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Abstract. The ubiquity of sophisticated devices, along with uninterrupted access to the Internet and organizational computerized systems, allows for the "anyplace" workplace to be established. Technology has the potential to deliberately or inadvertently impact psychological wellbeing. Specific psychological demands are inadvertently imposed on remote employees whose permanent online presence is required. Hence, it is important to understand factors affecting digital wellbeing and steps that can be taken to maximize the wellbeing of remote employees. This paper provides suggestions for future research on studying the digital wellbeing of (fully or partially) remote employees. A research framework is proposed to demonstrate the different levels of analysis at which digital wellbeing could be explored and studied.

Keywords: Remote work · Digital wellbeing · Digital wellness · Technostress

1 Remote Work

Due to the increased pervasiveness of new communication technologies, new ways of working (that resulted in a mobile, multi-locational, remote, flexible, distributed, or virtual workplace) have become increasingly feasible. A new digital workplace has emerged from breaking down information silos and channels once available only on desktop computers in the physical workplace (Byström 2016). As discussed later, the literature has documented both positive and negative effects of remote work on wellbeing. The coronavirus crisis has demonstrated that remote work may become commonplace even for professions that are deemed more inclined toward in-person interactions such as teachers, lawyers, and priests. Therefore, new questions arise from remote work becoming increasingly ubiquitous: Does it matter where you work? How does remote work impact our lifestyle and wellbeing? How do employees negotiate their work-life boundaries under these circumstances?

Many companies intend to maintain remote work even after the pandemic is over because both employees and organizations see benefits in terms of cost-saving, lowering costs of commuting, saving time and organizational resources, and higher employee satisfaction (Barbuto et al. 2020; Thulin et al. 2019). However, certain negative effects in terms of employees' wellbeing might also occur (De Menezes and Kelliher 2011;

Grant et al. 2007; Michel 2011; Moen et al. 2013; Parker 2014). Therefore, further research is necessary to study these unintended consequences of remote work on digital wellbeing, which refers to the impact of digital technologies on what it means to live a life that is good for a human being (Burr et al. 2020; Floridi 2014; Nah and Siau 2020).

Working from home is not a new phenomenon, but the coronavirus crisis intensified and accelerated workplace changes that normally would have taken far longer to materialize. Instead of a hybrid digital-physical workplace that is already customary for many organizations, a fully virtual and digital workplace has become the norm in a very short time. These changes have affected how information is created and consumed in organizations. It is expected that 'when' and 'where' people work may not only affect their productivity and innovativeness but can also affect employees' digital wellbeing.

Several studies have shown that the use of information and communication technologies (ICTs) during the coronavirus crisis has made a positive impact on digital wellbeing (e.g. García del Castillo-Rodríguez et al. 2020). But for others, working from home is associated with a negative impact on digital wellbeing (Song and Gao 2020). It does "Matter Where You Work".

1.1 It Does Matter Where You Work

Remote work, also known as telecommuting or telework, is an arrangement between an employee and the employer where the employee's work is performed remotely outside the employer's physical premises (Messenger et al. 2017). People who work away from a "formal" desk show a remarkable diversity in their work patterns (Bjerrum and Bødker 2003). Burmeister et al. (2018) found that the environment affects concentration, accuracy, and decision-making; more specifically, participants in the 'formal' work environment showed higher accuracy compared to participants in the non-work environment. Further, remote workers demonstrate significantly lower satisfaction with work-life balance and higher negative work-home interaction (Jacukowicz and Merecz-Kot 2020).

Several studies conducted during the coronavirus pandemic found that remote employees emphasize the importance of and difficulty in maintaining work contacts and intense use of communication systems. Most remote employees found themselves working longer hours than normal, and some even indicated that they accomplished less. However, it is possible for remote employees to efficiently and effectively perform their tasks and maintain good relations with colleagues, but with the downside that it may require working longer than normal (Bolisani et al. 2020).

1.2 Work-Life Boundaries

The distinction between work-related and non-work-related activities is becoming less and less meaningful, as the spheres of work and life blur into each other (Bødker 2016). The "always-on" mode has extended work beyond the walls of physical buildings, creating an intrusion into people's personal life (Bjerrum and Bødker 2003; Bødker and Christiansen 2006). Because home is normally a place of restoration, the blurring of work-home boundaries may reduce opportunities to disconnect from work for restoration, and hence, it can negatively impact wellbeing.

Bødker (2016) advocates rethinking technology and how it contributes to the boundaries of work and life. She argues that work-life boundaries are not fixed, and technology should not, and is not meant to, remove the boundaries. She calls for controllable/negotiable dynamic boundaries made possible through flexibility in technological settings. In this regard, seams and boundaries are not static, and they are considered resources for: 1) reducing the complexity of information and activity; 2) standardizing shared objects across activities, communities, and groups; 3) making boundaries visible so groups can define and distinguish themselves from others; 4) supporting individual/group privacy and legitimacy.

2 Digital Wellbeing in the Remote Workplace

Digital wellbeing has been defined as "A state where subjective wellbeing is maintained in an environment characterized by digital communication overabundance. Research has shown that it does "matter where you work" (Hill et al. 2003; Moskaliuk et al. 2017) as the physical environment can influence cognition and work performance (e.g., Kay et al. 2004).

2.1 Digital Wellbeing and HCI Research

There seems to be a need for a new cross-cutting research field that focuses on the identification, analysis, and management of vulnerabilities and the unintended side effects emerging as a result of the sociotechnical digital transition (Scholz et al. 2018).

According to Schalock et al. (Schalock et al. 2002), there are more than 200 definitions of wellbeing across different contexts and there are three factors in the wellbeing construct: *1) independence* (personal development and self-determination); 2) *social participation* (relationships, social acceptance, and rights); 3) *wellbeing* (psychological, physical and material). Burr et al. (2020) identified three themes in wellbeing research: *1) positive computing; 2) personalized human-computer interaction; 3) autonomy and self-determination.* They believe these themes are central to ongoing discussions and research on digital wellbeing.

Positive Computing. This theme builds on positive psychology research and adopts an interdisciplinary perspective to study the individual and social factors that foster wellbeing (human flourishing) to understand how to promote digital wellbeing by embedding ethics more closely within the design process (Calvo and Peters 2017; Desmet and Pohlmeyer 2013).

Personalized Human-Computer Interaction. Personalization has been defined as "the ability to provide contents and services tailored to individuals based on knowledge about their needs, expectations, preferences, constraints, and behaviours" (Vallée et al. 2016, p. 186). The ubiquity of complex digital technologies and advances in data management and analytics has increased the viability of personalized human-computer interaction (Burr et al. 2020).

Autonomy and Self-determination. Five dimensions of autonomy may clarify the mediating role of health and wellbeing applications on the communication of information: *1) degree of control and involvement* that the user has within the app; 2) *degree of personalization* over the app's functionality; 3) *degree of truthfulness and reliability* related to the information presented to the user, and how it affects the user's decisions; 4) *user's self-understandin*g regarding the goal-pursuit, and whether the app promotes or hinders a user's awareness of their agency; 5) *whether the app promotes some form of moral deliberation or moral values* in the actions it recommends (Rughiniş et al. 2015).

2.2 Designing for Wellbeing

Peters et al. (Peters et al. 2020) suggest that designing for wellbeing must be distinguished from designing for positive emotions. In this view, wellbeing involves more than positive emotions. Tools should be built in a way to help safeguard against psychological harm and support sustainable wellbeing. While recognizing its importance, design for positive emotion, will not necessarily result in wellbeing, as feeling good is different from functioning well (Ryan and Deci 2017; Keyes and Annas 2009).

Specker Sullivan and Reiner (2019) describe several ethical frameworks to assess the justification of the influence of digital wellness technologies on users. They argue that "while some technologies help users to complete tasks and satisfy immediate preferences, other technologies encourage users to reflect on the values underlying their habits and teach them to evaluate their lives' competing demands" (p. 1). They conclude that applications take a more *maternalistic* approach to wellbeing and focus on both immediate wellness and long-term reflection on wellbeing are preferable.

2.3 Levels of Analyzing Digital Wellbeing

The "Digital Revolution" is a double-edged sword with benefits and challenges such that special attention should be given to what Scholz et al. (2018) call the "unseens". They suggest that these unseen effects should be studied at multiple levels: *1) the Human Individual; 2) Human Groups; 3) Organizations (Companies); 4) Institutions (Governmental Organizations); 5) Societies (Nation States); 6) Human Species.* The authors argue that human-machine interaction must be seen as a form of social interaction and self-reflection.

Individual. Countless studies have shown that communication medium affects communication itself, and thereof expected to play a significant role in wellbeing (Taylor et al. 2008; Caplan 2007).

Theories of Computer-Mediated Communication (CMC). CMC theories can be useful in wellbeing research within HCI. One of the most influential CMC theories is the media richness theory (MRT) (Daft and Lengel 1986; Dennis and Kinney 1998). According to MRT, which is also known as information richness theory, different media vary in their capacity for *1) immediate feedback; 2) multiple cues; 3) language variety; 4) personal focus*. Leaner media might be best used to reduce uncertainty, while richer

media are best used to reduce equivocality. Media synchronicity theory (MST) (Dennis et al. 2008) is another prominent theory. MST focuses on the ability of media to support synchronous communication. According to MST, when the main objective is to convey information, low synchronicity media are more suitable, but when the main objective is convergence on shared meanings, high synchronicity media are more suitable. Both MRT and MST are focused on which media should be chosen in different contexts. The Uses and Gratification (U&G) theory explores which channels are chosen and the reasons for them. According to U&G, users are looking to satisfy certain needs when using media. Recently, U&G has focused more on connecting the needs, goals, benefits, and consequences of media consumption and uses, along with individual factors, making U&G more predictive and explanatory (West and Turner 2010).

Gui et al. (2017) define digital wellbeing skills as "a set of skills needed to manage the side effects of digital communication overabundance" (p. 163). These skills are necessary to achieve strategic attention focus, avoid the stress caused by an overwhelming flow of information, minimize time wasted, and reduce attention on irrelevant activities. Digital stimuli should be managed so that they can be efficiently filtered and finalized toward personal goals and wellbeing. Two types of digital wellbeing skills are: 1) *attentional skills* (cognitive skills required for maintaining focus on specific issues for sufficient lapses of time, without getting interrupted); 2) *strategic or meta-cognitive skills* (cognitive strategies that envisage "constraints that an agent imposes on himself for the sake of some expected benefit to himself" (Elster and Jon 2000, p. 4).

Group. Communication (formal and informal) and awareness are key to working in teams/groups. The social dimension of remote work and digital wellbeing also needs a conscious reflection on digital etiquette (Montag and Diefenbach 2018) and consists of examining how technology is integrated within the existing culture of a group/team, the organization, or society as a whole. It includes determining what is considered an appropriate or adequate use of technology in social settings and areas intentionally made technologically-free (e.g., for certain hours of the day). This aspect is of importance especially in the context of the fully or partially remote workplace.

Wang et al. (2014) for example, used the feedback process model and the dissonance reduction theory to examine the effects of two types of emoticons (i.e., liking and disliking emoticons) on negative feedback acceptance. Their results showed that liking and disliking emoticons have different effects on the acceptance of negative feedback. They found that the perceived good intention of the provider and the perceived feedback negativity are contingent upon feedback specificity.

Organizational. Kulkarni et al. (2017) have used the structurational model of technology (Orlikowski 1992), which is based on structuration theory (Giddens 1979; Giddens 1984), to reconstruct the relationship between organizations and technology. In the context of remote work and when communication channels are porous (e.g., constant switching between email vs. chat), the question becomes how business intelligence (BI) capability is affected, and how can an organization improve its BI capability. Additionally, user participation is found to affect general information capability and BI capability. Hence, remote work outcomes at the individual and group levels have an impact at higher levels of analysis.

Government and Society. The fulfillment of psychological needs at the societal level contributes to long-term wellbeing (Sheldon et al. 2001). Evidence shows that the extent to which the needs of other people and society are fulfilled is also a determinant factor of individual subjective wellbeing (Tay and Diener 2011).

Because human relationships with one another and their environment has been changed by the rapid deployment and ubiquity of digital technologies, the wellbeing of individuals is now intimately connected to the information environment and the digital technologies that mediate human interactions with that environment (Burr et al. 2020). Therefore, ethical questions concerning the impact of digital technologies need to be considered at the societal level.

Capability Approach. Taddeo (2015) has proposed using a capability approach (Sen 1980) in analyzing the online persona in the context of individual wellbeing. He states that there is a "struggle between liberties and authorities" which will then be reconsidered based on an analysis of the wellbeing of the online persona, and the individual rights that come with it. Society today faces a compelling need to strive for a harmonious combination of liberties and authorities to ensure the wellbeing of individuals and society.

Human Species. In the longer term, different modalities of communication and working environments will cause changes in our brains by changing the nature of work itself, our expectations, and our employers' expectations. With continuous and repeated feedback loops between us and these systems, our psyches will change and adapt (Bednar and Welch 2019).

2.4   The Net Effect on Wellbeing

The lack of theoretical and empirical understanding of the goals of digital wellbeing could be due, partially or fully. to disagreements regarding the optimal way to measure the wellbeing construct, and/or from the uncertainty about the causal relationship between the use of digital technology (e.g., a smartphone) and the psychological effects (e.g., increased anxiety or depression) (Peters et al. 2018).

Advantages. Research shows that the use of ICTs can improve life satisfaction in the elderly population by, for example, increasing feelings of self-sufficiency (Klein 2017); ICTs can also provide young people and adults with more social and emotional support, which improves their psychological wellbeing (e.g., Meng et al. 2017; Pérez 2018; Verduyn et al. 2017).

Peters et al. (2020) contend that there is a gap in commercial digital wellbeing initiatives because the focus is mostly on changing human behavior rather than changing technologies. From a design perspective, Desmet and Fokkinga (2020) contend that need profiles can support a systematic approach to design for positive experiences and subjective wellbeing (Hassenzahl et al. 2010; Desmet et al. 2001; Desmet and Hekkert 2007). Wellbeing-supportive design tools should satisfy the need for proof, buy-in, tangibility, and the need for clear instruction (Peters et al. 2020).

Garcia del Castillo-Rodriguez et al. (2020) examined the use of the Quality of Life scale (acronym in Spanish is TICO) and ICTs in the context of coronavirus. They found

that the factors examined in the instrument account for the following dimensions: *1)
satisfaction with life; 2) emotional support;* 3) *"social support"*. The conclusion is that
these factors present an adequate correlation to assess personal perceptions of quality
of life associated with the use of ICTs in the context examined. Evidence also suggests
that positive work factors (*collegial support, rewards,* meaning, *and cohesion*) promote
wellbeing (Rogerson et al. 2016). Therefore, when technology supports these needs, it
promotes their wellbeing.

Digital Wellness. Digital wellness technologies are tools that are designed to address
immediate needs in digital wellbeing. Some technologies are geared toward helping users
to complete tasks and satisfy immediate preferences, while others focus on encouraging
users to reflect on the values underlying their habits and teaching them to evaluate and
prioritize their lives' competing demands. Specker Sullivan and Reiner (2019) proposed
that a maternalistic approach that incorporates these wellness technologies is more effec-
tive than a paternalistic approach as the former is more likely to lead to more skillful
user engagement with technology. The main difference between the two approaches
is that paternalism involves a local constraint of an individual's liberty for the sake of
their immediate benefit (but not necessarily their global autonomy competencies), while
maternalism involves a local intervention on an agent that benefits their overall autonomy
competencies in conjunction with their wellbeing.

Disadvantages. Recent research during the coronavirus pandemic has shown contrary
evidence to what was generally assumed in the pre-COVID literature. It was found that
working from home is not always a positive factor for employees as it depends on their
specific home conditions (Bolisani et al. 2020). A large portion of employees can keep
sufficiently good and fruitful interactions, although it depends on the type of job they
perform and the availability of appropriate communication technologies. There are still
many employees who struggle with using different communication systems, and this
struggle can be a stress factor for them.

Fragmentation of Everyday Life. Duke and Montag (2017) have provided evidence that
smartphone addiction is inversely related to self-reported productivity. In terms of frag-
mentation of daily life, they suggest that it can be partly explained by the high number of
daily interruptions. When working from home, the number of non-related interruptions
is expected to be higher.

Interruptions caused by ICTs can potentially reduce business productivity and
increase employee stress. In this context, Galluch, Grover, and Thatcher (2015) exam-
ined the quantity and content of ICT-enabled interruptions. They found that ICT-enabled
interruptions may negatively affect individual productivity and therefore decrease orga-
nizational productivity. Additionally, interruptions may lead to technostress which can,
initially, be in the form of short-term episodes of technostress, but cumulatively, can
cause harm to sustainable wellbeing.

Technostress. The term technostress was originally coined by Craig Brod (1984), and
more recently has been defined as "the stress that users experience as a result of applica-
tion multitasking, constant connectivity, information overload, frequent system upgrades

and consequent uncertainty, continual relearning and consequent job-related insecurities, and technical problems associated with the organizational use of ICT" (Tarafdar et al. 2010, pp. 304–305). Kushlev and Dunn (2015) demonstrated that there is a positive correlation between the number of times a day a person checks emails and his or her stress level, while other studies show that the mere presence of a mobile phone diminishes the quality of face-to-face interaction (Przybylski and Weinstein 2013). Molino et al. (2020) examined technostress in the context of coronavirus pandemic and found that it negatively affects work-family conflict and behavioral stress.

Fatigue, Isolation, and Digital Depression. Research has shown that social factors (social comparison, social interaction overload, social surveillance, and social information overload) and the technical factors of system complexity can all be contributing factors to fatigue.

Isolation increases with remote work (Mann and Holdsworth 2003). Moreover, there is a perceived obligation to maintain connections and stay updated, which can negatively affect wellbeing (Brooks 2015; Fox and Moreland 2015). Toscano and Zappalà (2020) investigated the experience of isolation in terms of stress, perceived productivity, and work satisfaction in the context of the coronavirus crisis. They found that social isolation is negatively related to remote work satisfaction, confirming previous studies (Orhan et al. 2016; Lee and Brand 2005). Social isolation and stress were also found to be linked to each other which is consistent with previous studies (Stephenson and Bauer 2010; Weinert et al. 2015). The findings also indicate a negative influence of social isolation on perceived productivity. Their study emphasized the importance of social relationships and found that feelings of loneliness are related to perceived productivity and work satisfaction.

Brown and Kuss (2020) looked at the *fear-of-missing-out* (FOMO) phenomenon, mental wellbeing, and social connectedness, and how they were influenced by a social media abstinence trial. FOMO is a strong motivator for social media use and may impact individual wellbeing. A significant positive relationship between mental wellbeing and social connectedness was found. The authors also provide additional insights regarding distracting nature of notifications from many platforms (such as email, chat, etc.). They found that the removal of notifications was associated with a more positive experience, suggesting that notifications trigger FOMO.

Although long-term effects of technology use on the human brain have not been sufficiently conclusive, they can change the human brain because technology pervades all aspects of our lives and exerts an impact on thinking, feeling, and social interaction (e.g., Small et al. 2020; Sparrow et al. 2011). The term "Digital Depression" underlines threats to wellbeing and happiness (Diefenbach and Ullrich 2016). Evidence has shown that overuse of digital channels is strongly linked to depression (e.g., Montag et al. 2017).

3   Research Models and Measures

We review related research in digital wellbeing and discuss the research models and their measurement in this section.

Bednar and Welch (2019) argue that human action, along with changes in personal and organizational life, is driven by desire. They proposed using a socio-technical approach that reflects *multiple boundaries* drawn from the perspectives of different human actors within the space. This approach recognizes the fact that individuals interact within an organized working system, *continually creating and recreating it*. Multiple roles with unique perspectives join, interact in, and leave the system making it open and dynamic.

Vanden Abeele (2020) proposed a theoretical model of digital wellbeing that accounts for the dynamic and complex nature of peoples' relationships to continuous connectivity. The model considers the balance *between connectivity and disconnectivity* that results in digital wellbeing, contingent upon a constellation of *person-, device- and context-specific factors*. Different combinations of these factors represent pathways to digital wellbeing, and with continuous repetitions, affect long-term digital wellbeing.

3.1   Design to Support Wellbeing

Two of the methods proposed for investigating wellbeing-supportive design are: 1) *a six-step process of Positive-Practice Canvas (PPC)* (Klapperich et al. 2019), and 2) METUX - a model for *Motivation, Engagement, and Thriving in User Experience* (Peters et al. 2018).

Positive-Practice Canvas.   The PPC is based on a model of social practices (Shove et al. 2012) combined with the notion of psychological needs (Hassenzahl et al. 2013). It takes a *multi-level model*, which connects wellbeing, positive experiences, and psychological needs (*the 'Why'*) through activities (*the 'What'*) with concrete technologies, their form, and interaction possibilities (*the 'How'*). This methodology allows for positive practices to be accumulated and serve as a starting point for further design activities.

METUX.   This model draws on SDT to understand the impact of digital technology on motivation, engagement, and wellbeing. SDT identifies three basic needs which must be satisfied for an individual to experience digital wellbeing: *1) autonomy; 2) competence; 3) relatedness.* They propose that to address wellbeing, psychological needs must be considered within the following *five spheres of analysis*, which sit within a *sixth sphere* that addresses the direct and collateral effects of technology use and non-user experiences: 1) at the point of technology adoption; 2) during interaction with the interface; 3) as a result of engagement with technology-specific tasks; 4) as part of the technology-supported behavior; 5) as part of an individual's life overall.

3.2   Measurement

Screen Use/Screen Time.   People find it difficult to identify a healthy routine of technology use (e.g., Blabst and Diefenbach 2017). A debate about the psychological impacts of screen time is ongoing. Some evidence routinely shows negative correlations between screen time and wellbeing (e.g., Twenge and Campbell 2018). However, recent meta-analyses (Odgers and Jensen 2020; Orben 2020) have found that research in this area is difficult to interpret and there are mixed findings. Overall, there are criticisms concerning

poor conceptualizations, the use of non-standardized measures that are predominantly based on self-report, and issues with measuring screen time as a ratio over time and context (Kaye et al. 2020).

Kaye et al. (2020) suggest replacing "screen time" with "screen use" which varies across time and context. In this way, the measurements are more centrally developed around behaviors rather than what "functions and features" people are using. The authors view "screen use" to be irrespective of platforms or features; it is based on the behavior(s) facilitated by the screens: entertainment, social, education/work, and informational. Therefore, this view suggests that the needs of users should be the main concern, and users themselves should be co-creators. Once again, a more user-participative and context-relevant approach is advocated in addressing relevant aspects of digital wellbeing.

4 Future Research

Particularly during the coronavirus pandemic, many practitioners have looked for best practices to address the digital wellbeing of remote employees. For example, Greenwood and Krol (2020) offer eight concrete actions managers and leaders can take:

- Be vulnerable
- Model healthy behaviors
- Build a culture of connection through check-ins
- Offer flexibility and be inclusive
- Communicate more than you think you need to
- Invest in training - prioritize proactive and preventive workplace mental health training
- Modify policies and practices - to reduce stress for everyone
- Measure – to ensure accountability.

While the above suggestions are all useful tips, the new realities of remote work require a better understanding of digital wellbeing. As Tarafdar, Gupta, and Turel (2013) have stated, "the very qualities that make IT useful - reliability, portability, user friendliness and fast processing - may also be undermining employee productivity, innovation and wellbeing". In the rest of this section, we present future research areas/themes for exploring, understanding, and enhancing digital wellbeing, in the context of fully or partially remote work.

We expand on research avenues proposed by Montag and Diefenbach (2018) below. The literature review provided strong support for cross-cutting research on digital wellbeing, which should take place at different levels of analysis (as first presented by Scholz et al. 2018). Additionally, it has become evident that context and repeated experiences (loops) play a significant role and should be factored in when examining digital wellbeing. Several authors also distinguish between near-term and long-term digital wellbeing.

Further research is needed to look at the different levels of analysis – from individuals, groups of individuals, organizations, etc. – in *a work setting that can take place anywhere* (see Fig. 1). More specifically, areas for future digital wellbeing research include (starting at the lowest level of analysis):
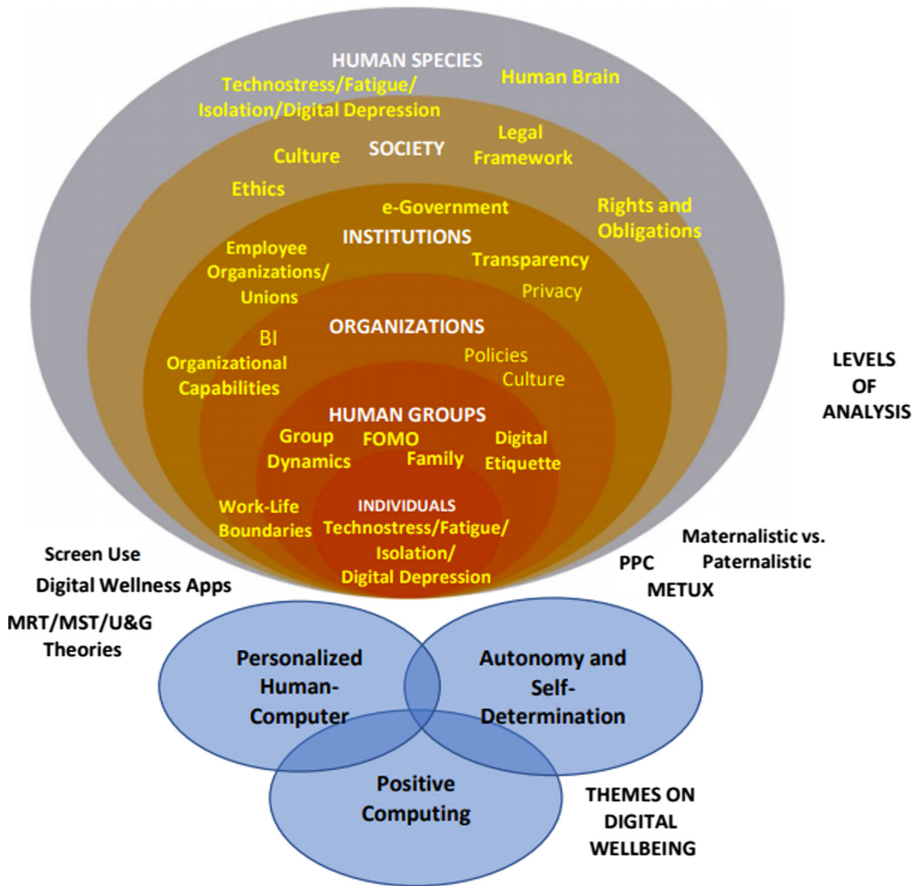
Fig. 1. A multi-level approach to research on digital wellbeing

- How do new forms of self-perception, self-reflection, and self–presentation affect the social communication of remote employees?
- What kinds of self-control mechanisms and other digital skills are employed by the individual employee when it comes to his/her online work persona? How are these digital skills used to maximize the net short-term and long-term (sustainable) wellbeing?
- What ICT support is needed for the individual employees to remain effective and efficient in meeting their performance goals of remote work while preserving their wellbeing?
- How do pragmatic and symbolic reasons for media choice operate in the context of remote work?
- What are strategies to promote flow experiences in times of fragmented lifestyle of individuals and the groups/teams they belong to?
- What is the impact of group/team features, such as social inclusion, group identity, norm-building (e.g., digital etiquette), and group dynamics, on digital wellbeing?

- What are the characteristics of tools that can help and facilitate individual employees and teams in managing work-life boundaries? What is the right balance between seamlessness and seamfulness?
- What are meaningful rules for social communication in times of abundantly available access to digital distractions (for individual, group, and organization)?
- How can one better adapt to hybrid or fully virtual meetings, and "decision-making by Zoom"? Are decision-makers going to adapt their styles considering digital wellbeing considerations? What tools do they need to be able to remain efficient and efficient while maintaining everyone's digital wellbeing? At what level should feature-control be exercised (e.g., individual, group, meeting level, etc.)? What are employees looking for in this new context for decision-making?
- How does increased autonomy impact digital wellbeing? What are the technological features necessary to preserve trust and minimize stress from autonomy? What role can technological tools/features play in performance feedback and conflict resolution for remote staff?
- In what organizational contexts are maternalistic approaches the most effective for designing digital wellbeing organizational tools? What are the pros and cons of paternalistic approaches in designing technologies to be used in remote workplaces? Do organizational and national culture make a difference?
- How do organizations/companies/governments manage the "struggle between liberties and authorities" in the context of remote work? In what ways do practices, policies, and legal frameworks need to change to reflect the new realities to ensure sustainable wellbeing?
- What are the roles and social responsibilities of digital professionals in designing online settings to encourage practices of wellbeing?
- How does the digital world shape or change the human brain and how can we hinder or minimize harmful effects on the human brain? Are there cultural differences?
- How can we design the digital world according to our emotional evolutionary heritage to foster wellbeing in digital societies (individual, group, society)?
- Do we need a better measure for the digital wellbeing construct and its antecedents (e.g., technostress creators)? How can we better understand the relationships between remote work and digital wellbeing?

5   Conclusion

Creating a better understanding of the direct and indirect effects of the "unseens" on digital wellbeing requires experience and expertise from different fields of science. The proliferation of technology supporting a culture that is "always-on" and its impact on wellbeing warrants further research in order to propose solutions to maximize individual digital wellbeing. In this paper, we propose a multi-level framework that demonstrates the effects of different technological affordances on the digital wellbeing of users. We also provide suggestions for future research at each level of analysis.

In this paper, we highlight the importance of recognizing the dynamic and complex nature of the relationships between people and the continuous connectivity that they experience to more fully understand their impact on wellbeing. Remote employees operate in a system where boundaries open and close at different times, and there

are continuous information and feedback not only at the individual level but also at the higher levels. Therefore, cross-cutting research that utilizes mixed methodologies would be the most promising. The questions identified in this paper are not meant to be comprehensive, but they serve as an initial blueprint in advancing digital wellbeing research.

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