

Article

Not peer-reviewed version

Cyberloafing Under Toxic Leadership: A Job Demands–Resources Account of Burnout and Perceived Psychosocial Safety Climate

[Weiwei Wang](#)*, [Ho Woo](#), [Meghan Patra](#), [Angeli Santos](#)

Posted Date: 13 April 2026

doi: 10.20944/preprints202604.0811.v1

Keywords: burnout; BAT-12; toxic leadership; cyberloafing; psychosocial safety climate; JD-R model; the complete full range leadership model; moderated mediation



Preprints.org is a free multidisciplinary platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This open access article is published under a [Creative Commons CC BY 4.0 license](#), which permit the free download, distribution, and reuse, provided that the author and preprint are cited in any reuse.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Article

Cyberloafing Under Toxic Leadership: A Job Demands–Resources Account of Burnout and Perceived Psychosocial Safety Climate

Weiwei Wang ^{1,*}, Ho Woo ¹, Meghan Patra ² and Angeli Santos ¹

¹ University of Nottingham, UK

² Independent Researcher, UK

* Correspondence: weiwei.wang@nottingham.ac.uk

Abstract

Cyberloafing is increasingly recognised as a common yet motivationally complex workplace behaviour. Drawing on the Job Demands–Resources (JD-R) framework, this study examined whether toxic leadership is associated with cyberloafing through burnout syndromes and whether individual-level perceived psychosocial safety climate (PSC) buffers this health-impairment process. Using a cross-sectional online survey design, data were collected from 199 working adults across multiple industries, primarily from South Asia. A first stage moderated parallel mediation model was tested using Hayes's PROCESS v5.0 Model 7 with 5000 bootstrap resamples. Toxic leadership was positively associated with all four burnout subdimensions, and significant indirect effects on cyberloafing emerged via exhaustion, cognitive impairment, and emotional impairment, whereas mental distance did not mediate the relationship. Individual-level perceived PSC did not significantly buffer the links between toxic leadership and burnout. Overall, the findings suggest that, in toxic supervisory contexts, cyberloafing may be better understood as a maladaptive coping response to burnout-related impairment than as a simple retaliatory behaviour. These results extend leadership and burnout research by locating toxic leadership within the JD-R health-impairment pathway and by highlighting the limited protective role of perceived PSC when the source of harm is the immediate supervisor. Practical implications support an integrated intervention strategy.

Keywords: burnout; BAT-12; toxic leadership; cyberloafing; psychosocial safety climate; JD-R model; the complete full range leadership model; moderated mediation

1. Introduction

The Internet is a double-edged sword in modern workplaces: while it offers employees instant access to information and supports organisational goals by cutting costs and expanding market reach (Koay & Soh, 2018), it also enables cyberloafing, namely, employees' voluntary use of organisational internet resources during working hours for purposes unrelated to their job tasks (Lim, 2002). Lim and Teo (2005) distinguished between nonwork-related emailing and browsing nonwork-related websites, whereas Blau et al. (2006) further distinguished a more passive form of cyberloafing from more interactive forms, such as downloading information, playing games, or using a chat room, that resemble property deviance. With advances in technology over the past two decades, the construct has expanded to include newer forms of personal internet use in the workplace, including social media use (Andreassen et al., 2014; Ma et al., 2023; Zhou et al., 2023). Huma et al. (2017) have since refined the definition of cyberloafing as "*personal Internet use in the workplace*" (p. 98). Cyberloafing requires neither technical skills nor malicious intent; anyone with access to a digital device can engage in it. It is also difficult to detect, with employees appearing busy while browsing unrelated content and has become increasingly common in workplaces shaped by remote work and bring-your-own-device policies (Bhattacharjee & Sarkar, 2024; Mercado et al., 2017).

Cyberloafing is widely recognised as a counterproductive work behaviour (CWB), and a pervasive concern across industries (O'Neill et al., 2014). Research has linked it to technology addiction, procrastination, reduced concentration and lower individual efficiency (Aciksoz et al., 2024; Tsai, 2023). In high-stakes settings such as healthcare, such distraction may threaten patient safety by diverting nurses' attention from core tasks (Albayrak et al., 2023; Ross, 2018; Sarioğlu Kemer & Dedeşin Özcan, 2021). On an organisational level, cyberloafing has been associated with production misconduct, time theft, withdrawal behaviours, strained bandwidth, compromised network security, and diminished organisational trust and justice (Hadlington & Parsons, 2017; Hancock, 2016; Mills et al., 2001; Sarioğlu Kemer & Dedeşin Özcan, 2021). It may also damage team dynamics and morale while imposing substantial economic costs on organisations (Lim & Teo, 2022; Zhang et al., 2024). It is estimated that employees spend about 10%–30% of work time, or 1–2 hours per workday, on cyberloafing; the productivity losses may reach up to USD 85 billion annually, alongside information security and legal risks (Agarwal, 2019; Jiang et al., 2024; Koay et al., 2022; Lim & Teo, 2005).

However, existing research presents mixed findings, suggesting that the nature of cyberloafing is far from straightforward. A critical debate in the literature concerns its duality, with some viewing it as counterproductive and others as constructive. Emerging evidence suggests that certain forms of cyberloafing may be restorative, serving as compensatory behaviours that help employees cope with job stress and reduce burnout (Aciksoz et al., 2024; Andel et al., 2019; Wu et al., 2020). It has also been associated with short-term recovery benefits, including lower stress, higher energy or vitality, improved end-of-workday well-being, greater work engagement, and, in some cases, higher perceived productivity (Coker, 2011; Janicke-Bowles et al., 2019). Some studies further suggest that certain forms of cyberloafing may foster positive affect, brief psychological recovery, and work engagement, with possible downstream benefits for productivity and workplace social connectedness (Aciksoz et al., 2024; Coker, 2013; Li et al., 2024; Tsai, 2023).

Given its costly negative impact, growing prevalence, and potential restorative function, it is not only important to understand why employees cyberloaf but also the motivations behind it. Lim and Teo (2022) synthesises 203 cyberloafing studies, identifies leadership style as one of the most influential antecedents. Existing studies have examined a range of leadership antecedents of cyberloafing, including empowering leadership (Peng et al., 2023), servant leadership (Tan et al., 2024), responsible leadership (Zhu et al., 2021), and authoritarian leadership (Y. Zhang et al., 2022). By contrast, direct work on toxic leadership (Akinyele & Chen, 2024; Schmidt, 2008b; Andrew Alexander Schmidt, 2014) and cyberloafing is still comparatively limited, with the broader cyberloafing review literature focusing more heavily on abusive supervision, ethical leadership, responsible leadership, and supervisor–employee relationship quality than on toxic leadership specifically (Lim & Teo, 2022).

The concept of toxic leadership has developed significantly since early discussions in the 1990s and is widely recognised as a pattern of persistent leader behaviours that are negative, humiliating, dysfunctional, and malicious (Whicker, 1996). Toxic leaders mistreat, threaten, and verbally abuse subordinates, often displaying recurring mood swings that diminish employees' self-esteem, causing serious and lasting harm to followers, organisations, and non-followers alike (Lipman-Blumen, 2006). Such misuse of formal authority undermines employees' health and effectiveness, through overt hostility and intimidation as well as more insidious, low-visibility forms of control and psychological harm, ultimately contributing to withdrawal, reduced performance, or turnover behaviours (Einarsen et al., 2023; Nunes & Palma-Moreira, 2024; Tummers & Bakker, 2021). However, despite the proliferation of research, Higgs et al. (2025) contend that the field of dark leadership suffers from a Jungle Fallacy (Kelley, 1927) whereby multiple terms—such as abusive supervision, petty tyranny, pseudo-transformational leadership, personalised charismatic leadership, strategic bullying, and managerial tyranny—are used to describe closely related phenomena (Krasikova et al., 2013). Such conceptual fragmentation, with blurred and often conflating boundaries that mix traits with behavioural characteristics and outcomes, hinders cumulative progress (Thoroughgood et al., 2016).

Schmidt (2008) argued that toxic leadership should be recognised as a distinct construct, defined as a set of leadership behaviours that negatively impact subordinates in predictable ways. Schmidt (2008, 2014) further operationalised the concept into five dimensions in the Toxic Leadership Scale (TLS): abusive supervision, authoritarian leadership, narcissism, self-promotion, and unpredictability. Unlike the well-known laissez-faire leaders who hinder work progress and disappoint their followers through neglect or a lack of managerial competence (VonBergen, 2012), toxic leaders are not absent. They actively demonstrate deviant leadership behaviours through both overt hostility and subtler forms of manipulation, control, and psychological destabilisation, undermining employee well-being and the organisation's functioning.

1.1. Toxic Leadership Activating the Health Impairment Pathway

According to the Complete Full Range of Leadership framework (Itzkovich et al., 2020), toxic leadership represents one of the most damaging forms of actively destructive leadership, creating a consistently negative and psychologically draining environment. Employees do not need to be direct targets to be affected; witnessing or being part of such a destructive climate puts the workforce at risk of health and psychological issues such as burnout. The literature supports this link well. Harvey et al. (2014) contend that constant high-pressure micromanagement may undermine an employee's sense of autonomy, while public shaming can damage self-worth and professional confidence. In other words, persistent exposure to hostility and disrespect reduces job satisfaction, motivation, and dedication to organisational goals, gradually depleting employees' psychological resources and diminishing their emotional and physical equilibrium, resulting in burnout and a significant negative impact on employee well-being (Bhandarker & Rai, 2019). Empirical evidence supports this argument. A recent meta-analysis (Pletzer et al., 2023) shows that, compared with work engagement ($k = 72$, $\rho = -.220$), destructive leadership has a stronger association with burnout ($k = 122$, $\rho = .381$). Further, through the mediating effect of burnout ($\beta = .021$, 95% CI [.018, .024], $p < .001$), destructive leadership is indirectly related to job performance as the downstream behavioural outcome of this mechanism. These findings, together with the evidence demonstrated in the systematic review by Tummers and Bakker (2021), well integrate the broader leadership literature within the Job-Demand and Resources (JD-R) framework (Bakker et al., 2023; Schaufeli & Taris, 2014; Tummers & Bakker, 2021), and by extension, the destructive leadership type as a hindrance job demands: a chronic interpersonal stressor that requires sustained effort to cope with, depleting employees' psychological, mental, and physical resources and thereby leading to burnout through the health impairment pathway.

Following the same logic, it is reasonable to expect that burnout may likewise mediate the relationship between toxic leadership and cyberloafing, particularly as toxic leadership represents a specific operationalisation of actively destructive leadership (Itzkovich et al., 2020). In other words, it is expected that cyberloafing, as a downstream performance behaviour, may be activated by toxic leadership, through burnout on the health impairment pathway.

1.2. Cyberloafing: Maladaptive Coping or Deviant Retaliation

The impact of burnout is widely recognised and commonly measured using Maslach et al. (2001) three-dimensional model, the Maslach Burnout Inventory (MBI) (Maslach et al., 1997), which views burnout as three interconnected yet distinct clusters of psychological experiences. In 2022, the World Health Organisation (WHO) included burnout in the International Classification of Diseases (ICD-11) and described it as "a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed" (Nadon et al., 2022). In 2020, W. B. Schaufeli et al. (2020) further refined the concept of burnout, operationalising it through the Burnout Assessment Tool (BAT), and then later on the BAT-12 shorter form (Hadzibajramovic et al., 2022; Schaufeli & De Witte, 2023). BAT integrates empirical findings with Edward Thorndike's fundamental tenet of fatigue to capture a comprehensive range of clinically diagnosable symptoms—an inability to exert effort: exhaustion, cognitive impairment, emotional impairment—and an unwillingness to exert effort: mental distance.

When cyberloafing is seen as a passive-avoidant response to burnout, its restorative logic becomes clearer (Lim & Teo, 2022). Within the BAT framework, burnout reflects both an inability and unwillingness to invest effort in work (Schaufeli et al., 2020), making cyberloafing a theoretically plausible downstream behavioural response. Beginning with exhaustion and cognitive impairment, employees who are chronically depleted and have compromised executive functioning may struggle to sustain concentration, effort, and decision-making on work tasks. In this context, cyberloafing is attractive precisely because it is low-effort, immediately gratifying, and requires minimal cognitive investment (Liu et al., 2024; Lu et al., 2024). Personal internet browsing may therefore function as a form of micro-recovery or passive withdrawal, allowing employees to temporarily disengage from work demands and protect their remaining resources, consistent with the conservation-of-resources logic embedded in JD-R theory (De Beer et al., 2022). This same reasoning also applies to mental distance, the BAT dimension capturing aversion to and cynicism about work. Employees who have become psychologically detached from the value or meaning of their work are not only less capable but also less willing to stay task-focused; cyberloafing offers a concrete behavioural outlet for this withdrawal by redirecting attention away from devalued work towards personally meaningful or pleasurable online content (Bhattacharjee & Sarkar, 2024; Koay et al., 2022; Lim et al., 2020). Finally, emotional impairment, characterised by difficulty regulating emotional reactions and heightened irritability at work (Schaufeli et al., 2020), suggests a further restorative pathway. Employees experiencing emotional dysregulation may turn to cyberloafing as an emotion-focused coping strategy, using personal internet browsing, messaging, or social media to self-soothe, distract from negative affect, or seek immediate interpersonal comfort when more adaptive regulatory resources are unavailable. Empirical findings are broadly consistent with this view: burnout has been shown to predict social forms of cyberloafing used to communicate with others (Aghaz & Sheikh, 2016) and healthcare workers in high-pressure emergency departments were observed to spend more time on Facebook during peak workloads (Black et al., 2013). Taken together, the four BAT burnout dimensions offer a comprehensive, distinct, yet complementary pathway linking burnout to cyberloafing. This multidimensional rationale supports the expectation that burnout, both globally and across the four BAT subdimensions, is positively related to cyberloafing.

However, cyberloafing may serve not only a restorative function. It may also be motivated by direct retaliation against mistreatment. Evidence found that employees tend to engage in cyberloafing when they perceive organisational injustice, such as unjust treatment, unfair decision-making, or underpayment (Blau et al., 2006; Chavan et al., 2022), whereas perceived organisational justice is associated with reduced cyberloafing (Oosthuizen et al., 2018; Restubog et al., 2011). Given the power imbalance inherent in leader-subordinate relationships, employees avoid direct confrontation and instead use cyberloafing as a less visible means of protest, neutralisation, or silent retaliation (Koay et al., 2022). This may be especially likely when mistreatment takes subtle or covert forms of toxic leadership, such as authoritarianism, narcissism or self-promotion, which are difficult to challenge openly (Y. Zhang et al., 2022). Frustrated by perceived powerlessness or a lack of job autonomy under authoritarian leadership, employees may turn to cyberloafing to express dissatisfaction indirectly to regain a sense of control without open confrontation (Pizzolitto et al., 2023; Yajun Zhang et al., 2022). This interpretation is also consistent with the reciprocity principle in the Social Exchange Theory, as applied in the organisational setting (Mitchell et al., 2012), which suggests that subordinates exposed to abusive or unfair leadership may reciprocate by reducing desirable work behaviour, particularly when their sense of organisational belonging is diminished (Lyu et al., 2016).

Taken together, within the conceptual context of a toxic leadership-activated health impairment process, cyberloafing appears to have a dual motivational basis. On the one hand, it might occur as a maladaptive coping strategy offering a low-effort micro-break from exhaustion, temporary regulation of impaired cognitive and emotional functioning, and behavioural withdrawal from psychologically devalued work. On the other hand, it may also represent a covert form of retaliation through which employees attempt to neutralise mistreatment or regain a sense of control under toxic leadership.

1.3. *The Buffering Potential of Individual Perceived Psychosocial Safety Climate*

As a leader-driven psychosocial hazard embedded in an asymmetric power relationship, toxic leadership may not only impair employee health through burnout but also perpetuate a self-undermining cycle, in which cyberloafing may further reduce task focus, impair performance, and elicit negative managerial responses, thereby feeding a downward spiral of strain (Bakker et al., 2023). If this cycle is to be interrupted before it escalates, a top-down organisational resource is likely to be especially important, rather than reliance on employee-level coping alone. One well-established contextual factor with such buffering potential is Psychosocial Safety Climate (PSC), which has been conceptualised within the JD-R framework as an organisational resource that can weaken stress-strain relationships (Dollard & Bakker, 2010). The PSC captures the extent to which an organisation's policies, practices, and procedures prioritise workers' psychological health and safety relative to productivity (Dollard, 2019). Within the JD-R framework, PSC has been theorised as an organisational resource - a shared perception of senior management's commitment, communication, and participation for building a conducive work environment (Hall et al., 2010). When analysed on the individual level, PSC may be understood as a perceived organisational 'safety signal' - an employee's appraisal of the availability of the formal coping resources and protective mechanisms in the organisation for the protection of their mental health and a safeguard of their psychological safety (Berthelsen et al., 2020; Dollard, 2019). It is therefore plausible that an individual perceiving a high PSC signal may be less likely to normalise or tolerate toxic leadership behaviours and more likely to interpret such behaviour as inconsistent with organisational priorities for psychological safety. This is consistent with evidence that a high PSC climate, through enacted PSC, gives rise to effective procedures underpinning an anti-bullying climate that effectively reduces workplace mistreatment (Dollard et al., 2017). When the proximal stressors are a toxic line manager, a subordinate perceiving a high level of PSC signal might be more confident and therefore better able to use organisational escalation routes to protect themselves. They may also be less concerned about the career costs and social stigma of speaking up (Klinefelter et al., 2021), thereby reducing the burden of self-blame, threat appraisal, and hypervigilance that may otherwise intensify physical, emotional, and cognitive strain (Fattori et al., 2022). Conversely, low PSC may discourage employees from seeking formal support, regardless of its availability in the workplace.

Since its conception, a myriad of studies have demonstrated various effects of PSC, including its role as a precursor to job design and work characteristics, a predictor of employee well-being and health, and a moderator that buffers the stressor-strain relationship, including emotional exhaustion. Accordingly, it is reasonable to examine whether individual-level perceived PSC, conceptualised within the JD-R framework as a perceived organisational job resource, may make employees less tolerant of leadership mistreatment, more likely to seek help, and thus less vulnerable to the harmful effects of toxic leadership on their mental health.

1.4. *Aim and Objectives*

Building on prior work (Bhattacharjee & Sarkar, 2023; Fan et al., 2023; Lim et al., 2020; Yajun Zhang et al., 2022), this study aims to extend research on the association between leadership and counterproductive workplace behaviour. We focus on clarifying how followers' psychological reactions to supervision quality explain this link and under what boundary conditions leadership exerts its effects. Specifically, we integrate the actively destructive leadership perspective from the Complete Full Range Leadership Model (Itzkovich et al., 2020) with the health impairment pathway in the JD-R framework (Bakker et al., 2023) to conceptualise toxic leadership behaviours (Schmidt, 2008b; Andrew Alexander Schmidt, 2014) as a higher-order hindrance job demand that may give rise to cyberloafing behaviour. Extending prior evidence that has focused mainly on emotional exhaustion, we employ the more recently developed BAT-12 tool (De Beer et al., 2022; Hadzibajramovic et al., 2022; Schaufeli & De Witte, 2023) to test the mediating pathway via the broader burnout syndrome dimensions, thereby capturing more comprehensive exhaustion, cognitive, emotional, and motivational mechanisms. In addition, rather than focusing on individual

differences or attitudinal states, we examine the boundary conditions of this health impairment process by investigating the buffering potential of the individual-level perceived psychosocial safety climate (PSC) (Dollard, 2019) as a key perceived organisational job resource (see Figure 1 for the conceptual model). We therefore hypothesise that:

H1: Conceptualised as a hindrance job demand, toxic leadership is positively associated with burnout subdimensions (H1a: exhaustion, H1b: mental distance, H1c: cognitive impairment, and H1d: emotional impairment).

H2: Burnout subdimensions (H2a: exhaustion, H2b: mental distance, H2c: cognitive impairment, and H2d: emotional impairment) are positively associated with cyberloafing.

H3: Burnout subdimensions (H3a: exhaustion, H3b: mental distance, H3c: cognitive impairment, and H3d: emotional impairment) mediate the positive association between toxic leadership and cyberloafing.

H4: Individual-level perceived psychosocial safety climate weakens the positive association between toxic leadership and burnout subdimensions, such that the indirect association between toxic leadership and cyberloafing via burnout is weaker at higher levels of perceived PSC (H4a: exhaustion, H4b: mental distance, H4c: cognitive impairment, and H4d: emotional impairment).

[insert Figure 1 here]

2. Materials and Methods

2.1. Study Design and Ethics

This study employed a cross-sectional online survey design to examine the associations among toxic leadership, burnout, cyberloafing and individual-level perceived psychosocial safety climate (PSC). The study was conducted in accordance with the Declaration of Helsinki and was reviewed and approved by the University of Nottingham Mental Health and Clinical Neuroscience Ethics Subcommittee (Ethics Ref: 3413; Approval Date: 20th June 2025). Before accessing the survey, all participants were provided with an online participant information sheet and gave informed consent electronically. Participation was voluntary, anonymous, and uncompensated.

2.2. Participants and Procedure

Participants were recruited between June and August 2025 using a combination of organisational gatekeeper recruitment and snowball sampling. A dedicated LinkedIn research account was created to identify organisations across industries and global regions. These organisations were approached via their human resources departments, which were asked to distribute the study invitation, participant information sheet, and survey link to employees. Recipients were also encouraged to forward the invitation to other eligible working adults to support snowball sampling.

Participants were eligible if they were currently employed, at least 18 years old, and reported to a line manager. A total of 213 responses were received. After screening and data cleaning, the final analytic sample consisted of 199 participants. The sample spanned a wide age range, with the largest group aged 36–45 years (25.1%), and was broadly gender-balanced (48.5% men, 51.5% women). Organisational tenure varied, although nearly half of the participants (46.7%) had been with their current organisation for more than 10 years. Respondents were employed across diverse sectors, most commonly healthcare (22.1%), education (16.6%), and government/public service (13.1%). Geographically, the sample was predominantly from South Asia (e.g., India, Pakistan, Bangladesh; 70.8%), with the remainder drawn from other world regions. Full demographic details are presented in Table 1.

[insert Table 1 here]

2.3 Measures

2.3.1. Toxic Leadership

Toxic leadership was assessed using the 15-item Toxic Leadership Scale (TLS-15; Schmidt, 2008, 2014). The scale comprises five subdimensions: self-promotion ($\alpha = .85$), abusive supervision ($\alpha = .79$), unpredictability ($\alpha = .85$), narcissism ($\alpha = .81$), and authoritarianism ($\alpha = .84$). Each subdimension includes three items describing overt leader behaviours, such as “publicly belittles subordinates,” “allows current mood to define the climate,” and “accepts credit for successes that do not belong to him/her,” rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). For the present analyses, items were combined to form an overall toxic leadership score, with higher scores indicating greater perceived exposure to toxic leadership. Internal consistency for the total scale in the present sample was excellent ($\alpha = .96$).

2.3.2. Cyberloafing

Cyberloafing was assessed using an 11-item scale developed by Lim (2002). This scale measures the frequency of non-work-related online activities during work hours (e.g., visiting news, sports, entertainment, or investment websites; shopping online; checking, receiving, or sending non-work emails). Participants rated each item on a 5-point Likert scale ranging from 1 (never) to 5 (constantly). Higher scores indicated more frequent cyberloafing. Internal consistency for the total scale in the present sample was excellent ($\alpha = .92$).

2.3.3. Burnout

Burnout was measured using the 12-item Burnout Assessment Tool (BAT-12) (Hadzibajramovic et al., 2022). The BAT-12 comprises four three-item dimensions: exhaustion, mental distance, emotional impairment, and cognitive impairment. Items were rated on a 5-point frequency Likert scale ranging from 1 (never) to 5 (always). Example items include “At work, I feel unable to control my emotions,” and “At work, I have trouble staying focused.” For the present analyses, separate mean scores were computed for each burnout subdimension. Internal consistencies were $\alpha = .90$ for exhaustion, $\alpha = .82$ for mental distance, $\alpha = .88$ for cognitive impairment, and $\alpha = .87$ for emotional impairment. The total BAT-12 score showed excellent internal consistency ($\alpha = .93$) and is reported descriptively only.

2.3.4. Individual-Level Perceived Psychosocial Safety Climate

Individual-level perceived psychosocial safety climate was assessed using the four-item Psychosocial Safety Climate questionnaire (PSC-4; Dollard, 2019). The PSC-4 assesses employees' perceptions of the extent to which their organisation prioritises and communicates concern for workers' psychological health and safety. Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). An example item is: “There is good communication here about psychological safety issues which affect me.” Higher scores indicated stronger perceived PSC. Internal consistency in the present sample was excellent ($\alpha = .92$).

2.3.5. Covariates

The analyses included four covariates: gender, age, frequency of interaction with the current line manager, and job level. Gender was coded numerically for analysis as (male = 1, female = 2). No participant selected “other” or “prefer not to say”; these categories were excluded in the following analyses. Age was measured in year groups and recoded as an ordinal variable ranging from 1 to 6. Interaction frequency with the line manager was assessed with a single item: “How often do you interact with your current line manager during the workweek?” Responses were rated on a 7-point scale ranging from 1 (never) to 7 (multiple times a day), with higher scores reflecting more frequent contact. Job level was determined using self-reported organisational role categories (e.g., individual contributor, first-line manager, middle manager, senior management) and was treated as an ordinal variable in the analyses.

2.4 Data Screening and Analytical Strategy

A total of 213 employees responded to the survey. 14 total cases were excluded if the participant skipped more than 10% of the total number of items or if a participant’s responses were largely invariant across all scale items. As the missing data accounted for approximately 0.16% of the total dataset, which is far less than the 5% threshold generally considered to be potentially biased(Schafer, 1999; Yeatts & Martin, 2015), the mean score imputation was used using the participant’s mean score for the corresponding scale. After screening, the final sample comprised 199 participants.

All analyses were conducted using IBM SPSS Statistics version 29. Multivariate outliers were assessed using Mahalanobis distance, and influential cases were evaluated using Cook’s distance. No problematic multivariate outliers or influential observations were detected. Inspection of residual scatterplots indicated no obvious evidence of heteroscedasticity. Multicollinearity was not a concern, with all tolerance values above .80 and variance inflation factors (VIFs) below 2.

Hypotheses 1, 2, and 4 were tested using a first-stage moderated parallel mediation model, estimated with Model 7 in the PROCESS version 5.0 SPSS macro (Hayes, 2013). Hypothesis 3 was examined separately using the PROCESS model 4 to estimate the unconditional indirect effect of toxic leadership on cyberloafing through burnout subdimensions. Bias-corrected 95% bootstrapped confidence intervals based on 5,000 resamples were used. See Figure 1 for a visual aid of the model tested.

3. Results

3.1. Descriptive Statistics, Reliability and Bivariate Correlation of the Study Variables

Descriptive statistics, reliability analysis and bivariate correlation are presented in Table 2. All scales demonstrated good to excellent internal consistency, with Cronbach’s alpha coefficients ranging from .82 to .96. Toxic leadership was positively correlated with cyberloafing, all four burnout subdimensions, and the overall burnout score, and was negatively correlated with individual-level perceived psychosocial safety climate (PSC). Cyberloafing was positively and statistically significantly correlated with burnout, and its four subdimensions; its correlation with PSC was very weak and statistically insignificant. Consistent with the wider burnout literature, burnout and its subdimensions were negatively correlated with PSC; however, the strength of these associations was weak. Moreover, the association between burnout subdimension exhaustion and PSC was not statistically significant. Overall burnout and its four subdimensions share strong correlations, consistent with the BAT literature, reflecting its higher-order structure (De Beer et al., 2022; Wilmar B. Schaufeli et al., 2020)

[insert Table 2 here]

3.2 Hypothesis Testing

As expected, toxic leadership was positively associated with all four burnout subdimensions, including exhaustion (H1a: $\beta = .21$, $p = .01$), mental distance (H1b: $\beta = .27$, $p < .01$), cognitive impairment (H1c: $\beta = .33$, $p < .01$), and emotional impairment (H1d: $\beta = .33$, $p < .01$), supporting H1.

Hypothesis 2 received partial support. Burnout subdimensions of exhaustion (H2a: $\beta = .20$, $p = .02$) and cognitive impairment (H2c: $\beta = .25$, $p = .01$) were positively associated with cyberloafing, supporting Hypotheses 2a and 2c. Emotional impairment was also positively associated with cyberloafing (H2d: $\beta = .18$, $p = .051$); however, this relationship was only marginally significant, not supporting H2d. In contrast, mental distance was negatively associated with cyberloafing (H2b: $\beta = -.01$, $p = .87$), indicating a very small, statistically nonsignificant effect. Hypothesis 2b was therefore also not supported.

[insert Table 3 here]

Hypothesis 3 also received partial support. Conducted using PROCESS Model 4, this parallel mediation analysis indicated significant indirect effects of toxic leadership on cyberloafing via

exhaustion (H3a: $\beta = .04$, BCa 95% CI [.01, .08]), cognitive impairment (H3c: $\beta = .09$, BCa 95% CI [.02, .16]), and emotional impairment (H3d: $\beta = .06$, BCa 95% CI [.003, .13]). No significant indirect effect was observed via mental distance (H3b: $\beta = -.004$, BCa 95% CI [-.05, .05]). In this model, the total effect between toxic leadership and cyberloafing was positive and statistically significant ($\beta = .25$, 95% CI [.12, .39]), whereas the direct effect ($\beta = .07$, 95% CI [-.04, .14]) was not significant after the four burnout subdimensions were entered. Taken together, these findings support Hypotheses 3a, 3c, and 3d, but not H3b.

[insert Table 4 here]

Hypothesis 4 was not supported. A first-stage moderated parallel mediation model estimated using PROCESS Model 7 showed that none of the interaction effects between toxic leadership and PSC predicted any of the burnout subdimensions (H4a: exhaustion ($\beta = .07$, $p = .22$); H4b: mental distance ($\beta = .08$, $p = .18$); H4c: cognitive impairment ($\beta = .07$, $p = .22$); H4d: emotional impairment ($\beta = .08$, $p = .11$). Accordingly, Hypotheses 4a-4d were not supported, and there was no evidence of moderated mediation. In addition, PSC did not show significant direct associations with exhaustion ($\beta = -.04$, $p = .59$), mental distance ($\beta = -.09$, $p = .22$), cognitive impairment ($\beta = -.08$, $p = .27$), or emotional impairment ($\beta = -.08$, $p = .27$). Suggesting that PSC does not predict any of the burnout subdimensions. See Figure 2 for a visual representation of the hypothesis numbered model paths and their corresponding coefficients.

[insert Figure 2 here]

Among the covariates, gender showed medium-to-strong positive associations with all burnout subdimensions, however the association with mental distance ($\beta = .23$, $p = .11$) and emotional impairment was not statistically significant ($\beta = .19$, $p = .17$). Given the coding of gender, this pattern suggests that women in the present sample were more likely than men to report exhaustion ($\beta = .32$, $p = .03$), and cognitive impairment ($\beta = .34$, $p = .02$). Gender was also significantly associated with cyberloafing ($\beta = -.37$, $p = .003$) indicating that women reported lower levels of cyberloafing than men. Interaction frequency with the line manager showed a small positive association with exhaustion ($\beta = .11$, $p = .001$), suggesting that employees who interacted more frequently with their line manager were more likely to report exhaustion. Interaction frequency did not show meaningful associations with cognitive or emotional impairment, mental distance, or cyberloafing. Finally, job level showed generally negative associations with exhaustion ($\beta = -.08$, $p = .28$), mental distance ($\beta = -.08$, $p = .30$), cognitive impairment ($\beta = -.09$, $p = .24$), emotional impairment ($\beta = -.17$, $p = .02$), and cyberloafing ($\beta = -.11$, $p = .09$), suggesting that employees in more senior roles tended to report lower levels of these three burnout syndromes and also engaged in cyberloafing less frequently. However, this association was statistically significant only for emotional impairment, indicating that employees in more senior positions were less likely to experience difficulties regulating their emotions at work.

4. Discussion

This study aimed to advance understanding of the relationship between leadership and counterproductive work behaviour. Drawing on the health impairment pathway within the Job Demands-Resources (JD-R) framework, this study explored when and how toxic leadership relates to cyberloafing. Employing a first-stage moderated parallel mediation model, we examined the mediating role of burnout syndrome clusters and the moderating effect of individual-level perceived psychosocial safety climate (PSC) on this indirect path. Overall, the results provide partial support for the hypothesised model. Please see Figure 2 for a visual display of the path model and corresponding coefficients.

Hypothesis 1 examined whether toxic leadership is associated with the four burnout syndrome clusters measured by the BAT-12(De Beer et al., 2022; Hadzibajramovic et al., 2022). Overall, in line with prior empirical evidence (Budak & Erdal, 2022; Carlson et al., 2012; Nunes & Palma-Moreira, 2024; Palvimo et al., 2023), all four hypothesised paths in H1 were supported. Specifically, toxic leadership is most strongly related to reduced capacity to sustain cognitive focus and emotional stability (i.e., cognitive and emotional impairment), followed by a more moderate decline in work

motivation (i.e., mental distance) and a smaller depletion of physical and mental energy (i.e., exhaustion). Conceptualised as a chronic social stressor and, within the JD-R model, as a hindrance job demand, toxic leadership appears particularly detrimental to employees' self-regulatory capacity, making it harder for them to concentrate, remain calm, and stay motivated, while also leaving them physically and mentally exhausted.

The results partially support hypothesis 2, indicating a more nuanced pattern of associations between burnout subdimensions and cyberloafing. Specifically, the BAT-12 exhaustion facet showed a small-to-moderate positive association with cyberloafing. This finding is consistent with Lim and Teo's (2022) view that cyberloafing may serve a short-term restorative or escape-oriented function, offering exhausted employees a low-effort, readily accessible option to momentarily disengage from work demands. From this perspective, cyberloafing can be understood as a passive-avoidance coping strategy that provides temporary relief from work strain and facilitates the conservation or replenishment of resources and energy, although in the long run, cyberloafing is thought to be maladaptive (Bakker & de Vries, 2021; Fan et al., 2023).

We also observed a slightly stronger positive association between cognitive impairment and cyberloafing, suggesting that employees who have trouble maintaining attention on core tasks are more susceptible to distraction by non-work-related online activities. In other words, cyberloafing may represent an attention-drift or low-regulation fallback behaviour that occurs when cognitive control is diminished (Bakker & de Vries, 2021; Hadzibajramovic et al., 2022; Restubog et al., 2011). Additionally, there is a slightly smaller effect linking emotional impairment to cyberloafing, although this effect fell just short of the conventional p -value cut-off ($p = .051$) and therefore, H2d was not supported. Even so, the direction and size of the coefficient remained theoretically coherent and practically meaningful. Emotional impairment, characterised by difficulties in regulating affective reactions such as irritation, frustration, or sadness, may lead employees to engage in cyberloafing as a form of self-soothing or emotional escape. This behaviour is particularly evident when individuals use social media for distraction, comfort, or informal social connection.

Contrary to expectations, mental distance showed a negative and almost negligible association with cyberloafing. Within the BAT framework, mental distance represents a motivational state of psychological withdrawal characterised by cynicism, indifference, and aversion toward work. In the current sample, however, this form of withdrawal did not correspond to increased personal internet use during work hours. One possible explanation is that cyberloafing is not a useful coping strategy for employees who are already highly detached from their work. The near-zero effect might suggest that employees exhibiting high levels of detachment may withdraw through other means, such as reducing discretionary effort, engaging in presenteeism, or considering turnover (Chiu & Tsai, 2006; Nunes & Palma-Moreira, 2024; Nwosu et al., 2021; Schaufeli & De Witte, 2023).

Moreover, high motivational withdrawal may also overlap with broader depressive symptoms. Given the established strong overlap ($r = .80$) between burnout and depression reported in a recent meta-analysis (Bianchi et al., 2021; Schonfeld & Bianchi, 2016), employees with high mental distance may lose interest not only in work but also in potentially rewarding non-work online activities, rendering cyberloafing less appealing as it no longer fulfils a restorative or regulating role.

Overall, the pattern in H2 results indicates that cyberloafing is more likely to occur when burnout is experienced as energy depletion and impaired self-regulation, rather than as motivational disengagement. These findings highlight the practical utility of BAT-12 in differentiating qualitatively distinct burnout profiles that may have varying behavioural consequences (De Beer et al., 2022; W. B. Schaufeli et al., 2020).

Hypothesis 3 was also partially supported. We tested the indirect association between toxic leadership and cyberloafing through the four BAT-12 burnout subdimensions. Significant mediation effects were identified for exhaustion, emotional impairment and, most strongly, cognitive impairment. There is no mediation through mental distance. Within the Job Demands-Resources (JD-R) framework, the three mediational paths support the health-impairment proposition: toxic leadership, conceptualised as a supervisor-driven psychosocial hazard and higher-order hindrance

job demand, appears to deplete employees' energy and impair cognitive and emotional regulation. Under such conditions, cyberloafing may arise as a maladaptive coping response when employees remain willing to manage task demands despite increasing strain. Overall, the H3 pattern suggests that cyberloafing is more closely associated with the inability aspect of burnout than with the unwillingness aspect, aligning well with the BAT conceptualisation.

Concurrently, the association between toxic leadership and cyberloafing decreased substantially, dropping 5-fold from a significant moderate total effect to a small, non-significant direct effect, consistent with the mediation-only pattern described byZhao et al. (2010). Given that the present sample was drawn largely from South Asian sectors such as healthcare, education, and government services, it is plausible that higher power-distance norms further discourage any form of disobedience (Hofstede, 2011; Smith & Hume, 2005; Yajun Zhang et al., 2022). In these contexts, mistreated employees may be more likely to cope passively or withdraw quietly rather than express dissatisfaction in ways that could be perceived as oppositional. Although this interpretation was not directly tested in the current study, it provides a plausible contextual explanation for the findings.

Hypothesis 4 posits that individual-level perceived psychosocial safety climate (PSC) would buffer the indirect associations between toxic leadership and cyberloafing via the mediating effects of BAT-12 subdimensions of exhaustion (H4a), mental distance (H4b), cognitive impairment (H4c) and emotional impairment (H4d). Based on the buffering proposition of job resources in the health impairment pathway within the JD-R model(Bakker et al., 2023), we speculated that this interaction effect would occur on the toxic leadership–burnout syndrome paths. Accordingly, we tested it with the first-stage moderated parallel mediation model(Ng et al., 2023). However, contrary to existing findings(Dollard et al., 2017; Dollard et al., 2012), hypothesis 4 was not supported. All four moderated mediation paths show statistically nonsignificant, negligible effects.

On close inspection, we found that the absence of moderated mediation effects was due to the absence of the buffering effect of PSC on the associations between toxic leadership and the four burnout syndrome clusters. Specifically, although not statistically significant, the results indicate that for the current participants, when exposed to the psychosocial hazards of toxic leadership, individuals who perceive a higher PSC signal did experience a small reduction in the burnout syndrome of exhaustion, mental distance, cognitive impairment, and emotional impairment as compared to people perceiving low PSC signals. Therefore, this null finding should be interpreted with caution rather than as evidence that PSC is irrelevant.

Critically, the selective nature of the PSC moderation effect is well documented in the literature(Dollard et al., 2012; Fattori et al., 2022; Heming et al., 2025; Parkin et al., 2023). In the first study to examine PSC within the JD-R framework, Dollard and Bakker (2010) found that PSC moderated the emotional demands-psychological health outcome association, but not the work pressure-strain relationship. They proposed that this pattern could be explained by the triple-match principle(de Jonge & Dormann, 2006), which posits that the buffering effect is more likely when the domains of the demand, resource and strain variables align. This reasoning may also account for the present findings. Although PSC is relevant to burnout as a psychological health outcome, its alignment with toxic leadership may be weaker than anticipated. Toxic leadership is not simply a general job demand; it constitutes a proximal, supervisor-driven psychosocial hazard that may involve emotional pressure, cognitive unpredictability, fear of violation or retaliation, or more insidious threats to employees' identity and core self-evaluations through manipulative or narcissistic leader behaviour(Akinyele & Chen, 2024; Hughes, 2022; Lipman-Blumen, 2006). The harm caused by such a unique form of interpersonal tension may lack enough congruence with a general safety message.

A second explanation concerns the level of analysis and the enactment of PSC. Dollard and Bakker (2010) conceptualised PSC as an upstream organisational resource and climate property aggregated to a higher level. In the present study, however, PSC was analysed at the individual level, meaning that what was tested was individual-perceived PSC rather than a shared climate property. This distinction is important. A generally positive perception that senior management values

psychological health may not be sufficiently proximal to influence the immediate manager–subordinate relationship, especially when the local supervisor is the source of the hazard. This interpretation echoes the debate on the distinction between espoused and enacted PSC in the literature (Yulita et al., 2017). Espoused PSC refers to the organisation's stated concern for psychological health, whereas enacted PSC, in the context of the present study, pertains to the translation of this concern into concrete local practices, such as credible escalation channels, anti-bullying procedures, conflict-resolution mechanisms, and protection against retaliation. When the direct supervisor is the source of the psychosocial hazard, enacted and more proximal supports may be more likely to exert a meaningful buffering effect than perceived PSC alone. This becomes especially problematic when the local leader operates like a petty tyrant—controlling task allocation, performance appraisal, access to information, and support—in ways that can easily neutralise broader organisational safety signals (e.g. authoritarianism) (Ashforth, 1994; Einarsen et al., 2023; Lipman-Blumen, 2006). Put differently, an individually perceived psychosocial safety signal may be too distal and too weakly enacted to significantly buffer the effects of toxic leadership.

Examining the unconditioned main associations between PSC and the burnout dimensions, all coefficients were again in the expected negative direction, but none reached statistical significance. Employees perceiving stronger PSC signals reported slightly lower exhaustion, a greater reduction in cognitive impairment and emotional impairment and an even more noticeable reduction in mental distance. While these coefficients are weak and nonsignificant and should not be overinterpreted, their pattern is theoretically important. Consistent with Dollard and Bakker's (2010) conceptualisation, employees who perceived stronger PSC signals appear to experience less ability-related burnout syndromes. Furthermore, in line with the motivational proposition of job resources in JD-R (Bakker et al., 2023), the strongest negative coefficient was observed for mental distance, the most clearly motivational facet of BAT-12. This pattern also aligns with the inability–unwillingness conceptualisation of burnout advanced by Schaufeli and colleagues and provides tentative support for the construct validity of the BAT-12 operationalisation (De Beer et al., 2022; Hadzibajramovic et al., 2022; Schaufeli & De Witte, 2023; W. B. Schaufeli et al., 2020). However, it must be acknowledged that none of the above-discussed buffering or the motivational effect of PSC was statistically significant and should therefore be regarded as suggestive rather than confirmatory.

A more practical interpretation is that the perceived effects of the PSC signal in this study may have been too small to detect reliably. Interaction effects are often small to modest in organisational research, and moderated mediation models require even greater statistical power (Aguinis et al., 2005; Aguinis et al., 2017; Holland et al., 2017). Given the small coefficients observed and the current sample size limitation, our study was underpowered to detect a genuinely small buffering effect. Overall, the H4 results do not suggest that PSC is unimportant, but rather that its buffering role may depend on stronger domain congruence, greater proximity to the source of harm, and more clearly enacted organisational support than was captured in the present study.

4.1 Theoretical Contribution

This study contributes to theory in four main ways. First, it contributes to the integration of leadership research with the Job Demands-Resources (JD-R) framework (Pletzer et al., 2023; Tummers & Bakker, 2021) by locating the concept of toxic leadership (Schmidt, 2008b; Andrew Alexander Schmidt, 2014) within the health-impairment pathway as a supervisor-driven psychosocial hazard and higher-order hindrance job demand (Bakker et al., 2023). In doing so, it also supports the broader proposition of the Complete Full Range Leadership framework (Itzkovich et al., 2020) that actively destructive leadership is qualitatively different from mere leadership absence or incompetence: it is a harmful form of supervisory influence that systematically depletes employee resources and undermines well-being.

Second, the study extends the understanding of how toxic leadership harms employees by moving beyond narrower operationalisations of burnout that are primarily centred on emotional

exhaustion. Using BAT-12 (Hadzibajramovic et al., 2022), it shows that toxic leadership is associated with a fuller syndrome-based pattern of burnout involving exhaustion, cognitive impairment, emotional impairment, and mental distance. This enriches the health-impairment account by showing that toxic leadership harms both employees' capacity to function effectively and their willingness to continue investing effort in work.

Third, the findings contribute to the motivational debate on cyberloafing (Lim & Teo, 2022). While cyberloafing has often been interpreted as either deviance or retaliation, in the context of a supervisor-driven psychosocial hazard, it is better understood as a maladaptive self-regulatory response to burnout-related functional impairment. This indicates that cyberloafing is more strongly tied to the inability aspect of burnout than to the unwillingness aspect, thereby clarifying that strained employees cyberloaf not to retaliate, but to obtain short-term relief while still attempting to cope with work demands.

Fourth, the null moderation result for individual-level perceived psychosocial safety climate (PSC) is theoretically informative. Although the buffering effect of PSC is a well-established organisational resource within JD-R (Dollard, 2019; Dollard & Bakker, 2010; Dollard et al., 2012; Huma et al., 2017), the present findings suggest that a broad perceived organisational safety signal may be too distal, less targeted or weakly implemented to buffer a proximal supervisor-driven hazard. This contributes to PSC theory by pointing to a meaningful boundary condition and supporting the distinction between espoused and enacted PSC in the literature (Dollard et al., 2017; Parkin et al., 2023).

In addition, by linking toxic leadership, PSC, and cyberloafing to the BAT-12 dimensions within a theoretically coherent JD-R framework, the study contributes to the growing body of nomological network evidence for BAT-12 as a useful syndrome-based burnout measure in JD-R-informed leadership research.

4.2 Practical Implication

From a workplace mental health management perspective, this study echoes the literature to advocate for an integrated measure (Cooper & Cartwright, 1997; LaMontagne et al., 2014). The present findings suggest that organisations should treat toxic leadership as a serious psychosocial hazard. Its harm appears to operate through a health-impairment process and may escalate into a self-undermining cycle if not addressed. Considering the supervisor-follower power imbalance, it is important to ensure congruence between the espoused organisational commitment to the stable accessibility of the locally targeted and enacted measures (Yulita et al., 2017). In practice, this points to the need to invest in primary prevention by strengthening leader selection, training, and accountability systems so that individuals who display actively destructive behaviours—such as authoritarian control, unpredictability, self-promotion, or abusive conduct—are less likely to be placed in or retained in supervisory roles. Meanwhile, leadership development programmes should focus not only on performance management but also on competencies relevant to understanding, promoting and managing psychological health, including respectful communication, emotional regulation, fair treatment, and constructive conflict management. This is consistent with JD-R and self-regulation perspectives (Bakker & de Vries, 2021; Tummers & Bakker, 2021; Yulita et al., 2017), which emphasise that stable organisational resources and healthy leadership become especially important for preventing the emergence of leader-driven psychosocial hazards.

At the same time, organisations need secondary intervention systems that employees can realistically use when the direct supervisor is the source of harm. The present PSC findings imply that generic safety messages from senior management are not enough on their own; organisations need credible escalation channels, psychologically safe reporting routes, anti-bullying procedures, HR protections against stigmatisation, retaliation, and access to supportive recovery resources (Dollard et al., 2017).

Finally, although detrimental in the long run, cyberloafing should not be managed through blanket punitive measures. In this study, cyberloafing appeared more consistent with maladaptive

coping than with simple revenge, suggesting that managers should respond with proportionate and context-sensitive internet-use policies that distinguish between misconduct and strain-related dysregulation (Andel et al., 2019; Lim & Teo, 2005). A purely punitive approach may suppress symptoms without addressing the underlying burnout process that drives the behaviour in the first place.

4.3 Limitations and Future Research

This study has several limitations. First, the cross-sectional, self-report design limits causal inference and raises the possibility of common method variance (Podsakoff et al., 2024). Given the stigma that may surround toxic leadership and counterproductive behaviour, responses may also have been influenced by social desirability (de Jonge & Peeters, 2009). Future studies should therefore adopt longitudinal, diary, or multi-source designs to better establish temporal ordering and reduce same-source bias. This is especially important considering that the relationship may not be strictly unidirectional; follower resistance behaviour may also provoke retaliatory mistreatment from leaders (Güntner et al., 2021; Sheng et al., 2024). Second, the null moderation result for individual-level perceived PSC should be interpreted cautiously. Moderation effects are often small in organisational research, and the first-stage moderated mediation model used here may have been underpowered to detect a genuinely small buffering effect (Sommet et al., 2023). Therefore, if this study is to be replicated, a substantially larger sample size is recommended (Murphy & Russell, 2016). Third, PSC was measured using the brief PSC-4 and analysed at the individual level. Although efficient, short-form measures may be less sensitive to small interaction effects, and individual-level PSC may not adequately capture the shared climate property emphasised in PSC theory. Future research should therefore test multilevel models that examine aggregated PSC as an upstream antecedent, ideally alongside more proximal indicators of enacted support, to assess whether buffering emerges more clearly under those conditions. Fourth, contextual factors may also have constrained the buffering effect. Prior PSC research suggests that high-risk settings, restricted variance in PSC, and cultural conditions, such as the stronger power distance likely reflected in the present sample, may reduce the extent to which organisational safety signals are perceived as credible, actionable, and safe to use while examining leadership effects. The results show that senior-level participants in the current sample are less likely to report burnout syndromes or cyberloafing, which might indicate this possibility. Future research should therefore examine the present model across sectors and cultural contexts (Berthelsen et al., 2020; Tear et al., 2020). It would also be valuable to compare cyberloafing with other withdrawal responses, such as presenteeism, reduced discretionary effort, silence, and turnover intentions, to better understand how toxic leadership may translate into distinct behavioural outcomes across different burnout profiles.

5. Conclusions

Overall, this study indicates that toxic leadership harms employees through a health-impairment process, which in turn is associated with cyberloafing as a maladaptive coping mechanism. Using BAT-12, the study demonstrates that this mechanism is more complex and extends beyond emotional exhaustion alone. The findings also imply that general perceptions of organisational psychological safety may not be strong or immediate enough to counteract supervisor-driven toxic harm. The study points to an integrated intervention system to better manage workplace stress, leadership behaviour and employee health.

Author Contributions: Conceptualisation, Meghan Patra and Weiwei Wang; methodology, Weiwei Wang and Meghan Patra; investigation, Meghan Patra; validation, Weiwei Wang.; formal analysis, Ho Woo.; data curation, Weiwei Wang. writing—original draft preparation, Weiwei Wang, Ho Woo, Meghan Patra.; writing—review and editing, Angeli Santos.; visualisation, Weiwei Wang, Ho Woo.; supervision, Weiwei Wang; project administration, Weiwei Wang. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and was reviewed and approved by the University of Nottingham Mental Health and Clinical Neuroscience Ethics Sub-committee (Ethics Ref: 3413; Approval Date: 20th June 2025).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Acknowledgements: During the preparation of this manuscript, the authors used Grammarly (including its AI writing assistance features, accessed in April 2026) for grammar checking, wording and paraphrasing suggestions. The authors have reviewed and edited all AI-assisted content and take full responsibility for the final version of the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript

BAT	Burnout Assessment Tool
BAT-12	12-item Burnout Assessment Tool
CWB	Counterproductive Work Behaviour
ICD-11	International Classification of Diseases, 11th Revision
JD-R	Job Demands–Resources
MBI	Maslach Burnout Inventory
PSC	Psychosocial Safety Climate
PSC-4	4-item Psychosocial Safety Climate Scale
TLS	Toxic Leadership Scale
TLS-15	15-item Toxic Leadership Scale
WHO	World Health Organization

References

Aciksoz, S., Sendir, M., Atar, N. Y., Simsekoglu, N., & Baydili, K. N. (2024). Exploring the relationship between cyberloafing and innovativeness among nurses in research hospitals: a cross-sectional study in Turkey. *BMC Nursing*, 23(1), 371. <https://doi.org/10.1186/s12912-024-02008-6>

Agarwal, U. A. (2019). Impact of Supervisors’ Perceived Communication Style on Subordinate’s Psychological Capital and Cyberloafing. *Australasian Journal of Information Systems*, 23. <https://doi.org/10.3127/ajis.v23i0.1759>

Aghaz, A., & Sheikh, A. (2016). Cyberloafing and job burnout: An investigation in the knowledge-intensive sector. *Computers in Human Behavior*, 62, 51-60. <https://doi.org/10.1016/j.chb.2016.03.069>

Aguinis, H., Beaty, J. C., Boik, R. J., & Pierce, C. A. (2005). Effect size and power in assessing moderating effects of categorical variables using multiple regression: a 30-year review. *J Appl Psychol*, 90(1), 94-107. <https://doi.org/10.1037/0021-9010.90.1.94>

Aguinis, H., Edwards, J. R., & Bradley, K. J. (2017). Improving our understanding of moderation and mediation in strategic management research. *Organizational Research Methods*, 20(4), 665-685.

Akinyele, A. I., & Chen, Z. (2024). Dark clouds of leadership: causes and consequences of toxic leadership. *International Studies of Management & Organization*, 55(4), 476-503. <https://doi.org/10.1080/00208825.2024.2442185>

Albayrak, Ö., İşseven, S. D., & Berber, K. (2023). The Effect of Nurses' Cyberloafing Levels on Their Perceptions of Individualized Care. *CIN: Computers, Informatics, Nursing*, 10.1097.

- Andel, S. A., Kessler, S. R., Pindek, S., Kleinman, G., & Spector, P. E. (2019). Is Cyberloafing More Complex Than We Originally Thought? Cyberloafing as a Coping Response to Workplace Aggression Exposure. *Computers in Human Behavior*, 101, 124-130. <https://doi.org/10.1016/j.chb.2019.07.013>
- Andreassen, C. S., Torsheim, T., & Pallesen, S. (2014). Predictors of Use of Social Network Sites at Work - A Specific Type of Cyberloafing. *Journal of Computer-Mediated Communication*, 19(4), 906-921. <https://doi.org/10.1111/jcc4.12085>
- Ashforth, B. (1994). Petty tyranny in organizations. *Human Relations*, 47(7), 755-778.
- Bakker, A. B., & de Vries, J. D. (2021). Job Demands-Resources theory and self-regulation: new explanations and remedies for job burnout. *Anxiety Stress Coping*, 34(1), 1-21. <https://doi.org/10.1080/10615806.2020.1797695>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job Demands–Resources Theory: Ten Years Later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(1), 25-53. <https://doi.org/10.1146/annurev-orgpsych-120920-053933>
- Berthelsen, H., Muhonen, T., Bergstrom, G., Westerlund, H., & Dollard, M. F. (2020). Benchmarks for Evidence-Based Risk Assessment with the Swedish Version of the 4-Item Psychosocial Safety Climate Scale. *Int J Environ Res Public Health*, 17(22). <https://doi.org/10.3390/ijerph17228675>
- Bhandarker, A., & Rai, S. (2019). Toxic Leadership: Emotional Distress and Coping Strategy. *International Journal of Organization Theory and Behavior*, 22(1), 65-78. <https://doi.org/10.1108/ijotb-03-2018-0027>
- Bhattacharjee, A., & Sarkar, A. (2023). Abusive Supervision and Cyberloafing: An Investigation Based on Stressor-Emotion-CWB Theory. *Information Technology and People*, 37(3), 1126-1155. <https://doi.org/10.1108/itp-05-2022-0353>
- Bhattacharjee, A., & Sarkar, A. (2024). Abusive supervision and cyberloafing: an investigation based on Stressor-Emotion-CWB theory. *Information Technology & People*, 37(3), 1126-1155.
- Bianchi, R., Verkuilen, J., Schonfeld, I. S., Hakanen, J. J., Jansson-Fröjmark, M., Manzano-García, G., Laurent, E., & Meier, L. L. (2021). Is Burnout a Depressive Condition? A 14-Sample Meta-Analytic and Bifactor Analytic Study. *Clinical Psychological Science*, 9(4), 579-597. <https://doi.org/10.1177/2167702620979597>
- Black, E. W., Light, J., Black, N. P., & Thompson, L. A. (2013). Online Social Network Use by Health Care Providers in a High Traffic Patient Care Environment. *Journal of Medical Internet Research*, 15(5), e94. <https://doi.org/10.2196/jmir.2421>
- Blau, G., Yang, Y., & Ward-Cook, K. (2006). Testing a measure of cyberloafing. *Journal of allied health*, 35(1), 9-17.
- Budak, O., & Erdal, N. (2022). The Mediating Role of Burnout Syndrome in Toxic Leadership and Job Satisfaction in Organizations. *South East European Journal of Economics and Business*, 17(2), 1-17. <https://doi.org/10.2478/jeb-2022-0011>
- Carlson, D. S., Ferguson, M., Hunter, E. M., & Whitten, D. (2012). Abusive Supervision and Work–family Conflict: The Path Through Emotional Labor and Burnout. *The Leadership Quarterly*, 23(5), 849-859. <https://doi.org/10.1016/j.leaqua.2012.05.003>
- Chavan, M., Galperin, B. L., Ostle, A., & Behl, A. (2022). Millennial's perception on cyberloafing: workplace deviance or cultural norm? *Behaviour & Information Technology*, 41(13), 2860-2877. <https://doi.org/10.1080/0144929X.2021.1956588>
- Chiu, S. F., & Tsai, M. C. (2006). Relationships among burnout, job involvement, and organizational citizenship behavior. *J Psychol*, 140(6), 517-530. <https://doi.org/10.3200/JRLP.140.6.517-530>
- Coker, B. L. (2011). Freedom to surf: the positive effects of workplace Internet leisure browsing. *New technology, work and employment*, 26(3), 238-247.
- Coker, B. L. S. (2013). Workplace Internet Leisure Browsing. *Human Performance*, 26(2), 114-125. <https://doi.org/10.1080/08959285.2013.765878>
- Cooper, C. L., & Cartwright, S. (1997). An intervention strategy for workplace stress. *Journal of Psychosomatic Research*, 43(1), 7-16. [https://doi.org/https://doi.org/10.1016/S0022-3999\(96\)00392-3](https://doi.org/https://doi.org/10.1016/S0022-3999(96)00392-3)
- De Beer, L. T., Schaufeli, W. B., & Bakker, A. B. (2022). Investigating the validity of the short form Burnout Assessment Tool: A job demands-resources approach. *African Journal of Psychological Assessment*, 4. <https://doi.org/10.4102/ajopa.v4i0.95>
- de Jonge, J., & Dormann, C. (2006). Stressors, resources, and strain at work: a longitudinal test of the triple-match principle. *J Appl Psychol*, 91(6), 1359-1374. <https://doi.org/10.1037/0021-9010.91.5.1359>

- de Jonge, J., & Peeters, M. C. (2009). Convergence of self-reports and coworker reports of counterproductive work behavior: a cross-sectional multi-source survey among health care workers. *Int J Nurs Stud*, 46(5), 699-707. <https://doi.org/10.1016/j.ijnurstu.2008.12.010>
- Dollard, M. F. (2019). The PSC-4; A Short PSC Tool. In *Psychosocial Safety Climate* (pp. 385-409). https://doi.org/10.1007/978-3-030-20319-1_16
- Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology*, 83(3), 579-599. <https://doi.org/10.1348/096317909x470690>
- Dollard, M. F., Dormann, C., Tuckey, M. R., & Escartín, J. (2017). Psychosocial safety climate (PSC) and enacted PSC for workplace bullying and psychological health problem reduction. *European Journal of Work and Organizational Psychology*, 26(6), 844-857. <https://doi.org/10.1080/1359432x.2017.1380626>
- Dollard, M. F., Tuckey, M. R., & Dormann, C. (2012). Psychosocial safety climate moderates the job demand-resource interaction in predicting workgroup distress. *Accident analysis and prevention*, 45, 694-704. <https://doi.org/10.1016/j.aap.2011.09.042>
- Einarsen, S. V., Skogstad, A., & Aasland, M. S. (2023). Destructive leadership. In *Encyclopedia of business and professional ethics* (pp. 540-547). Springer.
- Fan, T., Khan, J., Khassawneh, O., & Mohammad, T. (2023). Examining Toxic Leadership Nexus With Employee Cyberloafing Behavior via Mediating Role of Emotional Exhaustion. *Journal of Organizational and End User Computing*, 35(1), 1-23. <https://doi.org/10.4018/joeuc.320817>
- Fattori, A., Comotti, A., Bordini, L., Dollard, M. F., & Bonzini, M. (2022). Psychosocial safety climate (PSC) at middle management level in the healthcare sector: A contribution to the Italian validation of psychosocial safety climate-4. *Front Psychol*, 13, 1046286. <https://doi.org/10.3389/fpsyg.2022.1046286>
- Güntner, A. V., Klasmeier, K. N., Klonek, F. E., & Kauffeld, S. (2021). The Power of Followers That do not Follow: Investigating the Effects of Follower Resistance, Leader Implicit Followership Theories and Leader Negative Affect on the Emergence of Destructive Leader Behavior. *Journal of Leadership & Organizational Studies*, 28(3), 349-365. <https://doi.org/10.1177/15480518211012408>
- Hadlington, L., & Parsons, K. (2017). Can cyberloafing and internet addiction affect organizational information security? *Cyberpsychology, Behavior, and Social Networking*, 20(9), 567-571.
- Hadzibajramovic, E., Schaufeli, W., & De Witte, H. (2022). Shortening of the Burnout Assessment Tool (BAT)-from 23 to 12 items using content and Rasch analysis. *BMC Public Health*, 22(1), 560. <https://doi.org/10.1186/s12889-022-12946-y>
- Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial Safety Climate: Development of the PSC-12. *International Journal of Stress Management*, 17(4), 353-383. <https://doi.org/10.1037/a0021320>
- Hancock, R. (2016). Misuse of Company Time: How the Internet and Social Media are Creating a New Time Theft.
- Harvey, P., Harris, K. J., Gillis, W. E., & Martinko, M. J. (2014). Abusive Supervision and the Entitled Employee. *The Leadership Quarterly*, 25(2), 204-217. <https://doi.org/10.1016/j.leaqua.2013.08.001>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis : a regression-based approach* (1 ed.). Guilford Press.
- Heming, M., Hander, N., Gundel, H., Feisst, M., Hansmann, M., Kroger, C., Mulfinger, N., Weber, J., Herold, R., Schroder, U., Wegewitz, U., & Angerer, P. (2025). The impact of psychosocial safety climate on the intervention effect of psychotherapeutic consultation at work in Germany - secondary analysis of a randomized controlled trial. *BMC Public Health*, 25(1), 3564. <https://doi.org/10.1186/s12889-025-24394-5>
- Higgs, M., Bulkan, S., & Ererdi, C. (2025). The bad, the very bad and the ugly: towards an integrated model of dark leadership. *Journal of Managerial Psychology*, 1-19. <https://doi.org/10.1108/jmp-04-2024-0282>
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1014>
- Holland, S. J., Shore, D. B., & Cortina, J. M. (2017). Review and recommendations for integrating mediation and moderation. *Organizational Research Methods*, 20(4), 686-720.
- Hughes, B. C. (2022). Examining Toxic Leadership: An Integrated Framework for Organizational Recovery. *Journal of behavioral and applied management*, 22(3), 309-344. <https://doi.org/10.21818/001c.55772>

- Huma, Z.-e., 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.
- Itzkovich, Y., Heilbrunn, S., & Aleksic, A. (2020). Full range indeed? The forgotten dark side of leadership. *Journal of Management Development*, 39(7/8), 851-868. <https://doi.org/10.1108/jmd-09-2019-0401>
- Janicke-Bowles, S. H., Rieger, D., & Connor III, W. (2019). Finding meaning at work: The role of inspiring and funny YouTube videos on work-related well-being. *Journal of Happiness Studies*, 20(2), 619-640.
- Jiang, H., Siponen, M., Jiang, Z., & Tsohou, A. (2024). The impacts of internet monitoring on employees' cyberloafing and organizational citizenship behavior: A longitudinal field quasi-experiment. *Information Systems Research*, 35(3), 1175-1194.
- Klinefelter, Z., Sinclair, R. R., Britt, T. W., Sawhney, G., Black, K. J., & Munc, A. (2021). Psychosocial safety climate and stigma: Reporting stress-related concerns at work. *Stress Health*, 37(3), 488-503. <https://doi.org/10.1002/smi.3010>
- Koay, K. Y., Lim, V. K. G., Soh, P. C.-H., Ong, D. L. T., Ho, J. S. Y., & Lim, P. K. (2022). Abusive supervision and cyberloafing: A moderated moderation model of moral disengagement and negative reciprocity beliefs. *Information & Management*, 59(2). <https://doi.org/10.1016/j.im.2022.103600>
- Koay, K. Y., & Soh, P. C.-H. (2018). Should Cyberloafing Be Allowed in the Workplace? *Human Resource Management International Digest*, 26(7), 4-6. <https://doi.org/10.1108/hrmid-05-2018-0107>
- Krasikova, D. V., Green, S. G., & LeBreton, J. M. (2013). Destructive Leadership: A Theoretical Review, Integration, and Future Research Agenda. *Journal of Management*, 39(5), 1308-1338. <https://doi.org/10.1177/0149206312471388>
- LaMontagne, A. D., Martin, A., Page, K. M., Reavley, N. J., Noblet, A. J., Milner, A. J., Keegel, T., & Smith, P. M. (2014). Workplace mental health: developing an integrated intervention approach. *BMC Psychiatry*, 14, 131. <https://doi.org/10.1186/1471-244X-14-131>
- Li, Y. N., Law, K. S., Yu, B., Wang, L., & Li, D. (2024). Different impacts of hedonic and utilitarian personal internet usage behaviour on well-being and work engagement: A daily examination. *Journal of Occupational and Organizational Psychology*, 97(3), 1011-1036.
- Lim, P. K., Koay, K. Y., & Chong, W. Y. (2020). The Effects of Abusive Supervision, Emotional Exhaustion and Organizational Commitment on Cyberloafing: A Moderated-Mediation Examination. *Internet Research*, 31(2), 497-518. <https://doi.org/10.1108/intr-03-2020-0165>
- 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. *Information & Management*, 42(8), 1081-1093. <https://doi.org/10.1016/j.im.2004.12.002>
- Lim, V. K. G., & Teo, T. S. H. (2022). Cyberloafing: A review and research agenda. *Applied Psychology*, 73(1), 441-484. <https://doi.org/10.1111/apps.12452>
- Lipman-Blumen, J. (2006). *The allure of toxic leaders: Why we follow destructive bosses and corrupt politicians--and how we can survive them*. Oxford University Press.
- Liu, M., Sun, Y., Liu, T., & Qi, L. (2024). Being a Focused Employee: Effects of Job Reattachment on Cyberloafing. *Stress and Health*, 40(5). <https://doi.org/10.1002/smi.3449>
- Lu, X., Wang, Y., Chen, X., & Lu, Q. (2024). From Stress to Screen: Understanding Cyberloafing Through Cognitive and Affective Pathways. *Behavioral Sciences*, 14(3), 249. <https://doi.org/10.3390/bs14030249>
- Lyu, Y., Zhou, X., Li, W., Jun-bao, W., Zhang, J., & Qiu, C. (2016). The Impact of Abusive Supervision on Service Employees' Proactive Customer Service Performance in the Hotel Industry. *International Journal of Contemporary Hospitality Management*, 28(9), 1992-2012. <https://doi.org/10.1108/ijchm-03-2015-0128>
- Ma, L., Zhang, X., & Yu, P. (2023). Enterprise Social Media Usage And social Cyberloafing: An empirical Investigation Using the JD-R Model. *Internet Research*, 34(3), 939-959. <https://doi.org/10.1108/intr-04-2021-0239>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). *Maslach burnout inventory*. Scarecrow Education.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(2001), 397-422.

- Mercado, B. K., Giordano, C., & Dilchert, S. (2017). A meta-analytic investigation of cyberloafing. *Career Development International*, 22(5), 546-564.
- Mills, J. E., Hu, B., Beldona, S., & Clay, J. (2001). Cyberslacking! A liability issue for wired workplaces. *Cornell Hotel and Restaurant Administration Quarterly*, 42(5), 34-47.
- Mitchell, M. S., Cropanzano, R. S., & Quisenberry, D. M. (2012). Social Exchange Theory, Exchange Resources, and Interpersonal Relationships: A Modest Resolution of Theoretical Difficulties. In K. Törnblom & A. Kazemi (Eds.), *Handbook of Social Resource Theory: Theoretical Extensions, Empirical Insights, and Social Applications* (pp. 99-118). Springer New York. https://doi.org/10.1007/978-1-4614-4175-5_6
- Murphy, K. R., & Russell, C. J. (2016). Mend It or End It. *Organizational Research Methods*, 20(4), 549-573. <https://doi.org/10.1177/1094428115625322>
- Nadon, L., Beer, L. T. D., & Morin, A. J. S. (2022). Should Burnout Be Conceptualized as a Mental Disorder? *Behavioral Sciences*, 12(3), 82. <https://doi.org/10.3390/bs12030082>
- Ng, C. K. J., Kwan, L. Y. J., & Chan, W. (2023). A Note on Evaluating the Moderated Mediation Effect. *Structural Equation Modeling: A Multidisciplinary Journal*, 31(2), 340-356. <https://doi.org/10.1080/10705511.2023.2201396>
- Nunes, A., & Palma-Moreira, A. (2024). Toxic Leadership and Turnover Intentions: The Role of Burnout Syndrome. *Administrative Sciences*, 14(12). <https://doi.org/10.3390/admsci14120340>
- Nwosu, A. D. G., Ossai, E., Onwuasoigwe, O., Ezeigweneme, M., & Okpamen, J. (2021). Burnout and presenteeism among healthcare workers in Nigeria: Implications for patient care, occupational health and workforce productivity. *J Public Health Res*, 10(1), 1900. <https://doi.org/10.4081/jphr.2021.1900>
- O'Neill, T. A., Hambley, L. A., & Chatellier, G. S. (2014). Cyberslacking, engagement, and personality in distributed work environments. *Computers in Human Behavior*, 40, 152-160.
- Oosthuizen, A., Rabie, G. H., & De Beer, L. T. (2018). Investigating cyberloafing, organisational justice, work engagement and organisational trust of South African retail and manufacturing employees. *SA Journal of Human Resource Management*, 16. <https://doi.org/10.4102/sajhrm.v16i0.1001>
- Palvimo, T., Vauhkonen, A., & Hult, M. (2023). The Associations among Destructive Leadership, Job Demands and Resources, and Burnout among Nurses: A Cross-Sectional Survey Study. *J Nurs Manag*, 2023, 4289450. <https://doi.org/10.1155/2023/4289450>
- Parkin, A. K., Zadow, A. J., Potter, R. E., Afsharian, A., Dollard, M. F., Pignata, S., Bakker, A. B., & Lushington, K. (2023). The role of psychosocial safety climate on flexible work from home digital job demands and work-life conflict. *Ind Health*, 61(5), 307-319. <https://doi.org/10.2486/indhealth.2022-0078>
- Peng, J., Nie, Q., & Chen, X. (2023). Managing Hospitality Employee Cyberloafing: The Role of Empowering Leadership. *International Journal of Hospitality Management*, 108, 103349. <https://doi.org/10.1016/j.ijhm.2022.103349>
- Pizzolitto, E., Verna, I., & Venditti, M. (2023). Authoritarian leadership styles and performance: a systematic literature review and research agenda. *Management Review Quarterly*, 73(2), 841-871. <https://doi.org/10.1007/s11301-022-00263-y>
- Pletzer, J. L., Breevaart, K., & Bakker, A. B. (2023). Constructive and destructive leadership in job demands-resources theory: A meta-analytic test of the motivational and health-impairment pathways. *Organizational Psychology Review*, 14(1), 131-165. <https://doi.org/10.1177/20413866231197519>
- Podsakoff, P. M., Podsakoff, N. P., Williams, L. J., Huang, C., & Yang, J. (2024). Common Method Bias: It's Bad, It's Complex, It's Widespread, and It's Not Easy to Fix. *Annual Review of Organizational Psychology and Organizational Behavior*, 11(1), 17-61. <https://doi.org/10.1146/annurev-orgpsych-110721-040030>
- Restubog, S. L. D., Garcia, P. R. J. M., Toledano, L. S., Amarnani, R. K., Tolentino, L. R., & Tang, R. L. (2011). Yielding to (cyber-)temptation: Exploring the buffering role of self-control in the relationship between organizational justice and cyberloafing behavior in the workplace. *Journal of Research in Personality*, 45(2), 247-251. <https://doi.org/https://doi.org/10.1016/j.jrp.2011.01.006>
- Ross, J. (2018). 'Cyberloafing' in health care: A real risk to patient safety. *Journal of PeriAnesthesia Nursing*, 33(4), 560-562.
- Sarioğlu Kemer, A., & Dedeşin Özcan, S. (2021). The dark side of technology: cyberloafing, a Turkish study of nursing behaviour. *International Nursing Review*, 68(4), 453-460.

- Schafer, J. L. (1999). Multiple imputation: a primer. *Stat Methods Med Res*, 8(1), 3-15. <https://doi.org/10.1177/096228029900800102>
- Schaufeli, W., & De Witte, H. (2023). Burnout Assessment Tool (BAT). In *International Handbook of Behavioral Health Assessment* (pp. 1-24). https://doi.org/10.1007/978-3-030-89738-3_54-1
- Schaufeli, W. B., Desart, S., & De Witte, H. (2020). Burnout Assessment Tool (BAT)-Development, Validity, and Reliability. *Int J Environ Res Public Health*, 17(24). <https://doi.org/10.3390/ijerph17249495>
- Schaufeli, W. B., Desart, S., & Witte, H. D. (2020). Burnout Assessment Tool (BAT)—Development, Validity, and Reliability. *International Journal of Environmental Research and Public Health*, 17(24), 9495. <https://doi.org/10.3390/ijerph17249495>
- Schaufeli, W. B., & Taris, T. W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health. In *Bridging Occupational, Organizational and Public Health* (pp. 43-68). https://doi.org/10.1007/978-94-007-5640-3_4
- Schmidt, A. A. (2008a). *Development and validation of the Toxic Leadership Scale* (Publication Number 1453699) [M.S., University of Maryland, College Park]. ProQuest Central. United States -- Maryland. <http://nottingham.idm.oclc.org/login?url=https://www.proquest.com/dissertations-theses/development-validation-toxic-leadership-scale/docview/193655997/se-2?accountid=8018>
- https://nusearch.nottingham.ac.uk/openurl/44NOTUK/44NOTUK?genre=dissertations&atitle=&author=Schmidt%2C+Andrew+Alexander&volume=&issue=&spage=&date=2008-01-01&rft.btitle=&rft.jtitle=&issn=&isbn=978-0-549-57351-7&sid=Accounting+%26+Tax+Database_
- Schmidt, A. A. (2014). *An examination of toxic leadership, job outcomes, and the impact of military deployment* (Publication Number 3627674) [Ph.D., University of Maryland, College Park]. ProQuest Central. United States -- Maryland. <http://nottingham.idm.oclc.org/login?url=https://www.proquest.com/dissertations-theses/examination-toxic-leadership-job-outcomes-impact/docview/1558874321/se-2?accountid=8018>
- https://nusearch.nottingham.ac.uk/openurl/44NOTUK/44NOTUK?genre=dissertations&atitle=&author=Schmidt%2C+Andrew+A.&volume=&issue=&spage=&date=2014-01-01&rft.btitle=&rft.jtitle=&issn=&isbn=978-1-321-03091-4&sid=Psychology+Collection_
- Schonfeld, I. S., & Bianchi, R. (2016). Burnout and Depression: Two Entities or One? *J Clin Psychol*, 72(1), 22-37. <https://doi.org/10.1002/jclp.22229>
- Sheng, Z., Fiscus, J., He, Y., Xu, X., & Yao, X. (2024). Who uses abusive supervision to punish deviant employees? An integration of identity threat and self-regulation perspectives. *Applied Psychology*, 74(1). <https://doi.org/10.1111/apps.12584>
- Smith, A., & Hume, E. C. (2005). Linking Culture and Ethics: A Comparison of Accountants' Ethical Belief Systems in the Individualism/Collectivism and Power Distance Contexts. *Journal of Business Ethics*, 62(3), 209-220. <https://doi.org/10.1007/s10551-005-4773-1>
- Sommet, N., Weissman, D. L., Cheutin, N., & Elliot, A. J. (2023). How Many Participants Do I Need to Test an Interaction? Conducting an Appropriate Power Analysis and Achieving Sufficient Power to Detect an Interaction. *Advances in Methods and Practices in Psychological Science*, 6(3). <https://doi.org/10.1177/25152459231178728>
- Tan, Z., Yan, S., Xia, Q., & Zhang, Y. (2024). The relationship between servant leadership and cyberloafing: an investigation of meaningful work versus citizenship pressure. *European Journal of Work and Organizational Psychology*, 33(4), 535-550. <https://doi.org/10.1080/1359432X.2024.2331787>
- Tear, M. J., Reader, T. W., Shorrock, S., & Kirwan, B. (2020). Safety culture and power: Interactions between perceptions of safety culture, organisational hierarchy, and national culture. *Safety Science*, 121, 550-561. <https://doi.org/10.1016/j.ssci.2018.10.014>
- Thoroughgood, C. N., Sawyer, K. B., Padilla, A., & Lunsford, L. (2016). Destructive Leadership: A Critique of Leader-Centric Perspectives and Toward a More Holistic Definition. *Journal of Business Ethics*, 151(3), 627-649. <https://doi.org/10.1007/s10551-016-3257-9>
- Tsai, H. Y. (2023). Do You Feel Like Being Proactive Day? How Daily Cyberloafing Influences Creativity and Proactive Behavior: The Moderating Roles of Work Environment. *Computers in Human Behavior*, 138, 107470. <https://doi.org/10.1016/j.chb.2022.107470>

- Tummers, L. G., & Bakker, A. B. (2021). Leadership and Job Demands-Resources Theory: A Systematic Review. *Front Psychol*, 12, 722080. <https://doi.org/10.3389/fpsyg.2021.722080>
- VonBergen, C. (2012). Not seizing opportunities: the effects of laissez-faire leadership. *Administrative Issues Journal*, 2(3), 20.
- Whicker, M. L. (1996). Toxic leaders: When organizations go bad. (No Title).
- Wu, J., Mei, W., Ugrin, J. C., Liu, L., & Wang, F. (2020). Curvilinear Performance Effects of Social Cyberloafing Out of Class: The Mediating Role as a Recovery Experience. *Information Technology and People*, 34(2), 581-598. <https://doi.org/10.1108/itp-03-2019-0105>
- Yeatts, S. D., & Martin, R. H. (2015). What is missing from my missing data plan? *Stroke*, 46(6), e130-132. <https://doi.org/10.1161/STROKEAHA.115.007984>
- Yulita, Dollard, M. F., & Idris, M. A. (2017). Climate congruence: How espoused psychosocial safety climate and enacted managerial support affect emotional exhaustion and work engagement. *Safety Science*, 96, 132-142. <https://doi.org/10.1016/j.ssci.2017.03.023>
- Zhang, Y., Wang, J., Akhtar, M. N., & Wang, Y. (2022). Authoritarian Leadership and Cyberloafing: A Moderated Mediation Model of Emotional Exhaustion and Power Distance Orientation. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1010845>
- Zhang, Y., Wang, J., Akhtar, M. N., & Wang, Y. (2022). Authoritarian leadership and cyberloafing: A moderated mediation model of emotional exhaustion and power distance orientation. *Front Psychol*, 13, 1010845. <https://doi.org/10.3389/fpsyg.2022.1010845>
- Zhang, Y., Wang, J., Zhang, J., Wang, Y., & Akhtar, M. N. (2024). You have got a nerve: examining the nexus between coworkers' cyberloafing and workplace incivility. *Internet Research*.
- Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), 197-206. <https://doi.org/10.1086/651257>
- Zhou, Y., Chen, P., Liu, Q., & Wang, T. (2023). More Haste, Less Speed: Leader Bottom-Line Mentality and Employee Counter-Productive Social Cyberloafing. *Journal of Managerial Psychology*, 38(8), 643-656. <https://doi.org/10.1108/jmp-02-2023-0078>
- Zhu, J., Wei, H., Li, H., & Osburn, H. (2021). The paradoxical effect of responsible leadership on employee cyberloafing: A moderated mediation model. *Human Resource Development Quarterly*, 32(4), 597-624.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.