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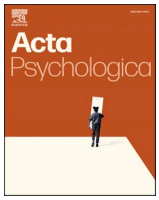

Failure of neutralization: How digital job demands shape cyberslacking and job performance in telework

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ABSTRACT

Organisations across the globe are deliberating on the future of work, whether to call employees back to the office, enable remote working, or offer flexibility through hybrid options. In this context, we studied two job demands—techno-invasion and electronic monitoring—that could influence employee performance. We surveyed knowledge workers ($n = 1446$) in two waves, separated by 25 days, to explore these dynamics. Using PLS-SEM, we empirically examined the relationships between job demands and job performance, with cyberslacking as the mediating variable and Information Technology (IT) support as the moderating variable. We further conducted robustness checks using Hayes PROCESS macro in SPSS.

This study introduces the concept of 'failure of neutralization' to show how techno-invasion operates as a hindrance stressor and can become intrusive to the extent that employees may be unable to justify or engage in cyberslacking. This specifies a boundary condition for neutralization, where a norm of perpetual availability can suppress even brief digital detachment. Techno-invasion is negatively related to cyberslacking and job performance. Our findings also reveal that cyberslacking positively influences job performance and mediates the relationship between job demands and performance. Additionally, IT support moderates the positive relationship between electronic monitoring and cyberslacking, which intensifies when IT support is low. It also emphasises the importance of sustainable work environments, where interventions such as IT support, clear boundaries for work-related ICT use, and policies promoting responsible internet behaviour can mitigate the adverse effects of job demands.

1. Introduction

The COVID-19 pandemic catalysed a global shift towards remote and hybrid work arrangements, compelling organisations to reconfigure their operational models (Kniffin et al., 2021). Teleworking—*also known as* telecommuting, distributed work, or flexible work arrangements (Allen et al., 2015)—emerged as a strategic response to ensure business continuity while offering employees enhanced work-life integration. While early adopters benefited from reduced overheads and increased flexibility (Maier et al., 2022), concerns around its long-term viability surfaced as several multinational firms, including IBM and Bank of America, rolled back their telework policies even before the pandemic (Wright, 2018). These reversals signal deeper tensions related to digital work—such as autonomy erosion, perceived inequity, and rising technostress—that can weaken the benefits of telecommuting (Iscan & Naktiyok, 2005).

We observe that remote and hybrid work models are now ingrained in organisational ecosystems (Venkatesh, 2020). Therefore, we believe that it is critical to revisit classical frameworks of job design through the lens of digital job demands. The Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007) provides a valuable foundation for understanding the evolving digital demands and their impact on employee well-being and performance. However, this relationship and its practical applications remain underapplied in high-intensity telecommuting contexts.

This study focuses on two nascent digital job demands: techno-invasion and electronic monitoring (e-monitoring). Techno-invasion refers to employees' perceived obligation to remain continually

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connected via digital tools such as email, instant messaging applications, and video conferencing platforms, often resulting in blurred boundaries between work and personal life (Chen et al., 2022; Stich, 2020). This state of perpetual availability might contribute to technostress and impair psychological detachment, which is essential for recovery and sustained performance. Interestingly, however, some studies suggest that controlled ICT interruptions may serve as restorative micro-breaks, offering temporary relief and even improving cognitive focus (Syrek et al., 2018).

Electronic monitoring (e-monitoring), the second job demand, refers to digital surveillance mechanisms—including email tracking, keystroke logging, webcam usage, and productivity software—that capture and evaluate employee behaviours remotely (Hamrick et al., 2024). While intended to improve accountability and performance (Siegel et al., 2022), such mechanisms often trigger concerns of surveillance, privacy invasion, and psychological reactance (Jeske, 2022). Reports indicate that over 80% of employees in the U.S. experience some form of electronic monitoring at work, with internet usage being the most frequently tracked activity (AMA, 2019) records that 82% of employees in the USA are under electronic monitoring. This environment of pervasive oversight may foster feelings of mistrust, ultimately eroding intrinsic motivation and organisational identification.

Beyond the telework design, the digital demand dynamics speak to the wider debates on digital control and workplace surveillance (Zuboff, 2019). The previous discussions assume that employees comply and perform in the digital workplaces primarily because they are being monitored. We argue that an equally consequential mechanism is the internalised pressure to remain perpetually available—what techno-invasion reflects. This can constraint employee's capacity to disengage even briefly and may also suppress coping behaviours. This distinction explains why digital job demands may shape employee behaviour through ways other than surveillance alone.

In response to these demands, employees may engage in cyberslacking—the non-work-related use of digital tools during work hours. This behaviour includes browsing non-work websites, engaging in personal social media use, or streaming entertainment content. The literature distinguishes between minor cyberslacking (e.g., checking personal emails, browsing news) and major cyberslacking (e.g., online gambling), with the former often viewed as a coping mechanism for digital fatigue (Blanchard & Henle, 2008; Güğerçin, 2020). However, the role of cyberslacking remains contested—framed alternately as restorative, neutral, or deviant depending on contextual factors. Further, existing theory does not fully explain why employees under identical digital demands differ in their use of cyberslacking as a coping response.

This research aims to understand the behaviour of employees when experiencing digital job demands, such as techno-invasion and electronic monitoring. To do so, we draw upon the Neutralization Theory (Sykes & Matza, 1957) and the Theory of Interpersonal Behaviour (Pee et al., 2008; Triandis, 1980) as the core theoretical lens of this study. We do so to provide a more context-specific explanation as to why employees justify the deviant behaviour or when, apart from intention, the facilitating conditions explain the employee behaviour more appropriately. The Neutralization Theory in our study helps explain why teleworkers will cyberslack despite its deviant connotation, and justify it as legitimate recovery. This theoretical framing is essential for understanding how teleworkers will reconcile organisational expectations with personal well-being in a digital work environment. The Theory of Interpersonal Behaviour complements this line of argument and explains why facilitating conditions, such as situation and environment, will enable or inhibit a behaviour. Therefore, the study aims to enrich the teleworking literature by arguing whether factors such as perpetual connectivity, electronic performance monitoring, the use of IT infrastructure, and response norms will determine whether employees can indulge in cyberslacking as a coping mechanism.

Building on the above, our study aims to extend the literature in three key ways:

1. It extends the JD-R model by conceptualising techno-invasion and e-monitoring as telework-specific job demands and explores their influence on job performance.
2. It integrates Neutralization Theory and Theory of Interpersonal Behaviour to assess the mediating role of cyberslacking, and theorises a "failure of neutralization" mechanism—where job demands may become so intrusive that deviant coping strategies are suppressed.
3. It introduces IT support as a moderating resource that may buffer or exacerbate the influence of job demands on cyberslacking, offering practical insights for sustainable remote work design.

By doing so, this study sheds light on the nuanced dynamics between digital job demands, employee coping strategies, and job outcomes, advancing the theoretical discourse on telework and providing actionable insights for employers navigating the digital workplace. The subsequent sections of this research explore the relevant literature, conceptual frameworks, and hypotheses that guide the study. A comprehensive methodology section outlines the process of data administration and statistical analysis conducted to examine the relationships between techno-invasion, e-monitoring, and cyberslacking and job performance in remote work. Later sections discuss the findings, considering existing research and offering valuable insights for academia and practitioners.

1.1. Theoretical underpinnings and hypotheses development

The unexpected shift to remote work during the COVID-19 pandemic activated a significant readjustment of job roles, expectations, and technological dependencies (Satpathy et al., 2021; Wang et al., 2021). In this evolving context, this study investigates how two digital job demands—techno-invasion and electronic monitoring might affect job performance, and whether cyberslacking mediates these relationships. We adopt a dual-theory perspective, grounding our investigation in Neutralization Theory and the Theory of Interpersonal Behaviour, and further situate our model within the Job Demands–Resources (JD-R) framework.

1.2. The job demands–resources (JD-R) model

The JD-R model (Bakker & Demerouti, 2007; Demerouti et al., 2001) provides a broad framework for understanding how work conditions influence performance. It proposes that every occupation includes job demands, which are typically aspects of work that require sustained effort. These job demands are therefore linked to physiological or psychological costs. Job resources, on the other hand, help achieve work goals, reduce demands, or stimulate growth. The model is based on two complementary pathways: the health-impairment process, in which excessive job demands lead to exhaustion, thereby reducing performance, and the motivational process, through which job resources can lead to improved performance.

We also draw upon the challenge-hindrance stressors framework (Cavanaugh et al., 2000; Lepine et al., 2005; Rodell & Judge, 2009) to classify the stressors as challenge—demands that employees perceive as rewarding and hindrance—demands that employee perceive as obstacles to personal growth (Rodell & Judge, 2009). While, previous research categorically classifies both challenge and hindrance stressors as positively related to emotional exhaustion, depression and tension (Lepine et al., 2005; Rodell & Judge, 2009). In the context of this study, we interpret techno-invasion as a hindrance-like digital demand (hindrance like boundary intrusion and lack of control). We also interpret e-monitoring as hindrance-like digital demand (hindrance-like surveillance appraisal). In the process, we also recognise that these labels reflect context-specific appraisals and not fixed properties of these stressors. Accordingly, the same digital demand may be appraised differently, depending on intensity, transparency of implementation,

and perceived controllability in an extended telecommuting setting. While the challenge stressors have a positive relationship with beneficial attitudes and behaviours at the workplace, hindrance stressors tend to positively relate to adverse attitudes and behaviours (Rodell & Judge, 2009). It is important to examine whether hindrance demands can still be associated with higher performance when compliance is amplified, is also an important question that we deal with in this research.

In digital work settings, techno-invasion and electronic monitoring represent contemporary job demands that consume cognitive and emotional energy. Conversely, information-technology (IT) support can serve as a job resource that buffers strain. By situating these constructs within the JD-R framework, this study conceptualises how digital job demands, when unmitigated by adequate resources, may erode performance. We extend the JD-R model by embedding moral-cognitive and behavioural mechanisms, proposing that employees respond to excessive digital demands through rationalisation (Neutralization Theory) and enacted coping behaviours (Theory of Interpersonal Behaviour).

Although often embedded within broader constructs like technostress (Ragu-Nathan et al., 2008), **techno-invasion** has emerged as a distinct stressor in digital work settings. Techno-invasion is characterised by the perception that one must remain constantly available and responsive, irrespective of time or context. This no-constraints connectivity results in work encroaching upon personal domains. Such permeability in boundaries erodes psychological detachment and increases emotional exhaustion (Chen et al., 2022; Stich, 2020). Techno-invasion is often accompanied by constant messaging, app-based pings, and expectations of asynchronous collaboration. This constant nudging reduces opportunities for task-focused recovery and intensifies cognitive load.

While some research highlights the potentially enabling aspects of technology, such as autonomy, flexibility, and responsiveness (Syrek et al., 2018). The overall trend suggests that when ICT is used pervasively and without boundaries, it may lead to impaired job outcomes (Capitano et al., 2019; Zinke et al., 2024). Consistent with the JD-R model, we argue that techno-invasion increases job strain and inhibits performance. Thus, we hypothesize:

H1. Techno-invasion influences job performance.

Electronic monitoring (*E*-monitoring) is another digital job demand that has received increasing attention, especially in remote and hybrid work arrangements. Defined as the use of technology to observe, record, and evaluate employee behaviours (Bhave, 2014; Stanton, 2000), e-monitoring is employed with the intention of ensuring productivity, compliance, and accountability (Siegel et al., 2022). It can range from keystroke logging to screen recording and app usage tracking.

The extant literature presents mixed findings. On the one hand, e-monitoring may improve employee focus by increasing perceptions of accountability and clarity (DelVecchio et al., 2013). On the other hand, constant monitoring can trigger perceptions of surveillance, erode trust, and promote psychological withdrawal (Jeske, 2022). These diverging findings suggest that the outcomes of e-monitoring may depend on context, implementation intensity, and employee perception. Additionally, we also acknowledge that the effect of e-monitoring also depends on the cultural sensitivity of a place. Expectations around surrounding autonomy and managerial control can have a direct ramification on the monitoring-performance linkage. In this study, we test the direct relationship between e-monitoring and job performance in extended telecommuting, where the visibility of performance may be reduced. Accordingly:

H2. *E*-monitoring influences job performance.

Cyberslacking, also called cyberloafing, has its intellectual underpinnings coming from the work of Lim (2002), who first conceptualised the use of organisational resources like organisational information or communication technologies for personal purposes during office hours, as a form of rationalised behaviour (Lim, 2002). Since, then multiple labels (cyberloafing, cyberslacking, nonwork related computing, personal internet usage) have been introduced and used interchangeably (Lim & Teo, 2024). As internet became ubiquitous via smart devices, scholars revised Lim's original "company resources" framing and defined cyberloafing as "personal Internet use at work" (Huma et al., 2017). This rationalised behaviour includes non-work-related use of organisational ICTs, including online shopping, gaming, or social media use (Blanchard & Henle, 2008). Further, scholars categorised cyberloafing into different forms, including nonwork-related emailing versus browsing nonwork-related websites (Lim & Teo, 2005), and passive versus interactive cyberloafing (Blau et al., 2006). Also, interactive forms such as downloading information, playing games, using chat rooms, viewed as more serious than just browsing the web (Lim & Teo, 2024).

Cyberslacking research is not new and has been prevalent (Garrett & Danziger, 2008), researchers called it computer gold-bricking (Lundgren & Lundgren, 1999), in which an employee would use the company's resources for wasteful tasks. Historically, cyberslacking was considered a counterproductive behaviour with workplace deviance (Lim, 2002; Lim & Teo, 2005; Weatherbee & Kelloway, 2006) and was considered to harm employees' involvement in the workplace (Liberman et al., 2011). However, recent scholarship suggests that cyberslacking may offer restorative benefits, serving as a brief reprieve from cognitive overload and technostress (Güğerçin, 2020; Reinecke, 2009; Zhong et al., 2022). Therefore, the broader literature mirrors the dualistic nature of cyberslacking, where it could be counterproductive or restorative depending on how it is enacted or regulated.

The contemporary studies on cyberslacking make our arguments stronger. A comprehensive review on the topic has been carried out by researchers, highlighting the contextual and cultural contingencies around cyberslacking (Lim & Teo, 2024), systematic research agenda with antecedents, outcomes, and theoretical underpinnings (Tandon et al., 2022), and exploring the linkages between cyberslacking and work-related factors (Uslu, 2025). The empirical findings on cyberslacking continue to provide its positive and negative ramifications on work outcomes. Studies have also argued that cyberslacking may lead to innovative work behaviour through affective coping (Zhong et al., 2022) or may act as a coping outlet moderated by mindfulness (Mishra & Tageja, 2022).

However, our study moves beyond these structural explanations by drawing on the Neutralization Theory and the Theory of Interpersonal Behaviour to answer as to *why the teleworkers will justify or fail to justify cyberslacking in response to digital job demands at the workplace*. We conceptualised cyberslacking as an intervening variable for this study.

1.3. Neutralization theory

Neutralization Theory (Sykes & Matza, 1957) explains how individuals justify or excuse deviant acts that conflict with prevailing norms. Originally developed in criminology, its applicability has grown to diverse fields, including classrooms, consumerism, and technology (Harris et al., 2021; Hinduja, 2007). Additionally, the theory is now been widely applied to organisational contexts, including employee misconduct and unethical consumption (Harris et al., 2021; Munoz & Mallin, 2018). Neutralization theory postulates that individuals engage in undesirable behaviour against societal norms and somehow redefine the deviant behaviour to make it acceptable to the organisation. This deviant behaviour originates from a stimulus from the work environment (Adeoti et al., 2020). This theory further claims that people employ cognitive techniques such as denial of responsibility, denial of injury, condemning the condemners, and appeal to higher loyalties to neutralize guilt and maintain a positive self-image while violating rules (Munoz & Mallin, 2018).

Employees use neutralization techniques to justify their deviant behaviour by convincing themselves and others (Cheng et al., 2014) of

such actions as they originate from the work environment. For instance, drawing on the Neutralization Theory (Sykes & Matza, 1957), employees may rationale cyberslacking through cognitive strategies, such as denial of responsibility (e.g., "I had to take a break from work"), condemnation of the condemners (e.g., "my boss is unreasonable"), and appeal to higher loyalties (e.g., "I'm just taking a quick break to check on my family"). This framework was further extended by Lim (2002) to workplace internet misuse, showing that employees justify such acts through the metaphor of a ledger, viewing brief online breaks as legitimate owing to their previous efforts. Additionally, these denial techniques are often justified as it does not harm or waste the time of the organisation (Khansa et al., 2018). Studies suggest that techniques to neutralize employees' behaviour are typically implemented when the perception of the behaviour turns deviant. For example, a study found that by the time a behaviour is officially categorised as deviant, employees may already perceive it as an acceptable norm within the organisation (Kim & Malhotra, 2005). Similarly a research argues that employees view such neutralization efforts as a retrospective process, which they often deem unimportant (Khansa et al., 2017).

Thus, we see that Neutralization theory has long been in research to measure for anti-social behaviours. Employees in organisations follow certain rules and principles to work and fulfil their responsibilities at work. They sometimes engage in deviant behaviours when they breach their principles due to some event that does not match their expectations at the workplace (Sykes & Matza, 1957). Hence, they indulge in neutralization techniques to justify their deviant behaviours (Zhu & Zhang, 2025). One such behaviour is cyberslacking that integrates this theory in this research. The present study uses neutralization theory to understand why employees cyberslack when presented with job demands. We also seek to know when employees behave contrary to tenets postulated in the neutralization theory, i.e., under what circumstances employees subjected to extreme job demands would still not indulge in deviant workplace behaviour.

1.4. Theory of interpersonal behaviour

The Theory of Interpersonal Behaviour (TIB) is based on three dimensions: intention, facilitating conditions, and Habit. Intention refers to employees' motivation or inspiration for a particular behaviour, facilitating conditions provide a push and make the occurrence of a particular behaviour easier (Triandis, 1980). Habit mentions the regularity of such behaviour. In the present research, this is studied in the context of cyberslacking behaviour of employees (Gagnon et al., 2003). As we understand, facilitating conditions are elements in a person's environment that make it simple for them to perform a behaviour. Contrarily, if their environment hinders those behaviours, even the intention to perform such behaviour is unlikely to converge into the said deviant behaviour. Facilitating conditions have two dimensions: situational (beneficial external situations, suitable surroundings, or access to resources) and internal (self-efficacy) (Kidwell & Jewell, 2003). People's perception of self-efficacy is influenced by their skills and their evaluation of what they can accomplish with those skills.

1.5. Integrating the three theoretical perspectives

Together, the JD-R model, Neutralization Theory, and the Theory of Interpersonal Behaviour form an integrated explanation of employee conduct in technology-intensive work. The JD-R framework, with the overarching structure, identifies the digital job demands such as techno-invasion and e-monitoring. Neutralization Theory introduces a moral-cognitive mechanism in which employees provide cognitive rationalisations to their deviant behaviour. Such cognitive rationalisations can enable a teleworker to reinterpret deviant behaviour, such as cyberslacking, as a coping mechanism. The Theory of Interpersonal Behaviour provides the behavioural channel, clarifying how such rationalisations, under enabling conditions, evolve into observable cyberslacking that ultimately influences job performance. Taken together, this framework explains how techno-invasion and electronic monitoring shape cyberslacking behaviour and, in turn, lead to job performance. This theoretical integration proposes to advance the JD-R perspective by embedding cognitive justification and behavioural translation processes. It offers a more nuanced understanding of how digital job demands not only exhaust resources but also activate reasoning and actions. Further, such reasoning and actions may paradoxically restore shorter benefits and jeopardise performance in the long run.

1.6. Techno-invasion and cyberslacking

The relationship between technological invasions of an employee's personal boundaries and their cyberslacking behaviour is under-researched (Zhou et al., 2023). Techno-invasion leads to work overload, or at least teleworkers perceive it thus. This overload may encourage retaliatory counterproductive behaviours (Yao et al., 2023). Employees may engage in cyberslacking to neutralize the effects of excessive techno-invasion by reducing their self-regulatory resources required to limit deviant behaviour (Chen et al., 2022). Insufficient job resources and higher job demands lead to job stress, which can result in employee cyberslacking (Koay et al., 2017).

On a contrasting note, drawing on the challenge-hindrance stressors framework (Cavanaugh et al., 2000; Rodell & Judge, 2009) and based on the appraisal lens, if the employee perceives techno-invasion as hindrance-like (Rodell & Judge, 2009), then they may respond by conserving time and attention for immediate responsiveness. In the process, they reduce the discretionary detachment such as cyberslacking. The theory of interpersonal behaviour further explains this mechanism, it states that an individual's behaviour is the culmination of habit strength, intention to engage, and relevant facilitating conditions (Pee et al., 2008). As we have previously explained, people's perception of self-efficacy is influenced by their skills and their evaluation of what they can accomplish with those skills. Employees burdened with work due to techno-invasion and the stress of completing assigned tasks may lack the psychological and situational resources to engage in deviant behaviour, such as cyberslacking. Therefore, in the context of this research, teleworkers, already burdened with work through digital job demands (absence of facilitating conditions), might not get any leverage to indulge in deviant behaviour such as cyberslacking in a technologically invasive remote work setting.

1.7. E-monitoring and cyberslacking

Literature on the relationship between e-monitoring and cyberslacking (Glassman et al., 2015) suggests that organisational monitoring and policies would deter this deviant behaviour. However, drawing on the challenge-hindrance stressors framework (Cavanaugh et al., 2000; Rodell & Judge, 2009), e-monitoring can be positioned as hindrance-type demand. When appraised as surveillance that could constraint autonomy of individuals, employees are likely to experience psychological withdrawal, making cyberslacking a plausible coping mechanism (Rodell & Judge, 2009). In addition, later research claims that e-monitoring has somehow been unable to contain cyberslacking as employees might use their smartphones as a ready substitute for organisational resources such as computers or the internet (Siegel et al., 2022). Extending this debate further, based on the neutralization theory (Li & Cheng, 2013), teleworkers might carry out deviant behaviour like cyberslacking more when subjected to e-monitoring. Rodell and Judge (2009) similarly suggest that stressors appraised as hindrances, can trigger discretionary responses that restore sense of control. Additionally, in the pandemic-induced strict remote working setup, employers, contrary to their liking, might not have been able to monitor employees' cyberslacking behaviour extensively. Therefore, we problematize that e-monitoring would remain largely ineffective in containing the cyberslacking behaviour of teleworkers.

1.8. Cyberslacking and job performance

The influence of cyberslacking on job performance in remote work is a matter of investigation. Supposedly, cyberslacking may act as a reprieve or escape from high work overload (Güğerçin, 2020) and could positively affect employee performance amidst social and professional isolation experienced by remote workers (Yan et al., 2025). Cyberslacking may even serve as a tool for recreation and recovery for the employee experiencing isolation and stress (Yeik et al., 2016). Studies show cyberslacking might boost work performance by increasing creativity (Oravec, 2002) and recharging the mind (Reinecke, 2009). According to previous research, cyberslacking can have either a positive, negative, or neutral effect on job performance. According to the data, the complexity of cyberslacking influences its impact on job performance. Furthermore, the lack of consistency in the conceptual constructs employed to describe job performance in diverse research adds to the difficulty of effectively identifying the real impact of cyberslacking on job performance.

Through this research, we problematize the association between job demands and cyberslacking and the corresponding influence on job performance. Therefore, we posit to understand the effect of cyberslacking on the proposed telework outcome, viz., employees' job performance.

H3. Cyberslacking will mediate the relationship between techno-invasion and job performance.

H4. Cyberslacking will mediate the relationship between e-monitoring and job performance.

1.9. Information technology and job demand

The role of IT in telecommuting has traditionally been seen as a facilitator for improved telecommuting (Baruch, 2000). However, recent studies question this assumption, showing that technology can enhance and hinder telecommuting efficiency (Avery & Baker, 2002). Employers' expectations for enhanced output increase with better IT availability (Baker et al., 2006). In other words, we can consider technology as a facilitator (by bringing positive work results) and inhibitor (by tearing the work apart) to efficient telecommuting. Hence, it remains an intriguing area of research to identify its role during the current era of telecommuting. The literature indicates that, among all the techno-stressors, techno-invasion contributes significantly to the overall stress that employees experience. This experience might be due to the extreme use of technology while telecommuting. The inability to meet personal commitments and a lack of privacy are two main factors contributing to stress among employees due to excessive technology use (Satpathy et al., 2021). In this study, we have operationalised IT support as the availability and adequacy of information technology assistance and enabling conditions for telework. Through this research, we problematize the influence of IT on the relationship between job demands, viz., techno-invasion and e-monitoring, and cyberslacking, and thus hypothesize:

This research examines the relationship between technological invasion and cyberslacking, exploring how high IT support in remote work settings affects this dynamic. High-quality technology may help employees manage workloads and balance work and personal life, reducing cyberslacking (Danilova et al., 2022). Conversely, low IT support may increase stress and cyberslacking as employees struggle with work demands. To study the dynamics involved, we propose to examine the following:

H5. IT support will moderate the relationship between techno-invasion and cyberslacking.

The relationship between e-monitoring and cyberslacking might differ depending on the employer's IT support in a remote work setting. When the employer provides high IT support, we conjecture that e-monitoring can reduce cyberslacking. This positive impact implies that the employer offers employees the necessary tools and resources to carry out their work effectively, including monitoring software that helps them track their progress and stay on task. With these tools in place, employees are more likely to remain focused on their work and avoid engaging in activities unrelated to work, such as cyberslacking. In cases where the employer provides low IT support, e-monitoring can have a negative relationship with cyberslacking. This negative relationship is because employees may feel that employers are closely watching and monitoring, leading to feelings of stress and anxiety. Additionally, without access to the necessary tools and resources to carry out their work effectively, employees may be more likely to engage in activities unrelated to work, such as cyberslacking, thus neutralizing.

H6. IT support will moderate the relationship between e-monitoring and cyberslacking.

We present the conceptual framework of this research study (Fig. 1) to illustrate the interconnected nature of all the proposed hypotheses (*H1-H6*).

2. Materials and methods

2.1. Participants details

We recruited participants online through professional social media websites, including LinkedIn, and personal channels from July to October 2023. The inclusion criteria specified that employees should work in the knowledge sector and work remotely for their entire workweek, indicating a high level of telecommuting intensity. The respondents were required to provide informed consent before completing the survey link. All the participants were teleworkers working in India across various knowledge sectors, including consulting, IT services, and online customer research, where their work was predominantly screen-based.

As Jordan and Troth (2020) recommend, researchers can mitigate concerns about common method bias by employing temporal separation. Therefore, we administered the instrument in a two-phase manner. We administered only the instruments measuring independent variables and the mediator in the first phase. Those participants who had completed the survey in the first phase were contacted 25 days later to complete the survey instrument. We had announced that respondents participating in both surveys would be eligible for a lucky draw, and five respondents would receive a cash reward of INR 2000 each (approximately $25). In the first phase, we received 1906 responses, which were reduced to 1606 for the second phase. After preliminary checks on missing values and unengaged responses, we finalised the sample of knowledge workers ($n = 1446$) who had completed both survey phases. The final sample consisted of 1446 teleworkers (male, $n = 719$, 49.7%; female, $n = 727$, 50.3%), with an average age of 38.82 years (SD = 7.18), ranging from 23 to 59 years.

2.2. Measures

We have employed standardised, validated scales and adapted them to suit the realities of telecommuting. However, we have contextualised this study to suit remote workers and telecommuting; we made sufficient modifications by recruiting telecommuting research experts ($n = 5$) (Cantrill et al., 1998; DeVellis, 1991). The experts met twice online, and in consultation with the experts, we made modifications and finalised the instrument's structure. We adhered to the expert's suggestions on measuring the items on a seven-point Likert scale.

We employed the Tarafdar et al. (2007) scale to measure techno-invasion. One statement read, “I am always expected to be accessible (through cell phone, instant messaging)”. We employed the modified ICT Demand Scale of Day et al. (2012) to measure e-monitoring. One item read, “My organisation monitors my emails”.

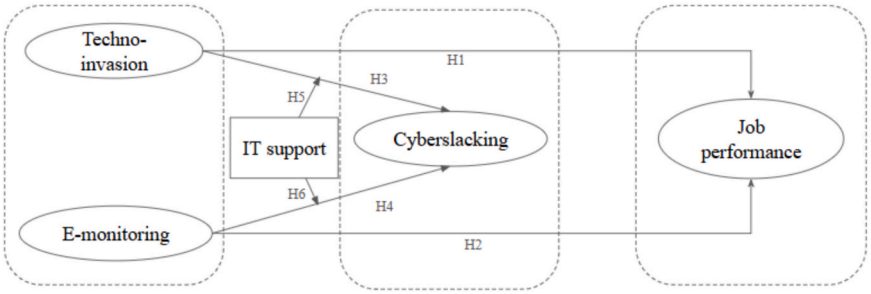

Fig. 1. Conceptual Framework.

We measured cyberslacking by sufficiently modifying the cyberslacking instrument (Metin et al., 2016) to assess the telecommuting context. The focus was on measuring digitally mediated behaviour in a remote work setting, and not as an on-site behaviour. Also the emphasis was to measure everyday ICT-based personal diversion and not as a major deviant online behaviour, such as gambling and data-misuse (Blanchard & Henle, 2008). This process ensured that the construct is measured and reflected as ICT-based breaks and not as general procrastination. One item read, "I spend time watching shows over OTT platforms while working remotely", which we included to reflect on the common form of short, online micro-breaks while teleworking (Grobelny et al., 2024; Liu et al., 2021; Syrek et al., 2018). This decision is supported by research that showcases that cyberslacking can provide psychological recovery and rejuvenation when subjected to digital job demands (Koay et al., 2017; Reinecke, 2009).

We modified the Williams and Anderson (1991) in-role performance instrument to assess job performance. One indicator read, "I perform tasks that are expected of me while working remotely". Finally, we employed the IT support scale (Baker et al., 2006) to measure IT support; one indicator read, "I receive as much technological support as I need when working from home".

3. Results

We first assessed the measurement model. We have employed PLS-SEM for analysis using Smart PLS 4 software, as the structural model proposed to test is complex with multiple independent and dependent variables and a mediator (Hair et al., 2019). To establish the construct's reliability, we examined the indicator loadings, composite reliability (rho_C), Cronbach's alpha, and rho_A. Each construct reported significant reliability, which is attributed to the modified scales employed in the study (Table 1). For the construct's convergent validity, we inspected if the average variance extracted (AVE) was more significant than 0.50. All the constructs reported high convergent validity.

We established the discriminant validity of the constructs by examining the Fornell and Larcker (1981) (Table 2A), cross-loadings, and HTMT (Henseler et al., 2015). The HTMT values ranged from 0.110 to 0.443 (Table 2B); ideally, the HTMT value should be less than 0.85 for conceptually different constructs. The constructs reported no issues with discriminant validity and provided sufficient proof that they are empirically distinct from other constructs in the model.

3.1. Common method bias

We have taken the necessary precautions to mitigate the problem of common method bias (CMB) by employing procedural strategies and standard statistical techniques to assess and minimise CMB. We structured the survey to include a temporal separation of 25 days between the independent and mediator variables and the study's dependent variables (Podsakoff et al., 2003). The researchers deemed a temporal separation of 25 days adequate to minimise the problem surfacing from the CMB (Jordan & Troth, 2020). We used the random variable method in PLS-SEM, and thereafter we assessed the variance inflation factor (VIF) method to test the inner VIF at the all-factor level. None of the factors reported a VIF value greater than 1.50, indicating that the model is free from CMB (Kock, 2015).

After examining the measurement model, we looked at the structural model. As collinearity can bias the structural relationship results, we assessed collinearity by employing VIF. In the analysis, we could find only four indicators that reported an outer VIF value greater than 3.30 (ranging from 3.383 to 3.660). The remaining indicators reported VIF in the range of 1.361 to 2.960. The occurrence of VIF greater than 3.30 indicates the presence of collinearity. After that, we employed R^2 and Q^2 to assess the model's explanatory power. For cyberslacking and job performance, the adjusted R^2 values were 0.210 and 0.075 (Henseler et al., 2009), given the context of the relationships under study. We also employed the blindfolding procedure to assess the predictive accuracy of the PLS model. The Q^2 values of 0.134 and 0.058 for cyberslacking and job performance, respectively, were greater than zero, indicating the predictive accuracy of the structural model. After establishing the model's explanatory power, we now assess the structural model's relevance and path coefficient statistical significance (Hair et al., 2019). Upon evaluating the structural model without the mediator cyberslacking, we accepted *H1 and H2* (Table 3).

As a final step proposed, we ascertained the indirect effect of the two job demands, e-monitoring and techno-invasion, on job performance via one intervening (mediating) variable – cyberslacking (Nitzl, 2016). We ran the bootstrapping procedure on 10,000 subsamples to assess the significance of the path coefficients and inspect the direct, indirect, and specific indirect effects. With the specific indirect effect, we established that cyberslacking mediated the relationship between independent and dependent variables, and therefore we accepted *H3 and H4* (Fig. 2, Table 4A).

We then tested the moderating effect of IT support on the relationship between job demands (techno-invasion and electronic monitoring) and cyberslacking. When we examined the moderating effect of IT support on the negative relationship between techno-invasion and cyberslacking (Table 4B), we found that neither higher nor lower IT support impacted the said relationship (*reject H5*). However, IT support moderated the positive relationship between electronic monitoring and cyberslacking (*accept H6*), such that at lower IT support, the said positive relationship gets further accentuated vis-à-vis at a higher IT support level. This result implies that when an organisation fails to provide adequate IT support during telecommuting, the incidence of cyberslacking increases at a higher rate when organisations employ increased electronic monitoring (Fig. 3).

For robustness checks, we conducted a complementary analysis on Hayes PROCESS macro (Model 7), in SPSS (Hayes, 2022). In this, we ran two models, one for each job demand (Table 5; Panel A and B). IT support did not moderate the relationship between techno-invasion and

Table 1
Construct Reliability & Validity.

Factors & Measures	Code	IL	AVE	rho_A	rho_C	Alpha
Techno-invasion			**0.672**	**0.870**	**0.891**	**0.841**
My employer expects me to respond immediately to instant messages (WhatsApp, telegram).	WL2	0.776				
My employer expects me to be accessible (e.g., through cell phone or instant messaging).	WL3	0.872				
Technology enables people I work with to contact me at any time.	WL4	0.825				
My employer expects me to check email and instant messages outside the regular work hours.	WL5	0.803				
Electronic Monitoring			**0.611**	**0.898**	**0.885**	**0.841**
My organisation monitors my internet usage	MN2	0.796				
My organisation monitors my emails	MN3	0.887				
My organisation monitors my phone calls	MN4	0.885				
My supervisor keeps a tab on my working hours	MN5	0.600				
My organisation monitors my email responses	MN6	0.700				
Cyberslacking			**0.648**	**0.876**	**0.902**	**0.864**
I spend time watching shows over OTT platforms while working remotely	PRC12	0.794				
I do online shopping during working hours	PRC13	0.848				
I overwork because I spend my time with irrelevant work activities	PRC14	0.750				
I play computer games at work	PRC15	0.871				
I let the time go by without getting any work tasks being done	PRC16	0.753				
Job Performance			**0.784**	**0.923**	**0.936**	**0.908**
I adequately complete assigned duties while working remotely.	JPER1	0.874				
I fulfil the responsibilities specified in the job description while working remotely.	JPER2	0.916				
I perform tasks that are expected of me while working remotely.	JPER3	0.923				
I meet the formal performance requirements of the job while working remotely.	JPER4	0.826				
Information Technology Support			**0.754**	**0.681**	**0.860**	**0.675**
I receive as much technological support as I need when working from home.	TR4	0.885				
When I have a technology-related query from home, someone in the organisation is always accessible.	TR6	0.852				

cyberslacking (TI × IT_S: $b = 0.01$, $p = 0.11$), thus *H5* was not supported. When checked with electronic monitoring, we found that IT support significantly moderated the relationship between electronic monitoring and cyberslacking ($b = -0.02$, $p = 0.01$). This demonstrates a buffering effect of IT support (*H6*). We also report that cyberslacking has a positive influence on performance ($b = 0.15$, $p < 0.001$). The direct effect of electronic monitoring on job performance was non-significant (b = 0.01, $p = 0.75$).

4. Discussion

We provide evidence establishing techno-invasion as a job demand that negatively influences teleworkers' performance (*H1*), drawing resonance with previous studies (Carlson et al., 2017; Ragu-Nathan et al., 2008). Additionally, we found a positive significant relationship between e-monitoring and job performance (*H2*), consistent with the focus and accountability argument (DelVecchio et al., 2013). This result however is contrasting with previous studies that present a negative relationship (Kehinde & Okafor, 2019; V & Pillai, 2022), where monitoring is perceived as intrusive. In line with our context-specific framing, this suggests that e-monitoring in extended telecommuting may operate as procedural control amplifying task focus and compliance, however not as punitive surveillance. Introducing cyberslacking as a mediator reveals a positive relationship, suggesting that cyberslacking enhances job performance, extending Koay et al.'s (2017) research, which indicates that cyberslacking can have positive ramifications at work. Consistent with the path estimates, the e-monitoring—cyberslacking linkage is positive, indicating even under monitoring, teleworkers may still engage in online detachments as a coping response, while maintaining or even improving performance (*H4*). Cyberslacking aligns employee and organisational goals by developing skills and knowledge, reducing boredom and fatigue (Reinecke, 2009), and lowering work stress (Koay et al., 2017). This study highlights cyberslacking as a beneficial coping mechanism for teleworkers. One, employees, through the metaphor of ledger, neutralize the perceived injustice at their workplace by engaging in cyberslacking (Lim, 2002). They cyberslack without any guilt by convincing themselves of taking what they deserve. In other words, they utilise the time they are supposed to be at work as they might not have been appreciated for their efforts in the past (Lim, 2002). This rationalisation provides a better psychological balance, leading to higher performance at work.

At the same time, our study finds that techno-invasion reduces cyberslacking, suggesting that under persistent connectivity expectations, teleworkers may have limited scope for even a brief online detachment (*H3*). This finding aligns with the broader argument on constrained recovery opportunity during technologically invasive remote work settings. In addition the results also suggest that teleworkers cannot neutralize the effects of techno-invasion, emphasising the importance of facilitating conditions in the Theory of Interpersonal Behaviour (Pee et al., 2008). External working conditions, appropriate settings, and access to resources are crucial for non-work-related behaviour at work. Also, this confirms our theorisation that when job demands become overwhelming, traditional neutralization mechanisms may collapse. Further, a trade-off between the benefits associated with cyberslacking and the perceived penalties on the use of the internet for non-work-related tasks is also analysed by the employees.

Table 2A
Assessing Discriminant Validity through Fornell-Larcker Criterion.

	Cyberslacking	Electronic Monitoring	IT Support	Job Performance	Techno-Invasion
Cyberslacking	0.805				
Electronic Monitoring	0.405	0.781			
IT Support	0.059	0.204	0.868		
Job Performance	0.236	0.110	−0.054	0.886	
Techno-Invasion	−0.209	−0.006	0.228	−0.188	0.820

Table 2B
Assessing Discriminant Validity through HTMT.

	Cyberslacking	Electronic Monitoring	IT Support	Job Performance	Techno-Invasion
Cyberslacking					
Electronic Monitoring	0.443				
IT Support	0.075	0.281			
Job Performance	0.262	0.110	0.070		
Techno-Invasion	0.227	0.175	0.299	0.206	

Table 3
Direct Relationship Assessment without Mediator.

	β	SD	T Statistics	*P* Values	Hypotheses
Electronic Monitoring ➔ Job Performance	0.114	0.025	4.542	***	H2 supported
Techno-Invasion ➔ Job Performance	−0.185	0.026	7.157	***	H1 supported

* For $p < 0.05$; *** for $p < 0.001$.

Failure of Neutralization: We can interpret the pattern of *failure of neutralization* through the lens of Neutralization Theory (Sykes & Matza, 1957). The theory explains as to how employees justify their non-work behaviour without feeling deviant about it. We see that under normal conditions, employees try to rationalise the act by terming it as *deserved time for recovery* or *harmless balance* (Lim, 2002). However, our study finds that when employees experience high-intensity work demands, such as techno-invasion, these rationalisations do not work. Employees might then experience *failure of neutralization—they cannot justify brief slacking even for a while, as they perceive being time-constrained or morally pressured*. Techno-invasion as reflected from our study like being available beyond work hours, or constant expectation of an immediate response point towards a sense of perpetual responsiveness. Under such conditions, we sense that the employee is undergoing a *failure of neutralization* as constant responsiveness itself becomes a work norm. Though the teleworkers might still need recovery, the psychological pressure to remain available suppresses cyberslacking as a coping mechanism. Contrarily, teleworkers do not feel the same with electronic monitoring which function as external control mechanism and not as internalised demand (read techno-invasion). This leads us to conclude that employees comply because they are perpetually obligated and not

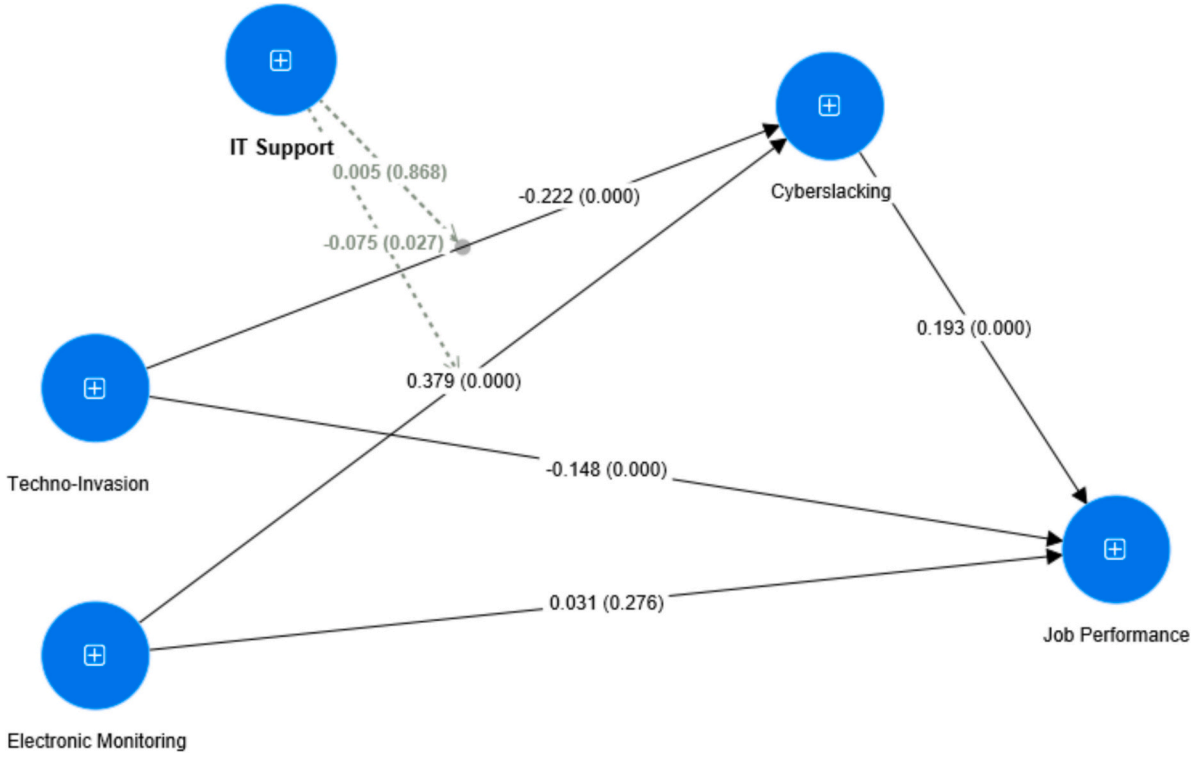

Fig. 2. Structural Model with the Mediator – Cyberslacking and Moderator—IT Support.

Table 4A
Testing Mediation.

	β	T statistics	95 BCE% CI LL UL	P values	Hypotheses
Techno-Invasion - > Cyberslacking - > Job Performance	−0.043	4.882	−0.061 -0.027	***	H3 accepted
Electronic Monitoring - > Cyberslacking - > Job Performance	0.073	5.532	0.048 0.1	***	H4 accepted

Table 4B
Testing Moderation of IT support.

	β	T statistics	95 BCE% CI LL UL	P values	Hypotheses
IT support x Techno-Invasion - > Cyberslacking - > Job Performance	0.001	0.163	−0.011 0.012	0.870	H5 Not Accepted
IT support x Electronic Monitoring - > Cyberslacking - > Job Performance	−0.015	1.999	−0.03 -0.001	0.046*	H6 Accepted

* For $p < 0.05$; *** for $p < 0.001$.

because they are being watched.

Contrasting Mechanism of Digital Job Demands: The contrasting nature of the two job demands also shows two distinct pathways through which they influence job performance, which can be explained through the JD-R model (Bakker & Demerouti, 2007) and subsequently through the challenge-hindrance stressors framework (Cavanaugh et al., 2000; Lepine et al., 2005). Electronic monitoring and techno-invasion can be discussed using the challenge-hindrance stressor lens as an appraisal-based interpretation. In this study, we treat e-monitoring as hindrance-like when it is appraised as surveillance. We also report techno-invasion as hindrance-like to the extent that is appraised as boundary intrusion and loss of control in extended telecommuting, where the teleworker feels a persistent need to be connected and responsive at all times. In such conditions, the time and autonomy required for discretionary detachment may be constrained, reducing the opportunity for cyberslacking. We extend the study of Zhou et al. (2023) by explaining the underlying mechanism through which these digital job demands can show contrasting relationships with cyberslacking in a telework setting. *E*-monitoring when appraised as surveillance, may induce withdrawal-oriented coping, which can increase cyberslacking even when performance is maintained through compliance. This implies that teleworkers would indulge in rejuvenation activities, like short psychological breaks (Reinecke, 2009) that would give them digital detachment to ease the mental strain and gain back the focus.

Contrarily, while experiencing techno-invasion continued expectation would erode autonomy and also the conditions for recovery or coping. This could be explained by the Theory of Interpersonal Behaviour (Pee et al., 2008), where the facilitating conditions, more particularly the enabling conditions, would collapse under persistent connectivity expectation. This would happen even when an employee rationalises cyberslacking (Li & Cheng, 2013; Lim, 2002). This would ultimately lead to what we call the *failure of neutralization* as the teleworker will not be able to justify or exercise brief online detachment.

These contrasting effects also indicate the differing nature of the job demands. While techno-invasion can be bracketed as an implicit norm, electronic monitoring functions as an explicit policy mechanism. Techno-invasion for the teleworkers, being an internalised expectation of perpetual response, does not leave any scope for disengaging or coping. Contrarily, electronic monitoring may be complied with outwardly, but teleworkers reclaim autonomy through limited cyberslacking as a quiet form of balance. This aspect also distinguishes between the normative and procedural character of the two job demands, and answers why techno-invasion will suppress coping behaviours and electronic monitoring may amplify it, and in the process yield distinguishing effects on cyberslacking and performance.

Selective Role of IT Support: Our study also provides additional

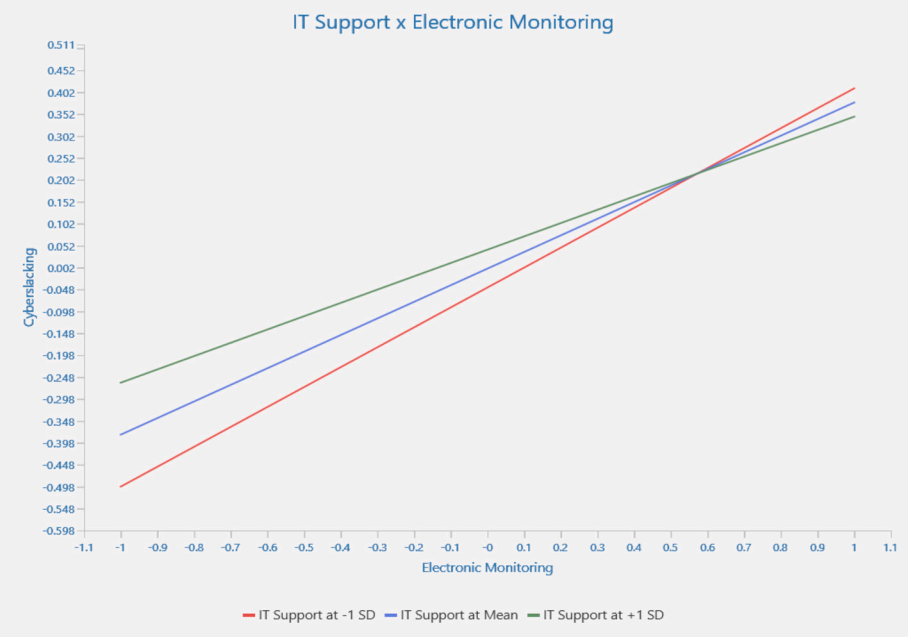

Fig. 3. Slope Analysis.

Table 5
Moderation and (conditional) indirect effects via Cyberslacking.

Panel A. Electronic Monitoring (X = EMON)

A1. Path estimates

Equation	Predictor	b	Standard Error	t	p	95% Confidence Interval (Lower, Upper)
M (CYBSL)	EMON	0.47	0.05	8.68	<0.001	[0.36, 0.57]
M (CYBSL)	IT_S	0.46	0.2	2.26	0.024	[0.06, 0.86]
M (CYBSL)	EMON × IT_S	−0.02	0.01	−2.57	0.01	[−0.031, −0.005]
Y (JPER)	EMON	0.01	0.02	0.32	0.75	[−0.03, 0.04]
Y (JPER)	CYBSL	0.15	0.02	8.27	<0.001	[0.12, 0.19]

A2. Direct and conditional indirect effects (bootstrap)

Effect	IT Support (W) level	Effect	Bootstrapped Standard Error	Bootstrapped 95% Confidence Interval (Lower, Upper)
Direct effect (EMON → JPER)	–	0.010	0.020	[−0.03, 0.04]
Indirect effect (EMON → CYBSL → JPER)	4.5	0.060	0.010	[0.04, 0.08]
	7.7	0.050	0.010	[0.04, 0.07]
	10.9	0.040	0.010	[0.03, 0.06]

Panel B. Techno-Invasion (X = TI)

B1. Path estimates

Equation	Predictor	b	Standard Error	t	p	95% Confidence Interval (Lower, Upper)
M (CYBSL)	TI	−0.34	0.05	−6.47	<0.001	[−0.45, −0.24]
M (CYBSL)	IT_S	−0.02	0.10	−0.24	0.81	[−0.22, 0.17]
M (CYBSL)	TI × IT_S	0.01	0.01	1.60	0.11	[0.00, 0.02]
Y (JPER)	TI	−0.11	0.02	−6.92	<0.001	[−0.14, −0.08]
Y (JPER)	CYBSL	0.12	0.02	6.58	<0.001	[0.08, 0.15]

B2. Direct and conditional indirect effects (bootstrap)

Effect	IT Support (W) level	Effect	Bootstrapped Standard Error	Bootstrapped 95% Confidence Interval (Lower, Upper)
Direct effect (TI → JPER)	–	−0.110	0.020	[−0.14, −0.08]
Indirect effect (TI → CYBSL → JPER)	4.5	−0.030	0.010	[−0.05, −0.02]
	7.7	−0.030	0.010	[−0.04, −0.02]
	10.9	−0.030	0.010	[−0.04, −0.02]

Note. Results are from Hayes PROCESS macro (Model 7) in SPSS (Hayes, 2022). Coefficients are unstandardized (b). Bootstrap = 5000 samples; 95% Confidence Intervals are bootstrap confidence intervals. IT Support (W) values shown correspond to the mean and ± 1 Standard Deviation. EMON = Electronic Monitoring; TI = Techno-Invasion; IT_S = IT Support; CYBSL = Cyberslacking; JPER = Job Performance; X = predictor; M = mediator; W = moderator; Y = outcome; CI = Confidence Interval.

insights into how job resources function in a remote setting through the moderating role of IT support. Within the JD-R framework, our study reports that IT support acts as a structural resource, helping teleworkers manage technological demands. The findings, however, suggest a selective buffering effect. While IT support did moderate the relationship between electronic monitoring and cyberslacking, the same did not hold true for the techno-invasion—cyberslacking relationship. This suggests that, with the requisite technological support, teleworkers may not or selectively resort to cyberslacking as a coping response to procedural demands, such as e-monitoring. However, this mechanism of coping will likely be ineffective for norm-based pressures, such as techno-invasion.

4.1. Theoretical implications

We integrate the JD-R framework, Theory of Interpersonal Behaviour and Neutralization theory to advance the understanding of digital job demands. In doing so, we shift the theoretical conversations from treating digital demands as a single category to explaining how distinct digital demands operate through distinct behavioural mechanism in extended telecommuting. The study's findings provide evidence that the two job demands — techno-invasion and e-monitoring —operate under different psychological mechanisms. This distinction offers a mechanism-based explanation to why teleworkers may show seemingly counterintuitive patterns of coping and performance under different forms of digital control and connectivity. While techno-invasion and e-monitoring can be interpreted using the challenge-hindrance lens in an appraisal-based manner, we do not treat these labels as fixed properties of the stressors. At the same time, our findings suggest that challenge-hindrance framework may be insufficient alone to explain the digital job demands in extended telecommuting. As both techno-invasion and e-monitoring can be appraised as hindrance-like demands yet display divergent relationships with cyberslacking and performance. Therefore, we draw upon the Theory of Interpersonal Behaviour to explain the role of facilitating conditions. These facilitating conditions of time, autonomy, and resource availability can determine the enactment of cyberslacking.

As a *hindrance stressor*, techno-invasion essentially erodes the autonomy and facilitating conditions of the employee to the extent that they are unable to justify or engage in cyberslacking. We conceptualise this phenomenon as the *failure of neutralization*. We advance "failure of neutralization" as a boundary condition for Neutralization Theory in telework contexts, specifying when rationalisations that could normally enable deviance cease to function under a norm of perpetual availability. During this failure, the employees find themselves constrained to even rationalise brief digital detachments as they are burdened with the norm of perpetual availability, jeopardising any psychological recovery space. Therefore, we identify a specific condition under which the theory's core mechanism is disrupted, thereby altering the availability of cyberslacking as a coping option. *E*-monitoring, consequently, could be also termed as a hindrance-like under the JD-R and challenge-hindrance stressor framework, where it leads to adaptive coping. In this context, cyberslacking serves as a psychological respite, helping employees rejuvenate and maintain their performance. Therefore, our findings substantiate that cyberslacking is not just a deviant act but an adaptive

coping behaviour that functions well in certain situations. Therefore, we also reposition cyberslacking as a context-dependent coping and not as a uniformly counterproductive work behaviour. Our study, thus, clarifies the performance-based consequences of discretionary online behaviour in telework settings. Additionally, we align these study outcomes with the Theory of Interpersonal Behaviour, specifically the mechanism through which people engage in deviant behaviour, such as cyberslacking, which is not only influenced by intentions but also by facilitating conditions. This holistic view helps us theorise why some digital job demands (e-monitoring) may elicit coping mechanisms and why others (techno-invasion) inadvertently suppress them. This understanding extends and enriches the behavioural theories concerning teleworkers.

4.2. Managerial implications

The research affirms that rigorous work environments and telecommuting will likely lead to stressful work culture. This research aligns well with SDG 3: Good Health and Well-being and showcases ways to improve this component. Organisations may think of best practices such as implementing "right-to-disconnect" policies, flexible working hours, and non-permeable boundary where there are policies around after-hours communication via ICT. These policies and practices are likely helpful to combat techno-invasion- where workplace demands intrude on personal life. Additionally, proactive measures such as Employee Assistance Programs, mental health assessments for employees, and digital detox initiatives could prove helpful in maintaining employee well-being. In this study, we have examined the notion that while cyberslacking can initially appear counterproductive, it is likely to offer employees necessary mental breaks, thereby enhancing their responsiveness outside regular hours. However, organisations should consider addressing extreme cyberslacking—significant time wastage or inappropriate internet use—through clear codes of conduct and not excessive e-monitoring, which attenuates job performance.

Our study shows that organisations can reduce digital strain by reconsidering how they use monitoring tools and communication technologies. Constant oversight and digital surveillance often create pressure and erode trust, leading employees to mentally disengage or cope in unproductive ways—such as cyberslacking. Instead, placing greater trust in employees and focusing on outcomes in place of minute-by-minute visibility may improve both performance and well-being. We also found that strong IT support acts as a critical buffer. When employees know that help is available and systems work smoothly, they're less likely to feel overwhelmed or frustrated by digital demands. Together, these findings suggest a broader lesson: designing remote work environments with care—balancing accountability with autonomy—can help reduce strain and enable people to do their best work. Additionally, organisations should provide ergonomic support for remote workers and encourage work-life balance through initiatives like no-meeting days and flexible work hours. These interventions address stress-related health issues, promote mental and physical well-being, and contribute to SDG 3 targets, particularly reducing workplace-induced illnesses (Target 3.4) and enhancing access to mental health care (Target 3.8). By aligning workplace practices with SDG 3, organisations can create healthier, more sustainable work environments while fostering employee engagement and long-term organisational success.

5. Conclusions

Our findings suggest that the way employees cope with digital pressure in remote work isn't always what we expect. While it's often assumed that workers respond to stress by disengaging or slacking off, our results show a different story. We found that techno-invasion—being constantly connected and interrupted—was actually linked to less cyberslacking, not more. This pattern also nuances wider debates on digital control in organisations by suggesting that compliance in remote work can be driven by internalised obligation to remain available, and not only by being watched through e-monitoring. This suggests that when digital demands become too intense, people may feel too overwhelmed to even take a break, which challenges the usual assumptions in neutralization theory. Interestingly, when employees did engage in some cyberslacking, it was associated with better job performance. In this context, diversions may help workers reset and refocus, and not reduce productivity. Our analysis also showed that cyberslacking played a key mediating role between job demands and performance, reinforcing the idea that how people respond to digital pressure matters. Ultimately, techno-invasion had a direct negative association with job performance, accentuating the risks associated with excessive digital intrusions in remote work. Our findings reveal limitations in applying neutralization theory to explain teleworkers' responses to techno-invasion, highlighting the need to establish boundary conditions for its relevance in remote work contexts. Adopting a more nuanced approach to technology management in telework settings is crucial for optimising job performance and adapting to the dynamic demands of modern work environments.

5.1. Limitations and future research directions

We acknowledge that the rationalisation process that teleworkers experience is likely to be influenced by demographic and cultural factors. In India, from where we have drawn on the sample for this study, there is a very strong inherent expectation of responsiveness. Additionally, the supervisor's oversight is generally strong in this region. Here, the employees feel that monitoring is a routine feature of work. In other cultures where autonomy is prioritised, the same type of electronic performance monitoring may be perceived as intruding on employees' work lives. This cultural difference could also tantamount to produce different coping mechanisms. Therefore, future studies can undertake cross-cultural sampling to establish the external validity of the model. Future studies should aim to replicate our findings using a more extensive and diverse sample of workers across various industries and regions to enhance the generalizability of our conclusions. Also, investigating the mechanisms behind the positive relationship between cyberslacking and job performance could offer practical insights for optimising employee productivity. Additionally, exploring the long-term effects of techno-invasion on job performance and developing effective strategies to mitigate its adverse impact would be critical for creating sustainable and productive telework environments.

A key direction that future research studies can undertake lies in a detailed examination of the conditions under which the *failure of neutralization* can occur. Our findings indicate that when digital job demands, such as techno-invasion, create a sense of perpetual response, teleworkers may struggle to justify even brief ICT breaks. This phenomenon can lead to a collapse in the usual rationalisation model in which cyberslacking was permitted. However, this process may not be universally applicable; we understand that cultural norms concerning availability, reverence towards managers, and the acceptability of breaks are likely factors that can influence whether employees are permitted to disengage and to what extent. Future studies can also investigate how contextual factors like age, gender, boundary management, maneuvering around digital strain, among others, govern the threshold at which employees stop being able to neutralize or justify such neutralization. Investigations on these lines can deepen the theoretical understanding of cyberslacking as a coping mechanism.

CRediT authorship contribution statement

Vibhash Kumar: Writing – review & editing, Writing – original draft, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. **Ashima Verma:** Writing – review & editing, Validation, Resources. **Sonal Jain:** Writing – review & editing, Validation, Supervision, Resources, Methodology,

Investigation. **Anuj Sharma:** Visualization, Validation, Supervision, Resources.

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Declaration of competing interest

The authors have no relevant financial or non-financial interests to disclose.

Data availability

Data will be made available on request.

References

Adeoti, M. O., Shamsudin, F. M., & Mohammad, A. M. (2020). Opportunity, job pressure and deviant workplace behaviour: Does neutralisation mediate the relationship? A study of faculty members in public universities in Nigeria. *European Journal of Management and Business Economics, 30*(2), 170–190. https://doi.org/10.1108/EJMBE-08-2017-0002

Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest, 16*(2), 40–68. https://doi.org/10.1177/1529100615593273

AMA. (2019). The Latest on Workplace Monitoring and Surveillance. https://www.amanet.org//articles/the-latest-on-workplace-monitoring-and-surveillance/.

Avery, G. C., & Baker, E. (2002). Reframing the infomated household-workplace. *Information and Organization, 12*(2), 109–134. https://doi.org/10.1016/S1471-7727(01)00013-6

Baker, E., Avery, G. C., & Crawford, J. (2006). Home alone: The role of Technology in Telecommuting. *Information Resources Management Journal (IRMJ), 19*(4), 1–22. https://doi.org/10.4018/irmj.2006100101

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328. https://doi.org/10.1108/02683940710733115

Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment, 15*(1), 34–49. https://doi.org/10.1111/1468-005X.00063

Bhave, D. P. (2014). The invisible eye? Electronic performance monitoring and employee job performance: PERSONNEL PSYCHOLOGY. *Personnel Psychology, 67*(3), 605–635. https://doi.org/10.1111/peps.12046

Blanchard, A. L., & Henle, C. A. (2008). Correlates of different forms of cyberloafing: The role of norms and external locus of control. *Computers in Human Behavior, 24*(3), 1067–1084. https://doi.org/10.1016/j.chb.2007.03.008

Blau, G., Yang, Y., & Ward-Cook, K. (2006). Testing a measure of cyberloafing. *Journal of Allied Health, 35*(1), 9–17.

Cantrill, J. A., Sibbald, B., & Buetow, S. (1998). Indicators of the appropriateness of long term prescribing in general practice in the United Kingdom: Consensus development, face and content validity, feasibility, and reliability. *Quality in Health Care, 7*(3), 130–135.

Capitano, J., McAlpine, K., & Greenhaus, J. (2019). *Chapter 4 organizational influences on work–home boundary permeability: A multidimensional perspective* (pp. 133–172). https://doi.org/10.1108/S0742-730120190000037005

Carlson, J. R., Carlson, D. S., Zivnuska, S., Harris, R. B., & Harris, K. J. (2017). Applying the job demands resources model to understand technology as a predictor of turnover intentions. *Computers in Human Behavior, 77*, 317–325. https://doi.org/10.1016/j.chb.2017.09.009

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology, 85*(1), 65–74. https://doi.org/10.1037/0021-9010.85.1.65

Chen, Y., Wang, X., Benitez, J., Luo, X. (Robert), & Li, D. (2022). Does techno-invasion Lead to employees' deviant behaviors? Journal of Management Information Systems, 39(2), 454–482. doi:https://doi.org/10.1080/07421222.2022.2063557.

Cheng, L., Li, W., Zhai, Q., & Smyth, R. (2014). Understanding personal use of the internet at work: An integrated model of neutralization techniques and general deterrence theory. *Computers in Human Behavior, 38*, 220–228.

Danilova, K. B., Ulfsten, A., Eikebrokk, T. R., Iden, J., Johannessen, T. V., & Johanson, D. (2022). Explaining individual job performance in work from home (WFH) arrangements. *Information Technology & People, 36*(5), 1915–1938. https://doi.org/10.1108/ITP-01-2021-0039

Day, A., Paquet, S., Scott, N., & Hambley, L. (2012). Perceived information and communication technology (ICT) demands on employee outcomes: The moderating effect of organizational ICT support. *Journal of Occupational Health Psychology, 17*(4), 473–491. https://doi.org/10.1037/a0029837

DelVecchio, S. K., Deeter-Schmelz, D. R., & Anselmi, K. (2013). Big brother or big bother? E-monitoring the salesforce. *Journal of Business & Industrial Marketing, 28*(4), 288–302. https://doi.org/10.1108/08858621311313893

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

DeVellis, R. F. (1991). Scale development: Theory and applications (p. 121). Sage Publications, Inc.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.2307/3151312

Gagnon, M.-P., Godin, G., Gagné, C., Fortin, J.-P., Lamothe, L., Reinharz, D., & Cloutier, A. (2003). An adaptation of the theory of interpersonal behaviour to the study of telemedicine adoption by physicians. *International Journal of Medical Informatics, 71*(2), 103–115. https://doi.org/10.1016/S1386-5056(03)00094-7

Garrett, R. K., & Danziger, J. N. (2008). On Cyberslacking: Workplace status and personal internet use at work. *Cyberpsychology & Behavior, 11*(3), 287–292. https://doi.org/10.1089/cpb.2007.0146

Glassman, J., Prosch, M., & Shao, B. B. M. (2015). To monitor or not to monitor: Effectiveness of a cyberloafing countermeasure. *Information & Management, 52*(2), Article 2. https://doi.org/10.1016/j.im.2014.08.001

Grobelny, J., Glinka, M., & Chirkowska-Smolak, T. (2024). The impact of hedonic social media use during microbreaks on employee resources recovery. *Scientific Reports, 14*, 21603. https://doi.org/10.1038/s41598-024-72825-x

Güğerçin, U. (2020). Does techno-stress justify cyberslacking? An empirical study based on the neutralisation theory. *Behaviour & Information Technology, 39*(7), 824–836. https://doi.org/10.1080/0144929X.2019.1617350

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hamrick, A. B., Zafar, S., LePine, J., & Wesson, M. (2024). A watched pot never boils: How appraisals of supervisor remote monitoring influence remote workers' voice and silence. Work & Stress, 0(0), 1–36. doi:https://doi.org/10.1080/02678373.2024.2410171.

Harris, K. J., Harris, R. B., Valle, M., Carlson, J., Carlson, D. S., Zivnuska, S., & Wiley, B. (2021). Technostress and the entitled employee: Impacts on work and family. *Information Technology & People, 35*(3), 1073–1095. https://doi.org/10.1108/ITP-07-2019-0348

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: Third edition: A regression-based approach* (3rd ed.). Guilford Press. In: https://www.guilford.com/books/Introduction-to-Mediation-Moderation-and-Conditional-Process-Analysis/Andrew-Hayes/9781462549030.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics, & P. N. Ghauri (Eds.), *20. New challenges to international marketing* (pp. 277–319). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014.

Hinduja, S. (2007). Neutralization theory and online software piracy: An empirical analysis. *Ethics and Information Technology, 9*(3), 187–204. https://doi.org/10.1007/s10676-007-9143-5

Huma, Z., Hussain, S., Thurasamy, R., & Malik, M. I. (2017). Determinants of cyberloafing: A comparative study of a public and private sector organization. *Internet Research, 27*(1), 97–117. https://doi.org/10.1108/IntR-12-2014-0317

Iscan, O. F., & Naktiyok, A. (2005). Attitudes towards telecommuting: The Turkish case. *Journal of Information Technology, 20*(1), 52–63. https://doi.org/10.1057/palgrave.jit.2000023

Jeske, D. (2022). Remote workers' experiences with electronic monitoring during Covid-19: Implications and recommendations. *International Journal of Workplace Health Management, 15*(3), 393–409. https://doi.org/10.1108/IJWHM-02-2021-0042

Jordan, P. J., & Troth, A. C. (2020). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management, 45*(1), 3–14. https://doi.org/10.1177/0312896219871976

Kehinde, O. J., & Okafor, E. E. (2019). The use of electronic monitoring and work performance of employees in the banking industry in Ibadan, Southwest Nigeria. *African Journal of Business Management, 13*(10), 327–342. https://doi.org/10.5897/AJBM2019.8764

Khansa, L., Barkhi, R., Ray, S., & Davis, Z. (2018). Cyberloafing in the workplace: Mitigation tactics and their impact on individuals' behavior. *Information Technology and Management, 19*(4), 197–215. https://doi.org/10.1007/s10799-017-0280-1

Khansa, L., Kuem, J., Siponen, M., & Kim, S. S. (2017). To Cyberloaf or not to Cyberloaf: The impact of the announcement of formal organizational controls. *Journal of Management Information Systems, 34*(1), 141–176. https://doi.org/10.1080/07421222.2017.1297173

Kidwell, B., & Jewell, R. D. (2003). An examination of perceived behavioral control: Internal and external influences on intention. *Psychology & Marketing, 20*(7), Article 7.

Kim, S. S., & Malhotra, N. K. (2005). A longitudinal model of continued IS use: An integrative view of four mechanisms underlying postadoption phenomena. *Management Science, 51*(5), 741–755. https://doi.org/10.1287/mnsc.1040.0326

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., Bamberger, P., Bapuji, H., Bhave, D. P., Choi, V. K., Creary, S. J., Demerouti, E., Flynn, F. J., Gelfand, M. J., Greer, L. L., Johns, G., Kesebir, S., Klein, P. G., Lee, S. Y., … Vugt, M. van. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. The American Psychologist, 76(1), 63–77. doi:https://doi.org/10.1037/amp0000716.

Koay, K. Y., Soh, P. C.-H., & Chew, K. W. (2017). Do employees' private demands lead to cyberloafing? The mediating role of job stress. *Management Research Review, 40*(9), 1025–1038. https://doi.org/10.1108/MRR-11-2016-0252

Kock, N. (2015). Common method Bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration (IJeC), 11*(4), 1–10. https://doi.org/10.4018/ijec.2015100101

Lepine, J. A., Podsakoff, N. P., & Lepine, M. A. (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal, 48*(5), 764–775. https://doi.org/10.5465/amj.2005.18803921

Li, W., & Cheng, L. (2013). Effects of neutralization techniques and rational choice theory on internet abuse in the workplace. Pacific Asia Conference on Information Systems. PACIS 2013 Proceedings. 169 https://aisel.aisnet.org/pacis2013/169.

Liberman, B., Seidman, G., McKenna, K. Y. A., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior, 27*(6), 2192.

Lim, V. K. G. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior, 23*(5), 675–694. https://doi.org/10.1002/job.161

Lim, V. K. G., & Teo, T. S. H. (2005). Prevalence, perceived seriousness, justification and regulation of cyberloafing in Singapore: An exploratory study. *Information & Management, 42*(8), 1081–1093. https://doi.org/10.1016/j.im.2004.12.002

Lim, V. K. G., & Teo, T. S. H. (2024). Cyberloafing: A review and research agenda. *Applied Psychology, 73*(1), 441–484. https://doi.org/10.1111/apps.12452

Liu, Y., Gao, Q., & Ma, L. (2021). Taking Micro-breaks at work: Effects of watching funny short-form videos on subjective experience, physiological stress, and task performance. *Cross-cultural design. Applications in arts, learning, well-being, and social development: 13th international conference, CCD 2021, held as part of the 23rd HCI international conference, HCII 2021, virtual event, July 24–29, 2021. Proceedings, Part, II*, 183–200. https://doi.org/10.1007/978-3-030-77077-8_15

Lundgren, T. D., & Lundgren, C. A. (1999). Computer gold-bricking. *The Journal of Computer Information Systems, 39*(4), 57.

Maier, C., Laumer, S., & Weitzel, T. (2022). A dark side of telework: A social comparison-based study from the perspective of office workers. *Business & Information Systems Engineering, 64*(6), 793–811. https://doi.org/10.1007/s12599-022-00758-8

Metin, U. B., Taris, T. W., & Peeters, M. C. W. (2016). Measuring procrastination at work and its associated workplace aspects. *Personality and Individual Differences, 101*, 254–263. https://doi.org/10.1016/j.paid.2016.06.006

Mishra, D., & Tageja, N. (2022). Cyberslacking for coping stress? Exploring the role of mindfulness as personal resource. *International Journal of Global Business and Competitiveness, 17*(Suppl. 1). Article Suppl 1.

Munoz, L., & Mallin, M. (2018). Unethical sales behavior neutralization: The impact of salesperson role variables and moderating effects of role relationship orientation. *Journal of Business & Industrial Marketing, 34*(1), 62–79. https://doi.org/10.1108/JBIM-10-2017-0243

Nitzl, C. (2016). The use of partial least squares structural equation modelling (PLS-SEM) in management accounting research: Directions for future theory development. *Journal of Accounting Literature, 37*(1), 19–35. https://doi.org/10.1016/j.acclit.2016.09.003

Oravec, J. A. (2002). Constructive approaches to internet recreation in the workplace. *Communications of the ACM, 45*(1), 60–63.

Pee, L. G., Woon, I. M. Y., & Kankanhalli, A. (2008). Explaining non-work-related computing in the workplace: A comparison of alternative models. *Information & Management, 45*(2), 120–130. https://doi.org/10.1016/j.im.2008.01.004

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., & Tu, Q. (2008). The consequences of technostress for end users in organizations: Conceptual development and empirical validation. *Information Systems Research, 19*(4), 417–433.

Reinecke, L. (2009). Games and recovery: The use of video and computer games to recuperate from stress and strain. *Journal of Media Psychology: Theories, Methods, and Applications, 21*(3), 126–142. https://doi.org/10.1027/1864-1105.21.3.126

Rodell, J. B., & Judge, T. A. (2009). Can "good" stressors spark "bad" behaviors? The mediating role of emotions in links of challenge and hindrance stressors with citizenship and counterproductive behaviors. *Journal of Applied Psychology, 94*(6), 1438.

Satpathy, S., Patel, G., & Kumar, K. (2021). Identifying and ranking techno-stressors among IT employees due to work from home arrangement during Covid-19 pandemic. *DECISION, 48*(4), 391–402. https://doi.org/10.1007/s40622-021-00295-5

Siegel, R., König, C. J., & Lazar, V. (2022). Impact of electronic monitoring on employees: A meta-analysis. *Computers in Human Behavior Reports*. , Article 100227. https://doi.org/10.1016/j.chbr.2022.100227

Stanton, J. M. (2000). Reactions to employee performance monitoring: Framework, review, and research directions. *Human Performance, 13*(1), 85–113. https://doi.org/10.1207/S15327043HUP1301_4

Stich, J.-F. (2020). A review of workplace stress in the virtual office. *Intelligent Buildings International, 12*(3), 208–220. https://doi.org/10.1080/17508975.2020.1759023

Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review, 22*(6), 664–670. https://doi.org/10.2307/2089195

Syrek, C. J., Kühnel, J., Vahle-Hinz, T., & De Bloom, J. (2018). Share, like, twitter, and connect: Ecological momentary assessment to examine the relationship between non-work social media use at work and work engagement. *Work & Stress, 32*(3), 209–227. https://doi.org/10.1080/02678373.2017.1367736

Tandon, A., Kaur, P., Ruparel, N., Islam, J. U., & Dhir, A. (2022). Cyberloafing and cyberslacking in the workplace: Systematic literature review of past achievements and future promises. *Internet Research, 32*(1), 55–89.

Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems, 24*(1), 301–328.

Triandis, H. C. (1980). Values, attitudes, and interpersonal behavior. *Nebraska symposium on motivation. Nebraska Symposium on Motivation, 27*, 195–259.

Uslu, O. (2025). Exploring the link between cyberloafing and work-related factors: A decade of systematic analysis. *Technology in Society, 83*, Article 102997.

V, B., & Pillai, J. (2022). E-monitoring system: Analyzing the benefits and effects of an E-monitoring system in the banks of Kerala. *International Journal of Software Innovation (IJSI), 10*(1), 1–19. https://doi.org/10.4018/IJSI.311507

Venkatesh, V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International journal of information management, impact of COVID-19 pandemic on information management research and practice: Editorial* Perspectives, 55, 102197. doi:https://doi.org/10.1016/j.ijinfomgt.2020.102197, International Journal of Information Management.

Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology, 70*(1), 16–59. https://doi.org/10.1111/apps.12290

Weatherbee, T., & Kelloway, E. K. (2006). A case of Cyberdeviancy: Cyberaggression in the workplace. In *Handbook of workplace violence* (pp. 445–487). Sage Publications, Inc.. https://doi.org/10.4135/9781412976947.n19

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management, 17*(3), 601–617.

Wright, A. D. (2018). Why are some companies moving away from telework?. https://www.shrm.org/resourcesandtools/hr-topics/technology/pages/why-are-some-companies-moving-away-from-telework.aspx.

Yan, R., Adnan, M., Ahmed, A., Naveed, R. T., Naseem, W., & Çakir, V. (2025). Introducing cyber-loafing as a coping mechanism for suicidal ideation resulting from social isolation, and domestic violence, among employees. *Acta Psychologica, 256*, Article 105021. https://doi.org/10.1016/j.actpsy.2025.105021

Yao, S., Lu, J., Wang, H., Montgomery, J. J. W., Gorny, T., & Ogbonnaya, C. (2023). Excessive technology use in the post-pandemic context: How work connectivity behavior increases procrastination at work. *Information Technology & People, 37*(2), 583–604. https://doi.org/10.1108/ITP-08-2022-0573

Yeik, K. K., Soh, P. C. H., & Wai, C. K. A. (2016). Proposed conceptual model of internet use. In *Addiction and job productivity in Malaysia. 11th AAM international conference*. Penang, Malaysia.

Zhong, J., Chen, Y., Yan, J., & Luo, J. (2022). The mixed blessing of cyberloafing on innovation performance during the COVID-19 pandemic. *Computers in Human Behavior, 126*, Article 106982.

Zhou, B., Li, Y., Hai, M., Wang, W., & Niu, B. (2023). Challenge-hindrance stressors and cyberloafing: A perspective of resource conservation versus resource acquisition. *Current Psychology, 42*(2), 1172–1181. https://doi.org/10.1007/s12144-021-01505-0

Zhu, H., & Zhang, M. (2025). "I don't get it, but I accept it" exploring uninformed consent to privacy policies: A neutralization perspective. *Computers & Security, 153*, Article 104396. https://doi.org/10.1016/j.cose.2025.104396

Zinke, J., Vahle-Hinz, T., & Hoppe, A. (2024). A longitudinal study on ICT workload in the extended stressor-detachment model: Testing moderated mediation models for extended work availability and workplace telepressure. *Work & Stress, 38*(1), 73–89. https://doi.org/10.1080/02678373.2023.2239179

Zuboff, S. (2019). The age of surveillance capitalism. In *social theory re-wired* (pp. 203–213). Routledge. https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifierValue=10.4324/9781003320609-27&type=chapterpdf.