

# Impact of Technostress on Work-Family Balance: The Mediating Role of Emotional Exhaustion Moderating Role of Perceived Organizational Support: A Study on IT Professionals in the Colombo District, Sri Lanka

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## ABSTRACT

Technostress has become a critical challenge for employees working in demanding environments, especially in the IT sector in Sri Lanka.. This study explores how technostress influences work-family balance among IT professionals in Colombo, focusing on the mediating role of emotional exhaustion and the moderating effect of perceived organizational support (POS). Utilizing a cross-sectional quantitative research design, data was gathered from 358 IT employees via a structured questionnaire and analyzed through SPSS and PROCESS macros. Findings revealed a strong negative correlation between technostress and work-family balance, alongside a positive association with emotional exhaustion. However, emotional exhaustion was not a mediating factor in the technostress-work-family balance relationship, suggesting alternative mechanisms at play. Importantly, high levels of POS mitigated the adverse effects of technostress, underscoring the value of supportive organizational structures for promoting better work-life integration among IT professionals. This study enriches the literature on technostress and employee welfare in Sri Lanka and proposes improvements for HR policies in technology-centric workplaces.

**Keywords:** Technostress, Work-Family Balance, Emotional Exhaustion, Perceived Organizational Support

## INTRODUCTION

The rapid advancement of technology has significantly transformed modern workplaces, particularly in the IT sector, enhancing efficiency, connectivity, and flexibility. Employees can now work remotely and collaborate seamlessly, leading to improved organizational performance. Technologies such as cloud computing and AI allow for data accessibility and automation of repetitive tasks, freeing employees for more strategic roles. However, these advancements also lead to psychological challenges, specifically technostress, characterized by feelings of overload, complexity, and a pressure to remain available. Key factors of technostress include techno-overload, techno-invasion, and techno-uncertainty, which contribute to employee strain and fatigue. The prevalence of technostress negatively impacts employee well-being, job satisfaction, and work-life balance.

Work-family balance (WFB) reflects an individual's ability to meet work and family obligations successfully. According to Allen et al. (2000), achieving WFB is crucial for psychological well-being, family satisfaction, and job performance. A failure to achieve WFB can result in work-family conflict, leading to job dissatisfaction, decreased productivity, and emotional exhaustion. IT professionals face unique challenges in

maintaining WFB, as technology often intrudes upon family time with work-related communications, thereby exacerbating this conflict. Constant alerts, an overwhelming number of digital meetings, and the expectation of being perpetually available diminish the time and resources available for family engagements. Research indicates that technostress significantly impacts work-family conflict by disrupting recovery times and personal boundaries (Bahamondes-Rosado et al., 2023). Emotional exhaustion, characterized by chronic stress exposure (Maslach & Jackson, 1981), is a critical aspect of this phenomenon, as it drains psychological resources and impacts employees' energy and capacity to fulfill both family and work responsibilities. Findings support that technostress is a predictor of emotional exhaustion, which in turn adversely affects WFB (Kassim et al., 2021). Overall, understanding the relationship between technostress, emotional exhaustion, and work-family balance is essential for organizations committed to enhancing employee well-being in the digital era.

Nonetheless, individual and organizational factors can negatively impact technostress, with perceived organizational support (POS) being a significant element. POS refers to employees' perception that their organization values their contributions and cares for their well-being (Eisenberger et al., 1986), which can foster a positive workplace culture. Such an environment aids in separating work from family life, thereby reducing stress and enhancing overall balance (Allen et al., 2000). However, the relationship between psychological boundaries and organizational support remains underexplored, particularly as technostress becomes more prevalent. This study aims to evaluate how individual and organizational resources can bolster psychological borders, contributing to a healthier work-family balance. The IT sector in Sri Lanka is rapidly growing, particularly in the Colombo District, which serves as a hub for IT services and software development. IT professionals in this area experience increasing digital pressures due to technological advancements, tight project deadlines, and ongoing interactions with clients across various time zones. These factors often blur the lines between work and personal life, elevating the risk of emotional exhaustion and undermining work-family balance. This research utilizes Work-Family Border Theory (Clark, 2000), Job Demands-Resources Theory (Bakker & Demerouti, 2017), and Organizational Support Theory (Eisenberger et al., 1986) to explore the impact of technostress on employees' work-family balance, particularly among IT professionals in the Colombo District of Sri Lanka. It highlights how excessive technology use leads to emotional exhaustion and challenges in managing work-life boundaries. The study investigates perceived organizational support (POS) as a mechanism to alleviate negative effects of technostress, with emotional exhaustion serving as a mediator and POS as a moderator. Results from this research aim to provide practical implications for practitioners, managers, and policymakers to foster supportive work environments that can mitigate technostress and enhance employee well-being, satisfaction, and productivity in technology-driven settings.

## Statement of the Problem

In the contemporary technology-centric environment, employees across various sectors encounter digital tools that enhance communication and collaboration but also contribute to psychological stress, termed technostress (Tarafdar et al., The technostress trifecta, 2019). This phenomenon is characterized by dimensions such as techno-overload, techno-invasion, techno-complexity, techno-uncertainty, and techno-insecurity (Sinha et al., 2022). In the IT sector, where reliance on digital platforms is pronounced, technostress poses a burgeoning challenge that adversely affects employee performance and well-being (Atanasoff & Venable, 2017). The Sri Lankan IT sector, a fast-evolving contributor to the national economy, faces increasing demands for skilled labor due to growing ICT and BPM workforces (Sophos & Tech Research Asia, 2024). A survey conducted in the Asia Pacific and Japan found that around 90% of IT and cybersecurity professionals experience burnout from constant exposure to digital technology (Sophos & Tech Research Asia, 2024). Consequently, it is likely that IT professionals in urban areas like Colombo are encountering heightened levels of technostress, disrupting their work-family balance (WFB), which refers to the ability to manage work and family obligations without interference.

Research indicates that maintaining work-life balance is crucial for the productivity and satisfaction of IT professionals, particularly those working from home (Jayanandana, 2023). However, there is a dearth of studies examining the impact of technostress on WFB within Sri Lanka's IT industry. Overexposure to technology-related stressors may blur the boundaries between work and personal life, leading to conflict, dissatisfaction, and emotional strain. Emotional exhaustion, a state marked by depleted emotional resources

arising from recurrent work demands, is identified as a key component of burnout (Maslach & Jackson, 1981). Evidence suggests that technostress contributes to emotional exhaustion, which in turn hinders employees' ability to sustain a healthy work-life balance (Harunavamwe & Ward, 2022). Thus, emotional exhaustion could act as a mediating factor through which technostress affects work-life balance among IT professionals. Additionally, perceived organizational support (POS), defined as the extent to which employees feel their organization cares for their well-being, may moderate the relationship between technostress and work-life balance. Higher perceived support from the organization can help employees manage work stress and achieve work-life balance (Eisenberger et al., 2021). Nevertheless, few empirical studies in Sri Lanka's IT sector have explored how POS may buffer against the adverse effects of technostress and emotional exhaustion on work-life balance. Therefore, this study aims to investigate how technostress affects the work-family interface of IT professionals in Colombo, the mediating role of emotional exhaustion in this relationship, and the moderating effect of perceived organizational support. Understanding these dynamics is critical for developing interventions that alleviate emotional depletion, enhance worker well-being, and maintain performance in Sri Lanka's expanding IT sector.

## **Purpose of the Study**

The study investigates the influence of technostress on work-family balance among Sri Lankan IT professionals in Colombo District, focusing on five dimensions: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. It highlights how increased digital expectations and constant connectivity can detrimentally affect employees' work-life balance and wellbeing. The research also examines the mediating role of emotional exhaustion and the moderating effect of perceived organizational support (POS) in mitigating technostress. The aim is to contribute to both academic understanding and practical HR and organizational policies that enhance employee wellbeing and productivity in Sri Lanka's IT sector.

## **Objectives of the Study**

### **General objectives**

- 1) To examine the impact of technostress on work–family balance among IT professionals in the Colombo District, Sri Lanka.

### **Specific objectives**

- 2) To examine the impact of technostress on emotional exhaustion among IT professionals in the Colombo District, Sri Lanka.
- 3) To examine the impact of emotional exhaustion on work–family balance among IT professionals in the Colombo District, Sri Lanka
- 4) To investigate the mediating role of emotional exhaustion in the relationship between technostress and work–family balance.
- 5) To investigate the moderating role of perceived organizational support on the relationship between technostress and work–family balance.

## **Significance of the Study**

### **Empirical contribution**

This study aims to empirically investigate the relationship between technostress and work-family balance among IT professionals in the Colombo District of Sri Lanka, a topic that has been underexplored in existing

literature. It recognizes the unique technological demands faced by these professionals, such as constant connectivity and high workload, which can negatively affect their family and work life. The research will explore the mediating role of emotional exhaustion in this relationship, as documented previously, and seeks to provide insights into how technostress contributes to emotional well-being and work-family balance. Additionally, the study will assess the moderating role of perceived organizational support (POS), examining how employees' perceptions of organizational care and appreciation influence these dynamics, an area that remains inadequately researched in the Sri Lankan context.

### **Theoretical contribution**

This research investigates the influence of technostress on work-family balance, a largely overlooked aspect in previous studies, especially in developing countries like Sri Lanka. It introduces a theoretical framework combining Job Demands-Resources (JD-R) theory, Theory of Perceived Organizational Support and Work-Family Boundary Theory (WFBT) to illustrate how technological stress affects employees' psychological resources, leading to emotional exhaustion and imbalances in family domains. The study proposes an integrated model that examines both individual and organizational factors, highlighting emotional exhaustion as a mediating factor. By focusing on the Sri Lankan IT sector, it addresses a gap in the literature and aims to bolster employee well-being through effective organizational support and proactive policy design to manage technostress and enhance work-family balance.

## **LITERATURE REVIEW**

### **Work –Family Balance**

Work-family balance has been widely examined as a critical factor affecting employee well-being and organizational outcomes. It refers to an individual's ability to meet role expectations in both domains without interference (Grzywacz & Carlson, 2007). WFB is often used interchangeably with work-life balance, but it is narrower, specifically focusing on how work and family roles interact together (Allen et al., A cross-national meta-analytic examination of predictors and outcomes associated with work-family conflict., 2021) Scholars further distinguish WFB from work-family conflict and enrichment by emphasizing balance as a unique construct rather than the absence of conflict or the presence of enrichment (Carlson et al., 2010) Role theory by Marks & MacDermid (1996) suggests that positive relationships across roles lead to balance, while Bakker et al. (2007) explains how job demands, such as technological stress, deplete emotional resources, leading to stress and reduced WFB. Constraint theory further explains how it is difficult to maintain proper work-family boundaries, especially in situations of constant digital connectivity. Recent studies suggest that technological stress significantly increases work-family conflict and interferes with boundary management, especially in technology-intensive occupations (Harunavamwe & Kanengoni, 2023) However, while POS functions as a job resource, high POS alone cannot completely block the effects of technological stress. Technological stress is also associated with cognitive and psychological distress, which reduces well-being and complicates family-work role management (Zhao et al., 2020). Evidence consistently demonstrates the role that organizational-level strategies, such as flexible work arrangements and family-friendly policies, can play in reducing conflict and facilitating the achievement of sustainable work-family balance.

### **Technostress**

Technostress refers to the emotional strain and anxiety caused by the use of technology and ICT services, impacting various areas of life, including work, education, and social relationships (Ayyagari et al., 2011). It stems from rapid technological advancement, excessive screen time, information overload, and blurred boundaries between work and home, compelling users to feel constantly connected and responsive, even outside working hours (Tarafdar et al., The technostress trifecta , 2019). Key factors contributing to technostress include techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty (Ragu- Nathan et al., 2008). Studies define technostress not only as a mental burden from adapting to new technologies but also as a driver of job-related stress, emotional exhaustion, and decreased job satisfaction. Organizational support emerges as a crucial factor to mitigate these negative outcomes,



highlighting the importance of work-life balance in an increasingly digitized environment. Mechanisms to cope with technostress and the role of perceived organizational support are considered essential in addressing its adverse effects on employees' mental health and work productivity (Harunavamwe & Ward, 2022). According to the Job Demands–Resources (JD-R) model, organizational support mitigates the effects of high job demands like technostress on employee well-being. Despite extensive global research on technostress, much of it is focused on Western contexts, with limited studies from Asian economies, particularly in Sri Lanka's IT sector. Previous research often addresses general workplace outcomes or specific dimensions, with few examining the interconnections between technostress, work-family balance, emotional exhaustion, and perceived organizational support. This study aims to fill these gaps by investigating technostress among IT professionals in Colombo, Sri Lanka, and exploring its impact on work-family balance, emotional exhaustion, and perceived organizational support, thus providing relevant context-specific evidence.

### **Emotional Exhaustion**

Emotional exhaustion is a condition characterized by feelings of depletion, overwhelm, and an inability to keep up with continuing demands, typically due to an imbalance between work and personal life. It is the core dimension of burnout and epitomizes the depletion of emotional resources beyond one's recuperative capabilities. In technology-intensive environments, emotional exhaustion is often the major psychological consequence of technostress. When coping mechanisms among employees are overwhelmed by continuous demands stemming from technologies, they experience fatigue and dwindling emotional energy, impacting their work and family life. Empirical evidence underlines that emotional exhaustion acts as a mediator in the relationship between technostress and low work-family balance (Buenadicha- Mateos & M., 2022). High levels of technostress deplete the emotional resources of employees, making it difficult to meet expectations in both domains, increasing conflict, and lowering well-being and job satisfaction (Kumar, 2024)..

Organizational support may mitigate these effects. In this respect, employees who perceive high levels of support report lower levels of emotional strain even in challenging conditions of technology demands (Syahril, et al., 2022). These authors found that technostress does not have an impact on work–life balance directly, but the indirect effect via emotional exhaustion is significant and negative. Congruent with the Job Demands–Resources theory, these studies also highlight that continuously occurring demands related to technology contribute to burnout, further solidifying emotional exhaustion as a vital mechanism within which technostress affects work–family balance. Despite this, very few studies have tested this relationship in developing-country contexts, hence justifying the need for studies among IT professionals in countries like Sri Lanka.

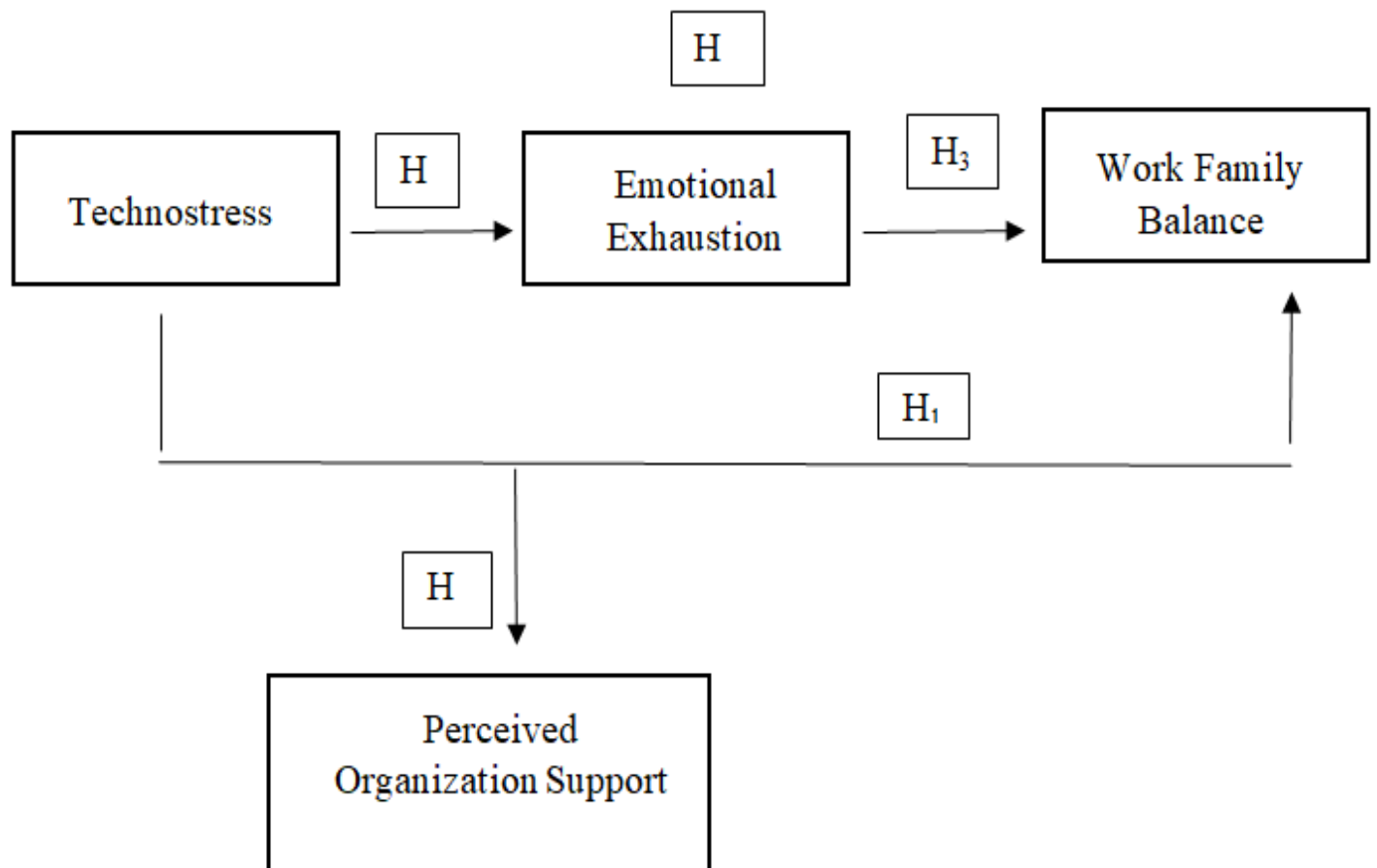
### **Perceived Organizational support**

POS is defined as employees' perceptions that their organization values their contributions and cares about their well-being. It shapes how employees interpret fair treatment, meaningful work, recognition, and supportive work conditions (Eisenberger et al., 1986). When employees have high perceptions of support, they develop strong effort-outcome expectations and affective attachment to the organization, which in turn improves performance and commitment.

In technology-intensive environments, POS is of particular importance as a protective buffer against technological stress. Among the supportive practices highlighted are flexible work arrangements and family-friendly policies, supervisor understanding, which enable employees to manage technology-induced stress and maintain work-family balance (Kossek et al., 2011). Research conducted during COVID-19 found that POS significantly attenuated the relationship between technological stress and work-family conflict by fostering resilience and well-being (Harunavamwe & Kanengoni, 2023). Other studies confirm that strong POS reduces the harm of digital demands and improves engagement even under conditions of high technological stress and work-family conflict (Ward & Harunavamwe, 2025; Harunavamwe & Kanengoni, 2023). Based on organizational support theory, Aselage & Eisenberger, 2003 state that POS is considered an essential job resource. Its three important dimensions include fair procedures, supervisor support, and positive rewards and working conditions; it provides employees with the resources they need to cope with work-family stress caused by excessive ICT use (Jichang-Ma et al., 2021).

## CONCEPTUAL FRAMEWORK AND METHODOLOGY

Figure 3. 1. Conceptual Framework of the Study



Sources: Author (2025)

### Hypothesis Developments

H1: There is a significant relationship between Technostress and Work–Family Balance

H2: There is a significant relationship between Technostress and Emotional Exhaustion

H3: There is a significant relationship between Emotional Exhaustion and Work-Family Balance

H4: There is a significant mediating effect of Emotional Exhaustion on the relationship between Technostress and Work-Family Balance

H5: There is a significant moderating effect of Perceived Organizational Support on the relationship between Technostress and Work-Family Balance

### Population, Sample and Sampling Technique

This section discusses the population and sampling technique for a study focusing on IT professionals in the Colombo District. The population is defined as IT professionals working in the district, with the national workforce estimate being 113,561 according to SLASSCOM's Industry Status Report 2019/20. Although there are no district-level employment statistics, it is assumed that a significant proportion of this workforce is based in Colombo due to its concentration of IT companies. For the sampling technique, a snowball sampling method was utilized, starting with initial participants who then referred others. Based on Krejcie and Morgan's table, an effective sample size of 384 respondents is deemed necessary to ensure statistical reliability, fitting within the national estimate.

## Measurement Scales

Technostress, the independent variable, was measured using Ragu-Nathan et al.'s (2008) multidimensional scales, focusing on five dimensions: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Sample items included statements like “I am forced by this technology to work much faster” and “I have to constantly update my skills to avoid being replaced”, rated on a five-point Likert scale. The dependent variable, work-family balance, was assessed using instruments developed by Richard et al. (1996), with sample items such as “My work prevents me from spending sufficient quality time with my family.” Emotional exhaustion was the mediating variable, using scales from Ma et al. (2021), measuring feelings like “I feel burned out from my work.” Lastly, perceived organizational support served as the moderating variable, evaluated with Eisenberger et al.'s (1986) scale reflecting employee perception of organizational value and care. All the responses were scored on the five-point Likert scale ranging from strongly disagree to strongly agree.

## Data Analysis

This chapter details the data analysis and findings regarding the impact of technostress on work-family balance among IT professionals in Sri Lanka.. The study achieved a valid response rate of 96.8% from 370 distributed questionnaires, with 358 valid responses after data screening. Overall, the data were clean and suitable for analysis, confirming a high level of participant engagement.

## Reliability and validity statistics

Table 4.1 Reliability and validity statistics

Variable	No. of items	Cronbach alpha	KMO Coefficient	Bartlett's Test [Chi-Square]	Sig.
Technostress (TS)	23	0.892	0.879	4795.009	0.000
Work Family Balance (WFB)	10	0.825	0.841	1552.075	<0.01
Emotional Exhaustion (EE)	5	0.887	0.802	1153.271	<0.01
Perceived Organization Support (POS)	8	0.847	0.855	3224.844	0.000

Source: Analyzed data, 2025

All variables show strong internal consistency, as Cronbach's alpha ranges from 0.825 to 0.892, over the recommended threshold of 0.70. The respective KMO coefficients are between 0.802 and 0.879, demonstrating meritorious adequacy of sampling for factor analysis. Bartlett's Test of Sphericity is highly significant for all constructs, Chi-square values ranging between 1,153.271 and 4,795.009 with  $p < 0.01$ , thus confirming data factorability. All in all, these findings suggest that the measurement scales used in this study are reliable and valid for further statistical analysis

## Hypothesis Testing

To test the advanced hypothesis, parametric tests including correlation and simple liner regression were used.

## Correlation analysis

The Pearson Correlation Coefficient was utilized to investigate the relationships among Technostress (TS), Work-Family Balance (WFB) and Emotional Exhaustion (EE), in the study. A two-tailed significance test assessed the statistical significance of the correlation coefficients since the hypotheses are non-directional. The analysis aims to understand the connections between Technostress and Work-Family Balance, including the mediating and moderating roles of Emotional Exhaustion and Perceived Organizational Support for IT professionals in the Colombo District. The coefficients range from -1.00 to +1.00, indicating perfect negative to perfect positive correlation, respectively, with additional results presented in tables.

Table 4.2 Correlation Statistics (H1)

Correlations			
		Technostress	Work-family balance
Technostress	Pearson Correlation	1	-.762**
	Sig. (2-tailed)		.000
	N	358	358
Work-family balance	Pearson Correlation	-.762**	1
	Sig. (2-tailed)	.000	
	N	358	358
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Analyzed data, 2025

As shown in table 4.8, a negative correlation can be sound between technostress and work-family balance which is statistically significance as sig 2 tailed (0.000) is less than the level of significance (0.01). Hence H1 is accepted testify that Technostress significantly negative correlated with work-family balance.

Table 4.3 Correlation Statistics (H2)

Correlations			
		Technostress	Emotional exhaustion
Technostress	Pearson Correlation	1	.693**
	Sig. (2-tailed)		.000
	N	358	358
Emotional exhaustion	Pearson Correlation	.693**	1
	Sig. (2-tailed)	.000	
	N	358	358
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Analyzed data, 2025

As presented in Table 4.9, technostress has a strong positive correlation with emotional exhaustion ( $r = 0.693$ ,  $p < 0.01$ ). The sig. (2-tailed) value of 0.000 is lower than the 0.01 Significant level, indicating the relationship is statistically significant. Hence, H2 is supported, confirming that higher levels of technostress are associated with higher level of emotional exhaustion.

Table 4.4 Correlation Statistics (H3)

Correlations			
		Emotional exhaustion	Work-family balance
Emotional exhaustion	Pearson Correlation	1	-.566**
	Sig. (2-tailed)s		.000
	N	358	358
Work-family balance	Pearson Correlation	-.566**	1
	Sig. (2-tailed)	.000	
	N	358	358
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Analyzed data, 2025

As shown in Table 4.16, Emotional exhaustion has a moderate negative correlation with work-family balance ( $r = -0.566$ ,  $p < 0.01$ ). The sig. (2-tailed) value of 0.000 is less than the significance level of 0.1, indicating that the relationship is statistically significant. Therefore, the findings confirm that higher emotional exhaustion is associated with lower work-family balance.



## Testing H4 – Mediator Analysis

To assess the effect of the mediator variable on the outcome of the relationship between the dependent and independent variables, the PROCESS Macro v5.0, developed by Andrew F. Hayes, was used through SPSS. The results generated including the total direct and indirect effects of the mediator, are given in Table

Table 4.4 mediator analysis (H4)

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t - Statistics	Conclusion
				Lower Bound	Upper Bound		
Technostress > Emotional Exhaustion > WFB	-0.9156	-0.8554	-0.0602	0.1593	0.0300	t=22.1879 (total) t=14.9668 (direct)	Not Supported

Source: Analyzed Data, 2025

The mediation analysis examined whether Emotional Exhaustion mediates the relationship between Technostress and Work–Family Balance. The total effect of Technostress on Work–Family Balance was significant ( $\beta = -0.9156$ ,  $t = 22.1879$ ), while the direct effect remained significant and negative ( $\beta = -0.8554$ ,  $t = 14.9668$ ). However, the indirect effect ( $\beta = -0.0602$ ) was not statistically significant, as the confidence interval (0.1593 to 0.0300) included zero. Therefore, Emotional Exhaustion does not mediate the relationship, and Hypothesis 4 is not supported.

## Testing H5 – Moderator Analysis

Table 4. 1. Model Summary

R	R Square	MSE	F	df1	df2	p
0.7860	0.6179	0.0758	190.7870	3.0000	354.0000	0.0000

Source: Analyzed Data, 2025

Table 4. 2.Regression Coefficients

Regression Coefficients	Coefficient	Standard Error	t-value	p-value	LLCI	ULCI
Constant	2.3097	0.9072	2.5459	.0113	0.5255	4.0939
Technostress (IV)	-0.0673	0.2073	-0.3249	-0.7455	-0.4750	0.3403
POS	0.8299	0.2503	3.3154	0.0010	0.3376	1.3222
Interaction	-0.2085	0.0563	3.7023	0.0002	0.3193	0.0977

Source: Analyzed Data, 2025

This model explains 61.79% of the variance in work-family balance ( $R^2 = 0.6179$ ), and the overall model is statistically significant ( $F = 190.787$ ,  $p < 0.001$ ). Technological stress shows a negative but non-significant effect on work-family balance. Perceived organizational support (POS) has a significant positive effect, and importantly, the interaction term between technological stress and POS is significant ( $p = 0.0002$ ), confirming a moderating effect. Thus, POS significantly moderates the relationship between technological stress and work-family balance, supporting Hypothesis 5.

## FINDINGS AND DISCUSSIONS

### Technostress and Work-Family Balance

The regression analysis for H1 shows that technostress affects work –family balance, with  $\beta = -0.916$ ,  $t = -22.188$ , and  $p < 0.001$ , and an  $R^2$  value of 0.580, explaining about 58% of the variance in work-

family balance. Therefore, this finding supports H1 and provides evidence that high level of technostress significantly reduces employees' ability to maintain healthy balance between work and family responsibilities. This is conceptually consistent with past research that emphasize the detrimental impact of technostress on employees' personal lives. From the practical perspective, managers can help maintain work – family balance by implementing various technological stress management initiatives, including workload optimization, flexible scheduling and trainings.

### **Technostress and Emotional Exhaustion**

According to the analysis for H2, the regression results showed that technostress significantly increases emotional exhaustion.  $B = 0.856$ ,  $\text{Beta} = 0.693$ ,  $t = 18.148$ ,  $p < 0.001$ , with an  $R^2$  of 0.481, indicating that 48% of the variance in emotional exhaustion is explain by the technostress. Thus, H2 is supported, establishing that IT professionals who perceived the high level of technostress report high level of emotional burnout. Conceptually, this underlines the fact that excessive technology demand strains the emotional exhaustion resource of employees. The practical implication here is that organization may want to help mitigate emotional exhaustion linked to technostress through such intervention as stress management programs, taking breaks from technology, and supportive policies.

### **Emotional Exhaustion and Work-Family Balance**

In regression analysis for H3, it was found that there was a significant negative relationship between emotional exhaustion and work family balance.  $B = -0.551$ ,  $\text{beta} = -0.556$ ,  $t = -12.942$ ,  $p < 0.001$ .  $R^2$  was 0.320, indicating that 32% of the variance in work- family balance is explained by emotional exhaustion are not able to maintain a proper balance between their work and family responsibilities. Conceptually, this make sense because emotional exhaustion describes the inability to handle personal and professional demands. This suggests that preserving the balance between work and family requires organization to reduce emotional exhaustion through supportive work environments, well – managed workloads, and programs aimed at improving employee well – being. However, the mediation result (H4) does not support emotional exhaustion as a mediator, which contrasts with several prior studies. For instance, Ma, Ollier-Malaterre, and Lu (2021) reported that emotional exhaustion *did* mediate the effect of techno-stressors on work–life balance, but only under certain conditions such as levels of job self-efficacy. This discrepancy suggests that emotional exhaustion may not always function as a universal mediating mechanism; instead, the mediation process can vary across contexts, cultures, job types, technological demands, or organizational support structures (Ma et al., 2021)

### **Mediating Role of Emotional Exhaustion**

The analysis of H4 showed that technostress significantly decrease work –family balance (total effect:  $b = -0.916$ ,  $t = 22.19$ ), and the direct effect is significant as well ( $b = -0.855$ ,  $t = 14.97$ ). However, the indirect effect through emotional exhaustion is not significant ( $b = -0.060$ , 95% CI  $[-0.159, 0.030]$ ), indicating that emotional exhaustion dose not act as a mediator for this relation. Thus, H4 is not supported these results indicate that technostress exerts it negative impact on work-family balance directly rather than through emotional exhaustion. From a practical point of view, Organization should manage technostress directly through interventions involving workload adjustment, technological support and training to protect employees' work –family balance.

### **Moderating Role of Perceived Organizational Support**

Moderation analysis showed that perceived organizational support (POS) significantly moderated the relationship between technostress and work family balance, as indicated by significant interaction effect ( $B = -0.2085$ ,  $p = 0.0002$ ). Although, technostress had a significant negative relationship with work –family balance, the negative relationship was even more negative at low, moderate, and High level of POS. This suggest that perceived organizational support moderates the relationship between technostress and work-family balance, as it surprising increased the negative impact of technostress, one possible explanation for this is that employees high perceived organizational support also feel high level of expectations or responsibilities, which may further disrupt work-family balance due to technostress.

## Limitation and Future Direction

- The study examines the impact of technostress on emotional exhaustion and work-family balance, highlighting the moderating role of perceived organizational support.
- Limitations include the study's focus on IT professionals in Colombo District, restricting generalizability beyond this context
- The exclusive use of self-report questionnaires may introduce response bias and does not capture broader contextual experiences.
- A cross-sectional design limits the ability to draw causal inferences about technostress and its effects over time.
- Future research should replicate the study across diverse industries and regions to enhance generalizability.
- Longitudinal designs are recommended to observe changes in technostress and emotional exhaustion over time.
- Qualitative methods such as interviews or focus groups could provide deeper insights into employee experiences and coping strategies.
- Incorporating additional variables like personality traits, work-family conflict, and digital resilience could enrich the study's findings.
- Further exploration of moderating factors like supervisor support and flexible work arrangements is suggested for better organizational management of technostress.

## CONCLUSION

This study investigated the effects of technostress on work-family balance among IT professionals in Colombo, highlighting the roles of emotional exhaustion and perceived organizational support. Findings revealed that technostress negatively impacts work-family balance and increases emotional exhaustion, but emotional exhaustion does not mediate this relationship. Instead, technostress appears to affect work-family balance directly. Conversely, perceived organizational support was found to positively moderate the relationship between technostress and work-family balance, suggesting that supportive environments can mitigate technostress's negative effects. The study concludes that while technostress is a key factor in work-family balance, emotional exhaustion does not mediate this impact, and organizational support is essential for employee well-being in Sri Lankan IT organizations.

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