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Technostress and work—family balance: IT Mindfulness and Perceived Organisational Support

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Abstract

Purpose: Prior research confirms the detrimental effects of technostress on employees; however, the mechanisms through which IT mindfulness mediates, and perceived organizational support moderates, its impact on work-family balance remain insufficiently theorized and empirically examined. This study examines the relationship between technostress and work-family balance, testing IT mindfulness as a mediating mechanism and perceived organizational support as a boundary condition.

Design/Methodology/Approach: Using a cross-sectional survey design, this study recruited 420 IT professionals from the Colombo District, Sri Lanka, through convenience sampling. Data was collected using structured, self-administered questionnaires, and the analysis was conducted with Structural Equation Modelling (SEM) using IBM SPSS and AMOS (version 21).

Findings: Empirical findings show that technostress significantly reduces work-family balance, partially mediated by IT mindfulness. Additionally, perceived organizational support moderated the relationship between IT mindfulness and work-family balance,

reinforcing mindfulness's positive impact in counteracting technostress.

Theoretical Implications: This study extends existing theories on work-family balance by integrating the work-family border theory (WFBT), Job Demands-Resources (JD-R) theory, and Organizational Support Theory (OST) with concepts of IT mindfulness and perceived organizational support (POS). The findings contribute to a deeper understanding of how individual-level factors and organizational-level factors interact to influence the effects of technostress on employees' ability to manage work-family balance.

Managerial Implications: Building on WFBT, JD-R, and OST, this study proposes a novel framework that incorporates IT mindfulness and POS. The findings advance understanding of how these individual-level factors interact to influence the effects of technostress on employees' workfamily balance.

Originality/Value: This study makes an original contribution by investigating how technostress, IT mindfulness, and perceived organizational support interact to influence work-family

balance. The results yield practical strategies for organizations to enhance employee resilience and well-being in technology-saturated workplaces.

Keywords: Technostress, Work-family balance, IT mindfulness, perceived organizational support, Work-family border theory, JD- R Theory.

1. Introduction

1.1. Background of study

The rapid advancement of technology is profoundly transforming the work environment, particularly in the information technology (IT) sector. This shift offers benefits such as increased efficiency, flexibility, and connectivity. Technology enables remote work, real-time communication, and streamlined processes, enhancing productivity and collaboration (Buchanan & Huczynski, 2019). For example, cloud computing facilitates data storage and processing on remote servers, allowing access from anywhere and improving collaboration and security (Marston et al., 2011). Similarly, advancements in AI and machine learning automate routine tasks, enabling employees to focus on strategic work and innovation (Brynjolfsson & McAfee, 2014). However, these advancements introduce also challenges, particularly technostress, stress resulting from the use of and constant connectivity to technology (Tarafdar et al., 2007). Staying up to date with rapidly evolving tools can lead to overwhelm, anxiety, and fatigue. Furthermore, Persistent connectivity blurs the boundaries between work and family life, hindering the ability to disconnect and leading to a work-family imbalance (Chesley, 2014). The cognitive load from managing multiple digital tools also contributes to mental fatigue and strain between domains (Ayyagari et al., 2011). While it can improve productivity through faster communication and collaboration (Buchanan & Huczynski, 2019; Chesley, 2014), it may also lead to technologyrelated stress and reduced balance between work and family life (Tarafdar et al., 2015). By blurring work-family boundaries, technostress affects personal relationships and overall well-being (Ayyagari et al., 2011).

Work-life balance refers to the balancing between professional responsibilities and personal life,

enabling individuals to fulfil their work obligations while dedicating time to family, leisure, and self-care (Greenhaus & Allen, 2011). A critical sub-dimension, work-family balance, emphasizes reducing conflict between work and family responsibilities, enabling individuals to navigate both domains effectively (Frone, 2003). The WFBT posits that effectively managing the boundaries between work and family roles, particularly psychological boundaries, essential for achieving balance (Clark, 2000). However, technostress, arising from constant digital connectivity and information overload, can hinder mental detachment from work, weakening psychological borders and increasing imbalance (Tarafdar et al., 2015; Mondo et al., 2023). These findings underscore the importance of addressing technostress and promoting psychological detachment to foster healthy workfamily boundaries. Strong psychological borders help individuals manage focus and stress within each domain. However, their effectiveness depends on individual-level factors. Drawing on the JD-R theory, technostress and rapid technological changes are job demands that challenge employees' cognitive and emotional resources, thereby blurring domain boundaries (Demerouti et al., 2001; Tarafdar et al., 2015). Although the JD-R model emphasizes the importance of personal and organizational resources in mitigating such demands, specific to buffer technostress remain resources underexplored. This is critical, as technostress not only increases emotional strain but also disrupts recovery and family life outside work. Furthermore, a supportive organizational culture can help employees mentally separate work from family, thereby reducing stress and improving work-family balance (Allen et al., 2000). Yet, the interaction between psychological borders and organizational support remains understudied, especially amid growing technostress. Therefore, this study examines how individual and organizational resources enhance can psychological boundaries and foster a healthy work-family balance.

This study offers theoretical, empirical, and managerial contributions. Theoretically, it advances work-family border theory, JD-R theory, and organizational support theory by examining how psychological borders are

managed in tech-driven workplaces and how individual and organizational support strengthen these boundaries. It examines how technostress affects work-family balance and how support systems mitigate this impact. Empirically, the study validates the impact of technostress on work-family balance across various settings, incorporating IT mindfulness and POS as key mediators and moderators. The findings aim to provide evidence-based insights into managing effective work-family borders amid technostress. From a managerial perspective, the study provides practical recommendations to enhance psychological resilience and create supportive work environments. These strategies aim to help employees manage technostress and achieve a better work-family balance, thereby boosting productivity and overall well-being. Supporting this, prior research highlights the growing challenges of work-family management in the digital era (Ward & Harunavamwe, 2025). Accordingly, this study aims to fill theoretical gaps, provide empirical evidence, and inform effective managerial responses to technostress and its impact on work-family balance.

1.2. Statement of the problem and justification

Technostress has emerged as a significant challenge in the global IT sector, including Sri Lanka, where increasing reliance on digital technologies has disrupted work-family balance and employee well-being. In Sri Lanka, a 2020 ICTA report revealed that over 45% of IT professionals experience high stress due to technology overload, while international studies link technostress to reduced productivity and job satisfaction (Tarafdar et al., 2015). Although some organizations have introduced flexible work policies, their effectiveness remains limited, with only 12% of firms reporting improved workfamily balance (Ceylon Chamber of Commerce, 2021). Given the growing prevalence of technostress, further research is essential to examine how individual-level and organizational-level support, and targeted interventions can mitigate its impact, particularly in developing economies like Sri Lanka, where digital transformation is accelerating without adequate stress-management frameworks.

Building on the growing concern over technostress in Sri Lanka's IT sector, Work-Family Border Theory (WFBT) and the Job Demands-Resources (JD-R) model provide critical frameworks for understanding its impact on work-family balance. WFBT (Clark, 2000) elucidates how constant connectivity blurs workfamily boundaries, exacerbating role conflict and stress, yet fails to explain how individuals can cognitively manage these permeable borders (Kossek et al., 2012). Similarly, JD-R Theory (Demerouti et al., 2001) frames technostress as a that depletes psychological demand resources, impairing work-family balance, but actionable mitigation strategies (Bakker & Demerouti, 2007). These gaps are compounded by emerging AI-driven work systems, which intensify technostress and demand new coping mechanisms (Vaast et al., 2020). Extending prior research (Tarafdar et al., 2019; Elyousfi et al., 2020), this study integrates Organizational Support Theory (OST) with WFBT and JD-R to examine IT mindfulness as a mediator and organizational support as a moderator (Hassan et al., 2019; Rhoades & Eisenberger, 2002), addressing how individuals and institutions can collaboratively mitigate technostress's spillover into work and family life. Extending the theoretical framework of workfamily border theory and JD-R theory, this study conceptualizes IT mindfulness as a mediating mechanism that buffers the adverse effects of technostress on work-family balance, grounded in JD-R theory. JD-R theory posits that excessive job demands such as constant connectivity and digital disruptions deplete psychological resources, exacerbating stress and impairing work- family balance (Demerouti et al., 2001); however, "IT mindfulness, conceptualized as the intentional and aware use of technological tools (Kabat-Zinn, 1990; Hulsheger et al., 2013), serves as a vital personal resource that empowers employees to reduce technostress while simultaneously improving both professional productivity and personal life engagement. Complementing this, OS theory underscores POS as a moderator, where employees' belief in institutional backing (Eisenberger et al., 1986) strengthens their capacity to navigate job demands while preserving wellbeing (Akhtar et al., 2021). By synthesizing these perspectives, the

study investigates IT mindfulness as a mediator and organizational support as a moderator in the technostress and work-family balance relationship, offering actionable insights into how employees and organizations can collaboratively foster resilience in digitally saturated work environments.

The empirical literature examining relationship between technostress and workfamily balance remains limited and inconclusive (Demerouti et al., 2001; Ayyagari et al., 2011). Current scholarship identifies critical gaps in understanding how individual factors like IT mindfulness mediate this relationship, and how organizational support might mitigate these effects (Akhtar et al., 2021). Particularly lacking are investigations into how modern workplace technologies affect employees' capacity to manage professional and familial obligations (Elyousfi et al., 2020; Jackson et al., 2019). These limitations underscore the need for cross-cultural and cross-industry studies to enhance the generalizability of work-family balance findings (Jackson et al., 2019). The Sri Lankan IT sector presents a compelling context for such an investigation, given its rapid digital transformation and unique cultural dynamics.

1.3. Research Questions

This study seeks to address three specific research questions:

- 1. To what extent does technostress affect workfamily balance among IT professionals?
- 2. To what extent does IT mindfulness mediate the relationship between technostress and work-family balance?
- 3. To what extent does the perceived organizational support moderate the relationship between IT mindfulness and work-family balance?

1.4. Research objectives

- 1. To identify the impact of technostress on work-family balance among IT professionals.
- 2. To identify the mediating impact of IT mindfulness on the relationship between technostress and work-family balance.
- 3. To identify the moderating effect of perceived organizational support on the

relationship between IT mindfulness and work-family balance.

1.5. Significance of the study1.5.1 Empirical contributions

This study makes three key contributions to work-family technostress and balance literature. First, it addresses the scarcity of context-specific research by examining the extent to which technostress affects work-family balance among IT professionals in Sri Lanka, a critical gap given the sector's rapid digital and transformation unique socio-cultural dynamics (Jayanandana & Jayathilaka, 2023; Samarakoon & Arachchige, 2020). Second, it theoretical understanding empirically testing IT mindfulness as a mediator in the relationship between technostress and work-family balance, building on emerging evidence of its stress-reducing potential (Moser et al., 2023; Jha & Latha, 2022). Third, it extends organizational support theory by investigating the extent to which the perceived organizational support moderates the protective effects of IT mindfulness, a nuanced relationship highlighted as understudied in recent work (Saeed et al., 2022; Eisenberger et al., 2021). Collectively, these contributions offer actionable insights for both theory and practice in culturally distinct, technology-intensive work environments.

1.5.2. Theoretical contributions

This study advances the literature on technostress and work-family balance through three key contributions. First, it addresses a critical gap by theorizing technostress's impact on work-family balance, a distinct subdimension of work-life balance that remains underexamined despite its relevance in technology-saturated workplaces (Bencsik & Juhasz, 2023; Tarafdar et al., 2020). While work-life balance research proliferated, the specific mechanisms linking technostress to management of work-family borders lack robust theoretical grounding (Elyousfi et al., 2020; Ragu-Nathan et al., 2023). Second, the study synthesizes WFBT, JD-R theory, and organizational support theory to elucidate how technostress disrupts work-family borders, offering a novel multi-theoretical lens to explain these dynamics (Kossek et al., 2022; Vaast et al., 2020).

The study's third contribution lies in its integrative framework, which incorporates IT mindfulness and perceived organizational support as pivotal factors in managing technostress. Emerging evidence positions IT mindfulness as a buffer against technostress (Jha & Latha, 2022; Moser et al., 2023), yet its mediating role in work-family balance remains unexplored. Similarly, while organizational support is known to mitigate work stress (Eisenberger et al., 2021), its moderating function in the IT mindfulness and work-family balance relationship is unexamined, particularly in IT professions (Saeed et al., 2022). By bridging these gaps, the study provides a comprehensive model that links individual coping strategies with organizational resources, offering new insights into theory and practice in technology-driven work environments

2. Literature review

2.1. Work-family balance

Work-family balance and work-life balance are interconnected vet distinct concepts, each addressing different aspects of an individual's well-being. Work-family balance focuses specifically on the interplay between work and family responsibilities, examining how these roles align or conflict (Greenhaus & Beutell, 1985). In contrast, work-life balance encompasses a broader perspective, considering the balance between work and all aspects of an individual's life, including leisure, personal development, and community engagement (Guest, 2002). While both concepts aim to ensure individuals achieve balance between their professional and personal spheres, the emphasis on work-family balance is more narrowly focused on the challenges of managing familial obligations alongside work roles (Allen et al., 2021).

The modern workplace is characterized by significant socio-economic transformations that have reshaped how individuals navigate the interplay between work and family domains. While technological advancements have introduced flexible working opportunities, they have also brought unique challenges for both employers and employees, intensifying stress between work and family responsibilities (Banerjee & Gupta, 2024). A notable contribution

to this stress is the reliance on technology, which, despite enhancing workplace efficiency, has introduced "technostress." This phenomenon disrupts the work-family balance by making it increasingly difficult to distinguish between work and family time, leading to feelings of being overwhelmed and demotivated (Atanasoff & Venable, 2017). These experiences negatively impact on employees' ability to balance work and family responsibilities (Zhao et al., 2020).

The pervasive use of technology often exacerbates role conflicts, eroding the boundaries between professional and personal life and consequently impacting work-family balance (Atanasoff & Venable, 2017). Furthermore, the cognitive, psychological, and physical health challenges induced by technology can diminish employee satisfaction and well-being, thereby complicating efforts to achieve a balance between work and family obligations (Zhao et al., 2020). For example, research findings report high levels of technostress due to heavy workloads, jobrelated stress, and challenges in disconnecting from work, emphasizing the importance of effective strategies to mitigate its impact on work-family balance (Scaramuzzino & Martinell Barfoed, 2023). This perspective highlights the significance of supportive organisational policies, including flexible working hours and family-friendly benefits, in mitigating conflicts and promoting a balance between work and family roles (Allen et al., 2021). As the nature of work-family balance evolves, individuals and organisations adopt must comprehensive strategies to address challenges such as technostress, while organisations promote initiatives that support employee well-being. Addressing the interplay between technology, work, and family roles remains essential for fostering organisational success and ensuring that employees achieve a sustainable balance in their lives.

2.2. Technostress

Technostress is defined by Brod (1984) as a psychological state where individuals experience stress due to their interaction with technology, particularly when the technological demands exceed their ability to cope. With the growing integration of digital tools into professional

environments, technostress has become a significant factor affecting employees' ability to balance work and family responsibilities. The pressures from constant connectivity, especially through emails, messaging apps, and virtual meetings, cause work to spill over into personal and family time, thereby disrupting individuals' capacity to balance these roles effectively (La Torre et al., 2020). Core technostress manifestations—techno-overload (overwhelm) and techno-invasion (boundary erosion) challenge work-family balance (Tarafdar et al., 2015), generating stress that spills into family life and impedes managing work and family roles (Fuglseth & Sorebo, 2014).

The rapid pace of technological advancement has increased the challenges of managing workfamily balance. Employees are under constant pressure to stay available, often outside of regular working hours, due to technological tools that facilitate communication and task management (Suh & Lee, 2017). This persistent connection leads to emotional exhaustion and stress, as individuals struggle to disengage from work tasks during family time, making it harder to fulfil family obligations. Studies have shown that workers experiencing technostress report lower levels of job satisfaction, emotional well-being, and higher levels of burnout, which further reduce their ability to engage in fulfilling family activities (La Torre et al., 2020; Bencsik & Juhasz, 2023). The inability to disconnect from work technologies during off hours creates a cycle where work interferes with family life, escalating the conflict between work and family roles (Ragu-Nathan et al., 2008).

Managing psychological boundaries is crucial in managing technostress and preserving a work-family balance. As digital tools blur the borders between work and family, individuals need to actively set psychological boundaries to protect their personal and family time (Ward & Harunavamwe, 2025: Derks et al., 2016). By establishing mental and emotional limits, individuals can prevent work from intruding into family-related activities, thus helping to mitigate the harmful effects of technostress. Effective border management allows employees to

navigate the demands of modern work environments while managing their well-being and family relationships (Ward & Harunavamwe, 2025; Suh & Lee, 2017). In turn, this can mitigate the negative impact of technostress on workfamily balance, enabling individuals to strike a healthier balance between their professional and family lives.

2.3. IT Mindfulness

IT mindfulness has gained significant attention in recent years as a strategy to address the challenges posed by the digital age, particularly regarding work-family balance (Ragu-Nathan et al., 2008). This concept, adapted from traditional mindfulness practices, emphasizes non-judgmental awareness and control over one's interactions with technology (Thatcher et al., 2018).

IT mindfulness encourages individuals to engage consciously with digital tools, ensuring that their use of technology aligns with personal well-being and work-family balance. Researchers have suggested that IT mindfulness may help mitigate the effects of technostress, which often hinders an individual's ability to manage a balance between work and family life. According to Tarafdar et al. (2020). IT mindfulness allows individuals to manage their emotional responses to technologydriven demands, reducing stress and fostering a healthier balance between work and family life. This ability to manage mindful awareness is particularly critical as digital technologies continue to blur the lines between work and family borders.

The benefits of IT mindfulness in work-family balance are increasingly supported by empirical research. By encouraging individuals to stay focused and present while interacting with technology, IT mindfulness can help mitigate the overwhelming impact of digital demands. For example, Bhagat et al. (2021) found that employees who practice IT mindfulness report better emotional regulation and lower stress levels, which positively influence their ability to manage work-family boundaries. Similarly, studies by Al-Hammouri, & Rababah (2024), suggest that employees who are mindful of their technology use experience less work-family conflict, as they are better able to allocate time for work responsibilities and family both

commitments. This conscious control over technology use fosters a sense of balance, as employees are less likely to feel overwhelmed by the constant connectivity demanded by modern digital tools (Al-Hammouri, & Rababah, 2024).

Furthermore, IT mindfulness helps individuals establish and maintain psychological boundaries between their work and family life. The ability to regulate work-related technological use, such as setting limits on hours or minutes of communication or technology-free family time, is central to preventing work from intruding into family life. According to Schaefer et al. (2020), setting clear digital boundaries can significantly reduce stress, prevent burnout, and improve the balancing ability of specific spare. Mindful workers are better equipped to set limits on their availability outside of work hours, thereby creating a psychological separation between work and family life, which is crucial for managing a work-family balance. This ability to create boundaries has been shown to enhance both job and family life satisfaction, as individuals can prioritise family time without the constant intrusion of work-related demands (Carvalho et al., 2022; Shi et al., 2023). Overall, IT mindfulness is a valuable strategy for emotional resilience, reducing promoting technostress, and fostering a healthy work-family balance.

2.4. Perceived organizational support (POS)

POS refers to employees' belief that their organisation values their contributions and cares about their well-being, which significantly influences their ability to balance work and family responsibilities (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). In environments characterised by technostress, where employees face pressures from digital technologies and constant connectivity, POS becomes a critical factor in enhancing work-family balance. Organisations that offer flexible arrangements, family-friendly policies, and foster a culture that acknowledges technological challenges enable employees to manage work and family demands better (Kossek et al., 2011; Hammer et al., 2020). Such support not only contributes to a positive work environment but also mitigates the adverse effects of technostress, facilitating a healthier work-family balance (Dolcos & Daley, 2009; Thompson & Prottas, 2006).

In the context of technostress, employees often experience feelings of being overwhelmed by excessive technological demands, such as constant connectivity and the pressure to remain available outside of working hours. This stress can interfere with family commitments, leading to greater work-family imbalance (Tarafdar et al., 2015). Studies show that POS can buffer these effects by enabling employees to access resources that help manage technostress. It reports that the perception that the organisation is supportive can reduce feelings of stress and increase employees' ability to disconnect from work, thereby fostering a better work-family balance (Lapierre et al., 2008). Recent research also emphasises that POS is particularly important in the era of digital transformation, where the rapid adoption of technology can exacerbate the work-family imbalance. When employees feel supported by their organizations, they are more likely to perceive their workplace as understanding and responsive to their needs, including the challenges posed by technostress. Furthermore, this will lead to the establishment of borders their between work and family (Harunavamwe & Ward, 2022). Research by Harunavamwe (2023) highlights that perceived organizational support is a form of policy that respects work-family borders.

3. Theoretical background 3.1. Work–Family Border Theory (WFBT)

Work-Family Border Theory (Clark, 2000) examines how individuals manage and navigate the borders between work and family domains to achieve a healthy balance. According to this theory, work and family are distinct but interconnected spheres, each with its own expectations, roles, and demands. Individuals act as "border-crossers," transitioning between these domains based on the level of flexibility, permeability, and segmentation they maintain. Rigid borders, where work and family domains are strictly separated, can lead to increased conflict between work and family. On the other hand, more flexible and supportive environments

facilitate a smoother transition between these spheres, allowing for a better work-family balance (Clark, 2000). Employees who manage clear boundaries between their professional and family lives report better psychological well-being, whereas those with blurred borders often experience higher stress and burnout (Kossek, 2016).

In the digital age, technostress poses significant challenges to the permeability of these borders. The constant use of information communication technologies has led to increased pressure on employees to remain connected beyond traditional work hours, resulting in a blurring of the boundaries between work and family. Techno-overload and techno-invasion, the overwhelming volume of information and the intrusion of work into personal time, can lead to emotional exhaustion, work-family conflict, and diminished well-being (Ayyagari, Grover, & Purvis, 2011; Tarafdar et al., 2019). The expectation of constant availability and the rapid pace of technological change make it increasingly difficult for employees to mentally detach from work, violating the psychological borders crucial for recovery and personal well-being (Ward & Harunavamwe, 2025. This blurring of work and family life further intensifies the stress experienced by employees, making it harder for them to recover and switch off from work at times (Sonnentag, 2018).

While flexible work arrangements, such as telecommuting and flexible hours, offer benefits by allowing employees to better integrate their work and family lives, they also require careful management of psychological boundaries. The use of digital tools, such as smartphones and laptops, can create a mental link to work, even during personal time, preventing employees from fully detaching and recovering from work-related stress. This constant mental connection can lead to increased emotional exhaustion and stress (Sonnentag & Fritz, 2015). Therefore, employees need to engage in managing borders and related strategies such as psychological detachment consciously "switching off" from work to prevent work from invading family time (Sonnentag, 2018). Careful management of psychological

boundaries is essential for sustaining a workfamily balance in today's digitally connected (Ward & Harunavamwe, Organizations play a crucial role in helping employees navigate these boundaries effectively. Implementing policies, clear communication guidelines, and encouraging work-family balance strategies can support employees in managing the demands of digital work while managing their family lives. When organizations create a supportive environment for managing these boundaries, they enable employees to navigate the challenges of technostress more effectively, thereby enhancing both productivity and the balance between work and family (Ward & Harunavamwe, 2025). Fostering a culture that values the balance between work and family helps employees adapt their boundaries, improving both their mental health and work performance (Kelliher & Anderson, 2010).

3.2. Theory of Job Demands-Resources (JD-R).

The Job Demands-Resources (JD-R) Theory, introduced by Demerouti et al. (2001), categorizes job characteristics into two main groups: job demands and job resources. Job demands refer to aspects of work that require sustained effort and are associated with physiological and psychological costs, such as high workload and conflicting demands. In contrast, iob resources are factors that facilitate achieving work goals, mitigate job demands, and promote personal growth, including social support, job control, and opportunities for advancement (Schaufeli & Taris, 2014). In the realm of technostress, IT employees face significant job demands due to factors such as techno-overload. techno-invasion. technocomplexity, techno-insecurity, and technouncertainty. These challenges necessitate continuous adaptation to new technologies, management of substantial workloads, and maintaining digital connectivity beyond standard work hours. Such demands can lead to increased work-family conflicts and a work-family imbalance (Tarafdar et al., 2019). The continuous nature of digital work creates persistent pressure to be available, leading to emotional exhaustion

and imbalance of work and family among IT professionals (Salanova et al., 2013).

However, the JD-R theory posits that job resources can mitigate the adverse effects of these demands. Resources such as social support from colleagues, job autonomy, and perceived organizational support play a crucial role in this context. For example, organizations that offer training, flexible work arrangements, and clear digital communication policies can enhance job resources, thereby reducing the stress associated with excessive digital demands (Bakker & Demerouti, 2017; Xie et al., 2021). Further, developing IT mindfulness, an individual's ability to regulate their engagement with technology, has been identified as a valuable resource in managing technostress and enhancing well-being (Intapunya & Mohan, 2025).

Furthermore, the JD-R theory emphasizes that access to sufficient job resources fosters work engagement and psychological well-being, even in high-demand settings. In the IT context, robust job resources enable employees to effectively manage technostress, maintain a work-family balance, and sustain performance amid ongoing technological changes (Maier et al., 2015; Schaufeli, 2017). Therefore, organizations that invest in resource-enhancing mechanisms create a healthier work environment and empower IT professionals to cope effectively technostress (Chen & Karahanna, 2018). Balancing job demands with adequate resources is essential for mitigating the negative impacts of technostress and promoting a supportive digital work environment with work-family balance.

3.3. Theory of perceived organizational support (POS)

The Perceived Organisational Support (POS) theory explains how employees' perceptions of organisational care and support influence their attitudes, behaviours, and overall well-being (Eisenberger et al., 1986). When employees feel that their organisation values their contributions and is concerned about their well-being, they are more likely to exhibit positive work attitudes and a higher level of commitment. In the context of technostress and work-family balance, employees who perceive strong organizational

support are better equipped to manage the challenges associated workplace with technology, reducing the negative effects of stress caused by digital demands (Tarafdar et al., 2019). One critical factor influencing technostress and POS is the organization's integration approach to technology communication. Employees who receive clear guidelines, training, and support for digital tools are less likely to experience the negative effects of technostress (Ragu-Nathan et al., 2008). According to Hwang et al. (2021), when organizations provide consistent communication about the purpose, benefits, and expectations of technology use, employees experience lower anxiety, improving their uncertainty and confidence and efficiency in handling technological changes.

Further, the availability of resources and support mechanisms significantly impacts employees' perceptions of organizational support in managing technostress. Employees who receive adequate IT support, workload flexibility, and stress management initiatives are more likely to perceive their organization as supportive, which helps mitigate the negative consequences of excessive digital demands (Safadi et al., 2022). Since technostress extends beyond physical and temporal boundaries, employees also require psychological resources to effectively manage technology-induced pressures (Salanova et al., 2013). Overall, POS Theory provides a useful framework for understanding how organizational support can buffer the adverse effects of technostress. Organizations that implement clear communication strategies, structured digital training programs, and policies promoting digital well-being enhance employees' perceived support, ultimately fostering a healthier, more productive workforce in the digital era (Ward & Harunavamwe, 2025)

4. Methodology

4.1 Theorization of the research problem

The current study draws on Work-Family Border Theory to explain the relationship between technostress and work-family balance (Clark, 2000). WFBT emphasizes how individuals manage the boundaries between their work and family domains, highlighting that these boundaries are influenced by factors such as time, energy, and cognitive resources (Clark, 2000). This theory remains a key framework for understanding how work-related stressors, such as technostress, impact the ability to balance work and family life (Bakker et al., 2020). The theory identifies that individuals adjust their borders based on the demands of work and family, with the permeability of these boundaries potentially leading to an imbalance between work and family (Clark, 2000). Recent studies have shown that technostress, particularly in the digital era, challenges the management of these borders and contributes to work-family imbalance (Shaukat et al., 2022). However, the factors that influence the disruption of work-family borders due to technostress still require further investigation. Therefore, the current study draws on the JD-R Theory and the theory of organizational support for the conceptualization of the research problem.

The Job Demands-Resources (JD-R) Theory explains stress as the result of an imbalance between job demands and the available personal and job resources (Demerouti et al., 2001). Job demands refer to physical, psychological, social, or organizational aspects of a job that require sustained effort and are associated with physiological or psychological costs. In the digital workplace, the increasing demands associated with constant connectivity, digital interruptions, and complex information systems can heighten stress levels. In this context, IT mindfulness has emerged as a vital personal resource that enables employees to manage these demands effectively. IT mindfulness, defined as an individual's present-focused awareness and attention when interacting with technologies, can enhance one's ability to cope with technological pressures. According to the JD-R theory, such personal resources play a crucial role in mitigating the negative effects of high job demands and promoting engagement and well-being. Employees who demonstrate higher levels of IT mindfulness are better equipped to regulate their responses to technological challenges, thereby reducing the risk of stress. Supporting this, research by Regehr et al. (2014) and Cavanagh et al. (2020) underscores the importance of IT mindfulness as a coping mechanism that enhances individuals' capacity to manage technological demands, ultimately promoting a healthier balance between work and family.

Furthermore, the current study incorporates the theory of Organizational Support (Eisenberger et al., 1986), which posits that employees form perceptions regarding how much organization values their contributions and supports their overall well-being. This perception is shaped by factors such as fairness, supervisor support, and job conditions, all of which have been shown to impact job satisfaction and performance (Rhoades & Eisenberger, 2002; Ma et al., 2021). Employees who feel that their organization provides adequate support are more likely to experience less stress and demonstrate greater commitment to their work (Luxmi & Yadav 2011). Moreover, organizational support is crucial in fostering innovation, as it helps employees build confidence and resilience when faced with challenges (Liu et al., 2020). The current study extends this theoretical perspective by introducing IT mindfulness as a key mediator in the relationship between technostress and work-family balance, while proposing perceived organizational support as a moderator that enhances the relationship between IT mindfulness and work-family balance. This framework suggests that organizational support not only directly influences employees' work attitudes but also strengthens their ability to manage the stress associated with technological demands, ultimately improving their work-family balance.

4.2 Development of hypotheses

4.2.1. Technostress and work-family balance

Few studies have explored the relationship between technostress and work-family balance (Tarafdar et al., 2019; Ma et al., 2021). Technostress can be defined as the stress experienced by individuals due to the use of information and communication technologies (ICTs), which disrupt their work and family lives (Ayyagari et al., 2011). In examining technostress within the context of work-family balance, Tarafdar et al. (2019) highlighted that high levels of technostress negatively impact employees' ability to manage their work and family roles effectively. This occurs when the demands of technology, such as constant connectivity,

information overload, and pressure to remain responsive, create conflicts between work and family responsibilities (Ragu-Nathan et al., 2008). From a theoretical standpoint, the workfamily border theory provides a framework for understanding how individuals manage the boundaries between work and family life. According to this theory, individuals attempt to create borders to balance work and family roles, although technostress can blur these borders, leading to role conflict and decreased satisfaction in both domains (Clark, 2000).

Empirically, studies have shown that technostress is a significant predictor of work-family imbalance and affects employees' work-family domains (Huang et al., 2021). Furthermore, Ma et al. (2021) emphasise that the constant technological demands on employees often lead to heightened stress levels, thereby diminishing the quality of time spent with family and negatively impacting overall well-being. Despite the growing body of research on technostress, studies directly linking it to work-family balance remain limited, underscoring the need for further exploration of these relationships.

Thus, based on the above theoretical and empirical evidence, the hypothesis below is advanced.

H1: There is an impact of Technostress on workfamily balance among IT employees.

4.2.2. Technostress and IT Mindfulness.

While IT mindfulness is often explored as a mitigating factor for technostress, recent theoretical developments suggest that technostress itself may adversely affect an individual's ability to remain mindful during technology use. Technostress, which arises from factors such as information overload, constant connectivity, and rapid technological changes, can drain cognitive and emotional resources (Tarafdar et al., 2015). According to the Job Demands-Resources (JD-R) theory, when job demands, such as technostress, exceed an individual's available resources, it leads to resource depletion and psychological strain (Demerouti et al., 2001). This resource depletion may, in turn, undermine IT mindfulness, which requires focused attention, awareness, and selfregulation engaging when with digital technologies (Chen et al., 2020). Empirical research supports this perspective, indicating that individuals overwhelmed by technological demands may struggle to sustain mindful technology use due to reduced mental clarity and attentional control (Pflügner et al., 2021; Kim et al., 2022). As technostress disrupts individuals' ability to remain present and deliberate in their interactions with technology, it becomes plausible that higher technostress may lead to lower levels of IT mindfulness.

Thus, based on theoretical reasoning and emerging empirical evidence, the following hypothesis is proposed:

H4: There is an impact of Technostress on IT Mindfulness among IT employees.

4.2.3. IT Mindfulness and work–family balance

With the increasing integration of digital technologies into both professional and personal life, managing work-family balance has become more challenging. In this context, IT mindfulness, defined as an individual's open, present-centred awareness and attention during interactions with technology, has been identified as a critical personal resource for managing digital demands effectively (Chen et al., 2020). According to the Job Demands-Resources (JD-R) theory, personal resources such as mindfulness enable individuals to better cope with job demands and maintain psychological well-being (Demerouti et al., 2001). IT mindfulness may help employees manage the cognitive and emotional challenges posed by constant connectivity, interruptions, and information overload—factors that often disrupt the boundaries between work and family life (Mazmanian et al., 2013; Pflügner et al., 2021). By promoting more intentional and controlled technology use, IT mindfulness enables to prevent technology individuals from encroaching on their personal lives, thereby supporting a better work-family balance. Emerging empirical evidence also suggests that IT mindfulness contributes to enhanced boundary management, reduced work-family conflict, and increased satisfaction across various life domains (Kim et al., 2022). Despite growing recognition of its importance, the role of IT mindfulness in directly improving work-family balance remains under-explored.

Thus, based on theoretical reasoning and emerging empirical evidence, the following hypothesis is proposed:

H5: There is an impact of IT mindfulness on work-family balance among IT employees.

4.2.4. Mediating Role of IT Mindfulness

The relationship between technostress and workfamily balance has been established in previous studies (Tarafdar et al., 2007; Molino et al., 2020). Scholars have identified that technostress. caused by excessive digital demands, disrupts employees' ability to balance their professional and family responsibilities (Feng et al., 2022; Gemmano et al., 2023). Ragu-Nathan et al. (2008) emphasised that key dimensions of technostress, including techno-overload, technoinvasion, and techno-complexity, contribute to extended working hours, cognitive fatigue, and blurred boundaries between work and family life. Furthermore, persistent exposure to digital stressors results in increased work-family conflict, reduced job satisfaction, and lower overall well-being (Sarker et al., Harunavamwe & Ward, 2022). Although the impact of technostress on work-family balance is widely recognized, the role of individual coping mechanisms in mitigating its negative effects remains an area of further exploration.

IT mindfulness has been identified as a crucial factor in managing technology-induced stress (Brooks et al., 2022). Brooks et al. (2022) mention that IT mindfulness enables individuals to remain aware and intentional in their technology use, reducing the likelihood of experiencing stress due to excessive digital demands. Khan and Mahmood (2022)emphasised that IT mindfulness helps employees establish clear boundaries between their work and family lives, thereby enhancing work-family balance. Studies have also indicated that individuals with high IT mindfulness are better equipped to handle the complexities of digital environments, reducing the adverse effects of technostress (Pflügner et al., 2021; Pflügner et al., 2019). Further, research suggests that IT mindfulness plays a protective role by enhancing individuals' ability to regulate their interactions with technology and prevent conflicts between work and family life (Califf et al., 2023).

Furthermore, IT mindfulness can promote digital well-being, enabling employees to maintain productivity without compromising their personal lives (Zheng & Lee, 2021; Ioannou et al., 2022).

Moreover, research suggests that technostress has a negative influence on IT mindfulness. Califf et al. (2023) noted that high levels of technostress lead to cognitive overload and emotional exhaustion, diminishing individuals' ability to remain mindful in their technology use. Zheng and Lee (2021) further argued that persistent exposure to technostress weakens mindfulness, making individuals more susceptible to workfamily conflict. Pflügner et al. (2021) found that employees experiencing high levels technostress struggle to engage in mindful technology use, further exacerbating their workfamily balance challenges. Additionally, Ioannou et al. (2022) highlighted that employees with low IT mindfulness are more prone to digital fatigue, further intensifying the negative effects of work-family dynamics. technostress on Consequently, based on these findings, IT mindfulness can be viewed as a mediating factor that reduces the impact of technostress on workfamily balance.

Thus, based on the above theoretical and empirical evidence, the hypothesis below is advanced:

H2: IT mindfulness mediates the relationship between technostress and work-family balance.

4.2.5. Moderating role of perceived organizational support

Perceived organizational support reflects employees' overall perception of how much their organization values their contributions and cares about their well-being (Eisenberger et al., 1986). Previous studies have indicated that employees who perceive higher levels of organizational support experience reduced stress and enhanced job satisfaction, ultimately leading to improved work outcomes (Smith et al., 2022; Riggle et al., 2009). Furthermore, Riggle et al. (2009) emphasized that perceived organizational support is a crucial determinant in shaping employees' attitudes toward their organization, thereby fostering motivation and resilience. Williams and Chen (2019) further stated that when employees believe their organization is committed to their

well-being, they are more likely to stay engaged and effectively manage workplace challenges.

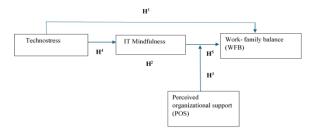
In the context of IT professionals, perceived organizational support plays a crucial role in mitigating the negative effects of technostress work-family and promoting a balance. Technostress, characterized by excessive digital demands and continuous connectivity, creates significant challenges for managing work-family boundaries (Zeng et al., 2018; Martinez et al., 2023). While IT mindfulness fosters a proactive approach to managing technology-induced stress, organizational support further enhances this capability by providing employees with the necessary resources, policies, and a supportive work environment (Sode et al., 2024; Mishra et al., 2022).

Furthermore, Riggle et al. (2009) emphasized that when employees perceive strong organizational support, they feel more confident in their ability to manage work-related challenges and maintain a sense of control over their responsibilities. Brown et al. (2022) further noted that POS fosters a positive work culture, enabling employees to optimize their cognitive and emotional resources in balancing work and family spheres. Furthermore, Davis et al. (2021) noted that during periods of high workplace stress, such as the demands of digital work environments, perceived organizational support plays a crucial role in sustaining employee well-being and preventing burnout. Thus, it could be argued that POS strengthens the positive relationship between IT work-family mindfulness and balance. Employees with high IT mindfulness are already equipped with strategies to manage technostress and achieve a better work-family balance. However, when organizations provide flexible work arrangements, digital wellness initiatives, and supportive leadership, employees are more likely to sustain their work-family balance effectively (Garcia et al., 2023). Consequently, POS is expected to act as a moderator, amplifying the positive impact of IT mindfulness on workfamily balance.

Thus, the following hypothesis is advanced:

H3: POS moderates the relationship between IT mindfulness and work-family balance.

4.3 Conceptual framework: key definitions of variables



Source: Author, 2025

Technostress is defined as "a modern disease of adaptation caused by an inability to cope with new computer technologies in a healthy manner" (Brod, 1984). It refers to the psychological strain and stress caused by the excessive use of information and communication technology (ICT), characterized by information overload, constant connectivity, rapid technological changes, and increased work demands. Further, it manifests in various forms, including technooverload, techno-invasion, techno-complexity, techno-insecurity. techno-uncertainty and (Tarafdar et al., 2007, 2019).

IT mindfulness refers to an individual's conscious and purposeful engagement with information technology, characterized by awareness, adaptability, and a focus on the effective use of IT systems. It encompasses four dimensions: alertness to distinctions, awareness of multiple perspectives, openness to novelty, and orientation in the present moment, all of which enable individuals to effectively manage technology and mitigate the negative effects of technostress (Thatcher et al., 2018).

Work-family balance refers to an individual's ability to effectively manage and fulfil both work and family responsibilities without significant conflict or negative spillover between the two domains. It involves the negotiation and management roles in both the work and family spheres in a way that allows individuals to meet expectations in both areas while minimizing stress and conflict (Carlson et al., 2009).

Perceived organizational support (POS) refers to employees' belief that their organization values their contributions and genuinely cares about their well-being. Higher POS is associated with greater job satisfaction, reduced stress, and improved work-family balance, as employees feel more supported in managing workplace demands (Eisenberger et al., 1986).

4.4 Analytical Strategies.

The unit of analysis for this study comprises IT professionals in Sri Lanka's IT sector, specifically those working in the Colombo District. Given the sector's heavy reliance on digital tools, remote collaboration, and rapid technological advancements, these professionals are considered particularly vulnerable to technostress and its potential impact on workfamily balance (Gamage et al., 2013). A convenience sampling approach was adopted, applying a non-probability sampling method due to the absence of a well-defined sampling frame (Sekaran & Bougie, 2018).

Since the study follows quantitative research design and relies on primary data, data will be collected through a self-administered, pre-tested questionnaire, ensuring validity and reliability. The questionnaire will be designed using established measurement scales: Technostress (Independent Variable): Tarafdar et al. (2007), IT Mindfulness (Mediator): Based on Thatcher et al. Work-Family Balance (2018),(Dependent Variable): Measured using Carlson et al. (2009), Perceived Organizational Support (Moderator): Assessed through Eisenberger et al. (1986). The data analysis will be conducted using SPSS and AMOS software, incorporating correlation analysis, regression analysis, and structural equation modelling (SEM). This approach aims to provide empirical evidence on how technostress affects employees' ability to balance work and family roles, and whether IT mindfulness and perceived organizational support can help mitigate its negative consequences.

4.5. Ethical and Legal Considerations

This research was conducted with integrity, responsibility, and respect for participants, ensuring that ethical standards were upheld throughout the study. Information consent was obtained from all participants, guaranteeing their voluntary participation, anonymity, and

confidentiality. To protect their privacy, all collected data was securely stored and accessed only for research purposes.

Furthermore, this study was designed to minimize any potential harm to individuals, the community, or the broader society. Ethical research practices were followed, including proper citation and adherence to APA referencing guidelines, ensuring that all sources and contributions were acknowledged.

5. Data analysis

The collected data were initially entered into IBM SPSS 22.0 software for processing, which involved identifying missing values and outliers (Kline, 2023). As part of the data-cleaning process, demographic profiles were examined, and multivariate assumptions were assessed. Structural Equation Modeling (SEM) was conducted using Analysis of Moment Structure (AMOS) 21.0 software, following the two-step approach. This approach facilitated development of the measurement model and the structural model. The goodness-of-fit indices were then used to assess the model's adequacy. In this study, females represent 56% of the sample, while males account for 44%. Most respondents (69%) are between the ages of 25 and 34, with only 3.6% of respondents over 60. Regarding professional experience, the majority (68.5%) have between 1 and 5 years of experience, while 22.6%, 7.5%, and 1.4% of respondents have 6-10 years, 11-15 years, and more than 15 years of experience, respectively. Educationally, 48.5% of respondents are graduates, and no respondent has an education level lower than G.C.E. Ordinary Level. The remaining respondents have attained secondary education (4.2%), postgraduate degrees (22.5%), and professional certifications (24.8%).

This study followed Hair et al.'s (2021) methodology for SEM-based data analysis, which involved evaluating multivariate assumptions. The first step included conducting the Hermann Single Factor test (Podsakoff et al., 2003) to check for common method bias. Subsequently, a one-way ANOVA test was performed, confirming the absence of non-response bias in the data (P = 1.00). Before developing the measurement model for confirmatory factor analysis, the multivariate assumptions for structural equation modelling

(SEM) normality, linearity, homoscedasticity, and multicollinearity were tested and validated.

5.1. Measurement model of the study

To assess convergent validity, items with standardized regression weights below 0.50 were removed (Kline, 2023), and the model's validity was reassessed. Based on the revised factor loadings, reliability and validity statistics were computed, as shown in Table 1.

The convergent validity of the study was verified using Average Variance Extracted (AVE) and Composite Reliability (CR). For AVE, values must exceed 0.50 (Fornell & Larcker, 1981; Hair et al., 2021), and CR should exceed 0.70 (Nunnally, 1978; Hair et al., 2021). In this study, only the latent variables (Ts, IM, POS) met the required thresholds. However, Fornell and Larcker (1981) argue that a composite reliability above 0.60 is considered acceptable for convergent validity, even if the average variance extracted (AVE) is below 0.50. As a result, it can be concluded that the current study demonstrates adequate convergent validity. Furthermore, discriminant validity was ensured, as the squared correlations between the latent variables were lower than their respective AVE values (Fornell & Larcker, 1981; Hair et al., 2021). Further, in this study, the following abbreviations are used: Ts for technostress, IM for IT mindfulness, WFB for work-family balance, and POS for perceived organizational support.

Table 1: Reliability and validity measures

Dimension	No of items	Factor loading (Min – Max)	AVE	CR	Cronbach's alpha	AVE2 vs SME			
						WFB	Ts	IM	POS
WFB	6	0.450 - 0.884	0.46	0.75	0.72	0.46			
Ts	23	0.557 - 0.710	0.52	0.88	0.81	0.14	0.52		
IM	11	0.530 - 0.860	0.56	0.82	0.73	0.17	0.09	0.56	
POS	6	0.610 - 0.825	0.52	0.80	0.81	0.18	0.29	0.44	0.52

As a result, the analysis revealed that the validation statistics and model fit indices are satisfactory, indicating that the measurement model is appropriate for use in structural equation modelling to test advanced hypotheses.

5.2. Structural model

The second stage focused on testing the causal relationships between the latent variables to evaluate the proposed hypotheses. To assess the significance of the standardized parameter estimates in the structural model, 95% confidence intervals were calculated using the bootstrap method in AMOS, as recommended by Hayes (2009).

Initially, all direct effects were tested, and the significance of the direct paths was assessed (Carlotto, 2017). The direct effect tested in the study included the impact of technostress on work-family balance. The standardized regression weights and p-values for these direct effects are presented in Table 2.

Table 2: Standardized regression weights and p - p-values

	Path	Beta value	P value	Decision
Direct effects	Ts and WFB	0.448	0.000	Accepted
	Ts and IM	0.100	0.017	Accepted
	IM and WFB	0.111	0.000	Accepted
Indirect effects	IM_ WFB	0.121	0.003	Accepted
The moderating effect of POS	IM and WFB	0.123	0.012	Accepted
	•		•	

According to Table 2, the p-values for all direct relationships (standardized estimates of direct effects) are below 0.05, indicating that these direct effects are statistically significant. Therefore, the direct effects were confirmed as statistically significant. The mediating effect of mindfulness was examined using the bootstrapping method in AMOS, with both direct and indirect paths analyzed during the mediation assessment. The results are presented in Table 2. To determine whether IT mindfulness acts as a partial or full mediator, both the significance of direct and indirect effects must be considered. As shown in Table 2, the effect of technostress on work-family balance through IT mindfulness is statistically significant, with a p-value of 0.003 (less than 0.05). Additionally, the direct effect of technostress on work-family balance remains significant despite the introduction of the mediator of IM (p-value = 0.00, which is less than 0.05). According to Kline (1998), when both the direct and indirect paths are significant, the mediator is classified as partial. Therefore, based on the analysis, IT mindfulness serves as a partial mediator, supporting the hypothesis (H2), which suggests that IT mindfulness significantly

mediates the relationship between technostress and work-family balance.

The moderating effects of perceived organizational support (POS) were tested using the multiplication method. An interaction term was introduced for each structural model to evaluate the moderating influence. As presented in Table 2, POS significantly moderates the relationship between IM and work-family balance (p-value = 0.012), with an effect size of 0.123 on work-family balance. Consequently, this finding supports the alternative hypothesis (H3), confirming that perceived organizational support moderates the effect of IM on work-family balance.

6. Discussion of findings

The present study aimed to examine the impact of technostress on work–family balance (WFB) by analyzing the roles of IT mindfulness and perceived organizational support (POS) among IT professionals in the Colombo District, Sri Lanka. The findings indicate that IT mindfulness significantly mediates the relationship between technostress and WFB, while POS serves as a significant moderator of this relationship.

According to the Work-Family Border Theory (Clark, 2000), individuals create and manage borders between their work and family domains, be physical, temporal, which can psychological. Among these psychological boundaries, the mental boundaries individuals construct to separate their work and family roles, are particularly significant in the digital age. These psychological borders can become increasingly blurred due to constant connectivity and the demands of technology, leading to challenges in managing a healthy work-family balance. In this context, technostress weakens individuals' ability to manage these borders effectively, making transitions between work and family roles more difficult and increasing role conflict.

Complementing this, the Job Demands-Resources (JD-R) theory suggests that individuals strive to acquire, maintain, and protect key resources, such as time, energy, and well-being (Bakker & Demerouti, 2007). Technostress drains these resources, making it more challenging for employees to balance their work and family life. However, IT mindfulness

helps to manage technology use and reduce stress, acting as a support mechanism (Houli & Radford, 2020). Furthermore, researchers have emphasized that technostress can directly impact work-family balance (Ioannou, 2023). In line with this, the current study finds a negative relationship between technostress and work-family balance, highlighting several emerging problems in managing work and family roles among IT professionals in Sri Lanka, particularly due to the increasing demands of technology.

The current study reveals a significant negative relationship between technostress and IT mindfulness (H4). These findings align with the work of Ioannou et al. (2022), who found that elevated levels of technostress contribute to cognitive overload and emotional exhaustion, thereby diminishing an individual's ability to maintain mindfulness in their interaction with technology. Further, this supports the earlier work of Ioannou and Papazafeiropoulou (2017), which argues that increased technostress disrupts intentional and conscious engagement with digital tools, reducing IT mindfulness. Therefore, organizations must pay close attention to managing technostress, not only to support employee well-being but also to foster a mindful use of technology that encourages sustainable work behaviours and a healthy work-family balance.

There is a positive relationship between IT mindfulness and work-family balance (WFB) (H5). IT mindfulness helps individuals manage work-family balance by improving focus and reducing stress (Rebecca & Jayawardana, 2023; Mellner et al., 2022; Azpíroz-Dorronsoro et al., 2024; Bakker & Demerouti, 2007). Furthermore, the JD-R theory suggests that high IT mindfulness enables employees to cope with work demands and enhances their well-being. The current study confirms these findings, showing that individuals who are mindful in their use of technology are more effective at managing their work-family balance.

Further, IT mindfulness significantly mediates the relationship between technostress and workfamily balance (WFB), supporting Hypothesis 2 (H2). This finding aligns with previous research emphasizing the role of IT mindfulness in managing work-family balance within technostress environments (Azpíroz-

Dorronsoroa et al., 2024; Ioannou, 2023). However, existing literature on this relationship remains inconsistent, indicating a need for further exploration. Based on these results, it can be suggested that employees who practice greater IT mindfulness are better equipped to manage workfamily balance.

Based on the statistical findings, Hypothesis 3 (H3) was accepted, indicating that perceived organizational support moderates the relationship between IT mindfulness and work-family balance (WFB). This result aligns with previous studies that emphasize the importance of organizational support in promoting a positive work-family balance. For example, Sangperm and Pimpaporn (2024) highlighted that higher levels of organizational support significantly enhance employees' balance between work and family life. Furthermore, Wattoo et al. (2018) found that POS has a positive influence on work-family balance, while also improving employee wellbeing. These studies suggest that employees in the IT industry benefit from both IT mindfulness and organizational support when managing workfamily balance. High levels of organizational support motivate employees to effectively utilize their IT mindfulness skills in managing the balance. Although empirical evidence on this specific relationship remains limited, existing theoretical frameworks provide strong support for these findings, reinforcing the role of organizational support in managing work-family balance in the context of technostress (Bai et al., 2023; Al Riyami et al., 2024).

7. Conclusion

7.1. synopsis of the study

This study investigated technostress among Sri Lankan IT professionals, confirming its significant negative impact on work-family balance, consistent with global findings (Tarafdar et al., 2007; Bencsik & Juhasz, 2023). The results demonstrate that IT mindfulness effectively mediates this relationship, validating its role as a personal resource that buffers technostress effects, as posited by JD-R Theory (Bakker & Demerouti, 2007) and reflecting Work-Family Border Theory (Clark, 2000), which highlights how technology can blur the borders between work and family roles, increasing the risk of stress. Furthermore, perceived organizational

support (POS) positively moderates the relationship between IT mindfulness and workfamily balance, supporting organizational support theory (Eisenberger et al., 1986). These findings were derived from a cross-sectional study of 420 IT professionals, using validated scales analyzed through structural equation modelling.

The study confirms that employees' ability to manage technostress and manage work-family balance depends on both individual factors (IT mindfulness) and organizational support. When employees cultivate mindful technology use and perceive strong organizational backing, they experience better work-family balance despite technological pressures. This aligns with prior evidence that organizational resources enhance personal coping strategies (Rhoades Eisenberger, 2002) and extends it to the Sri Lankan IT context, where technostress is prevalent (Thathsarani et al. 2021; Sooriyamudali & Perera, 2022). Ultimately, the research underscores that technostress is manageable when employees develop IT mindfulness and work in supportive environments. These findings contribute to understanding how technology-driven workplaces can sustain employee well-being by addressing individual factors. The study validates the proposed theoretical framework, integrating Work-Family Border Theory, JD-R Theory, and organizational support theory to explain technostress dynamics in a rapidly digitizing workforce.

7.2. Theoretical implications

This study advances theoretical understanding of technostress and work-family balance in three keyways. First, it extends Work-Family Border Theory (Clark, 2000) by demonstrating how technostress uniquely disrupts psychological boundaries in the IT sector. Unlike physical or temporal borders, these cognitive divisions between work and family roles are particularly vulnerable to technology-induced stressors like constant connectivity and digital overload. The study reveals how such technostress erodes these mental barriers, creating permeability that exacerbates work-family imbalance, a nuanced

contribution beyond WFBT's original formulation.

Second, the research bridges a critical gap in Job Demands-Resources (JD-R) theory identifying IT mindfulness as a novel individual resource and organizational support as a resource contextual that iointly buffer technostress effects. While JD-R theory traditionally treats job demands and resources generically, this study specifies how technologyspecific mindfulness (conscious engagement with with digital tools) interacts perceived organizational support to work-family balance. This dual-resource model offers explanatory power for technology-saturated work environments where conventional mechanisms may prove inadequate.

Finally, the study integrates WFBT and JD-R theory to create a comprehensive framework for understanding technostress in the digital era. By synthesizing managing psychological borders, with stress-or-mitigation (JD-R) perspectives, it addresses prior limitations in applying these theories to IT professionals (Tarafdar et al., 2019). The resulting model not only explains how technostress disrupts work-family balance through boundary violations, but also how mindfulness and organizational support can restore managing balance, providing both theoretical depth and practical relevance for contemporary workplaces (Sooriyamudali & Perera, 2022)

7.3. Managerial implications

This study offers actionable insights for IT sector professionals seeking to mitigate technostress and improve work-family balance. The findings demonstrate that technostress significantly disrupts employee well-being, but its effects can be alleviated through two key mechanisms: cultivating IT mindfulness and strengthening perceived organizational support. For immediate implementation, organizations should introduce targeted digital wellness programs that teach mindful technology use, (2) establish clear policies for after-hours communication to reduce constant connectivity pressures, and (3) provide training on workload prioritization techniques. These interventions address both individual coping capacities (through mindfulness development) and organizational infrastructure (through policy adjustments), creating a duallayer defense against technostress.

The moderating role of POS underscores the need for systemic cultural change. Management should prioritize three strategic initiatives: First, implement structured "digital detox" periods during non-work hours to reinforce psychological boundaries. Second, redesign performance metrics to reward sustainable work practices rather than constant availability. Third, train leadership in supportive management techniques, empathetic communication and flexible work institutionalizing arrangements. By practices—rather than treating them as optional benefit organizations can transform high-stress IT environments into ecosystems that actively sustain employee well-being and achieving balance. This approach not only reduces technostress but also yields long-term dividends in talent retention and job performance, as employees gain both the skills and organizational backing needed to thrive in digital workplaces.

7.4. Limitations

This study has several limitations that warrant consideration. First, the exclusive focus on Sri Lanka's IT sector, characterized by intensive technology use, agile work cultures, and flexible arrangements (Zubair et al., 2021), may limit the generalizability of findings to other industries or cultural contexts. The sector-specific dynamics influencing technostress experiences (Silva & Wijesiri, 2022) suggest caution when extrapolating results to non-IT or global workforces.

Methodological constraints further qualify the findings. The convenience sampling approach risks underrepresenting population diversity (Marani., 2021), while self-reported data, despite anti-bias measures, remain vulnerable to common method variance (Podsakoff et al., 2012). The cross-sectional design also precludes analysis of temporal dynamics, a significant gap given that technostress effects likely fluctuate with the demand of work and family (Sonnentag & Fritz, 2015). Longitudinal designs tracking these variables over time would yield more robust causal insights.

7.5. Areas for further research

Future studies should expand this research by examining how the relationship between technostress and work-family balance evolves over time through longitudinal designs, while also exploring cross-industry and cross-cultural differences to enhance generalizability. Additional research could investigate the role of personal resilience factors (e.g., coping strategies, emotional intelligence) and organizational culture (e.g., digital wellness policies, leadership approaches) in moderating technostress effects. Further exploration of generational differences and emerging challenges, such as AI-driven workplaces, would also provide valuable insights into mitigating technostress and improving work-family balance across diverse work environments.

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