

The ethics of digital communication in hybrid societies: cyberloafing, empathy and relational accountability

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Abstract

Purpose – This study aims to explore how cyberloafing – commonly viewed as a counterproductive or stress-related behavior – can be reinterpreted through a relational and ethical lens. It investigates how digital communication technologies in hybrid work settings alter the moral perception of online behaviors, focusing especially on the differences between online and offline manifestations of cyberloafing and their relational consequences.

Design/methodology/approach – Integrating insights from moral psychology, construal level theory and relational ethics, this paper draws on recent empirical and conceptual research to assess how cyberloafing affects interpersonal accountability and empathy. Special attention is given to how technology-mediated communication transforms the ethical salience of cyberloafing in hybrid workplaces, where online and offline interactions coexist but operate under different perceptual and moral dynamics.

Findings – Digital environments amplify the moral significance of cyberloafing by muting social cues and increasing psychological distance. The same act – such as a delayed response or passive disengagement – may be perceived as more ethically disruptive in online contexts than in face-to-face interactions. Empathic concern is more likely to be activated because information and communication technologies obscure intent, prompting coworkers to interpret silence or withdrawal as a relational breach. This highlights how moral meaning depends not only on behavior but also on the medium of communication through which it is perceived.

Originality/value – To the best of the authors' knowledge, this is the first study to explicitly compare the interpersonal and ethical consequences of cyberloafing in both online and offline settings. It responds to recent calls for more contextualized approaches to workplace deviance and contributes to a richer understanding of how digital communication shapes moral sensitivity, responsibility and care in technology-mediated work societies. The framework proposed bridges individual behavior with broader concerns in information ethics and communication responsibility, offering a fresh lens on digital accountability at work.

Keywords Organizational behavior, Cyberloafing, Technology and society, Relational ethics, Empathic concern, Hybrid work, Moral accountability, Hybrid societies, Digital ethics

Paper type Research paper

1. Introduction

Cyberloafing – nonwork-related internet use during working hours – has become a routine and often normalized feature of contemporary work, particularly in hybrid and digitally mediated environments. As work becomes increasingly embedded in systems of information and communication technologies, everyday behaviors once confined to physical space now unfold through platforms that reshape presence, responsiveness and accountability. Traditionally framed as a counterproductive behavior (Lim, 2002; Vitak *et al.*, 2011), it has more recently been examined through psychological, contextual and even restorative lenses



(Reinecke *et al.*, 2011; Askew *et al.*, 2014). Yet a critical dimension remains underexplored: its ethical and relational significance in technology-mediated communication.

Rather than asking whether cyberloafing is inherently moral or immoral, this study investigates how its ethical meaning emerges through digital communication channels, shaped by the social and emotional consequences it generates – especially when it disrupts cooperation or evokes moral emotions such as empathic concern (Hoffman, 2000; Cropanzano *et al.*, 2017). This shift responds to growing evidence that workers often experience cyberloafing less as an ethical breach and more as a response to structural conditions such as digital surveillance, remote fatigue or frustrated autonomy (van Doorn, 2011; Wu *et al.*, 2020).

Our paper directly addresses the gap identified by Uslu (2025), who notes that research on the consequences of cyberloafing – particularly its interpersonal and moral dimensions – remains scarce. To this end, we conceptualize cyberloafing as a morally contingent behavior, with its ethical significance depending on the relational context, and we present the first empirical comparison of its peer-level effects across both digital and physical work settings. In doing so, we illustrate how technology and communication environments shape moral perception, and how these dynamics differ meaningfully from those in face-to-face contexts.

Drawing on moral psychology, construal level theory (CLT; Trope and Liberman, 2010) and relational ethics, we examine how digitally mediated work modulates moral sensitivity – particularly when subtle acts such as ignoring a message or withholding collaboration are perceived as interpersonal slights. Our analysis reveals that moral concern, as indexed by empathic concern, is activated only in digital contexts, suggesting that mediated communication reshapes not just collaboration but moral accountability itself.

By offering this comparative and relational perspective, we contribute a novel ethical lens to cyberloafing research – one that links micro-level behaviors to broader questions of care, trust and responsibility in information-driven and hybrid work societies. This approach enriches theoretical understanding and informs practical strategies that go beyond compliance, emphasizing relational sensitivity as a foundation for ethical digital collaboration.

2. Theoretical background and conceptual model

2.1 Cyberloafing as a morally contingent and relational behavior

Cyberloafing is commonly defined as the use of the internet or digital devices for non-work-related purposes during working hours (Lim, 2002; Koay *et al.*, 2017). Traditionally framed as a counterproductive work behavior (CWB), this conceptualization emphasized its detrimental effects on productivity, organizational resources and goal achievement (Vitak *et al.*, 2011; Askew *et al.*, 2014). However, more recent scholarship has nuanced this view, recognizing that cyberloafing can also function as a coping mechanism to relieve boredom, stress or emotional fatigue (Reinecke *et al.*, 2011; van Doorn, 2011; Wu *et al.*, 2020), especially under conditions of work intensification and digital surveillance.

Recent empirical work has also begun to explore how cyberloafing relates to socioemotional and moral constructs, expanding the traditional focus on productivity loss. For example, Zoghbi-Manrique-de-Lara *et al.* (2020) showed that supervisor mindfulness can indirectly reduce cyberloafing by fostering compassionate climates that enhance empathic concern among employees. Their study highlights how cyberloafing is not only a reactive behavior but also sensitive to relational cues and emotional climates within organizations. This aligns with our moral-relational interpretation and supports the idea that cyberloafing's ethical salience is shaped by interpersonal context. Similarly, Zhang *et al.* (2024) demonstrate that leadership forgiveness, an empathic and morally framed behavior, may buffer the negative relational consequences of cyberloafing, suggesting that its impact is socially constructed and modulated by shared expectations of emotional accountability.

This study builds on these developments but proposes a shift from intent-based to consequence-based ethical reasoning. Rather than evaluating cyberloafing solely through its motivations or frequency, we explore its moral salience – how its ethical relevance emerges through its interpersonal consequences, especially when it disrupts expectations of responsiveness, attentiveness or mutual support among coworkers. This move aligns with calls in the literature to approach workplace behaviors not merely as individual acts but as relationally embedded and socially interpreted (Croppanzano *et al.*, 2017; Reynolds and Ceranic, 2007).

Moreover, cyberloafing encompasses both active and passive forms of digital disengagement. Active behaviors include browsing social media, shopping online or streaming nonwork content (Lim and Chen, 2012; Koay *et al.*, 2017), while passive forms – often overlooked in measurement scales – involve ignoring messages, delaying responses or appearing virtually absent (Bosch and Sonnentag, 2019; Lee and Li, 2023). These passive acts are particularly relevant in hybrid and remote work contexts, where perceived unavailability can be interpreted as a relational breach, regardless of intent. Future refinements to cyberloafing measurement scales should distinguish between these modalities, as both may carry different ethical and social implications.

In this context, we conceptualize cyberloafing as a morally contingent behavior (Batson and Ahmad, 2009) – one whose ethical meaning is not inherent to the act itself but shaped by the context, perception and relational consequences it produces. The same behavior (e.g. not replying to a message) may be perceived as benign in some settings but ethically disruptive in others, depending on expectations of availability, task interdependence and emotional closeness.

This relational perspective also reflects a shift in the study of workplace ethics – from rule-based, deontological frameworks toward context-sensitive approaches grounded in interactional dynamics and moral emotions such as empathy, guilt or disappointment (Hoffman, 2000; Haidt, 2001). The ethical significance of cyberloafing thus depends not only on formal rules or managerial evaluations but also on how coworkers interpret and respond to digitally mediated behaviors that affect relational accountability.

Finally, we respond to recent appeals for research that examines the interpersonal and moral consequences of cyberloafing, particularly in hybrid work settings (Uslu, 2025). As far as we are aware, this is the first empirical study that explicitly compares how cyberloafing is perceived and experienced in both online and offline environments, offering new insights into how technology and digital communication shape the moral interpretation of workplace behavior.

2.2 *The role of digital communication and moral perception*

To better understand why cyberloafing may acquire moral meaning in specific workplace contexts, we draw on CLT (Trope and Liberman, 2010), which has become increasingly relevant in the study of digitally mediated organizational behavior. CLT posits that individuals interpret events and actions based on their perceived psychological distance – temporal, spatial, social or hypothetical. As this distance increases, people tend to construe behaviors more abstractly and evaluatively, often attaching broader moral or normative meaning to otherwise neutral actions.

In hybrid work environments, digital communication technologies increase psychological distance by limiting contextual cues, reducing immediacy and blurring social boundaries (Leonardi, Parker and Shen, 2024). A brief delay in replying to a message or an absent gaze in a video call – common in remote collaboration – may be interpreted through abstract lenses such as disengagement, disrespect or lack of reciprocity. What would be seen as minor

or circumstantial in face-to-face interactions may be interpreted in mediated contexts as violating implicit moral norms, particularly those of responsiveness, availability or mutual support (Lim and Teo, 2009; Koay *et al.*, 2017).

Such construals are not purely cognitive but emotionally charged. CLT also implies that psychological distance affects the activation of moral emotions, such as empathic concern, by shaping how social harm is perceived (Trope and Liberman, 2010; Batson and Ahmad, 2009). In digital contexts, where social presence is reduced and intentions are opaque, coworkers may be more prone to moralize passive forms of cyberloafing (e.g. ignoring a message or failing to engage) as they infer relational harm. This emotional moralization is especially likely when workplace norms emphasize continuous connectivity, quick responsiveness or team interdependence (Wang *et al.*, 2020).

Importantly, the ethical salience of cyberloafing is not a function of the behavior alone, but of how it is communicated, interpreted and situated within technology-mediated relationships. CLT helps explain why the same cyberloafing behavior may be experienced as more ethically problematic online than offline – not because the action is different, but because digital contexts heighten abstraction and diminish the relational buffers (e.g. tone, facial expression, spontaneous repair) that often mitigate moral interpretation in copresent interactions.

This view reinforces our core proposition: cyberloafing is not inherently moral or immoral, but becomes ethically significant through its perceived consequences in communication-intensive, technologically mediated work environments. Digital disengagement, in particular, can function as a relational moral signal, shaped by the distance-enhancing affordances of communication technologies. By integrating CLT into the ethical analysis of cyberloafing, we illuminate how information and communication technologies alter the moral architecture of everyday work, making minor behaviors susceptible to ethical scrutiny through the lens of psychological and relational interpretation.

2.3 Empathic concern and contextual performance in hybrid work

In line with organizational behavior research, this study focuses on peer-focused contextual performance – discretionary behaviors that support coworkers and strengthen the relational dynamics within teams (Organ, 1997; Borman and Motowidlo, 1993; Lee and Allen, 2002; Koopmans *et al.*, 2014). Such behaviors include offering help, sharing information, responding promptly and showing concern – actions that are essential for effective collaboration, especially in hybrid work environments where interpersonal coordination spans both physical and digital spaces.

To capture this duality, we differentiate between two distinct but interconnected forms of contextual performance.

Online contextual performance, referring to collaborative and supportive behaviors enacted through digital channels, such as replying to messages, engaging in virtual platforms and maintaining availability in mediated communication (Colbert *et al.*, 2016; Wang *et al.*, 2020).

Offline contextual performance, referring to traditional in-person helping behaviors, informal coordination and spontaneous interpersonal support that occurs in colocated work settings.

As illustrated in Figure 1, the proposed model posits that cyberloafing disrupts both forms of contextual performance by reducing social availability – the perception that coworkers are engaged, responsive and present in their mutual responsibilities (Vitak *et al.*, 2011). When peers appear digitally disengaged – delaying responses, ignoring messages or withdrawing

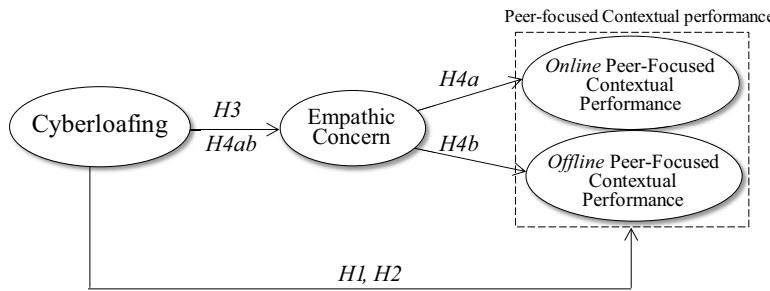


Figure 1. Hypothesized model illustrating direct and mediated effects of cyberloafing on online and offline contextual performance via empathic concern

from shared tasks – others may interpret these acts not simply as neutral delays but as relationally meaningful and potentially harmful.

Critically, we argue that the ethical salience of cyberloafing is context-dependent. Drawing on moral psychology and construal level theory (Trope and Liberman, 2010), we propose that cyberloafing in online settings is more likely to activate moral emotions such as empathic concern. This is because psychological distance is elevated, social cues are limited and intent is harder to infer – factors that make disengagement behaviors more likely to be morally construed (Batson and Ahmad, 2009).

In offline contexts, by contrast, the same behaviors may be buffered by richer interactional cues, opportunities for clarification and the immediacy of face-to-face repair. A colleague briefly stepping away, distracted or unavailable may not trigger moral concern if the context allows for understanding, signaling stress or task urgency rather than disregard (Lim and Teo, 2009).

This moral asymmetry suggests that empathic concern serves as a key mechanism through which digital disengagement acquires ethical meaning. It is not the act of cyberloafing itself that undermines contextual performance, but rather how the act is perceived and interpreted by others, particularly in mediated contexts where harm is more easily construed and less easily mitigated.

In sum, our framework advances the notion that cyberloafing can impair both online and offline contextual performance, but its ethical resonance – and its capacity to activate moral emotions – is amplified in digital environments. This reinforces our broader claim that the morality of digital behaviors is not intrinsic, but contingent on relational perception, communication medium and the psychological distance embedded in hybrid work.

2.4 Hypotheses

Building on our conceptual framework, we propose that cyberloafing undermines peer-focused contextual performance across both online and offline domains. By reducing availability, delaying responses and signaling disengagement, cyberloafing can impair the mutual responsiveness and cooperation upon which contextual performance depends (Chiaburu and Harrison, 2008; Wu *et al.*, 2020). Therefore:

- H1.* Cyberloafing is negatively associated with online peer-focused contextual performance.
- H2.* Cyberloafing is negatively associated with offline peer-focused contextual performance.

However, we contend that the ethical salience of cyberloafing is more likely to emerge in digital contexts, where actions are more easily observed, socially distant and ambiguous. In online environments, signals such as delayed replies or lack of responsiveness can generate empathic concern, a moral emotion triggered by perceived relational harm and unmet social expectations (Batmaz *et al.*, 2022; Leonardi, 2017; Mencl and May, 2009). In contrast, offline interactions provide richer social cues and spontaneous opportunities to repair misunderstandings (Daft and Lengel, 1986), potentially reducing the likelihood that similar behaviors are morally interpreted.

We therefore hypothesize a domain-specific moral mechanism, whereby cyberloafing predicts empathic concern, which mediates the relationship between cyberloafing and contextual performance only in digital settings:

- H3.* Cyberloafing is negatively associated with empathic concern.
- H4a.* Empathic concern mediates the relationship between cyberloafing and online peer-focused contextual performance.
- H4b.* Empathic concern does not mediate the relationship between cyberloafing and offline peer-focused contextual performance.

3. Method

3.1 Sample and procedure

Data were collected from 300 employees working in hybrid roles across UK-based banking institutions. All participants worked remotely at least three days per week and regularly engaged in digital collaboration with peers. To ensure social embeddedness and familiarity with team dynamics, participants were selected with a minimum tenure of six months in their organization.

A triadic sampling strategy was used across 100 bank branches, where managers were instructed to randomly select three employees per unit. This approach improved efficiency and internal consistency, while reducing sampling bias (Ng *et al.*, 2016). Data were gathered via an online survey, distributed through internal organizational platforms and facilitated by HR departments. Participation was voluntary and anonymous, and all respondents provided informed consent. Cases with missing or unreliable responses (e.g. straightlining) were excluded from the final data set.

The resulting sample included 69.7% men and 30.3% women. Approximately 35% were 34 years old or younger, and 16% were 55 or older. Most participants (82.7%) had worked in the banking sector for more than six years, and 69.3% had at least six years of tenure in their current company. Additionally, 37% had held their current position for six or more years, and only 26.7% reported having completed undergraduate education.

3.2 Measures

All constructs were measured using validated scales, adapted when necessary to reflect the hybrid work context and emphasize peer-focused interpretations. Items were rated on seven-point Likert-type scales ranging from 1 (strongly disagree) to 7 (strongly agree), except for behavioral items, which were rated from 1 (never) to 7 (constantly).

Cyberloafing was assessed with five items adapted from Lim (2002), capturing nonwork-related internet use during working hours (e.g. “Visit websites and digital newspapers to seek personal (nonwork) information”). Items were phrased to reflect observable frequency and potential impact on peers (Lim and Teo, 2024).

Empathic concern was measured using the empathic concern subscale of the Interpersonal Reactivity Index (IRI; [Davis, 1980](#)), adapted to the workplace context. Items reflected moral responsiveness to coworkers (e.g. “I feel often quite touched by things that I see happen to my peers”).

Online peer-focused contextual performance was measured with five items developed from [Wang et al. \(2020\)](#), [Zoghbi-Manrique-de-Lara \(2007\)](#) and [Konovsky and Organ \(1996\)](#), assessing digital responsiveness, resource sharing and collaborative engagement in virtual spaces (e.g. “I respond to online queries or requests of peers with problems”).

Offline peer-focused contextual performance was assessed with five items adapted from [Lee and Allen \(2002\)](#), capturing in-person support, cooperation and helping behaviors (e.g. “I give up time to help coworkers who have work or nonwork problems”).

3.3 Control variables

We included gender and age as control variables, given their documented influence on both cyberloafing tendencies and empathic responsiveness ([Restubog et al., 2011](#)). Gender was coded as 1 = male and 2 = female; age was categorized into six intervals. These controls were modeled directly within the structural equation modeling (SEM) framework as stand-alone variables ([Hancock and Mueller, 2006](#)).

3.4 Analysis strategy

Analyses were conducted using SPSS for descriptive statistics and AMOS 22.0 for SEM. We first ran confirmatory factor analysis (CFA) to assess the validity of the four latent constructs: cyberloafing, empathic concern, online contextual performance and offline contextual performance. Model fit indices for the final CFA were acceptable: CFI = 0.908, RMSEA = 0.069, SRMR = 0.066, following criteria from [Hu and Bentler \(1999\)](#). Residual covariance were added based on theoretical justification to improve model fit.

We then applied SEM to test both the direct and mediating effects. Mediation was further evaluated using nested chi-square difference tests to evaluate full versus partial mediation ([Anderson and Gerbing, 1988](#); [Zheng and Pavlou, 2010](#)).

4. Results

4.1 Measurement model and construct validity

We first conducted a CFA to assess the construct validity of the four latent variables: cyberloafing, empathic concern, online peer-focused contextual performance and offline peer-focused contextual performance. Although initial model demonstrated suboptimal fit ($\chi^2 = 1,208.555$; df = 295; CFI = 0.848; RMSEA = 0.089; SRMR = 0.067), though the SRMR value was within acceptable limits, the inclusion of five theoretically justified residual correlations between closely related items significantly improved model fit (e.g. e6–e7, e7–e8, e16–e17, e22–e23, e23–e24). The revised model yielded a satisfactory fit: $\chi^2 = 776.485$, df = 290, CFI = 0.908, RMSEA = 0.069 and SRMR = 0.066 in line with the recommended threshold ([Hu and Bentler, 1999](#)). All factor loadings were significant and exceeded 0.60. The final CFA supports the measurement model.

As shown in [Tables 1](#) and [2](#), all constructs demonstrated high reliability ($\omega > 0.87$), and discriminant validity was supported based on the Fornell–Larcker criterion (1981) (see main diagonal of [Table 2](#)). Average variance extracted (AVE) values were above 0.50 for all constructs.

We tested the hypothesized structural paths using SEM, evaluating the direct effects of cyberloafing on contextual performance ($H1$, $H2$) and the mediating role of empathic concern ($H3$, $H4a$ and $H4b$). Mediation was assessed using [Baron and Kenny's \(1986\)](#)

Table 1. Results of confirmatory factor analysis

Factors	Factor loadings	SMC	Composite reliability	AVE
<i>(F1) Cyberloafing</i> (<i>Alpha coefficient</i> = 0.926)			0.926	0.716
I acknowledge that I have used internet at work to ...				
X01 Visit websites and digital newspapers to seek personal (nonwork) information	0.828	0.686		
X02 Visit the website of my bank to consult my current account	0.814	0.663		
X03 Read or send personal (nonwork) emails	0.872	0.761		
X04 Download software or files for personal or family use	0.917	0.841		
X05 Surf the Net and so escape a little	0.793	0.628		
<i>(F2) Online peer-focused contextual performance</i> (<i>Alpha coefficient</i> = 0.906)			0.907	0.662
When I'm connected to the internet, voluntarily ...				
Y06 I share Web information to help peers with queries	0.813	0.430		
Y07 I respond to online queries or requests of peers with problems	0.692	0.479		
Y08 I send emails to peers to congratulate them for some success	0.813	0.661		
Y09 I reply to misdirected emails if I can help my peers	0.930	0.865		
Y10 I support peers who suffered a setback	0.802	0.642		
<i>(F3) Empathic concern</i> (<i>Alpha coefficient</i> = 0.887)			0.887	0.600
Y11 I feel often quite touched by things that I see happen to my peers	0.789	0.622		
Y12 I often feel tender, concerned feelings for coworkers less fortunate than me	0.851	0.724		
Y13 Sometimes I don't feel sorry for peers when they are having problems (R)	0.870	0.757		
Y14 Coworkers' misfortunes usually don't disturb me a great deal (R)	0.802	644		
Y15 Sometimes I feel myself as a pretty soft-hearted person concerning peers	0.607	0.369		
Y16 When I see peers being treated unfairly, I feel very much pity for them	0.574	0.329		
Y17 When I see peers being taken advantage of, I don't feel kind of protective toward them (R)	0.557	0.310		
<i>(F4) Offline peer-focused contextual performance</i> (<i>Alpha coefficient</i> = 0.903)			0.903	0.637
Y18 Help peers who have been absent	0.643	0.413		
Y19 Willingly give your time to help peers who have work-related problems	0.697	0.485		
Y20 Go out of the way to make newer colleagues feel welcome in the work group	0.779	0.607		
Y21 Adjust your schedule to accommodate other colleagues' requests for time off	0.853	0.728		
Y22 Give up time to help coworkers who have work or nonwork problems	0.824	0.680		
Y23 Assist peers with their duties	0.741	0.549		
Y24 Share personal property with peers to help their work	0.745	0.554		

Note(s): Four residual correlations between the residual terms (e6 and e7, e7 and e8, e16 and e17, e22 and e23 and e23 and e24 errors) were included. (R) = Reverse scored item. AVE refers to average variance extracted and SMC to squared multiple correlation. Cmin = 776.485; df = 290; $p < 0.001$; Cmin/df = 2.678; CFI = 0.908; SRMR = 0.066; RMSEA = 0.069

Table 2. Means, standard deviations, correlations and square root of AVEs

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Gender	1.30	0.46	—					
2. Age	2.80	0.73	-0.073	—				
3. Empathetic concern	5.05	0.85	-0.058	-0.100	(0.942)			
4. Cyberloafing	3.67	1.78	-0.011	-0.153**	-0.214***	(0.962)		
5. Online performance	4.76	1.02	-0.005	0.071	0.361***	-0.125*	(0.952)	
6. Offline performance	5.02	0.92	-0.072	0.139*	0.392***	-0.246***	0.551***	(0.950)

Note(s): Gender was coded as 1 = male, 2 = female. Age was coded as: 1 = up to 25 years old; 2 = 25–34; 3 = 35–44; 4 = 45–54; 5 = 55–65; 6 = over 65 years. $N = 300$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Square roots of the average variance extracted (AVE) are presented in italic on the diagonal

foundational framework, a widely recognized benchmark for testing mediation in behavioral research. This approach was complemented with nested model comparisons via sequential chi-square difference tests (Anderson and Gerbing, 1988), enabling a stringent assessment of full versus partial mediation (Zheng and Pavlou, 2010). The combined strategy ensured both theoretical alignment and empirical robustness in evaluating the proposed mediation mechanisms.

Finally, to improve model fit while maintaining theoretical integrity, we allowed for a limited number of correlated residuals between items belonging to the same latent construct. This approach follows standard practice in CFA (Byrne, 2010) and is psychometrically justified when items share semantic or methodological overlap. Importantly, no residual correlations were introduced between items from different constructs.

In line with psychometric theory (Cronbach, 1951; Schmitt, 1996), we recognize that perfect reliability (e.g. $\alpha = 1.00$) is not desirable, as it may reflect item redundancy rather than true internal consistency. Conversely, moderately low reliability values – especially in emergent or multifaceted constructs – are acceptable if supported by content validity and model fit.

The correlated residuals introduced were based on observed modification indices but were restricted to cases with strong conceptual justification (e.g. items reflecting similar behavioral cues or linguistic phrasing). This strategy helped to correct for localized sources of measurement error without compromising the discriminant validity of the factors or inflating reliability artificially.

In sum, the final model reflects a balanced integration between statistical parsimony and theoretical plausibility.

4.2 Structural model and direct effects

As shown in Figure 2, we tested a baseline SEM model to evaluate the direct effects of cyberloafing on both forms of peer-focused contextual performance, while controlling for gender and age. Model fit was acceptable: $\chi^2 = 516.360$; $df = 148$; $CFI = 0.904$; $RMSEA = 0.077$; $SRMR = 0.069$.

$H1$ was supported: cyberloafing negatively predicted online contextual performance ($\beta = -0.248$, $p < 0.001$). Similarly, $H2$ was supported: cyberloafing also negatively predicted offline contextual performance ($\beta = -0.175$, $p < 0.01$).

These findings suggest that although cyberloafing is enacted in digital environments, its negative effects extend beyond online interactions. It undermines both digital and in-person collaboration, indicating that the consequences of disengagement are not constrained by the medium through which they are initiated.

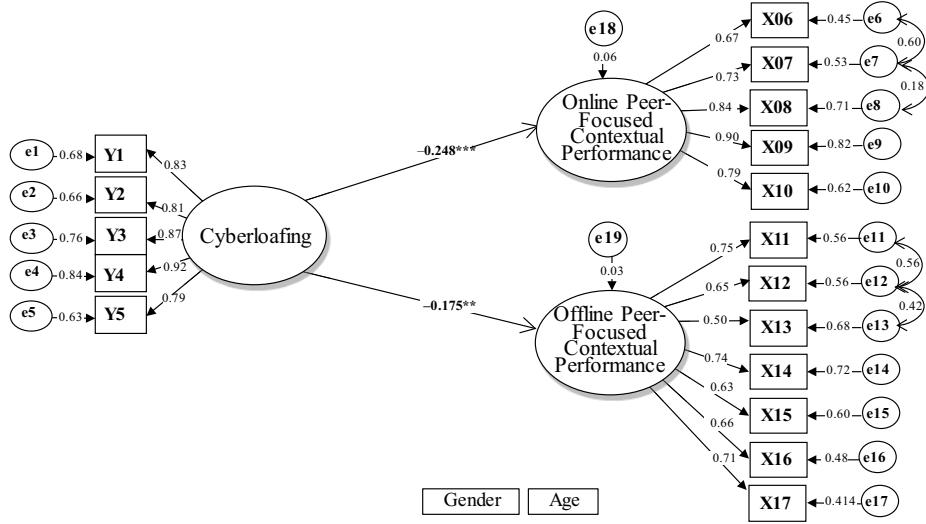


Figure 2. Main effects of cyberloafing on online and offline peer-focused contextual performance

Note(s): $N = 300$. $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. $C_{min} = 817.886$; $df = 291$; $p < 0.001$; $C_{min}/df = 2.791$; $CFI = 0.901$; $SRMR = 0.074$; $RMSEA = 0.077$. The control variables (gender and age) were incorporated directly into the model as stand-alone observed variables

4.3 Mediation analysis

To examine the mediating role of empathic concern, we followed the classic mediation framework proposed by [Baron and Kenny \(1986\)](#). This approach requires establishing that: (1) the independent variable (cyberloafing) predicts the mediator (empathic concern); (2) cyberloafing also predicts the dependent variables (peer-focused contextual performance, both online and offline); and (3) the inclusion of the mediator reduces the strength of the direct effect between cyberloafing and the outcome variables – ideally to nonsignificance, indicating full mediation.

As a first step, the baseline SEM model ([Figure 2](#)) confirmed that cyberloafing negatively predicts both online ($\beta = -0.248$, $p < 0.001$) and offline contextual performance ($\beta = -0.175$, $p < 0.01$), satisfying the initial requirement of the mediation test.

In the second model ([Figure 3](#)), we included empathic concern as a mediator while controlling for gender and age. The model demonstrated acceptable fit: $\chi^2 = 833.034$; $df = 291$; $CFI = 0.901$; $RMSEA = 0.076$; $SRMR = 0.084$. As shown in [Figure 3](#), cyberloafing was found to significantly reduce empathic concern ($\beta = -0.214$, $p < 0.001$), supporting $H3$. In turn, empathic concern positively predicted online contextual performance ($\beta = 0.375$, $p < 0.001$), but had no significant effect on offline performance. These findings partially satisfy the second criterion, indicating a potential mediating pathway only in the online context and are consistent with CLT, which posits that increased psychological distance in digital contexts heightens moral sensitivity ([Trope and Liberman, 2010](#); [Lee and Li, 2023](#)).

To assess the third criterion, we conducted nested model comparisons between a partially mediated model and a fully mediated model. The comparison revealed a modest but statistically significant improvement in fit for the fully mediated model regarding online performance [$\Delta\chi^2(2) = 8.045$, $p < 0.01$], supporting $H4a$. This suggests that the indirect path

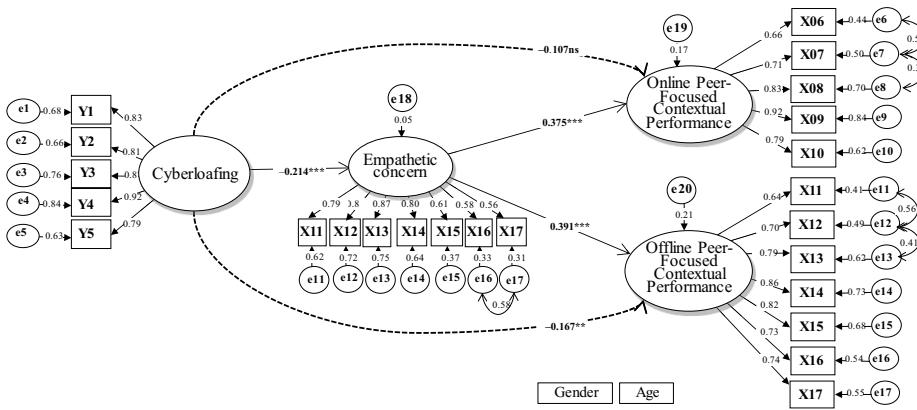


Figure 3. Partially mediated tested model via empathetic concern

Note(s): $N = 300$. ${}^*p < 0.05$, ${}^{**}p < 0.01$, ${}^{***}p < 0.001$. $C_{min} = 516.360$; $df = 148$; $p < 0.001$; $C_{min}/df = 3.489$; $CFI = 0.904$; $SRMR = 0.069$; $RMSEA = 0.077$. The control variables (gender and age) were incorporated directly into the model as stand-alone observed variables

through empathetic concern accounts for the entire effect of cyberloafing on online contextual performance.

In contrast, the relationship between cyberloafing and offline contextual performance remained significant even after introducing empathetic concern as a mediator ($\beta = -0.167$, $p < 0.01$), while empathetic concern itself did not predict offline performance. This result supports *H4b*, indicating that the indirect pathway is not viable in offline settings.

Taken together, these results support a context-sensitive interpretation of mediation: while empathetic concern plays a morally mediating role in online peer interactions, its absence as a mediator offline suggests a different psychological and ethical interpretation of disengagement in face-to-face contexts.

4.4 Interpretation of findings

These findings provide robust evidence that cyberloafing undermines peer-focused contextual performance across both digital and physical settings. However, the mechanisms through which this harm is perceived differ substantially. In online environments, the effect of cyberloafing is fully mediated by empathetic concern, indicating that the ethical salience of this behavior becomes more pronounced when interpersonal harm is filtered through technological distance. This aligns with CLT (Trope and Liberman, 2010), which suggests that increased psychological distance heightens moral sensitivity and encourages more abstract moral reasoning.

In contrast, in offline contexts, where social cues are richer and accountability is more immediate, the same disengagement behaviors appear to be interpreted more pragmatically – as temporary lapses or work-related distractions – rather than as moral violations. This is consistent with prior research suggesting that deviant behaviors in physical environments are often explained away as situational or circumstantial (Bosch and Sonnentag, 2019; Pindek et al., 2018).

Together, these results support our central proposition: cyberloafing is a morally contingent behavior, whose ethical relevance does not stem from the act itself but from its relational consequences – and particularly from how those consequences are interpreted within specific

social and technological contexts. While cyberloafing may be normalized or even trivialized within organizations, its moral impact surfaces when it disrupts relational trust and diminishes empathic engagement in digital peer interactions.

By highlighting this asymmetry, the study advances a more context-sensitive moral psychology of digital behavior, inviting scholars and practitioners to move beyond simplistic evaluations of cyberloafing as merely a productivity concern and toward a deeper understanding of its relational ethics in the hybrid workplace.

5. Discussion, implications and limitations

5.1 Cyberloafing as a contextual moral trigger

This study reconceptualizes cyberloafing not as a behavior to be judged in isolation, but in terms of its relational and contextual consequences. While prior research has positioned cyberloafing along a deviance–coping continuum (Lim, 2002; Askew *et al.*, 2014), our findings support a more nuanced understanding: its moral salience is not inherent to the act, but emerges through its perceived impact on coworkers, particularly in digitally mediated environments (Batson and Ahmad, 2009; Reynolds and Ceranic, 2007).

This relational interpretation marks a significant shift in how organizations might approach cyberloafing. As the behavior becomes increasingly normalized and resistant to traditional deterrents such as surveillance or punishment (Hadlington and Parsons, 2017), it opens new avenues for understanding its role in everyday work life. Our findings suggest that digital disengagement may erode relational trust and trigger moral emotions among peers – not because of the act itself, but because of the social fabric it disrupts (Koay *et al.*, 2017).

Our empirical results show that cyberloafing undermines peer-focused contextual performance in both online and offline domains. This aligns with emerging evidence that digital behaviors can generate offline relational consequences (Althoff *et al.*, 2017). However, only in the online context is this relationship mediated by empathic concern, suggesting that digital environments amplify the moral interpretation of disengagement. In such settings – where cues are muted and accountability diffused – moral emotions like guilt or concern become more salient, functioning as ethical triggers (Trope and Liberman, 2010).

These findings directly address the gap identified by Uslu (2025), who observed that cyberloafing research has focused heavily on antecedents – such as stress, leadership or workload – while largely overlooking its interpersonal consequences. Uslu also called for more context-sensitive approaches that examine cyberloafing in digitally mediated environments. Our study responds to this call by shifting the analytical lens from motivations to consequences, and from individual productivity to relational dynamics.

By demonstrating that empathic concern mediates the link between cyberloafing and online peer-focused performance, we show that moral meaning is shaped not only by behavior but also by digital interaction norms and perceived social harm – elements central to the relational perspective advocated by Uslu. Our contribution is thus both theoretical and empirical: we offer a novel moral-emotional framing of cyberloafing and support it with context-rich data from hybrid workplaces.

These findings invite broader reflection on how hybrid work reshapes moral awareness in organizations. Behaviors that may seem neutral in physical settings – such as brief unavailability – can acquire ethical weight in virtual contexts, where expectations for responsiveness are ambiguous and emotional resonance is diminished (Bosch and Sonnentag, 2019; Lee and Li, 2023). Cyberloafing thus becomes a contextual moral signal in digitally saturated workflows.

To our knowledge, this is the first empirical study to directly compare the interpersonal effects of cyberloafing across both online and offline settings within hybrid work. This dual-context approach reveals that digital mediation plays a central role in how everyday behaviors acquire – or lose – moral meaning, a dynamic that has been largely understudied.

From a strategic HR perspective, this reframing challenges the prevailing assumption that cyberloafing is merely a threat to productivity. Instead, it underscores the need to recognize cyberloafing as a potential rupture in relational accountability and moral connection. The managerial challenge, therefore, is not simply to eradicate the behavior, but to understand when it signals deeper issues in digital cooperation – and to respond accordingly.

Finally, our findings resonate with practice-based views of organizational life (Schatzki, 2001; Nicolini, 2012), which argue that behavior acquires meaning through context and interaction. Rather than universalizing the ethics of disengagement, we advocate cultivating shared norms of presence, responsiveness and care, especially in hybrid and remote work arrangements.

More broadly, our results suggest that in hybrid societies – where daily cooperation is increasingly mediated by digital platforms – the moral dimensions of work are progressively shaped by the structure and quality of digital communication. Empathy, accountability and trust no longer reside solely in face-to-face dynamics but are negotiated through screens, platforms and asynchronous interactions. In such contexts, even the ethics of helping or showing care are being redefined: to be responsive, available or emotionally attuned in virtual settings becomes a new form of moral labor. Cyberloafing, in this light, is not only a disruption of productivity, but a rupture in an emerging digital ethic of presence and relational responsibility.

Importantly, this finding also challenges the long-standing assumption that cyberloafing is an exclusively online phenomenon (Zoghbi-Manrique-de-Lara, 2023). By demonstrating that disengagement behaviors extend into offline domains and intertwine with physical work processes, our study redefines cyberloafing as a hybrid behavioral construct. This reconceptualization aligns with earlier insights on social loafing, shirking and job neglect, which have long been recognized as relationally disruptive forms of offline deviance (Bennett and Naumann, 2005). It invites scholars to reconsider the ontological boundaries of cyberloafing and to move beyond purely digital frameworks toward integrated models of workplace disengagement in hybrid environments.

5.2 Practical implications

Rather than viewing cyberloafing simply as a deviant act to be monitored or punished, our findings invite organizations to see it through a different lens – as a relational and moral signal. In hybrid and digitally mediated settings, moments of disengagement can carry deeper interpersonal meaning, often reflecting unmet needs, strained relationships or breakdowns in communication. Addressing cyberloafing, then, is less about enforcing compliance and more about understanding its underlying relational dynamics.

What this suggests is a shift in focus: from individual discipline to collective awareness. Organizations may benefit more from cultivating an ethical climate that emphasizes presence, empathy and mutual accountability, especially in digital interactions where the risk of misinterpretation is high.

Rather than relying on punitive strategies – which may backfire by increasing stress or alienation – leaders should consider proactive approaches that foster digital empathy and emotional attentiveness. This can include training programs that explore how online behaviors are perceived by others, leadership development that models respectful availability and the creation of team norms that openly define what responsiveness means in virtual collaboration.

Simple, concrete steps – like checking in regularly, acknowledging delays in communication or setting shared expectations about digital availability – can go a long way in restoring a sense of connection and reducing the moral weight of disengagement. When employees understand that their actions are not just operational but relational, they are more likely to act with consideration and care.

Ultimately, cyberloafing is not just about lost time – it is about relational ruptures and missed opportunities for trust-building. Reframing it in this way allows organizations to respond not with surveillance or suspicion, but with dialogue, empathy and the cultivation of shared responsibility in the digital workplace.

5.3 Limitations and future research

While this study offers novel insights into the moral dynamics of cyberloafing in hybrid work environments, it is not without limitations – each of which opens potential paths for future exploration.

First, our primary focus was on the consequences of cyberloafing, particularly its relational and ethical impact on coworkers. Although this perspective helps fill a notable gap in the literature, it inevitably leaves other questions open – especially those related to the antecedents of cyberloafing. Future research would benefit from delving more deeply into how employees rationalize, normalize or even resist disengagement in hybrid settings. Moral disengagement, for instance, could be explored as a coping mechanism or as a way of navigating blurred work boundaries.

Second, the study relied exclusively on self-reported data. While we used validated scales and took care to ensure internal consistency, self-report methods carry inherent risks – such as common method bias or social desirability effects. Future studies might triangulate these findings using complementary methods, such as peer-reports, behavioral tracking or experimental simulations that recreate hybrid work scenarios under controlled conditions. This would enrich the evidence base and provide a more nuanced picture of how cyberloafing unfolds in real time.

Another methodological limitation relates to sample size. Due to constraints, cross-validation was not feasible in the present study. Although our findings are theoretically coherent and statistically robust, we recommend that future studies replicate this model using larger or split samples to test its generalizability and stability across different contexts and populations.

In addition, while we explicitly distinguished between online and offline environments, we recognize that hybrid work increasingly blurs these boundaries. Employees often move fluidly between digital and physical interactions, sometimes within the same task or even the same moment. To better capture this complexity, future research might adopt experience sampling methods or real-time tracking tools that reflect the dynamic, intertwined nature of hybrid collaboration.

The cross-sectional design of this study also imposes certain constraints. Although the mediation model suggests that empathetic concern is activated in response to perceived digital disengagement, we cannot infer definitive causality. Longitudinal or experimental designs would help clarify whether these moral-emotional responses evolve over time and whether they lead to reparative behaviors or long-term shifts in team dynamics.

Our sample was also context-specific, drawn from the banking sector in London. While this setting provided a consistent and relevant environment for our study, it limits the extent to which our findings can be generalized to other industries or cultural contexts – particularly those with different norms around digital behavior, emotional expression or work expectations.

Finally, we did not explore how individual traits – such as moral identity, empathy levels or sensitivity to relational norms – might shape how cyberloafing is perceived or enacted. These variables could moderate the moral interpretation of disengagement and should be considered in future research.

In sum, while this study contributes meaningfully to our understanding of cyberloafing as a morally contingent behavior, it also lays the groundwork for richer, more context-sensitive inquiries that consider the complex social, technological and emotional architecture of modern work life.

6. Conclusion: Ethical awareness in the age of digital disengagement

This study contributes to the growing reassessment of cyberloafing by offering a context-sensitive ethical lens through which to understand its significance. Rather than evaluating such behavior through rigid or abstract moral frameworks, we show that the ethical meaning of cyberloafing emerges relationally – particularly within digitally mediated interactions where expectations of peer accountability and responsiveness are heightened.

In doing so, we respond to recent scholarly calls – most notably from [Uslu \(2025\)](#) – to shift the focus from antecedents to consequences, and from isolated behaviors to their broader social interpretations. Our findings reveal that empathic concern mediates the relationship between cyberloafing and online peer-focused performance, highlighting how hybrid work environments render teams more vulnerable to disruptions in moral perception and emotional resonance.

Crucially, our work reframes cyberloafing not as a fixed moral violation but as a relational signal, whose meaning is shaped by context, interpretation and the dynamics of digital communication. In hybrid workplaces, where face-to-face feedback loops are attenuated and cues are fragmented, even minor disengagements can carry disproportionate ethical weight.

This reconceptualization invites organizations and managers to move beyond binary logics of deviance and control. Instead, we advocate for leadership approaches grounded in ethical sensitivity – ones that acknowledge how the structures of digital collaboration are reshaping the very conditions of moral awareness. Managing people in the digital age, we suggest, requires not only technical efficiency but also a deeper attunement to the relational ethics of presence, availability and care.

As digital work becomes the norm rather than the exception, the ethics of collaboration must be reimaged – not through compliance checklists, but through the cultivation of trust, empathy and shared responsibility in the everyday flow of mediated work life.

Ethics statement

This study received ethical approval from the university's Ethics Review Board prior to data collection. The study followed all required procedures regarding informed consent, confidentiality and data protection.

Compliance with ethical standards

The author declares that the paper complies with ethical standards and no funding has been received for the study.

The study was approved by an institutional review board for human subject's research.

Nor the paper, or a version of it, has been previously submitted to this journal.

The author confirms the paper is not currently under review at any other journals.

There was informed consent of participants who participated in the study.

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