 69 students and its preliminary findings highlighting perceived challenges and benefits of both constant connectivity and unplugging.

INTRODUCTION

Increased ubiquity of personal technologies brings forward both significant benefits and challenges [6]. Such technologies allow for increased connectivity [4] and immediate access to information [9], while at the same time, they lead to a disconnection from face to face social communication [16][29], information overload and reduced productivity [9]. Growing medical research has highlighted the risks of social media and personal devices overuse for wellbeing and mental health [8] as reflected in reduced cognitive [17], emotional and social skills [30], as well as physical fitness and increased obesity [4]. HCI community has shown a growing interest in emotional wellbeing and affective health over the last decade [3][7][11][12][13][18][19][25][31]. With my collaborators, we explored a range of digital wellbeing topics such as autobiographical [14][15] and emotional memories [23][24][27][28], particularly in old [21] and end of life care [26], affective representations through smart materials [33][34], support for mindfulness [2][22], or through virtual reality interventions [5J][20]. HCI interest in digital unplugging which we define as the *disconnection from digital devices and applications* has only recently started to be explored, with findings highlighting both benefits [11] and challenges of constant connectivity [10][32]. In this paper, *digital wellbeing* is defined as the *mindful balance between digital connectivity and digital unplugging*, and we report preliminary findings from an online survey completed by 69 students (53 Male; 16 Female), (age range 17-27, Mean age = 20).

Findings

Millennials involved in this study own numerous devices: all of them have smartphones and laptops, and more than half have game consoles, desktop PCs, and tablets. With regard to the length of daily use, the most used devices are smartphones and laptops, with 41 participants using them between 2 and 7 hours, followed by desktop PCs, used by 21 participants between 2 and 7 hours, tablets used by 24 participants between 0 and 4 hours daily, and games consoles used by 23 participants between 0 and 4 hours daily. We also explored the frequency of checking for notifications on each of these devices. The most frequently used ones are smartphones, with 50 participants checking them at least once per hour, and 42 every 30 minutes. Laptops are used to check notifications by 17 participants at least once per hour, while 9 participants check their PCs at least once per hour. Interestingly, although only 9 participants reported the use of smartphones for checking notifications, they all mentioned checking them every 10 minutes. Apart from these range of devices, participants also reported use of different applications, with most common ones being used up to 4 hours daily such as Email (60 participants), Facebook (51), Messenger (41), Snapchat (31), Netflix (29), while other applications: Skype (22), YouTube (20), Twitter (20), and Instagram (20) are used for up to 1 hour daily.

The most important benefits of digital connectivity include immediate access to needed information (62 participants), increased sense of connectivity (50), frequent contact with family and friends (50), decrease boredom (47), and increased ability to work remotely (41). With respect to perceived challenges of digital connectivity, interestingly, at least half of participants perceived information overload, frequent interruptions, or disconnection with nearby people as less important, and 32 participants also perceived as less of a challenge the reduced control over how time is spent, or the violation of privacy. The only two identified challenges consist of decreased work productivity due to procrastination (40), and the dependency of being connected (32 participants).

Unplugging from devices target mostly smartphones (25 participants), 18 of whom unplug 1 to 4 times per day, laptops (25), 15 of whom unplug 1 to 4 times per day, game consoles (19), 13 of whom unplug 1 to 4 times per day, and desktop PCs (18), 7 of whom unplug 1 to 4 times per day. In terms of length of unplugging, about 25 participants unplug from smartphones and laptops, and more than half of them disconnect for no more than 4 hours. With respect to unplugging from applications, about half of participants unplug from Facebook: a quarter of them more than 8 times, but about a third, never or merely once; 24 participants unplug from YouTube and Messenger; more than half of them never or merely once. Finally, 20 participants unplug from email; almost three quarters of them less than 4 times a day. The most important perceived benefits of unplugging include taking time to focus on task without interruptions (44 participants), better productivity (34), and taking a break from social exchanges (31). In contrast, the most important perceived challenges of unplugging consist of harder to find information (49), missing opportunities to alleviate boredom (32), and fear of missing work related information (38).

These also relate to the most common feelings associated with unplugging such as boredom (29 participants), freedom (26), relief (23), satisfaction (19), pride in achievement (14), contentment (14), frustration (12), sadness (11), and stress (8). Participants also found it particularly difficult to unplug from devices, such as smartphones (31), desktop PCs (24), and less difficult from tablets, laptops, game consoles, smart TVs, or MP3 players. The most difficult app unplugging concerns Messenger (24), YouTube (21), Spotify (13), and Facebook (12).

Reflections

To conclude, millennials who responded to our survey are digitally connected through a large range of devices and applications used for long periods of time, and for daily often checks. An important finding is that most of them fail to perceive the challenges usually associated with digital connectivity, and that the benefits tend to outweigh the cost. Interestingly, in contrast with most previous work, we have identified perceived challenges and benefits of unplugging, and emotions associated with unplugging. These suggest a more complex and nuanced millennials' perception and experience of the tension between constant connectivity and unplugging. Following the call for actions from medical sciences [1][4][5][17], we argue for the importance of HCI community to further engage in the exploration and sensitive design for digital unplugging practices. As designers, we bear responsibility that the technologies we design are not harmful [18], ensuring that they support growth and joy rather than dependency and mindless engagement. As suggested by Pierce's underdesign principle [13], we also argue for the value of uncovering both design principles, and evaluation guidelines for such unplugging technologies.

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