From Digital Strain to Flourishing: How Work-Family Conflict Mediates the Impact of Technostress on Employee Well-Being

Hanani Hussin*, Azlin Azman, Hasyimah Razali

Faculty of Business and Management, Universiti Teknologi MARA Cawangan Kedah Kampus Sungai Petani, Malaysia

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ABSTRACT

The rapid digitization of modern workplaces has introduced unprecedented levels of technostress, leading to a critical deterioration in employee psychological health. While the direct impacts of digital strain are widely recognized, the precise domain-spanning mechanisms through which technology destabilizes overall well-being remain underexplored. To address this gap, this study aims to propose an integrative conceptual framework examining how work-family conflict (WFC) mediates the relationship between technostress and employee well-being. Employing a narrative review methodology, a systematic data collection process was executed utilizing the Scopus database. An integrative thematic analysis was then applied to synthesize recent peer-reviewed literature situated at the intersection of digital occupational strain, boundary management, and psychological health. The synthesis reveals that technostress creators specifically techno-overload and techno-invasion act as severe job demands that aggressively erode the boundaries between professional and domestic life, thereby significantly elevating WFC. Consequently, WFC serves as a critical mediating bridge, translating workplace digital strain into broader psychological distress, emotional exhaustion, and diminished life satisfaction. The findings emphasize that technostress severely depletes the cognitive resources necessary for non-work roles, indirectly harming overall well-being. Theoretically, this framework advances occupational health literature by mapping the technostress-to-well-being trajectory through the Conservation of Resources theory. Practically, the study equips organizational leaders and human resource practitioners with actionable insights to move beyond superficial wellness programs. By implementing robust boundary-management strategies, formal right-to-disconnect policies, and perceived organizational support systems, enterprises can actively mitigate inter-role conflict, interrupt the cycle of digital strain, and foster sustainable employee flourishing.

Keywords: Boundary-Management, Digital Strain, Employee Well-Being, Technostress, Work-Family Conflict

INTRODUCTION

The rapid digitization of contemporary workplaces and the widespread adoption of remote and hybrid work models have fundamentally transformed how organizational tasks are conducted. While information and communication technologies (ICTs) offer unprecedented operational flexibility and connectivity, they simultaneously expose employees to new forms of occupational strain, commonly conceptualized as technostress. This digital strain manifested primarily through techno-overload, techno-invasion, and constant connectivity demands continuous adaptiveness and creates an environment where work obligations imperceptibly infiltrate personal life. As organizational reliance on digital infrastructure deepens, understanding how digital strain shifts an employee's psychological trajectory from languishing to flourishing has emerged as a crucial area of inquiry within organizational behavior and occupational health studies.

Extensive literature demonstrates that the dark side of technology adoption exerts severe negative pressure on employee outcomes. Empirical investigations indicate that techno-stressors elevate psychological distress, reduce life satisfaction, and trigger emotional exhaustion and job burnout (Deng et al., 2026; Shaukat et al., 2022; Sommovigo et al., 2023). Crucially, recent scholarship underscores that technostress does not operate

in isolation; rather, it directly impairs the work-family interface. Technostress creators particularly techno-invasion and continuous digital connectivity blur the boundaries between work and non-work domains, making role separation exceptionally difficult (Deng et al., 2026; Rîglea et al., 2021). Consequently, employees experiencing techno-strain report elevated rates of work-family conflict (WFC), as heavy digital demands systematically undermine their ability to fulfill personal and domestic responsibilities (Ward & Harunavamwe, 2025).

Despite growing awareness of these isolated associations, a critical problem persists in modern workplace management: the precise mechanisms through which technostress translates into systemic declines in individual well-being remain insufficiently integrated. While the direct link between technostress and diminished employee health is well-documented, focusing solely on direct effects obscures the complex, domain-spanning pathways through which technology destabilizes human psychological health. When workers face relentless techno-overload, the immediate fallout frequently manifests outside the workplace, disrupting family dynamics and personal recovery time. Failing to address how digital demands spill over into non-work spheres leaves organizations ill-equipped to design targeted interventions that protect worker health without sacrificing digital performance.

To resolve this critical research gap, this study proposes an integrative conceptual framework that positions work-family conflict as a primary mediating mechanism between technostress creators and employee well-being. Although preliminary studies note correlations among technology, work-life interface, and health (Shah & Pandey, 2026; Sommovigo et al., 2023), there remains a need for an overarching conceptual model detailing how distinct dimensions of technostress (such as techno-overload and techno-invasion) systematically drive WFC, which subsequently depletes psychological well-being, life satisfaction, and mental vitality. The primary aim of this paper is to construct and articulate this mediating framework, offering a theoretical blueprint that demonstrates how mitigating WFC can interrupt the transmission of digital strain and foster employee flourishing in modern work settings.

This paper makes significant theoretical and practical contributions to the field of organizational psychology and human resource management. Theoretically, it advances current literature by framing the technostress–well-being relationship through the lens of Conservation of Resources (COR) theory and Job Demands-Resources (JD-R) theory, explaining how digital demands drain cognitive and emotional resources required for non-work roles (Deng et al., 2026). Practically, the framework offers actionable insights for organizational leaders and HR practitioners designing digital wellness policies, boundary-management strategies, and organizational support systems (Shah & Pandey, 2026; Ward & Harunavamwe, 2025). The remainder of this paper is structured as follows: Section 2 establishes the theoretical foundation and reviews the relevant literature on technostress, work-family conflict, and well-being; Section 3 details the proposed conceptual framework and formal hypothesis development; Section 4 outlines practical and managerial implications; and Section 5 presents key conclusions, study limitations, and directions for future empirical research.

LITERATURE REVIEW

Theoretical Underpinning

Technostress

Technostress, conceptualized as the occupational strain experienced due to the pervasive use of technology at work, has emerged as a critical concern in modern technology-driven and hybrid work environments (Joy & Arun Kumar, 2025). This phenomenon is primarily driven by technostress creators such as techno-overload, which refers to the excessive volume of work induced by technology, and techno-invasion, where work demands continuously encroach upon an individual's personal life (Deng et al., 2026; Oh & Park, 2016; Rîglea et al., 2021). The necessity for constant connectivity blurs the traditional boundaries between work and home, making it increasingly difficult for employees to mentally and physically disconnect from their professional roles (Oh & Park, 2016; Rîglea et al., 2021; Ward & Harunavamwe, 2025). This blurring of boundaries and the resulting digital strain have been particularly intensified by the shift to remote and hybrid work settings following the COVID-19 pandemic, creating an environment where employees are continuously exposed to

digital demands without adequate separation (Joy & Arun Kumar, 2025; Rîglea et al., 2021).

Beyond mere exposure to digital tools, the specific mechanisms of technostress fundamentally alter an employee's daily cognitive and temporal resources. Techno-overload forces individuals to process vast amounts of information and execute tasks at an accelerated pace, while techno-invasion strips away the spatial and temporal boundaries that traditionally protected personal time (Deng et al., 2026; Sommovigo et al., 2023). Because constant connectivity demands immediate responsiveness regardless of working hours, employees are denied the necessary psychological detachment required for recovery (Oh & Park, 2016). Consequently, technostress is no longer viewed as an episodic challenge but rather a chronic occupational hazard that systematically drains energy and actively erodes the vital division between professional obligations and personal sanctuary (Rîglea et al., 2021; Sommovigo et al., 2023).

Work-Family Conflict

Work-family conflict (WFC) represents the inter-role tension that arises when the demands of an employee's professional life interfere with their family responsibilities, serving as a critical mechanism in the digital work context (Deng et al., 2026; Rîglea et al., 2021). As technostress creators force work into the personal domain, the inability to compartmentalize these spheres directly escalates WFC (Oh & Park, 2016; Rîglea et al., 2021; Sommovigo et al., 2023). This boundary-blurring not only heightens WFC but also creates stress within the broader family system, potentially affecting both the employee and their spouse (Huffman et al., 2017). Furthermore, elevated levels of WFC driven by digital strain have been shown to diminish work engagement and increase turnover intentions among workers, highlighting its systemic negative impact on organizational dynamics (Harunavamwe & Kanengoni, 2023; Siddiqi, 2024). Organizations can, however, buffer these negative effects through perceived organizational support, which plays a vital role in mitigating the transition of technostress into disruptive work-family conflict (Harunavamwe & Kanengoni, 2023; Ward & Harunavamwe, 2025).

As a mediating variable, WFC acts as the primary transmission pathway that translates workplace digital strain into broader life dissatisfaction. When employees cannot establish a firewall between their digital work demands and their personal lives, the resulting depletion of time and emotional energy severely restricts their capacity to fulfill domestic and familial obligations (Deng et al., 2026; Rîglea et al., 2021). This negative spillover confirms that the consequences of technostress extend far beyond immediate declines in task performance; it fundamentally destabilizes the structural integrity of an employee’s home environment (Huffman et al., 2017; Ward & Harunavamwe, 2025). Recognizing WFC as this critical bridge underscores why managing digital workloads is not merely an operational necessity but a fundamental requirement for preserving an employee's functioning outside the workplace.

Employee Well-Being

Employee well-being is significantly compromised when technostress is channeled through heightened work-family conflict, leading to reduced psychological health, increased emotional exhaustion, and lower overall job satisfaction (Oh & Park, 2016; Rîglea et al., 2021; Sommovigo et al., 2023). Empirical evidence demonstrates that this indirect mediating pathway where technostress elevates WFC, which in turn diminishes well-being is a primary mechanism disrupting work-life balance and preventing adequate psychological recovery (Deng et al., 2026; Kamboj & E., 2025; Sommovigo et al., 2023). When individuals struggle to balance overlapping work and family demands due to continuous digital connectivity, their overall sense of life satisfaction and mental vitality substantially declines (Kamboj & E., 2025; Kusuma Dwi Wikka et al., 2024; Malik et al., 2026). Consequently, addressing WFC through clear boundary management and family-friendly organizational policies is essential to mitigate the negative psychological impacts of digital strain and promote a flourishing workforce (Kamboj & E., 2025; Rîglea et al., 2021).

Because the deterioration of well-being is heavily mediated by conflict in the home sphere, superficial interventions that only target workplace digital habits often fail to produce meaningful psychological improvements. The profound exhaustion, elevated burnout, and reduced life satisfaction reported by employees are symptoms of a systemic failure to protect personal recovery time (Kusuma Dwi Wikka et al.,

2024; Malik et al., 2026). Therefore, fostering sustainable well-being requires organizations to implement structural solutions such as reinforcing the "right to disconnect" and offering robust supervisory support that explicitly target the reduction of WFC (Siddiqi, 2024; Ward & Harunavamwe, 2025). By successfully mitigating the interference of work into family life, organizations can sever the adverse pathway linking technology to distress, ultimately transforming a digitally strained workforce into one capable of genuine psychological flourishing.

METHODOLOGY

Research Design: Narrative Review Methodology

This study adopts a narrative review methodology to construct and justify the proposed conceptual framework. Unlike systematic reviews or meta-analyses, which are primarily designed to answer highly specific empirical questions through rigid, quantitative data extraction, a narrative review is optimally suited for conceptual and theoretical papers aiming to synthesize fragmented bodies of literature. By providing a broad perspective on the current state of knowledge, this approach allows researchers to critically analyze, interpret, and integrate diverse theoretical perspectives regarding occupational strain and work-life boundaries.

In the context of this study, the narrative review method offers the necessary interpretive flexibility to explore the complex, multi-dimensional nature of digital strain. It enables the seamless weaving of isolated findings on technostress, work-family conflict (WFC), and psychological health into a cohesive theoretical narrative, thereby establishing a robust foundation for identifying critical research gaps and proposing WFC as a primary mediating mechanism.

Key Steps in Conducting a Narrative Review: Data Collection via Scopus

To ensure academic rigor and capture a comprehensive cross-section of high-quality literature, the data collection for this narrative review was systematically executed using the Scopus database. Scopus was selected as the sole database due to its status as the largest abstract and citation database of peer-reviewed literature, offering unparalleled coverage of top-tier journals across organizational psychology, management, and information systems. The execution of the review followed several structured steps (refer Figure 1):

- Keyword Identification and Search Strategy: The initial phase involved developing a targeted search string utilizing primary keywords relevant to the study's core variables. Keywords such as "technostress," "techno-overload," "techno-invasion," "constant connectivity," "work-family conflict," "work-life interference," and "employee well-being" were combined using Boolean operators (AND, OR) to identify literature existing at the intersection of these domains.

- Application of Inclusion and Exclusion Criteria: To maintain the quality and relevance of the synthesized literature, strict boundary conditions were applied to the Scopus search results. The inclusion criteria were restricted to peer-reviewed academic journal articles published in English. To ensure the framework reflects contemporary technological realities particularly the surge in remote and hybrid work environments priority was given to articles published within the last decade. Non-peer-reviewed sources, conference proceedings, and non-English texts were excluded.

- Screening and Selection Process: The retrieved literature underwent a rigorous two-stage screening process. Initially, the titles and abstracts of the generated articles were reviewed to assess their direct relevance to the relationship between technology use, home-life interference, and psychological outcomes. Articles that passed this initial screening were subsequently downloaded for full-text evaluation.

- Thematic Extraction and Synthesis: In the final step, the selected full-text articles were meticulously reviewed to extract key theoretical arguments, empirical findings, and methodological approaches. This extracted data was then categorized thematically to trace the pathways between technostress creators,

WFC, and well-being outcomes, ultimately serving as the evidentiary building blocks for the study's proposed conceptual model.

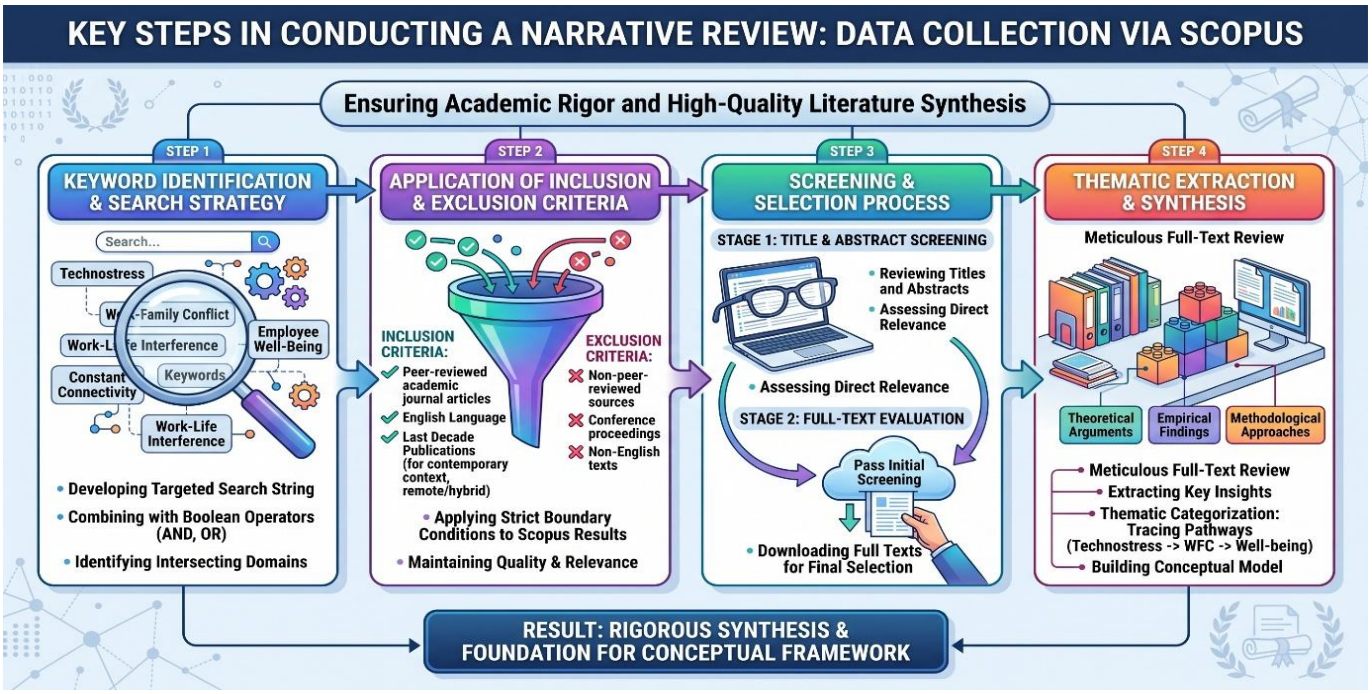

Figure 1: Key Steps in Conducting a Narrative Review

Source: Scopus AI and Gemini AI

Data Collection and Review Strategy

The data collection and review strategy for this study leverages a highly structured Boolean search protocol combined with an integrative thematic analysis to ensure a rigorous synthesis of the literature. This dual-pronged approach allows for the systematic identification of relevant empirical and theoretical work, followed by a nuanced extraction of underlying conceptual patterns.

Structured Data Collection via Targeted Search String

To isolate literature existing precisely at the intersection of digital strain, boundary management, psychological outcomes, and modern work configurations, a comprehensive search string was deployed within the Scopus database. The search strategy utilized Boolean operators (AND, OR) to combine four distinct conceptual pillars, ensuring that all retrieved articles simultaneously addressed the study's core variables.

The finalized search string applied to the title, abstract, and keyword fields was:

("work-family conflict" OR "work-life balance" OR "work-life conflict" OR "family-work conflict") AND ("technostress" OR "technology stress" OR "digital stress" OR "tech anxiety") AND ("job satisfaction" OR "employee well-being" OR "work engagement" OR "burnout") AND ("flexible work" OR "remote work" OR "telecommuting" OR "work arrangements")

- Pillar 1 (Boundary Dynamics): Captures the bidirectional interference or equilibrium between professional and personal domains.
- Pillar 2 (Digital Strain): Identifies specific technological stressors and anxieties.
- Pillar 3 (Psychological/Occupational Outcomes): Targets both positive (flourishing, engagement) and negative (burnout, distress) indicators of employee well-being.

- Pillar 4 (Work Context): Contextualizes the phenomenon within contemporary, digitally enabled, or flexible working environments.

Review Strategy: Integrative Thematic Analysis

Following the extraction of relevant literature using the search string, an integrative thematic analysis approach was employed to process the selected articles. Unlike purely descriptive reviews, an integrative thematic analysis moves beyond summarizing isolated findings; it actively compares, contrasts, and synthesizes fragmented data to generate a cohesive theoretical narrative.

This analytical process involves several continuous phases to build the conceptual framework:

- Open Coding and Deconstruction: Selected full-text articles were systematically reviewed to extract primary data points. This involved coding specific empirical findings, theoretical arguments, definitions of technostress creators, and recognized pathways of work-family conflict.

- Identifying Key Themes and Concepts: The initial codes were collated to identify recurring patterns and distinct conceptual themes across the literature. For instance, findings regarding the "spillover effect" of constant connectivity or the "buffering role" of organizational support were grouped into broader thematic categories.

- Synthesizing Theoretical Perspectives: The analysis mapped how different studies applied existing foundational theories (such as the Job Demands-Resources model, Boundary Theory, or Conservation of Resources theory) to the variables. This step reconciled overlapping or contradictory theoretical viewpoints.

- Framework Construction: In the final synthetic phase, the refined themes and integrated theoretical perspectives were mapped relationally. This allowed for the precise articulation of the proposed mediating pathways specifically, how contemporary digital demands trigger work-family conflict, which subsequently dictates the trajectory of employee well-being.

Key Findings from the Narrative Review

The synthesis of the literature identifies a clear and robust pathway detailing how digital occupational strain degrades psychological health, primarily through the disruption of personal and domestic boundaries.

Table 1: Key Findings on the Mediating Role of Work-Family Conflict

Key Finding Area	Description and Mechanisms	Associated Outcomes & Impacts	Supporting Primary Evidence
Technostress as a Driver of Conflict	Technostress creators specifically techno-overload, techno-invasion, and the demand for constant connectivity directly increase work-family conflict (WFC). Employees face blurred boundaries and struggle to separate professional duties from personal life, a phenomenon heavily intensified by the shift to remote and hybrid work	Heightened WFC and severe difficulty in balancing competing roles.	Deng et al. (2026); Rîglea et al. (2021); Shaukat et al. (2022); Sommovigo et al. (2023)

	models.		
Degradation of Well-Being via WFC	Elevated WFC directly disrupts work-life balance, which is a critical component of human flourishing. When employees struggle to balance these domains, their overall sense of well-being significantly diminishes.	Lower psychological well-being, reduced life satisfaction, and increased susceptibility to stress and job burnout.	Kamboj & E. (2025); Kusuma Dwi Wikka et al. (2024); Malik et al. (2026); Oh & Park (2016)
The Primary Mediating Pathway	WFC acts as the critical bridge translating digital strain into distress; technostress often does not reduce well-being directly, but rather channels its negative impact indirectly by increasing WFC.	Decreased psychological well-being as a direct consequence of techno-overload and techno-invasion elevating WFC.	Deng et al. (2026); Rîglea et al. (2021); Sommovigo et al. (2023)
Systemic and Organizational Impacts	The negative impacts of WFC extend beyond the individual, creating stress within the broader family unit and affecting spouses. Organizationally, high WFC reduces work engagement and increases turnover intentions.	Diminished workplace engagement, heightened turnover risk, and familial psychological distress.	Harunavamwe & Kanengoni (2023); Huffman et al. (2017); Siddiqi (2024)
The Buffering Role of Support	Perceived organizational support serves as a vital protective mechanism. It can buffer the negative effects of technostress on WFC, thereby shielding the employee's psychological health.	Preservation of employee well-being and mitigated conflict.	Harunavamwe & Kanengoni (2023); Shah & Pandey (2026); Ward & Harunavamwe (2025)

Source: Scopus AI and Gemini AI

SUMMARY OF KEY FINDINGS

The comprehensive narrative review demonstrates that work-family conflict is the central mediating mechanism through which technostress undermines employee well-being in modern digital work environments. Exposure to technostress creators, particularly techno-overload and techno-invasion, forces employees into a state of constant connectivity that systematically erodes the boundaries between work and home life. This boundary blurring, which has been significantly exacerbated by the widespread transition to remote and hybrid work settings, makes it exceptionally difficult for individuals to fulfill their family responsibilities, thereby triggering high levels of WFC.

Once established, this conflict serves as a bridge that translates technological strain into severe psychological deficits. Elevated WFC disrupts essential work-life balance, leading directly to reduced psychological well-being, lower job and life satisfaction, and increased rates of exhaustion and burnout. The literature further reveals that the consequences of this mediating pathway are systemic; failing to manage WFC not only generates psychological distress for the employee and their spouse, but also harms the organization by

diminishing work engagement and driving up turnover intentions.

Ultimately, to foster a flourishing workforce, interventions must target this specific pathway; providing strong organizational support and establishing clear boundaries can effectively buffer the impact of technostress on WFC, thereby protecting overall employee well-being.

DISCUSSION

Development of Theoretical Framework

The theoretical foundation of this study is anchored in the Conservation of Resources (COR) theory and the Job Demands-Resources (JD-R) model, which together provide a robust lens for understanding occupational strain in contemporary environments (Deng et al., 2026; Ward & Harunavamwe, 2025). COR theory posits that individuals inherently strive to obtain, retain, and protect their limited cognitive and emotional resources, while the JD-R model classifies workplace characteristics into resource-depleting job demands and health-promoting job resources.

Applied to the context of modern digital workspaces, technostress creators such as techno-overload, techno-invasion, and the expectation of constant connectivity function as severe job demands that continuously siphon employees' finite psychological resources (Oh & Park, 2016; Sommovigo et al., 2023). Because ubiquitous digital connectivity often denies workers the necessary time to detach and replenish these resources, the ensuing energetic depletion inevitably spills over into their non-work lives, fundamentally disrupting their capacity to manage domestic responsibilities and triggering pronounced work-family conflict (Rîglea et al., 2021).

Building upon these foundational theories, the conceptualization of the proposed framework positions work-family conflict (WFC) as the central mediating mechanism bridging technological strain and diminished employee well-being. Theoretical insights synthesized from recent literature corroborate this mediated pathway, demonstrating that technostress rarely harms psychological health in a vacuum; rather, it aggressively forces work obligations into the family domain, creating an unsustainable inter-role tension (Deng et al., 2026; Shaukat et al., 2022).

By integrating these historically fragmented findings, the framework maps a sequential degradation process: digital stressors initiate a rapid resource drain (the demand), which manifests behaviorally and emotionally as WFC (the mediator), subsequently culminating in critical resource exhaustion, reduced life satisfaction, and psychological burnout (Kamboj & E., 2025; Malik et al., 2026). This integrated conceptual model thereby addresses a major research gap, explicitly mapping the exact trajectory of how boundary-spanning digital demands erode the structural integrity of an employee's work-life equilibrium and prevent psychological flourishing (Kusuma Dwi Wikka et al., 2024; Rîglea et al., 2021).

The practical implications derived from this theoretical framework emphasize that organizational interventions must move beyond superficial digital wellness initiatives to systematically address boundary management and inter-role conflict. If WFC serves as the primary conduit through which technostress degrades overall well-being, then organizational leaders must intentionally supply job resources such as high perceived organizational support, formalized "right to disconnect" policies, and supportive supervisory behaviors to actively buffer this resource loss (Harunavamwe & Kanengoni, 2023; Shah & Pandey, 2026; Ward & Harunavamwe, 2025).

In conclusion, this theoretical framework provides a comprehensive blueprint that clarifies the complex, multi-domain interplay between modern technology use and psychological health. By firmly establishing work-family conflict as the pivotal mediating variable, the model not only advances occupational health literature but also equips human resource practitioners with targeted, actionable strategies to interrupt the cycle of digital strain and foster sustainable employee well-being in an increasingly interconnected era (Joy & Arun Kumar, 2025; Siddiqi, 2024).

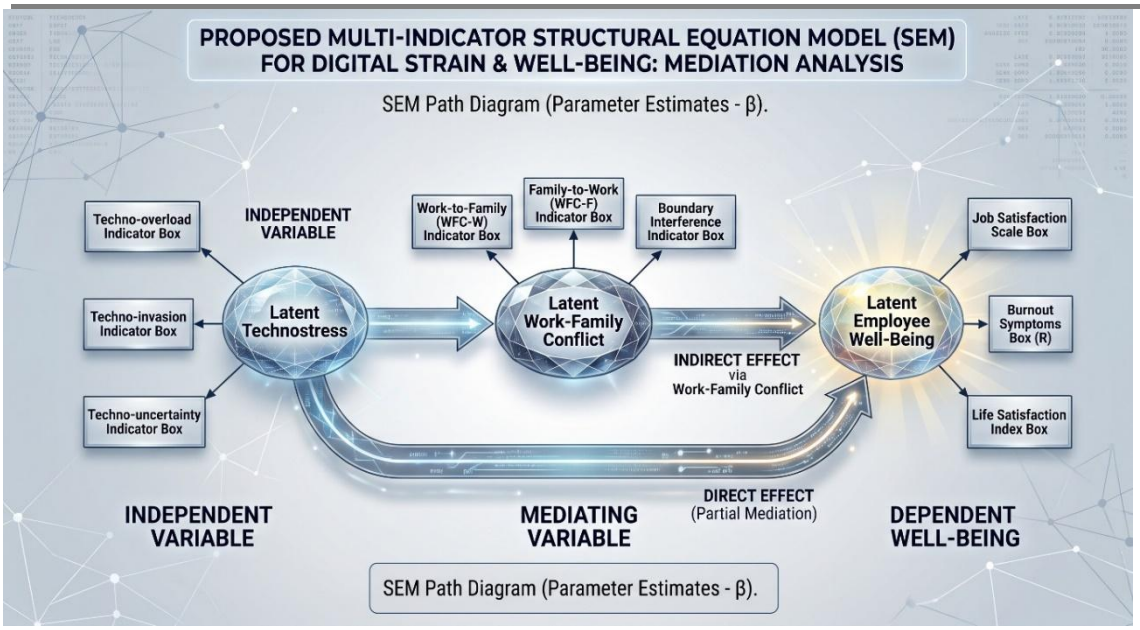

Figure 2: Proposed theoretical framework

Source: Scopus AI and Gemini AI

Proposition Development

Technostress positively influences Employee Well-being

Conceptualizing the complex interplay within the digitally enabled modern workplace, emerging theoretical and empirical perspectives propose that technostress, when managed effectively, can paradoxically positively influence employee well-being. Contrary to the traditional view of digital demands as purely resource-depleting, technostress creators such as techno-overload or techno-invasion can sometimes function as eustress (positive stress) catalysts, triggering deeper psychological flourishing through distinct mechanisms of learning and autonomy. Deng et al. (2026) observed that the cognitive challenge associated with mastering sophisticated new technologies in a digitally intense professional landscape can cultivate a profound sense of competence, mastery, and professional growth, contributing directly to an employee's eudaimonic well-being. Furthermore, the pervasive information and communication technologies (ICTs) that introduce strain also facilitate unprecedented levels of work flexibility and remote working capabilities. As noted by Malik et al. (2026), this technology-enabled digital flexibility affords employees substantial autonomy in boundary management, which can directly bolster subjective well-being and overall life satisfaction for those segments of the workforce prioritizing control over their work-life interface. Managed digital strain can thereby function not solely as distress, but as an engaging challenge and enabling force catalyst for positive flourishing in technology-dependent modern professional roles.

Building upon these emerging insights, it is further suggested that within digitally mature organizations, managed levels of technostress can foster sustainable engagement and perceived impact. Modern professionals, particularly digital natives, may perceive constant connectivity and techno-demands less as purely invasive stressors and more as indicators of constant connectivity, continuous upskilling, and significant professional relevance within a digitally advanced corporate environment. A study by Harunavamwe and Kanengoni (2023) revealed that for employees with high perceived organizational support and digital competence, managed technology-related demands could be interpreted as challenging, yet rewarding, components of a high-performance, engaging modern role. Digital strain, in this framing, paradoxically acts as an enabler and catalyst for professional contribution in high-performance roles. Moreover, the very digital infrastructure that introduces demands simultaneously provides powerful, instantaneous social support structures and direct connection to essential resources, which K kamboj and E. (2025) observed could paradoxically buffer digital strain and improve subjective well-being despite simultaneous high technology usage and demands. Technology adoption can thereby paradoxical act as an

enabling force for flourish by enhancing connection, learning, and perceived impact.

Based on these emerging perspectives, it is proposed that managed levels of technostress, through mechanisms of mastering challenging technology and technology-enabled autonomy, can positively contribute to employee well-being in the modern workplace.

Technostress positively influences Work-family Conflict

In the contemporary digitally saturated professional landscape, higher levels of technostress are expected to be inextricably linked with increased work-family conflict. Drawing upon Conservation of Resources (COR) theory and the Job Demands-Resources (JD-R) model, specific technostress creators namely techno-overload and techno-invasion function as severe occupational demands that excessively drain essential cognitive and emotional resources. Deng et al. (2026) observe that when employees are forced to process excessive amounts of information or speed up their work due to complex technologies, they experience a significant depletion of psychological energy that belongs to the personal domain. Consequently, the energy exhausted while managing digital demands leaves workers with insufficient resources to fulfill familial roles and non-work responsibilities effectively, triggering bidirectional inter-role conflict.

This relationship is severely exacerbated by the pervasive "always-on" culture facilitated by constant digital connectivity. Modern information and communication technologies (ICTs) facilitate techno-invasion, allowing work obligations to permeate every domain of domestic life and blurring the traditional boundaries between professional and personal spheres. Sommovigo et al. (2023) highlight that smartphone and laptop dependency prevents necessary psychological detachment from occupational roles, ensuring work demands remain omnipresent. This relentless interference denies employees the time and mental separation required for adequate recovery, directly leading to severe difficulty in balancing competing domestic and organizational pressures.

Proposition 2: Higher levels of technostress positively influence (increase) work-family conflict among employees in the modern workplace.

Work-family Conflict positively influences Technostress

High Work-family Conflict (WFC) can act as a critical precursor that actively intensifies the experience of technostress among modern professionals. Drawing upon the Conservation of Resources (COR) theory, which posits that individuals operate with a finite pool of cognitive and emotional energy, existing conflict in the non-work domain functions as a continuous and aggressive resource drain (Rahman & Singh, 2024). When an employee struggles to fulfill familial obligations due to competing demands, their available psychological resources are severely depleted (Rahman & Singh, 2024). Consequently, when this resource-depleted employee attempts to navigate complex workplace software, manage rapid information flows, or adapt to technological changes, they possess insufficient adaptive capacity to cope (Harunavamwe & Ward, 2022). High conflict in the family domain thus reduces the crucial psychological reserves required to manage common technological pressures efficiently, making the interaction with technology far more taxing (Harunavamwe & Ward, 2022).

Furthermore, existing conflict between work and family roles can proactively trigger a resource loss spiral, leaving employees highly vulnerable to workplace demands (Rahman & Singh, 2024). When WFC is elevated, employees may find themselves distracted or exhausted, which necessitates a heavier reliance on information and communication technologies to catch up on unfulfilled professional tasks, thereby increasing their exposure to techno-overload and techno-invasion (Harunavamwe & Ward, 2022). Without adequate personal and organizational support, this generalized psychological strain lowers an employee’s tolerance for digital complexity, ensuring that standard technological requirements are perceived as overwhelmingly stressful (Harunavamwe & Ward, 2022). Because the employee lacks the psychological buffering required to manage these digital demands, their experience of technological strain is significantly magnified. Based on these theoretical mechanisms, the following is proposed:

Proposition: Work-family conflict positively influences technostress in the modern workplace.

Technostress Mediates the Relationship between Work-family Conflict and Employee Well-being

The tension arising when family responsibilities interfere with work demands known as work-family conflict (WFC) serves as a primary catalyst for occupational strain in technology-driven environments. Based on the Conservation of Resources (COR) theory, employees experiencing high WFC enter the workplace with already depleted cognitive and emotional reserves. When forced to navigate constant connectivity and heavy digital demands, these resource-depleted individuals find it significantly harder to cope, leading to heightened experiences of techno-overload and techno-invasion.

In this context, the pre-existing struggle to balance roles intensifies the negative perception of workplace technology, making employees feel increasingly overwhelmed by digital stressors as they find it harder to separate professional obligations from personal limitations (Deng et al., 2026; Sommovigo et al., 2023).

This amplified technostress subsequently acts as the critical bridge that translates the initial work-family tension into reduced psychological well-being. Once WFC triggers elevated digital strain, employees are subjected to a continuous cycle of technology-induced exhaustion where they are unable to mentally disconnect and recover from daily pressures. The presence of this resulting technostress is consistently linked to lower levels of psychological well-being, reduced life satisfaction, and increased burnout (Rîglea et al., 2021; Shaukat et al., 2022).

Therefore, digital strain functions as a key mediating mechanism; the initial conflict between competing roles exacerbates the stress experienced due to the use of technology at work, which in turn undermines an employee's overall mental health and capacity to flourish.

Proposition 4: Technostress mediates the relationship between work-family conflict and employee well-being in the modern workplace.

CONCLUSION

This study establishes a comprehensive conceptual framework illustrating how the pervasive demands of modern digital workspaces systematically degrade employee well-being through the disruption of personal boundaries. By positioning work-family conflict as the pivotal mediating mechanism, the framework clarifies that technological stressors such as constant connectivity, techno-overload, and techno-invasion do not operate in a vacuum; rather, they aggressively spill over into the domestic sphere, draining the finite cognitive and emotional resources necessary for a balanced personal life.

Theoretically, this model advances occupational health literature by integrating foundational stress theories to map the exact trajectory of digital strain across professional and personal domains, demonstrating how workplace technology acts as a profound inter-role disruptor. Practically, these insights equip organizational leaders and human resource practitioners with a clear mandate to move beyond superficial wellness programs.

To foster genuine employee flourishing, organizations must implement robust boundary-management strategies, structuralize the right to disconnect, and cultivate supportive cultures that actively protect workers' recovery time from technological encroachment.

While this conceptual model provides a crucial blueprint for understanding modern occupational stress, it is inherently limited by its theoretical nature and requires rigorous empirical validation. Future research should prioritize longitudinal study designs to capture the dynamic, evolving nature of digital strain over time and to definitively establish causal relationships between technology use, inter-role conflict, and psychological health outcomes.

Additionally, scholars should explore the boundary conditions of this framework by investigating how individual differences, such as technological fluency or inherent psychological resilience, along with structural

factors like varying degrees of hybrid work arrangements, might buffer or exacerbate these negative pathways. By empirically testing and expanding upon this framework across diverse industries and cultural contexts, researchers can further refine actionable interventions designed to successfully navigate digital demands and transform occupational strain into sustainable psychological well-being.

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