



ONLINE VIGILANCE AND DIGITAL WELL-BEING: EXPLORING THE ROLES OF DIGITAL ANXIETY AND AVAILABILITY NORMS IN KNOWLEDGE WORK

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Abstract

With the introduction of Digital in the workplace, workers face constant digital communication, which can impact on their psychology. This study examines the mediating contribution of digital anxiety and the moderating role of availability norms between the dimensions of online vigilance (ongoing cognitive monitoring of digital communication) and digital well-being. The study involved 345 knowledge workers among the sectors that have high digital communications such as corporate services, IT, banking, telecom, higher education and others. The data were gathered by using an internet-based survey and SmartPLS 4 was used to analyse it with partial least squares structural equation modelling (PLS-SEM). These findings suggest that overall, online vigilance is significantly associated with greater digital anxiety, and with a decrease in digital well-being. Digital anxiety mediated between online vigilance and digital well-being, indicating that the psychological path connecting attentional engagement with technology had an impact on feelings of a lack of well-being. Furthermore, availability norms reinforced the link between online vigilance and digital anxiety, indicating the expectations expressed by the organizations to always be able to reach them to increase digital anxiety. The results deepen and enrich the theoretical framework around the Autonomy–Control Paradox of Technology and Technostress Theory by providing an interaction of individual and organizational factors on digital well-being. In practice, the study highlights the need for rules of availability in use, digital stress reduction and the regulation of online vigilance, to create better digital work environments.

Keywords: Digital Well-being, Online Vigilance, Digital Anxiety, Availability Norms, Autonomy–Control Paradox

1. Introduction

It has been found that digital technologies are an integral part of today's organizational life, influencing the ways in which organizational members communicate, collaborate with one another, and otherwise work (Raza et al., 2026). Work tasks and colleagues can be reached, instantly via email, messaging systems as well as collaborative applications and communication tools of social media. These technological advancements can increase the efficiency and flexibility but at the same time put a psychological burden on the user with the constant connectivity and information flow. This has warranted the attention of researchers focusing on digital well-being – in general, the bookkeeping of consumers' healthful, equilibrium, and happy relationship with digital technologies without experiencing emotional pressure or dependence (Vanden Abeele, 2021).



Digital well-being is the perceived control a person experiences while using the technology, that he is the driver, not the technology (Raza et al., 2026). While there has been a proliferation of academic interest in digital well-being, the supporting and inhibiting conditions that shape employees' experiences of digital wellness within organizational environments are not well-documented or studied.

An important phenomenon that has surfaced with omnipresent connectivity is “online vigilance,” which refers to an ongoing mental state of earliness towards the stream of communication and information received on the internet (Reinecke et al., 2018). High Internet vigilance people are always checking the online communication avenues, preparing for messages, and still considering the online world, even when they are not on the web (Raza et al., 2026).

When communication technologies are a key part of job-related tasks, workers can become more attuned to notifying, receiving messages, and getting digital updates. This constant welding of things online into everyday life and the continuous provision of psychological pressure to stay connected, can lead to seeping of the boundaries between work and personal life. Existing studies indicate that a constant connectivity can contribute to psychological non-recovery, cognitive burden, and stress (Ayyagari, Grover, & Purvis, 2011; Day, Paquet, Scott, & Hambley, 2012). However, not much attention has been paid to understanding the effect of online vigilance on employee’s digital well-being in the workplace.

One of the psychological factors that could be the explanation for this relationship is digital anxiety. Digital anxiety is the stress, worries, or unease with the demands of digital communication, information overload, and always “on” requirements. If workers are vigilant about Internet communication, they could feel stress when they see incoming emails, worried about missing important messages, compelled to respond immediately or feel overwhelmed because they don't want to get back to work. This monitoring can end up adding to user anxiety of digital technologies due to emotional stress and cognitive load. Previous studies of technostress confirms that over-exposure to digital demands can be a cause of psychological stress and anxiety for workers (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008). All of these negative emotional experiences can make it difficult for individuals to have a balanced and healthy relationship with technology, which will in turn make it difficult for them to gain their digital well-being.

The literature has identified some stressors that have been found to be associated with technology, but the studies have mainly focused on how those stressors affect certain outcomes like stress, burnout and/or job performance (Ayyagari et al., 2011; Tarafdar, Cooper & Stich, 2019). Fewer studies have focused on the psychological processes which can explain the technology-related cognitive orientations in terms of well-being outcomes. Specifically, the intervening variable of digital anxiety in the relationship between online vigilance and digital wellbeing has not been well-studied. Knowing how this occurs is crucial as it helps to elucidate how ongoing engagement with digital communication contexts might be linked to reduced wellbeing in digitally oriented workplaces.

Availability norms in organizations are another important determinant that can influence the outcomes of vigilance in cyberspace. Availability norms – common expectations that staff will be accessible and responsive via electronic communication methods. The norms are frequently applied tacitly in organizations where responding to an email or message or a digital request quickly signals commitment and professionalism (Barber & Santuzzi, 2015). But with high norms, staff might think they need to always be ready for digital communication channels and react fast to incoming communications. For instance, in these situations, staying vigilant on the internet might be more worrisome for workers since they feel more compelled to be connected and responsive. On the other hand, in other situations where norms of accessibility are less strict, the employees might feel freer to take control of their digital communication, which gives them less reason to fear constant overviews in digital settings. Although they are relevant to the digital world, availability norms have hardly been investigated as circumstantial factors that influence the connection of online vigilance to digital well-being.

Combining the previous research, it is easy to observe that there are some important gaps in the research. First, while there has been an increasing focus on digital wellbeing in digital behaviour studies, empirical studies of factors that influence digital wellbeing in the organizational space are limited. Second, in



previous studies, online vigilance was largely ignored as a cognitive variable which could have negative consequences for the digital well-being of employees. Third, although the stressors of technology have received extensive research, the relationship between digital anxiety and online vigilance and digital well-being has not been investigated adequately. Last, the role of norms of availability as one of the factors that may moderate how employees experience the psychological implications of online vigilance in digital workplaces has been virtually ignored in the studies to date.

To bridge these gaps, the present study proposes and validates a moderated mediation model examining the effects of online vigilance on digital well-being via digital anxiety, with the moderating effect of availability norms discussed. In particular there are three major objectives of this study. First, it aims to examine if online vigilance can be considered as an important antecedent of digital anxiety in employees. Secondly, the study seeks to investigate the effect of digital anxiety between online vigilance and digital wellbeing. Third, the study tests the moderating effect of norms on the association between online vigilance and digital anxiety, to intensify or obstruct the indirect pathway of online vigilance to digital well-being. This study makes a valuable addition to the existing research on digital well-being in the workplace by investigating factors, particularly cognition and context, which influence the psychological status of employees within a digitally connected workplace.

This work has a few noteworthy implications. Theoretically, it contributes to understanding digital well-being, positing that online vigilance serves as a key cognitive antecedent and clarifying how vigilance can be a psychological pathway towards a decrease in overall well-being when online. This study also suggests that organizational communication expectations will impact the digital experience of the employee when availability norms are used as a contextual moderator. In practice, the results can help companies to gain insights into how expectations for constant connectivity can contribute to overwork at a subconscious level. Organizations therefore can make a difference to foster more healthy communication practices, facilitate boundary management and encourage responsible practices of technology use to enhance employees' digital well-being in the digital era of increasingly connected work environments.

2. Literature Review

Theoretical Background

This study is mainly based on the Autonomy–Control Paradox. The paradoxes of digital communication technologies in modern workplaces are understood from this standpoint. Use of digital tools like email, IM, and collaboration tools gives employees flexibility and autonomy, but also raises expectations of availability, responsiveness, and constant connectivity (Mazmanian, Orlikowski, & Yates, 2013). Consequently, there are technologies available that allow for more flexibility in work that can also be organizational technologies of control in subtle ways.

The autonomy–control paradox implies that digital technologies enable employees to work anytime and anywhere, which increases autonomy in the management of work tasks. This flexibility can become an implicit expectation, however, that workers always have access and are always on digital communications. These expectations develop into social and organizational norms over time, which manifest themselves in the need to make sure digital communication flows are monitored, and to respond quickly and effectively to messages. These expectations are especially prominent in organizations that are heavily reliant on coordinating and collaborating through digital communication channels. This can result in an increased sensitivity to digital interactions, so that employees constantly think in an online world even when they are not directly communicating in digital channels. The concept of online vigilance helps to explain this constant attitude towards digital communication. Online vigilance is an employee's habit of keeping an eye on digital communication channels, expecting incoming communication, and being aware of online information streams (Reinecke et al., 2018). Online vigilance can be seen as a form of behaviour that arises in the middle of the tensions that are generated by the dual nature of digital technologies within the autonomy–control paradox framework. The flexibility and autonomy of digital communication tools benefit employees on one hand, but on the other, they are being expected to be more responsive and available.



These expectations are supported by norms of workplace communication. Availability norms are defined as common beliefs that workers should be accessible and "on call" via digital communication media (Barber & Santuzzi, 2015). These norms tend to develop over time and informally in an organization and influence employees' ideas about appropriate communication behaviour. If availability requirements are high, workers may feel obligated to be constantly 'on', which can lead them to feel like they have to reply immediately to digital communication channels in order to uphold perceived expectations of responsiveness. In this regard, the autonomy from digital technologies becomes paradoxically a means of social control, further driving employees' attentional involvement in online environments. Thus, availability norms can exacerbate the effects of online availability on psychological outcomes among employees.

The present study also builds on the Technostress theory to gain an understanding of the psychological impact of the employees' persistent attentional engagement with digital communication technologies, while the autonomy–control paradox is used to understand the reasons for such engagement. Technostress theory implies that technological requirements place psychological strains on people which can have a negative impact on their well-being and performance (Ayyagari, Grover, & Purvis, 2011; Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008). Such demands can come from different parts of technology usage, from the overload of information, constant connectivity, to interruptions in communication.

In the digitally intensive work context, on-line vigilance can be a technology-related demand that exerts constant cognitive demands on workers. People who continue to monitor digital communication platforms may suffer from anticipatory stress, anxiety about missing out on something, the need for instant replies and anxiety about getting messages. This constant monitoring can cause mental fatigue and emotional stress – both elements of technostress.

Anxiety is a psychological consequence of this process, and one of the most critical. Digital anxiety is a state of tension, worry or unease related to the pressures of digital communication and being connected all the time. Technostress theory suggests that the excessive exposure to technology demands can induce emotional responses like stress and anxiety which, in turn, can adversely affect people's well-being (Tarafdar, Cooper, & Stich, 2019). For the purpose of the current study, online vigilance is defined as a cognitive demand that occurs due to the constant online connectivity, and digital anxiety is defined as a psychological strain that results from this demand.

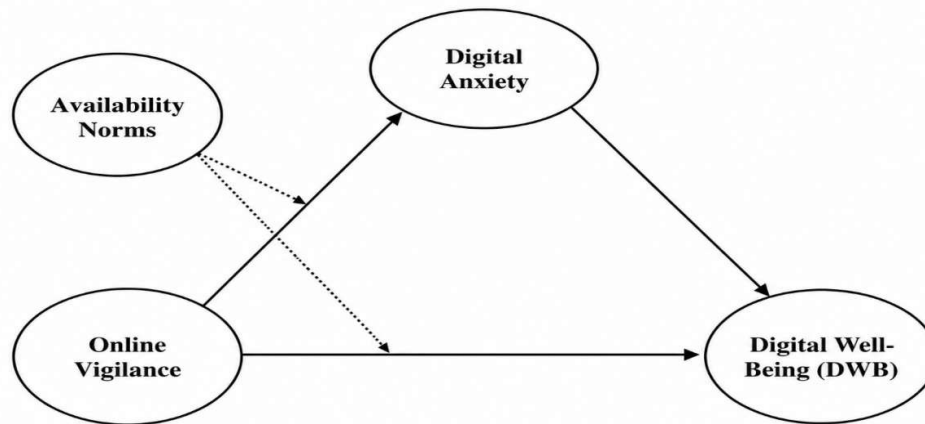
This strain can then impact people's electronic health. Digital well-being is the capacity to engage with digital technologies in a healthy and balanced way without experiencing undue psychological distress (Vanden Abeele, 2021). If employees are feeling digital anxiety, their relationships with digital technologies could turn into stress and discomfort instead of productivity and flexibility. These experiences could diminish people's ability to use digital technology in a balanced and mentally healthy way over time.

The current study combines the technostress theory and autonomy–control paradox perspective to offer a comprehensive explanation of how digital connectivity impacts employees' well-being. The autonomy–control paradox is the organizational and technological phenomenon that leads to online vigilance, and technostress theory is the theory that reflects that vigilance leads to psychological strain and digital well-being. Over the last thirty years, these theoretical perspectives offer a solid basis for exploring the impact of online vigilance on digital well-being through digital anxiety and its relationships with the availability norms in digitally connected workplaces.



Figure 1

Research Model



Online Vigilance and Digital Well-being

As digital communication technologies are increasingly embedded in the daily work situation, concerns have emerged about employees' capacity to have a healthy relationship with these technologies. Online vigilance is one of these concepts, a constant mental state of readiness to online communication and information streams, involving predictive monitoring of communication messages, frequent thoughts about online communications, and increased sensitivity to notifications (Reinecke et al., 2018). By engaging employees in online vigilance, digital well-being can impact their psychological experience in the digital world.

Some studies indicate that online vigilance can have adverse effects on digital well-being, such as impacting attention and cognitive functions. For instance, constant surveillance of online communication can be distracting and lead to higher cognitive demands, thus creating fewer chances to psychologically disengage from online work contexts (Johannes et al., 2021). This cognitive strain can affect a person's ability to effectively manage their technology use, resulting in reduced control over their digital engagement and experience of digital well-being. Digital well-being is the use of digital technology in a control way (Raza et al., 2025). Reinecke et al. (2018) state that they believe the salience of digital communication for employees with high levels of online vigilance may further increase their stressors and/or decrease their psychological recovery, which leads to decreased digital health.

Empirical studies have also detected mechanisms of how online vigilance relates to well-being outcomes. Using online vigilance was correlated with greater mind-wandering and less mindfulness, which in turn were negatively correlated with life satisfaction and affective well-being (Johannes et al., 2018). This indicates that the focused concentration of online vigilance interferes with peoples' current state awareness, leading to a negative impact on their psychological and digital health. Likewise, research on the college students found that the more vigilant they were online, the higher their level of anxiety and psychological distress were, suggesting that constant attention to digital communication may result in ongoing emotional stress (Johannes et al., 2021).

Although there is much evidence that suggests that online vigilance has a negative impact on digital well-being, some researchers report that this impact can be situation-specific. For example, people who think that online interactions are positive or supportive might not have as negative a reaction as those who do not, and they may even have a more positive reaction – such as better feelings of connectedness or social awareness in some instances (Reinecke et al., 2018). However, the prevailing view in the field of organizational research suggests that ongoing cognitive monitoring of digital communication is likely to have a detrimental impact on digital wellbeing in various ways, including attentional fragmentation, cognitive overload and psychological strain (Johannes et al., 2018; Johannes et al., 2021).



The literature suggests a negative link between online vigilance and digital well-being, as online vigilance is a cognitive demand that interferes with attention and causes a psychological load. Despite the limited empirical studies in the literature, however, it is still unclear what mechanisms and/or moderators might affect this relationship such as digital anxiety or availability norms, and further studies are needed to examine these relationships.

H1: *Online vigilance negatively affects digital well-being.*

Online Vigilance and Digital Anxiety

Along with the widespread adoption of digital communication technologies, there are new cognitive demands in the workplace that have led to phenomena like online vigilance, which is characterized by continuous attention focus on online messages and notifications without active involvement (Reinecke et al., 2018). Employees who are online vigilant continually check digital communication systems, anticipate messages, and keep their digital interactions in mind. To stay informed and responsive, attention focus can be beneficial, but at the same time, it can also add to psychological strain, potentially resulting in negative emotional consequences like digital anxiety.

Digital anxiety is characterized as the emotional stress, concern or discomfort caused by the need for instant response, information overload and digital communication demands (Tarafdar et al., 2019). This anxiety is when people are pushed to be constantly connected and responsive, leading to ongoing stress and cognitive overload. Online vigilance is digital anxiety's forerunner, as it reinforces a cognitive focus on digital communication. Constant attention engagement and anticipatory monitoring from online vigilance contribute to the mental effort required and to heightened sensitivity to interruption while leaving less room for psychological detachment, thereby leading to anxiety over digital technologies (Ayyagari et al., 2011).

Empirical studies have backed up the positive association of online vigilance and anxiety outcomes. In an attempt to characterize the nature of online vigilance, Johannes et al. (2018) found that employees who were more vigilant online had more mind-wandering and less mindfulness, both of which correlated with greater negative affect and anxiety. In the same way, research in the organizational and academic setting has found that when digital communication channels are monitored for extended periods of time, there are increased feelings of stress and anxiety, suggesting that the preoccupation with technology can lead to emotional strain (Ragu-Nathan et al., 2008; Reinecke et al., 2018). The results are in line with technostress theory which states that the psychological load associated with technological demands results in psychological strain that in turn has a negative impact on employee health and performance (Ayyagari et al., 2011).

Furthermore, the link between online vigilance and digital anxiety can be intensified in contexts where the availability norm is high, such as where there are implied norms that employees should be ready to respond promptly and that they can be reached via digital channels (Barber & Santuzzi, 2015). In such settings, the cognitive load caused by online vigilance is exacerbated by the social and organizational pressures, leading employees to become vulnerable to anxiety arising from demands of digital communication. It shows the significance of the context of the psychological outcomes of online vigilance.

The literature clearly shows that vigilance online is an important cause of digital anxiety. The focus on online communication over time creates cognitive and emotional stress, elevating employees' perception of stress and anxiety around digital technology. Although there are positive functions that come from vigilance in order to stay connected and responsive, these results suggest that constant online monitoring may have serious psychological consequences, especially in a digitized environment.

H2: *Online vigilance leads to digital anxiety.*

Digital Anxiety and Digital Well-being

Digital well-being refers to when a person uses the digital world in a way that contributes to their psychological well-being, life satisfaction, and productivity, but not to psychological stress or burnout (Vanden Abeele, 2021). Although digital technologies can offer flexibility, connectivity and informational access, over-cognitive and over-emotional interaction with digital technologies can have a negative impact on health and wellbeing (Raza et al., 2025) especially when information anxiety is present.



Digital anxiety is a psychological response that includes tension, worry, or unease because of the constant demands of digital communication, the expectations of being “responsive”, and the feeling of information overload (Tarafdar et al., 2019). High digital anxiety can make employees feel pressured to monitor and respond to digital messages immediately, thereby resulting in heightened stress and a sense of being “always on” (Ragu-Nathan et al., 2008). This constant emotional stress can hinder recovery from digital demands, and hamper an individual's ability to use technology in a balanced and controlled fashion.

The negative association between digital anxiety and digital wellbeing is supported by empirical evidence. For example, Ayyagari et al. (2011) determined that the use of technology-induced stress, such as stress from constant connectedness, was related to the perceived impact on well-being and overall psychological health of users. Likewise, Tarafdar et al. (2019) pointed out that techno-distress (anxiety about technology demands) affects the employees' capacity to effectively manage their technology use, which can lower employee digital well-being. These studies suggest that digital anxiety acts as a psychological stumbling block to a healthy relationship with digital tools. Moreover, digital anxiety acts as a moderating factor in the relationships between cognitive and behavioural involvement with technology and well-being outcomes. For instance, one would predict that people who are vigilant online would experience more anxiety because they are constantly paying attention to messages and notifications (Johannes et al., 2018, Reinecke et al., 2018). This worry, in turn, diminishes their digital well-being by contributing to feelings of pressure, control, and less detachment from the digital work communication. Mediated relationships underscore the need to study the psychological mechanisms that underlie the relationships between the specific technology-related behaviours and digital well-being in organizational settings, including digital anxiety.

The negative impacts of digital anxiety on well-being can be exacerbated by contextual factors like availability norms. Employees who have a strong availability norm feel that there are expectations that they must be available and responsive at all times, which can increase digital anxiety and further reduce digital well-being (Barber & Santuzzi, 2015). This indicates that employees' emotional experiences and their digital well-being in general, are influenced by their individual cognitive orientation towards digital technology (e.g., online vigilance) and organizational expectations (e.g., availability norms).

Digital anxiety is a pivotal variable between technology-related cognitive and behavioural factors (e.g., online vigilance) and the well-being outcomes associated with digital technology. There is evidence across the disciplines that increases in digital anxiety are linked to decreases in digital well-being, meaning that individual and organizational factors that are associated with high levels of anxiety in digitally intensive settings need to be addressed.

H3: *Digital anxiety negatively affects digital well-being.*

H4: *Digital anxiety mediates the relation between online vigilance and digital well-being.*

Availability Norms as a Moderator

Digital communication technologies have had a significant impact on how people expect to communicate within an organization. Many workplaces have a tradition of workers being available at all times via digital communication channels like email, IM and collaboration software. In general, such expectations are understood as availability norms – shared understandings that workers should be available and responsive to work-related communication most of the time (Barber & Santuzzi, 2015). Norms of availability can be implicit in an organization and affect how people communicate, providing a tacit cue about the pace and frequency of reply to digital messages.

In digital connected workplaces, availability norms are especially important because they impact on employees' perceptions and management of the demands of digital communication. If the norms are high for availability, then employees might feel that they have to check on the channels more often, and be able to react quickly to messages from coworkers and supervisors. The need to be connected at all times can add a further cognitive and emotional burden to digital communication, potentially adding to psychological stress (Day et al., 2012). This means that having a high level of availability can lead to higher levels of stress and anxiety in individuals working in a workplace that has strong expectations for technological availability, compared to those of a workplace with weaker expectations.



Availability norms have come into focus as a key moderator of employees' reactions to technology demands. Barber and Santuzzi (2015) say that workplace telepressure, which occurs when there is a sense of being always available and responsive, is what leads to the feeling of being pressed into respond quickly to work messages. This pressure pushes staff to stay alert to digital communication channels and heightens the feeling of working all the time. Likewise, Day et al. (2012) showed that the perceived information and communication technology (ICT) demands have a different effect on employee outcomes as a function of the organizational context such as the expectations about the availability of communication.

Availability norms can be a significant contextual factor that strengthens employees' psychological reactions to ubiquitous connectivity in the context of online vigilance. Online vigilance is characterized by a constant mental focus on digital communication streams like expecting to receive messages and being extra sensitive to notifications (Reinecke et al., 2018). Vigilance can be a result of people's cultural habits with technology, but the demands of the organization for responsiveness can be a determinant factor related to the psychological strain caused by vigilance. If the norms for availability are strong, then employees who are highly vigilant with digital communication may feel pressure to respond quickly and be available at all times, increasing anxiety about digital communication.

In other settings, however, where there is less available norm, employees may feel more free to be the first to decide how to respond to a message and may feel less pressure to reply immediately. In certain situations, those online observations could have little psychological impact without being cognitively demanding. This indicates that availability norms can either magnify or dampen the link between online vigilance and digital anxiety regarding the pressure of demands for digital communication.

Theories about the moderating effect of availability norms can also be explained through the autonomy–control paradox of technology, a theory proposed by Mazmanian et al., 2013, which states that digital technologies can be used to offer flexibility and autonomy to employees while at the same time raising their expectations of being available at all times. There are subtle ways in which organizations can influence how people communicate digitally with one another via availability norms, that is, the expectations people have about their availability and responsiveness. As a result, these expectations can leave a digital citizen feeling more obligated to be online, potentially increasing the psychological impact of online watchfulness.

The literature reviewed thus far shows that in general, the availability norms are one of the contextual factors that influence employees' experiences with digital communication technologies. Availability norms can help cement the link between online vigilance and digital anxiety, which in turn can have an indirect impact on employees' digital well-being, as these norms reinforce expectations of constant availability and responsiveness. Although available, availability norms have not been examined in detail in studies that focus on the psychological effects of online vigilance, further research is needed to explore their moderating effects in technology related stress processes.

H5: *Availability norms moderate the relation between online vigilance and DWB.*

H6: *Availability norms moderate the relation between online vigilance and digital anxiety.*

3. Research Methodology

Research Design

The studied population in the present study was knowledge workers working in an organization that operates in a digitally intensive environment. According to Drucker (1999), Alavi and Leidner (2001), knowledge workers are employees with the primary role of information processing, technology-mediated communication, and digital collaboration. This population was considered to be the theoretical population that this study used because the constructs studied, digital well-being (DWB), online vigilance, digital anxiety, and availability norms, are part of digitally mediated working contexts. Knowledge workers have to deal with vast amount of digital information on a daily basis that is demanded from them cognitively and emotionally to process, respond and manage; hence they are more vulnerable to technology related demands (Tarafdar et al., 2019).

There were 345 full-time employees who completed the study. The respondents were selected from various organizations that were seen to be dependent on digital communication and included in their business



information technology, banking, telecommunication, higher education and corporate services. The sectors were chosen because in these contexts, workers often use digital communication technologies like email, IM apps, collaborative platforms and virtual meeting software to coordinate work activities and ensure organizational collaboration (Ayyagari et al., 2011; Day et al., 2012). Digital communication technology is used extensively in these industries, leading to a diverse and contextually nuanced range of employee experiences of online vigilance, digital anxiety, and digital well-being, as well as different norms of availability, or shared expectations for timely responses to digital communication (Barber & Santuzzi, 2015).

The data were gathered via a structured electronic questionnaire, done with a secure online survey platform. The survey link was sent out by professional networks, organizational contacts and internal communications to those who work in occupations that rely heavily on digital technology. There was no requirement for participation, and respondents were assured that their answers would be anonymous and confidential, and that this information would only be used for academic research. These measures were taken to minimize evaluation apprehension, social desirability, and to ensure honest and accurate responses (Podsakoff et al., 2003). The selection of workers from the higher digitally intensive sectors improves the external validity of the findings, since they are about the workplace use of digital technologies not about spontaneous or personal use. Additionally, this study focuses on organizational employees as opposed to students or general social media users, which aligns with previous studies on workplace well-being, technology-mediated communication, and organizational psychology (Vanden Abeele, 2021). Digital well-being and online vigilance are timely and relevant topics, as people today, especially in the workplace, are becoming more dependent on digital communication technologies, both in the workplace and in the hybrid and remote format.

The survey included a number of screening questions to guarantee construct content and to assure that the respondents were appropriate. Only those who fulfilled all the eligibility criteria would be eligible. The following criteria were used to include patients:

1. **Full-time Employment:** Participants had to affirm that they worked full-time. This condition ensured that the study reflected workplace experience in formal organizational settings as opposed to informal or temporary digital settings (Tarafdar et al., 2019).
2. **Digital Communication Responsibilities:** Participants were requested if they had some responsibilities to use digital communication technologies like email, instant messaging apps or virtual meeting platforms on a regular basis. This requirement ensured that it reflected the study's focus on digitally mediated communication and on technologically-driven work environments.
3. **Average Hours of Digital Communication Exposure:** Participants were asked to give details of the average number of hours per day spent on digital communication platforms for work-related purposes. Given that the research aimed to obtain sufficient coverage of technology-mediated work demands, only participants who reported at least one hour of digital communication per day were included.
4. **Formal Digital Communication Platforms:** Participants were asked to confirm that they routinely used one or more platforms for formal digital communication, such as email systems, instant messaging platforms, collaborative work spaces, or virtual meeting software. This criterion guaranteed the use of digital communication as an integral part of professional duties.
5. **Minimum Organizational Tenure:** Respondents had to have a minimum of three months of tenure in their current organization. This made that participants got enough exposure to the organization's communication climate, norms, and availability expectations in digital communication. It is important to note that in organizations with a short tenure of employees, norm perceptions and measures of organizational digital well-being (Day et al., 2012; Mazmanian et al., 2013) may not be valid due to the fact that employees do not have established perceptions of the norm.

The inclusion criteria were chosen to make sure that the end sample was representative of knowledge workers who are highly relevant to the research context and for whom online vigilance, digital anxiety and availability norms are meaningful and operationally significant.



The demographic profile of the 345 respondents is shown in Table 1. The sample was slightly male dominated with 53% male and 47% female. The majority of respondents were relatively young, 59.5% between 21 and 30 years old. Regarding education, most (44.2%) possessed a bachelor's degree and 46.2% had a master's degree. In terms of length of time in the organization, the highest number of workers was in the 1-3 year range (39.4%) and 3-5 year range (23.2%). With an emphasis on technology-mediated work environments, participants were selected from various digitally intensive industries such as information technology, banking and finance, telecommunications, higher education, and corporate services.

Table 1*Demographic Characteristics of Respondents (N = 345)*

Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	183	53.0
	Female	162	47.0
Age (years)	21–30	205	59.5
	31–40	92	26.7
	41–50	38	11.0
	51 and above	10	2.8
Education	Bachelor's Degree	152	44.2
	Master's Degree	159	46.2
	Doctorate / Others	34	9.6
Organizational Tenure	<1 year	33	9.6
	1–3 years	136	39.4
	3–5 years	80	23.2
	5–10 years	55	15.9
	>10 years	41	11.9
Sector	Information Technology	105	30.4
	Banking and Finance	78	22.6
	Telecommunications	62	18.0
	Higher Education	50	14.5
	Corporate Services	50	14.5

Measures

Items were rated with 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Digital Well-Being Scale by Arslankara et al. (2022) was used to assess digital well-being, which comprises 12 items. The scale measures employees' perceived competence in sustaining a healthy and balanced relationship with digital technologies, such as psychological, social and cognitive aspects of well-being in digital contexts. Sample items are: "I feel in control of how I use digital technologies at work" and "Using digital communication tools does not overwhelm me." Previous researches have shown high reliability and construct validity of the scale. Measuring online vigilance involved completion of the Online Vigilance Scale developed and validated by Reinecke et al. (2018) online. The scale is an assessment of employees' chronic cognitive tendencies to engage in digital communication across three factors: salience, monitoring, and reactivity, each of which consists of four items. Similar to Reinecke et al. (2018), the three subscores were combined to create an overall score of online vigilance. Examples of items to consider are: "I often think about getting messages when not online" and "I pay attention to what happens with notifications of digital communication tools."

Digital anxiety was measured by using 5-item scale created by Firk et al., (2023). This tool assesses the emotional stress, anxiety and discomfort that employees feel about the demands and expectations of technology in the workplace. A sample item is: "I'm concerned that my personal skills are becoming less relevant with the growth of digital technology. In previous studies, the scale has shown good internal consistency and constructs validity, and can be used to measure the emotional strain associated with the use



of technologies. Derks et al. (2015) developed a 10-item scale to assess availability norms which was used here. This scale assesses employees' experience of the level of responsiveness and accessibility in digital communication channels as perceived by them. Examples of items that can be included are: "I feel expected to respond to work-related messages immediately".

The reliability and validity of all scales were conducted, such as Cronbach's Alpha for internal consistency and Confirmatory factor analysis (CFA) for construct validity. The measures were designed to ensure the instruments measured what employees experienced with digital well-being, online vigilance, digital anxiety, and organizational availability.

4. Data Analysis

The current study was used the Partial Least Squares Structural Equation Modelling (PLS-SEM) using SmartPLS 4 software for testing the proposed model. The selection of PLS-SEM was justified because it is a promising technique for predictive modelling, it has the ability to work with complex models that include multiple constructs and it is suitable for data that is not normally distributed (Hair et al., 2022; Ringle et al., 2020). This approach enabled the simultaneous evaluation of the reliability and validity of the constructs and the hypothesized relationship among the constructs as well as the measurement model.

It was first assessed in terms of internal consistency reliability (Cronbach's α and composite reliability), convergent validity (average variance extracted, AVE) and discriminant validity (Fornell-Larcker criterion) (Hair et al., 2022). In the second step, the structural model was investigated to assess the hypothesized relationships between the constructs, namely direct effect of Online Vigilance on Digital Anxiety and Digital Well-Being, mediation path of Digital Anxiety, and moderation path of Availability Norms. A bootstrapping method using 5,000 resamples was used to assess the significance of path coefficients and confidence interval (Hair et al., 2022).

Measurement Model

Cronbach's alpha (α) and composite reliability (CR) were used to test the internal consistency reliability, and average variance extracted (AVE) was used for convergent validity. Based on the recommended thresholds, Cronbach's α and composite reliability values should also be above 0.70, and AVE values should be greater than 0.50 to ensure good reliability and convergent validity.

Table 2

Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability (pa)	Composite Reliability (pc)	AVE
Availability Norms	0.983	0.996	0.985	0.867
Digital Well-Being	0.988	0.988	0.989	0.882
Digital Anxiety	0.964	0.964	0.972	0.873
Online Vigilance	0.985	0.985	0.987	0.860

The reliability of the internal consistency of the results is excellent for all constructs (Table 2). There is substantially high Cronbach's alpha value ranging from 0.964 to 0.988 which is above the recommended value of 0.70. Likewise, the composite reliability numbers (pc) were between 0.972 & 0.989, indicating high construct reliability. In addition, convergent validity is supported because the AVE values for the variables are between 0.860 and 0.882 which is greater than the minimum AVE value that must be more than 0.50. The results showed that these constructs account for a high percentage of the variance of their respective variables, thus confirming the satisfactory convergent validity. Likewise, all HTMT values are well below the conservative value of 0.85, which indicates distinctness of the constructs in an empirical sense (Table 3). Thus, the HTMT criterion supports the adequate discriminant validity.



Table 3

HTMT Ratio

Construct	Availability Norms	Digital Well-Being	Digital Anxiety	Online Vigilance
Availability Norms	—			
Digital Well-Being	0.077	—		
Digital Anxiety	0.032	0.619	—	
Online Vigilance	0.044	0.524	0.517	—

Moreover, the square root of AVE values was larger than the correlations between constructs and met the Fornell-Larcker criterion (Table 4). This means that the variance for each construct is greater with its indicators than with the other constructs, confirming the discriminant validity.

Table 4

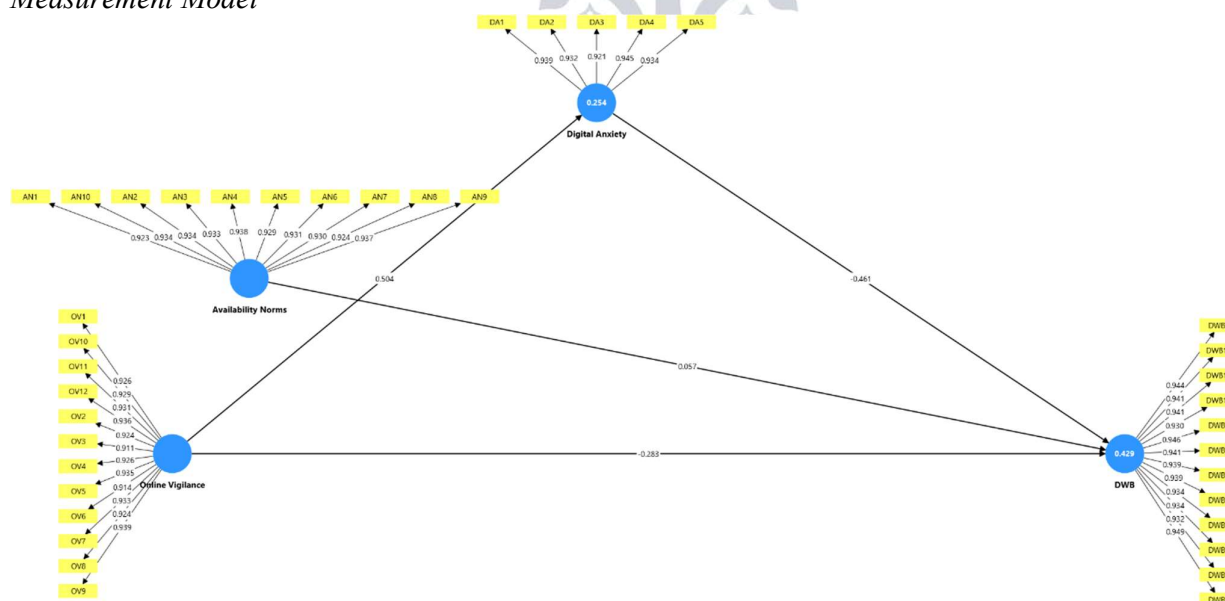
Fornell–Larcker Criterion

Construct	Availability Norms	Digital Well-Being	Digital Anxiety	Online Vigilance
Availability Norms	0.931			
Digital Well-Being	0.078	0.939		
Digital Anxiety	-0.019	-0.604	0.934	
Online Vigilance	-0.043	-0.518	0.504	0.927

The measurement model has good psychometric characteristics. All constructs have an acceptable level of internal consistency reliability, convergent validity, and discriminant validity. Thus, the measurement model is deemed acceptable for moving forward with the evaluation of the structural model.

Figure 2

Measurement Model



Structural Model

The structural model was assessed by testing the significance and strengths of the hypothesized relationships between the constructs of online vigilance, digital anxiety, availability norms, digital well-being. The results from the bootstrapping analysis show that some hypothesized relationships were statistically significant (Table 5).



According to the findings, online vigilance has a significant negative effect on digital well-being ($\beta = -0.276$, $t = 5.715$, $p < 0.001$). This finding indicates that when individuals are cognitively engaged in digital communication and constantly check online information, they have reduced digital well-being. Constantly focusing on digital environments can result in psychological fatigue and less capacity to avoid the technology, which can negatively impact employees' digital balance and their well-being. Online vigilance was significantly and positively associated with digital anxiety ($\beta = 0.489$, $t = 11.466$, $p < 0.001$). This means that those who regularly check and expect digital communication more readily feel anxious about digital technologies. Ongoing focus on online communication channels might put pressure on keeping up to date and responsive, thereby raising levels of stress and uncertainty in relation to online environments. As per the findings of the study, digital anxiety negatively and significantly affects digital well-being ($\beta = -0.484$, $t = 10.332$, $p < 0.001$). Staff members who feel more anxious about digital technologies are more likely to report poor digital wellbeing. Digital anxiety can cause emotional fatigue, frustration with technology, and problems with healthy boundaries with technology, which can negatively impact one's psychological comfort with technology use.

The mediation analysis also indicates that digital anxiety is a significant mediator between online vigilance and digital well-being ($\beta = -0.236$, $t = 7.437$, $p < 0.001$). The discovery suggests that online vigilance has an indirect impact on digital well-being via its impact on digital anxiety. In other words, those who are vigilant online are more likely to become digitally anxious, which then negatively impacts their digital well-being. As for the moderated influence of online vigilance on digital anxiety (H6), results showed that the availability norm had a significant moderating effect ($\beta = 0.247$, $t = 5.179$, $p < 0.001$). In work contexts where workers have to stay constantly connected and attentive to digital communication, the positive association between online vigilance and digital anxiety is increased. Employees, who are already aware of the expectation to be constantly "on" may become more stressed about technology in the workplace when they feel they are expected to communicate online at all times.

However, the moderating effect of availability norms on the relationship between online vigilance and digital well-being (H5) was not statistically significant ($\beta = 0.071$, $t = 1.683$, $p = 0.092$). This suggests that availability norms have an indirect effect on digital anxiety, but they do not modify the direct link between online vigilance and digital well-being.

The coefficient of determination (R^2) values for the digital well-being and digital anxiety models are 43.4% and 31.4% respectively (Table 6). The results of these values indicate moderate model power that is able to predict the outcomes that are aimed at.

Table 5

Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	Online Vigilance $\rightarrow$ Digital Well-Being	-0.276	5.715	0.000	Supported
H2	Online Vigilance $\rightarrow$ Digital Anxiety	0.489	11.466	0.000	Supported
H3	Digital Anxiety $\rightarrow$ Digital Well-Being	-0.484	10.332	0.000	Supported
H4	Online Vigilance $\rightarrow$ Digital Anxiety $\rightarrow$ Digital Well-Being	-0.236	7.437	0.000	Supported
H5	Availability Norms $\times$ Online Vigilance $\rightarrow$ Digital Well-Being	0.071	1.683	0.092	Not Supported
H6	Availability Norms $\times$ Online Vigilance $\rightarrow$ Digital Anxiety	0.247	5.179	0.000	Supported



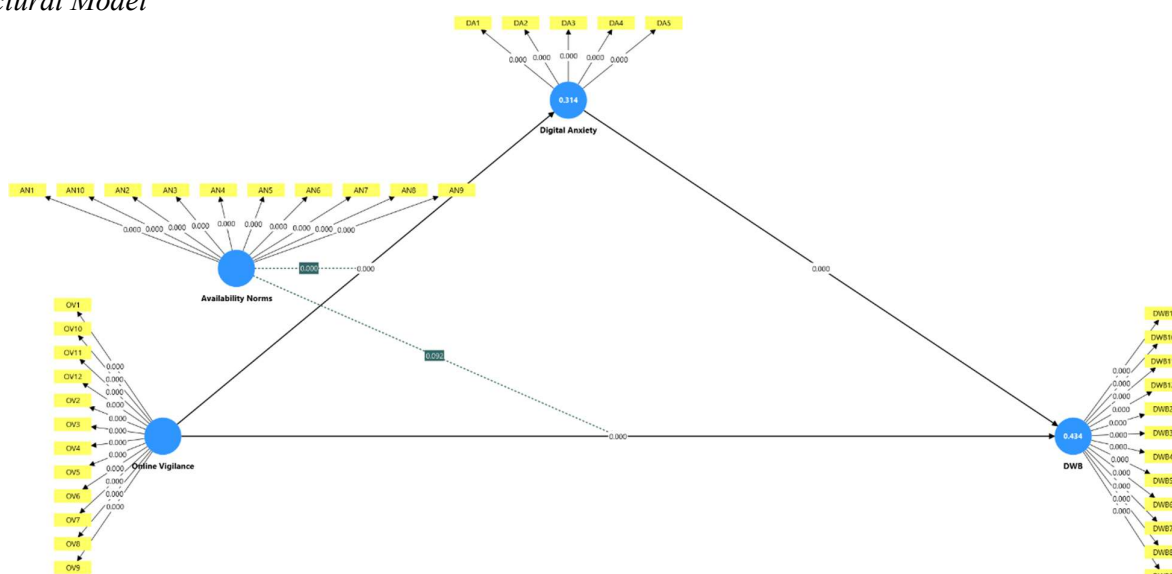
Table 6

Coefficient of Determination (R^2)

Endogenous Variable	R^2	Interpretation
Digital Well-Being	0.434	Moderate
Digital Anxiety	0.314	Moderate

Figure 3

Structural Model



5. Discussion

The current study investigated how digital anxiety was a mediator between online vigilance and digital well-being and how availability norms was a moderator between online vigilance and digital well-being among knowledge workers in digitally intensive work environments in the present study. The results offer several key implications for the psychological experiences of employees in modern workplaces when exposed to the persistent use of digital communication technologies.

First, the findings show that vigilance is a significant and negative factor of digital well-being. This discovery indicates that people who are constantly thinking about digital communication or constantly checking on online information (cognitively preoccupied) have poorer digital well-being. Online vigilance is a sustained attentional focus on the digital communications system and can make it challenging to mentally switch off from digital communication even when they are not actually using it. This can lead to cognitive overload, clutter and challenges in establishing healthy boundaries online amongst employees. This finding aligns with previous studies reporting that constant connectivity and attention demand of digital technologies can have a negative effect on human psychological health and the capacity to switch off from work-related technologies (Reinecke et al., 2018; Sonnentag & Fritz, 2015). Digital technologies can offer flexibility and autonomy but, at the same time, they raise the expectations of responsiveness and monitoring and may ultimately reduce the sense of digital well-being of their employees as part of the Autonomy – Control Paradox of technology.

Second, the study revealed that online vigilance has a positive relationship with digital anxiety. The more often employees check the digital communication platforms and anticipate incoming messages, the more likely they are to feel anxiety related to digital technologies. This finding lends credence to the idea that prolonged engagement with digital environments can lead to psychological strain to stay current and responsive. This pressure can create uncertainty and technological stress over time, and cause concerns about



meeting digital demands. The results confirm previous research, which has shown that electronic connectivity and electronic interruptions can lead to psychological strain and technology-related stress for workers (Ayyagari et al., 2011; Reinecke et al., 2018). In the context of Technostress theory, over-exposure to digital communication demands can be seen as a digital stressor and cause negative emotional response including anxiety.

Third, the results demonstrate that digital anxiety has a significant negative effect on digital well-being. Higher anxiety in relation to digital technologies is associated with lower levels of digital well-being among employees. Digital anxiety can be experienced in terms of feeling inadequate with technology, being worried about missing out, or wondering about being able to keep up with digital systems that are changing so quickly. The psychological reactions can lessen people's ease with technology use and decrease their capability to develop a well-balanced and healthy connection with technology. This is in line with previous research indicating that anxiety and stress around technology can have adverse impacts on employees' well-being and work experiences (Tarafdar et al., 2015).

The mediation analysis also showed that the relationship between online vigilance and digital well-being is mediated by digital anxiety. Thus, online vigilance has the potential to indirectly impact digital well-being by contributing to employee anxiety about digital technologies. That is, workers who are constantly alert and vigilant about digital communication are more likely to experience anxiety about technology and will ultimately have a negative impact on their digital well-being. These results shed light on the psychological pathway whereby chronic digital attentional engagement when affecting well-being. It proposes that the negative aspects of being vigilant online are not exclusively behavioural but are also emotional and cognitive responses to online communication and the environment.

The study also explored how availability norms—shared norms about how responsive employees should be to digital communication—mediate the relationship between each type of digital communication and REJECTION. The study also analysed the moderating effects of availability norms, which are shared norms about how responsive employees should be to digital communication, on the relationship between each type of digital communication and REJECTION. The findings indicate that there are significant moderation effects between online vigilance and digital anxiety. In particular, the positive relationship between online vigilance and digital anxiety increases in workplaces where workers are expected to be constantly monitored and responsive via digital communication technologies. This discovery reveals the impact of organisational communication culture in the experiences of employees using digital technologies. Organizations that tacitly or explicitly promote 24/7 connectivity could actually make people who are already vigilant online more stressed out, contributing to increased digital anxiety. The result is in line with studies indicating that expectations of availability may heighten the stress experienced with digital communication technologies (Derks et al., 2015).

The moderating effect of availability norms on the relationship between online vigilance and digital well-being was not statistically significant, however. These findings indicate that availability norms do not directly influence the association between online vigilance and digital well-being, but at the same time amplify its effect when combined with online vigilance. One possible reason is that online vigilance negatively affects digital well-being regardless of expectations for availability of an organization. Frequent mental interaction with digital communication might, in fact, create a subconscious imbalance in individuals' experience of digital communication, even in jobs with comparatively moderate expectations for availability.

The results of this study add to the body of research on digital well-being by highlighting online vigilance as an important predictor of digital well-being in organizational settings. The findings emphasize the importance of digital anxiety as a psychological process between the constant attentional involvement with digital communication and low well-being of employees. Additionally, the study illustrates how organizational availability norms may exacerbate psychological outcomes of online vigilance, specifically digital anxiety. Such knowledge and understanding are particularly relevant in the modern workplace where digital communication technologies are integral to everyday work processes, and where employees are increasingly called upon to be available outside of traditional working hours.



6. Implications

This study makes several significant contributions to the digital well-being, organization technology use, and technology-related stress fields. First, this research contributes to the growing body of literature about digital well-being by establishing online vigilance as an important antecedent of digital well-being in organizational settings. The study underscores the importance of the enduring cognitive orientation towards digital communication as a key determinant of employees' digital experiences, which is a focus not explored in depth by previous studies. The findings of this study confirm that online vigilance has harmful impacts on individuals' psychological well-being in the digital sphere and expand the conceptual framework of the role online attentional engagement with digital environments can play in shaping employees' psychological outcomes.

Second, the study builds upon existing literature by defining digital anxiety as an underlying psychological mechanism that is related to online vigilance and digital well-being. While some studies have shown that hyperconnectivity with digital technologies can lead to stress and adverse emotional responses, there is sparse empirical research on the mechanisms by which these experiences impact digital well-being. This study explores how digital anxiety acts as a mediator between online vigilance and digital well-being, thereby affording a deeper understanding of the relationship between digital monitoring of communication channels and reduced digital well-being. This discovery extends the theoretical dialogue by bringing emotional reactions to technology into the digital well-being discourse.

Third, the study advances the use of the Autonomy–Control Paradox of Technology in organizational studies. Digital communication technologies can offer employees autonomy, flexibility and better access to information. The results of this study, however, show that such technologies can also generate higher expectations for responsiveness and continual monitoring, which in turn can result in psychological tension and less well-being. The study empirically shows how the expectations for vigilance and availability online can lead to digital anxiety and decrease in digital well-being, thus confirming the paradox of the use of digital technologies in the workplace.

Fourth, this study contributes to Technostress Theory, as it focuses on the organizational boundary condition of availability norms and how it influences employees' psychological reactions to digital communication technologies. The results showed that availability norms reinforce the link between online vigilance and digital anxiety, meaning that having high norms about the availability of the technology can increase digital anxiety experiences. The discovery also has implications for the study of technostress, highlighting the role of norms and expectations of social interaction and communication within the organization in determining employees' technostress experiences.

Last, the study joins the existing body of research on digital workplace behavior by combining individual-level psychological processes with the contextual factors which exist at the organizational level. It integrates the concept of online vigilance, digital anxiety, and availability norms, offering a more holistic perspective on how workers perceive digital communication technologies in their modern workplace. This is an integrated view that can help fill the gaps between research on technology use, workplace stress and employee well-being, and provide a more sophisticated theory of digital well-being in the modern workplace.

7. Practical Implications

Based on the results of this research, the following implications for practice are drawn for organizations, managers, and staff in digitally intensive jobs. With digital communication technologies still being a key part of working life, it is critical to have an understanding of the impact of digital communication technologies on employee psychological experience to ensure better digital working and employee well-being.

First, the findings indicate that organizations need to be more attentive to employee online vigilance behaviour as monitoring digital communication platforms over time can have a negative impact on digital well-being. Managers should support their staff in setting boundaries around work communications and time. Schools could also implement policies that encourage healthy digital use, including limiting after-hours digital communication, suggesting to staff members to take regular digital rest breaks, and encouraging staff to work



in concentrated time blocks to avoid constant digital distractions. These can be useful in minimizing digital engagement in cognition and facilitating employees' ability to mentally unwind from technology.

Second, the results emphasize the need for workplace digital anxiety, which is a common issue among workers. Training and support should be made available to employees to enable them to cope with technology-induced stress and anxiety. Training on digital literacy, technology support initiatives, and technology to manage digital workloads are examples of offerings that help build work confidence and help employees avoid anxiety over technology. Organizations also can provide well-being programs like mindfulness classes, stress-reduction courses or digital wellness classes to assist employees build healthier relationships with digital technologies.

Finally, the moderating effect of availability norms suggests that there is a potential for digital anxiety to escalate based on the organizational expectations about being responsive. Managers need to be mindful of the communication expectations communicated and enforced in the organisation. Setting response time expectations for emails, messages and other digital communication can help to eliminate confusion and avoid employees feeling "on call." Several organizations have started adopting "right to disconnect" policies, restricting work-related digital communication outside of work hours and assisting employees to achieve a better balance between being digitally connected and being able to recover.

Fourth, organizations should foster a positive culture of digital communication that encourages productivity and wellness, not always being "on call. Leaders have an important role to set these norms and demonstrate appropriate digital communication, including avoiding late night texts and respecting employees' boundaries outside of work hours. Creating a communication climate focused on well-being can help overcome the negative psychological impacts of a constant on-going digital connection within organizations.

Finally, the findings highlight the need for digital well-being to be part of an organizational well-being strategy. With the growing number of hybrid and remote work, the use of digital communication technologies by employees is likely to rise. Digital wellbeing then needs to be incorporated into the wider employee wellbeing strategies of organizations. This can ensure that organizations have a productive, healthy workforce, while also reducing the risk of the negatives that can occur with constant digital connectivity.

In general, the findings of this study highlight the need for two types of interventions: at an individual level and at an organizational level, in the context of managing employees' experiences with digital communication technologies. Organizations can foster a healthier digital workplace by educating employees on online vigilance, manage the expectations for availability, and create a more digital environment without digital anxiety.

8. Limitations and Future Research Directions

This study has some limitations that need to be recognized: While this study offers valuable insights into the correlation between online vigilance and digital well-being, it does have some limitations: These limitations also offer future research opportunities to further advance this line of enquiry.

The study was a cross-sectional type of research; thus, it did not allow the researchers to draw the cause-and-effect relationships between the variables. While the structural model suggests important links between the constructs of online vigilance, digital anxiety, and digital well-being, it is not possible to fully substantiate the temporal ordering of these relationships. Longitudinal and time-lagged research designs could be used for future studies to better capture the evolution of employees' digital behaviours and psychological responses over time. This will help the researchers to determine if ongoing online surveillance contributes to building the digital anxiety that eventually affects digital well-being. Second, the data was obtained from self-reported survey measures which may raise the potential for common method bias and social-desirability bias. While anonymity and confidentiality were guaranteed to reduce these concerns, having only one source of data could still have an impact on the validity of the answers. Future research should overcome this limitation by using multi-source/multi-method research designs whereby survey responses are complemented by other types of data on digital communication use, such as logs of actual digital communication use, or by using assessment of employee's technology-related behaviours by supervisors.



Thirdly, the sample was largely knowledge workers working in digitally intensive industries (IT, banking, telecommunications, higher education and corporate services). The sample was suitable for the purposes of examining digitally mediated work experience but may not have been representative of other occupational groups or industries in which digital communication technologies are not as integral to daily work. Future studies could explore similar patterns in other occupational settings or explore the extent to which there are differences between digitally intensive occupations and more traditional ones. Fourth, the study was concerned with digital anxiety as the main mediating variable between online vigilance and digital well-being. The results validate the significance of this psychological pathway, but there could be other possible intervening factors. Future research may investigate mediators that can further explain how sustained digital connectivity affects employee well-being, for instance, digital fatigue, continuous partial attention, work–life boundary blurring, and workplace alienation. Fifth, the study focused on availability norms as a contextual condition, but further organizational and/or individual factors may influence the relationship between online vigilance and digital well-being. Moderators could be further investigated in future studies, including digital well-being awareness, organizational support, mindfulness, digital self-control, or leadership communication styles. An analysis of these factors might be useful to have a more holistic view of factors influencing the positive and negative impacts of digital communication technologies on employees.

Last but not least, digital workplaces are constantly changing with the growing use of hybrid working, remote collaboration tools and AI-powered communication systems, which warrants further research into the impact of new technologies on digital employee experiences and wellbeing. Such research would contribute to understanding how to create healthier, more sustainable, digital work environments for scholars and practitioners.

9. Conclusion

The digital communication technologies are now so integrated into the processes of organizational work that they have changed the way employees communicate, interact and work. These technologies offer significant advantages in efficiency, flexibility and connectivity, but can also present new psychological obstacles that could affect an employee's digital health. This study aimed to investigate the impact of a continuous cognitive disposition towards digital communication (online vigilance) on digital well-being of employees, taking into account the mediating effect of digital anxiety and the moderating effect of availability norms.

The findings show that employees' digital well-being is also jeopardized when they are vigilant online, and this experience also raises their digital anxiety. Those who are always observing the digital communication platforms are likely to have anxiety about using digital technology, which ultimately will make them feel less balanced and comfortable with digital technology. In addition, the findings indicate that digital anxiety is an important psychological process that detrimental impacts on digital well-being via online vigilance. This reinforces the need to take into account the emotional reactions to the use of technology to understand employees' experiences with digitally connected workplaces.

The study also demonstrates that there is a positive link between the availability norms and the relationship between online vigilance and digital anxiety, indicating that the psychological response to the demands of digital communication can be exacerbated by organizational norms around ongoing availability. However, there was no significant moderation of the direct link between online vigilance and digital well-being by availability norms. This suggests that the relationship between online vigilance and digital well-being may not be stronger when availability norms are high than when they are low, meaning that high levels of cognitive presence in relation to organizational communication may diminish digital well-being.

The results of the study add to the existing literature on digital well-being as the study revealed online vigilance as one of the most important antecedents and provided an understanding of the psychological mechanisms that underlie how demands of digital communication affect employee well-being. The study merges the concepts of the Autonomy–Control Paradox of Technology and Technostress Theory to offer a broad perspective on why digital connectivity can produce psychostrain along with psychostimulating benefits in contemporary workplaces.



Given the growing importance of communication technologies such as digital communication in the working lives of organizations, it is crucial to understand what influences employees' digital experiences. When employees have a heightened need to be available, it can create technology-related anxiety for staff, which can be addressed by promoting healthier digital communication practices, managing availability expectations, and supporting staff in dealing with technology-related anxiety.

Contribution of Authors

All the authors participated in the ideation, development, and final approval of the manuscript, making significant contributions to the work reported.

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this article.

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Informed Consent

Informed consent was obtained from all participants.

Data Availability

The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

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