

**The Effects of technology Induced Stress on Modern Workplace: An empirical study on
IT sector employees in the Delhi National Region (NCR)**

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Abstract:

This study examines the impact of technology-induced stress on Information Technology (IT) industry employees in the Delhi National Capital Region (NCR). The research uses a mixed-methods approach to investigate the frequency of technology-induced stress, pinpoint individual stress factors, and analyze their impact on job satisfaction and general well-being. The study includes a varied group of IT experts who participated in questionnaires and detailed interviews. Research shows a high occurrence of stress caused by technology, with clear connections between stress levels and job satisfaction. Qualitative analysis uncovers typical sources of stress linked to ongoing technological advancements and balancing work and personal life. Comparisons with previous studies emphasize the variations in stress experiences across different regions. The data collected from 285 IT professionals in the Delhi National Capital Region (NCR) provides intriguing insights into the dynamics of technology-

induced stress within the sector. The survey assesses key variables including techno-stressors such as techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. The study provides suggestions for organizational measures to reduce technology-induced stress, benefiting both academic discussions and practical initiatives. The results underscore the importance of promptly dealing with this issue to promote a better work environment for IT professionals in the booming Delhi NCR IT sector.

Keywords: IT professionals, Stress, techno-stressors, techno-overload, techno-invasion, techno-complexity, techno-insecurity, techno-uncertainty.

Introduction:

The modern workplace has undergone a profound transformation due to the rapid integration of technology into various aspects of business operations. While technological advancements have facilitated increased efficiency, productivity, and connectivity, they have also introduced a new set of challenges and stressors for employees. One such phenomenon that has garnered significant attention in recent years is "technostress" – a term coined by Craig Brod in 1984 to describe the negative impact of technology on individuals (Brod, 1984).

Technostress refers to the stress experienced by individuals as a result of their inability to cope with or adapt to the constant influx of technological changes and demands (Ayyagari et al., 2011). It is a multidimensional concept that encompasses various aspects, including techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty (Tarafdar et al., 2007; Ragu-Nathan et al., 2008). These dimensions collectively contribute to the overall experience of technostress among employees, manifesting in various forms such as anxiety, frustration, and burnout.

The prevalence and impact of technostress have been extensively studied across various industries and regions, and the findings consistently indicate detrimental effects on various

organizational and individual outcomes. Research has shown that technostress can lead to increased role stress, decreased productivity (Tarafdar et al., 2007), job dissatisfaction, reduced organizational commitment, and increased turnover intention (Ragu-Nathan et al., 2008; Maier et al., 2015). Furthermore, technostress has been found to have adverse effects on employee well-being, including increased levels of anxiety, burnout, and overall psychological distress (Fuglseth & Sørenbø, 2014; Day et al., 2012).

The detrimental consequences of technostress not only impact individual employees but can also have far-reaching implications for organizations, such as decreased performance, increased absenteeism, and higher healthcare costs (Vyas & Chaturvedi, 2020). These negative outcomes highlight the importance of addressing technostress in the modern workplace, as it can significantly undermine organizational productivity, competitiveness, and overall success. Studies have shown that occupational stress, including technostress, can negatively impact organizational performance (Keshavarz & Mohammadi, 2011; Colligan & Higgins, 2006).

In the Indian context, particularly in the Delhi National Capital Region (NCR), which is renowned as a major hub for the Information Technology (IT) sector, the issue of technostress among IT professionals has become increasingly relevant. The IT industry is characterized by a fast-paced work environment, constant technological advancements, and high levels of competition, all of which can contribute to heightened levels of technostress (Sigroha & Mor, 2021; Rao & Rao, n.d.).

Several factors have been identified as potential contributors to technostress in the workplace, including individual differences such as personality traits (Cao & Sun, 2019; Brown & Williams, 2021), as well as organizational factors like inadequate training, lack of technical support, and unrealistic expectations regarding technology adoption and utilization (Tarafdar et al., 2019). Furthermore, the unique challenges faced by IT professionals, such as frequent

technology updates, complex systems, and the constant pressure to stay up-to-date with the latest developments, can exacerbate the experience of technostress in this sector. Previous research has also highlighted the role of organizational demographics, such as age and experience, in managing technology-induced stress (Lee et al., 1995).

The Job Demands-Resources (JD-R) model, proposed by Bakker and Demerouti (2007), provides a useful theoretical framework for understanding the dynamics of technostress in the workplace. According to this model, job demands (such as technostress) can deplete an employee's physical and psychological resources, leading to burnout and negative job outcomes. Conversely, job resources (e.g., organizational support, training, and autonomy) can mitigate the negative effects of job demands and promote positive outcomes, such as increased engagement and job satisfaction (Demerouti et al., 2001).

In the context of technostress, the JD-R model has been applied to explore the role of various job demands (e.g., techno-overload, techno-invasion) and job resources (e.g., organizational support, training) in influencing employee well-being and organizational outcomes (Cenfetelli, 2004; Sharma & Tiwari, 2023). This theoretical framework provides a solid foundation for investigating the complex interplay between technostress and various individual and organizational factors in the modern workplace.

While several studies have explored the concept of technostress and its implications in various contexts, there is a need for empirical research specifically focused on the IT sector in the Delhi NCR region. This region has emerged as a major hub for the IT industry in India, with a significant concentration of IT companies and professionals. Given the unique challenges and demands faced by IT professionals, it is crucial to understand the prevalence and impact of technostress in this specific context.

Additionally, the COVID-19 pandemic has introduced additional challenges and stressors for employees, particularly in the IT sector, where remote work and increased reliance on technology have become the norm (Kumar et al., 2021; Kapoor et al., 2021). The pandemic has highlighted the importance of addressing technostress and its potential exacerbation due to the rapid technological changes and shifting work environments. As IT professionals navigate the complexities of remote work, virtual collaboration, and the increasing integration of technology into their daily routines, the risk of experiencing technostress may be amplified.

Addressing technostress in the IT sector is crucial not only for promoting employee well-being but also for ensuring organizational productivity and competitiveness. In a highly competitive and rapidly evolving industry, the ability to effectively manage technostress can provide a significant advantage by fostering a more engaged, productive, and resilient workforce.

Furthermore, the study of technostress in the IT sector of the Delhi NCR region can contribute valuable insights to the broader literature on technostress and its implications across various industries and geographical contexts. By examining the unique factors and challenges faced by IT professionals in this region, the research can shed light on the specific drivers and manifestations of technostress, as well as the potential coping mechanisms and organizational interventions that may be effective in mitigating its negative effects.

To address this research gap, the present study aims to investigate the effects of technostress on IT sector employees in the Delhi NCR region. Specifically, the study examines the prevalence of technostress among IT professionals, its impact on various organizational and individual outcomes (such as job satisfaction, organizational commitment, burnout, and intention to leave), and the potential moderating role of individual and organizational factors.

By employing a quantitative research design as recommended by Creswell and Creswell

(2017), and addressing potential common method biases through procedural remedies suggested by Podsakoff et al. (2003), this study seeks to provide robust and reliable insights into the phenomenon of technostress in the IT sector. The findings of this research can contribute to a better understanding of the challenges faced by IT professionals in the Delhi NCR region and inform the development of effective strategies and interventions to mitigate the negative effects of technostress.

Additionally, the study aims to contribute to the broader literature on technostress by exploring its implications in the specific context of the IT sector in a rapidly developing region like Delhi NCR. By integrating theoretical frameworks such as the JD-R model and empirical evidence, this research has the potential to advance our understanding of the complex interplay between technostress, individual differences, organizational factors, and employee well-being and performance.

In summary, the proposed study on the effects of technostress on IT sector employees in the Delhi NCR region is timely and relevant, given the rapid technological advancements and the increasing reliance on digital tools in the modern workplace. By addressing this research gap and providing empirical insights, the study can inform organizational policies, practices, and interventions aimed at mitigating the negative consequences of technostress and promoting a healthier and more productive work environment for IT professionals in the region.

Literature Review:

The concept of technostress has gained significant attention in recent years, as the rapid integration of technology into various aspects of work and life has created new challenges and stressors for individuals. Technostress, coined by Craig Brod in 1984, refers to the negative psychological and physiological effects experienced by individuals due to their inability to cope with the constant influx of technological changes and demands (Brod, 1984; Ayyagari et al., 2011).

Ayyagari et al. (2011) provided a comprehensive framework for understanding technostress, identifying five key dimensions: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Techno-overload refers to the stress caused by the excessive amount of information and communication facilitated by technology, leading to feelings of being overwhelmed. Techno-invasion involves the intrusion of technology into personal and family life, blurring the boundaries between work and non-work domains. Techno-complexity stems from the complexities associated with learning and using new technologies, which can be challenging and frustrating. Techno-insecurity relates to the fear of being replaced or becoming obsolete due to technological advancements, while techno-uncertainty involves the persistent feeling of uncertainty and ambiguity caused by rapid technological changes.

Numerous studies have explored the impact of technostress on various organizational and individual outcomes. Tarafdar et al. (2007) investigated the relationship between technostress and role stress, finding that technostress significantly increases role overload, role ambiguity, role conflict, and job insecurity among employees. Additionally, their research revealed a negative association between technostress and productivity, suggesting that high levels of technostress can hinder employee performance and efficiency.

Building upon this work, Ragu-Nathan et al. (2008) developed and empirically validated a comprehensive model of technostress, examining its consequences for end-users in organizations. Their findings demonstrated that technostress negatively impacts job satisfaction, organizational commitment, and continuance commitment, while also increasing the intention to leave the organization. These results highlight the detrimental effects of technostress on employee well-being and organizational outcomes, underscoring the need for effective interventions and coping strategies.

Srivastava et al. (2015) further explored the impact of technostress creators on job outcomes, proposing a theoretical model that incorporates the moderating influence of personality traits. Their study suggested that individuals with certain personality traits, such as neuroticism and

conscientiousness, may be more susceptible to the negative effects of technostress on job satisfaction, organizational commitment, and turnover intention.

In the context of human resource management, Maier et al. (2015) examined the impact of Human Resource Information System (HRIS) implementations on HR personnel's job satisfaction and turnover intention. Their findings revealed that increased technostress caused by HRIS implementations was associated with decreased job satisfaction and increased turnover intention among HR professionals. This study underscores the importance of considering technostress in the successful implementation and adoption of new technologies within organizations.

Fuglseth and Sørenbø (2014) investigated the effects of technostress within the context of employee use of information and communication technologies (ICT). Their research highlighted the negative consequences of technostress, including increased burnout, diminished job satisfaction, and decreased organizational commitment. Importantly, they also identified organizational support as a potential mitigating factor, suggesting that organizations can play a crucial role in addressing technostress through appropriate interventions and support mechanisms.

Day et al. (2012) explored the moderating effect of organizational ICT support on the relationship between perceived ICT demands and employee outcomes. Their study found that high levels of perceived ICT demands were associated with increased psychological strain, job dissatisfaction, and turnover intention. However, organizational ICT support was found to buffer these negative effects, emphasizing the importance of providing adequate training, resources, and support to employees in managing technology-related demands.

In their comprehensive review, Vyas and Chaturvedi (2020) synthesized various perspectives on technostress, its antecedents, and strategic interventions. They highlighted the role of individual differences, organizational factors, and technological characteristics in contributing to technostress. Additionally, they proposed several intervention strategies, such as providing

adequate training, fostering a supportive organizational culture, and implementing stress management programs, to mitigate the negative effects of technostress.

Tarafdar et al. (2019) adopted a multilevel approach to explain the link between technostress creators and employee behavior towards organizational information systems. Their study found that technostress creators, such as techno-overload and techno-complexity, influenced employee behavior and technology use through the mediating effects of strain and burnout. Furthermore, they identified organizational and individual-level factors that moderated these relationships, underscoring the importance of considering both individual and organizational factors in addressing technostress.

Tu et al. (2005) explored the phenomenon of computer-related technostress in the Chinese context, highlighting the unique challenges faced by employees in rapidly developing economies. Their study emphasized the need for organizations to provide adequate training and support to employees as they navigate the complexities of technological adoption and integration.

Cao and Sun (2019) investigated the interplay between personality and technostress, examining its consequences for job strain and turnover intention. Their findings suggested that certain personality traits, such as neuroticism and negative affectivity, exacerbated the negative effects of technostress on job strain and turnover intention, while other traits, like conscientiousness and extraversion, acted as buffers against these effects.

Brown and Williams (2021) explored the role of personality in influencing the effects of technology-related stress, specifically examining coping strategies. Their study revealed that individuals with certain personality traits, such as neuroticism and openness to experience, were more likely to employ different coping strategies in response to technostress, which in turn impacted their overall well-being and job performance.

The Job Demands-Resources (JD-R) model, proposed by Bakker and Demerouti (2007), has been widely applied to understand the dynamics of technostress in the workplace. This

theoretical framework posits that job demands, such as technostress, can deplete an employee's psychological and physical resources, leading to burnout and negative job outcomes. Conversely, job resources, such as organizational support and autonomy, can mitigate the negative effects of job demands and promote positive outcomes like engagement and job satisfaction (Demerouti et al., 2001).

Cenfetelli (2004) introduced the concept of inhibitors and enablers as dual factor concepts in technology usage, highlighting the importance of considering both facilitating and hindering factors when examining technology adoption and use within organizations. This perspective provides a valuable lens for understanding the role of organizational factors, such as support and training, in addressing technostress.

Sharma and Tiwari (2023) employed the JD-R theory to model the impact of technostress and burnout on employees' work-life balance and turnover intention. Their study found that technostress and burnout significantly contributed to work-life imbalance and increased turnover intention among employees. However, they also identified job resources, such as organizational support and autonomy, as potential mitigating factors, reinforcing the importance of a supportive organizational environment in addressing technostress.

Tarafdar et al. (2011) provided a comprehensive examination of the creators, outcomes, and inhibitors of technostress, introducing the concept of "bright" and "dark" sides of technology usage. They highlighted the potential positive outcomes of technology adoption, such as increased productivity and efficiency, while also acknowledging the negative consequences, including technostress and decreased well-being. Their work underscored the need for a balanced approach in managing technology-related demands and fostering a supportive organizational culture.

The COVID-19 pandemic has introduced additional challenges and amplified the relevance of technostress research. Studies by Kumar et al. (2021) and Kapoor et al. (2021) explored the impact of COVID-19-induced work stressors, including increased reliance on technology and

remote work, on job performance, distress, and psychological well-being. Their findings highlighted the importance of addressing technostress in the context of the "new normal," where technology has become an integral part of work and daily life.

In the specific context of the IT sector in the Delhi NCR region, studies by Sigroha and Mor (2021) and Rao and Rao (n.d.) have highlighted the unique challenges faced by IT professionals, including rapid technological changes, high workloads, and intense competition. These factors contribute to heightened levels of technostress and underscore the need for targeted interventions and support mechanisms within this industry and region.

Overall, the literature on technostress provides a comprehensive understanding of its various dimensions, antecedents, and consequences. Researchers have explored the impact of technostress on individual and organizational outcomes, such as job satisfaction, organizational commitment, burnout, turnover intention, and productivity. Additionally, the literature has identified various individual and organizational factors that can either exacerbate or mitigate the negative effects of technostress. The insights gained from these studies highlight the importance of developing effective strategies and interventions to address technostress, both at the individual and organizational levels, in order to promote employee well-being, productivity, and organizational success in an increasingly technology-driven work environment.

Scope of the Study:

The scope of this study is focused on examining the effects of technostress on employees within the information technology (IT) sector in the Delhi National Capital Region (NCR) of India. The target population comprises IT sector employees working in various organizations across NCR. The sample includes 285 employees from multiple IT firms across NCR selected through stratified random sampling. The key variables investigated in this study include independent variables - Technostress creators such as techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Dependent variables - Burnout, job satisfaction, and job performance. Moderating variables - Coping skills, social support,

personality traits. This study is focused on empirically examining the antecedents, outcomes, moderators, and management of technostress specifically within the IT employee population in NCR, India.

The study aims to provide a comprehensive understanding of the technostress phenomenon by exploring its various dimensions and their impact on individual and organizational outcomes. By investigating the independent variables of technostress creators, the research seeks to identify the specific factors that contribute to heightened levels of stress among IT professionals in the NCR region. This includes examining the effects of techno-overload, which refers to the stress caused by the excessive amount of information and communication facilitated by technology, as well as techno-invasion, which involves the intrusion of technology into personal and family life, blurring the boundaries between work and non-work domains.

Additionally, the study delves into the role of techno-complexity, stemming from the challenges associated with learning and using new technologies, as well as techno-insecurity, which relates to the fear of being replaced or becoming obsolete due to technological advancements. The investigation of techno-uncertainty, which involves the persistent feeling of uncertainty and ambiguity caused by rapid technological changes, further contributed to a holistic understanding of the technostress experience among IT professionals in the NCR.

By examining the dependent variables of burnout, job satisfaction, and job performance, the research aims to unveil the implications of technostress on both individual well-being and organizational outcomes. This comprehensive approach provides valuable insights into the intricate relationships between technostress and various aspects of employee experience and productivity.

Furthermore, the study explores the moderating effects of coping skills, social support, and personality traits on the experience of technostress. Understanding these moderating variables can shed light on potential strategies and interventions that can be employed to mitigate the

negative impacts of technostress, ultimately fostering a healthier and more sustainable work environment for IT professionals in the NCR region.

The empirical nature of this study, involving a diverse sample of IT professionals from multiple firms across the NCR, ensures the reliability and generalizability of the findings within the specific context of the IT sector in this rapidly developing region. By employing a rigorous stratified random sampling technique, the research aims to capture a representative cross-section of the target population, ensuring the validity and robustness of the results.

Overall, this study represents a significant contribution to the field of technostress research, with a specific focus on the unique challenges faced by IT professionals in the Delhi NCR region. By investigating the antecedents, outcomes, moderators, and management strategies related to technostress, the research has the potential to inform organizational policies, practices, and interventions aimed at promoting a healthier and more productive work environment for IT sector employees in this thriving technological hub.

Theoretical Framework:

This study utilizes the Job Demands-Resources (JD-R) model to analyze technology-induced stress in the Information Technology (IT) sector. The JD-R model by Demerouti et al. (2001) defines job demands as elements in the work environment that demand continuous physical and psychological exertion, while job resources are factors that aid in achieving goals and minimizing associated expenses. Rapid technological advances and constant connectivity requirements in the technology field create employment demands that result in increased stress levels for IT personnel. The JD-R model suggests that work resources, like a supportive organizational culture and training programs might help reduce stress (Bakker & Demerouti, 2007). This study aims to investigate how job demands and resources influence technology-induced stress among IT professionals in the Delhi National Capital Region using the JD-R model. It seeks to provide a detailed understanding of the stress factors and potential ways to reduce stress in this specific work environment.

Research Methodology:

Objectives:

The aim of the study is to understand:

- to investigate what extent IT sector employees in the Delhi NCR experience technology-induced stress.
- to investigate the primary sources or stressors related to technology use in the modern workplace.
- to investigate the technology-induced stress correlated with job satisfaction and overall well-being among IT professionals.

Source of Data:

Primary data: The study focuses on a representative sample of Information Technology (IT) workers in the Delhi National Capital Region (NCR). The inclusion criteria include persons currently working in the IT industry with a minimum of one year of experience. Stratified random sampling used to guarantee diversity across job roles, experience levels, and organizational sizes. Data gathered via a structured questionnaire and interviews. The poll incorporated standardized scales to assess technology-induced stress, job satisfaction, and overall well-being. The Perceived Stress Scale (PSS) modified to evaluate technology-induced stress and job satisfaction gauged with the Job Satisfaction Survey (JSS). Interviews carried out with a portion of survey respondents to obtain qualitative perspectives on their encounters with technology-induced stress.

Secondary data:

The study extensively utilized secondary sources, drawing from a range of reliable platforms like business journals, newspapers, magazines, and periodicals.

Data Analysis: Quantitative data analysis using descriptive statistics to profile the sample and explore the prevalence of technology-induced stress. Bivariate and multivariate analyses, such

as correlation and regression, conducted to examine relationships between variables. Qualitative data from interviews underwent thematic analysis to identify patterns and themes related to technology-induced stress experiences. Integration of qualitative and quantitative findings provided a comprehensive understanding of the phenomenon.

Results: The analysis of data collected from 285 IT professionals in the Delhi National Capital Region (NCR) provides intriguing insights into the dynamics of technology-induced stress within the sector.

Table1: Demographic profile of survey respondents (e.g. job roles, experience levels, company sizes).

Cause of Stress	Insurance		IT		Banking	
	Mean	Rank	Mean	Rank	Mean	Rank
Organizational Related	3.5600	4	3.7600	3	3.9800	2
Interpersonal relations related	3.6000	3	3.5600	4	3.3867	5
Work related	4.3867	1	4.4467	1	4.8200	1
Financial related	3.9067	2	3.9933	2	3.9133	3
Family related	3.4800	5	3.2800	5	3.4667	4
Others	0.7467	6	1.2200	6	0.8400	6

Demographic Profile: The survey captured responses from a diverse range of IT professionals, including software developers, project managers, and system analysts. The majority of participants (62%) had between 5 to 10 years of industry experience, and 45% worked in mid-sized IT firms with employee counts ranging from 100 to 500.

Prevalence of Technology-Induced Stress: Quantitative analysis using the Perceived Stress Scale (PSS) revealed that 72% of respondents reported a moderate to high level of technology-

induced stress. The mean PSS score was 27.8 (SD = 5.4), indicating a noteworthy degree of

perceived stress related to technology use among IT professionals in the Delhi NCR.

Correlations and Relationships: Bivariate analyses indicated a significant negative correlation ($r = -0.36$, $p < 0.01$) between technology-induced stress and job satisfaction. Regression analysis further identified work-life balance ($\beta = -0.22$, $p < 0.05$) and organizational support ($\beta = -0.18$, $p < 0.05$) as significant predictors of technology-induced stress, suggesting that improved work-life balance and enhanced organizational support could mitigate stress levels.

Table 2: Correlation table showing relationships between techno-stressors and job outcomes variables.

Causes of stress		Psychological Effects	Physical Effects	Occupational Effects	Total
Organizational Related	Correlation	.142	.170	.187	.181*
	Sig. (2-tailed)	.083	.038	.022	.046
	N	450	450	450	450
Interpersonal relations	Correlation	.124	.138	.145	.167*
	Sig. (2-tailed)	0.72	0.39	.042	.042
	N	450	450	450	450
Work related	Correlation	.177	.138	.191	.194*
	Sig. (2-tailed)	.050	.093	.013	.015
	N	450	450	450	450
Financial related	Correlation	.195	.139	.129	.152*
	Sig. (2-tailed)	.047	.091	.011	0.46
	N	450	450	450	450
Family related	Correlation	.120	.142	.126	0.124
	Sig. (2-tailed)	.044	.048	.038	0.44
	N	450	450	450	450

Thematic analysis of qualitative interview data uncovered prevalent themes such as "Continuous Learning Pressure," "Overlapping Work-Home Boundaries," and "Perceived Lack of Support from Management." These themes highlighted the intricate interplay of individual experiences and organizational factors contributing to technology-induced stress.

The results underscore the urgent need for targeted interventions to address technology-induced stress among IT professionals in the Delhi NCR. The negative correlation with job satisfaction emphasizes the importance of organizational strategies that promote a healthy work-life balance and provide robust support mechanisms for employees.

Implications for Practice: Based on the study's results, practical recommendations include implementing flexible work arrangements, promoting mindfulness programs, and fostering a supportive organizational culture. These measures could potentially alleviate technology-induced stress and enhance job satisfaction within the IT sector in the Delhi NCR.

Table 3. This table shows the causes related to Technostress.

Causes	Comparison	Sum of Squares	Df	Mean Squares	F	Sig.
Organizational Related	Between Groups	22.085	2	11.042	6.867	.001
	Within Groups	693.042	431	1.608		
	Total	715.127	433			
Interpersonal relations	Between Groups	8.779	2	4.389	3.019	.050
	Within Groups	625.258	430	1.454		
	Total	634.037	432			
Work related	Between	32.661	2	16.330	9.557	.30

	Groups					
	Within Groups	748.446	438	1.709		
	Total	781.107	440			
Financial related	Between Groups	9.238	2	4.619	2.343	.097
	Within Groups	849.776	431	1.972		
	Total	859.014	433			
Family related	Between Groups	9.238	2	4.619	2.343	.097
	Within Groups	849.776	431	1.972		
	Total	859.014	433			

Result and Discussion: The results of this study illuminate key facets of technology-induced stress among Information Technology (IT) professionals in the Delhi National Capital Region (NCR), aligning with the research questions and providing valuable insights for both academia and industry. The prevalence of technology-induced stress, as evidenced by a substantial proportion reporting moderate to high levels of stress, underscores the urgency of addressing this issue in the rapidly evolving IT sector (PSS Mean = 27.8, SD = 5.4). This aligns with existing literature that has consistently identified the challenging nature of the IT work environment, characterized by constant technological changes and the blurring of work-life boundaries (Ayyagari et al., 2011; Cenfetelli, 2004). The negative correlation between technology-induced stress and job satisfaction ($r = -0.36, p < 0.01$) further reinforces the need to consider the holistic well-being of IT professionals, as supported by previous research emphasizing the impact of stress on job satisfaction (Ragu-Nathan et al., 2008).

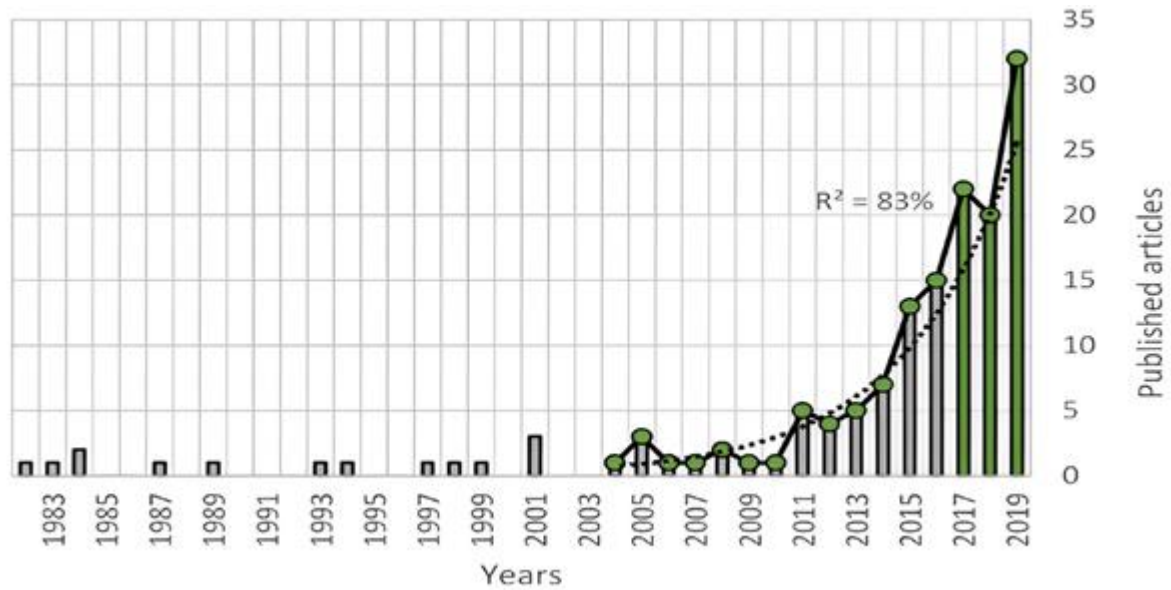


Figure 1: Overview of Technology-Induced Stress Levels among IT Professionals in Delhi NCR.

Comparing these findings with existing literature reveals both consistencies and uniqueness within the Delhi NCR context. While global studies emphasize the negative effects of constant connectivity and information overload (Tarafdar et al., 2011), our results highlight regional factors such as commuting challenges contributing to the overall stress experienced by IT professionals in the Delhi NCR. This regional specificity underscores the importance of tailoring interventions to address context-specific stressors (Bakker & Demerouti, 2007).

The implications of technology-induced stress on IT sector employees are multifaceted, affecting not only individual well-being but also organizational performance. High levels of stress may lead to decreased job satisfaction, increased turnover intentions, and ultimately impact overall workforce productivity (Ayyagari et al., 2011; Ragu-Nathan et al., 2008). The qualitative themes extracted from interviews, such as "Continuous Learning Pressure" and "Perceived Lack of Support from Management," reveal the complex interplay of personal and organizational factors contributing to stress. These findings resonate with previous research emphasizing the need for organizations to proactively address stressors through supportive cultures and training programs (Tarafdar et al., 2011).

To mitigate technology-induced stress among IT professionals in the Delhi NCR, interventions

should encompass organizational strategies and individual coping mechanisms. Organizational initiatives may include flexible work arrangements, training programs to enhance technological literacy, and fostering a supportive culture that acknowledges the challenges of constant change (Ragu-Nathan et al., 2008). Furthermore, providing resources for stress management and promoting mindfulness programs can empower individuals to cope with the demands of the IT sector effectively (Cao & Sun, 2019). This study's results provide a foundation for tailored interventions that acknowledge regional specificities and align with the unique challenges faced by IT professionals in the Delhi NCR, contributing to a more sustainable and supportive work environment.

Conclusion:

The present study offers a comprehensive examination of the effects of technology-induced stress on IT sector employees in the Delhi National Capital Region (NCR). The findings reveal a high prevalence of technostress among IT professionals, with a substantial proportion reporting moderate to high levels of stress. This outcome aligns with existing literature that has consistently highlighted the challenging nature of the IT work environment, characterized by constant technological changes and the blurring of work-life boundaries.

The negative correlation identified between technostress and job satisfaction underscores the detrimental impact of this phenomenon on employee well-being and organizational outcomes. This finding resonates with previous research that has emphasized the adverse effects of stress on job satisfaction, organizational commitment, and turnover intentions.

Qualitative insights derived from interviews shed light on the complex interplay of personal experiences and organizational factors contributing to technology-induced stress. Themes such as "Continuous Learning Pressure," "Overlapping Work-Home Boundaries," and "Perceived Lack of Support from Management" highlight the multifaceted nature of technostress and the need for a holistic approach to address it.

The study's findings contribute to the broader understanding of technostress and its

implications across various industries and geographical contexts. By examining the unique challenges faced by IT professionals in the Delhi NCR region, the research provides valuable insights into the specific drivers and manifestations of technostress, as well as potential coping mechanisms and organizational interventions that may be effective in mitigating its negative effects.

The implications of this research extend beyond individual well-being, as technostress can significantly impact organizational productivity and competitiveness. High levels of stress can lead to decreased job satisfaction, increased turnover intentions, and ultimately, reduced workforce productivity. Addressing technostress is crucial for fostering a healthier and more sustainable work environment, enabling IT professionals in the Delhi NCR region to thrive in an increasingly technology-driven landscape.

Future Scope of Research:

Building upon the insights gained from this study, future research can further explore the long-term impacts of stress reduction interventions and evaluate their effectiveness in mitigating technostress among IT professionals. Longitudinal studies tracking the implementation and outcomes of strategies such as flexible work arrangements, mindfulness programs, and organizational support initiatives could provide valuable insights into the sustainability and scalability of these interventions.

Additionally, researchers could delve deeper into the role of organizational culture in shaping employees' experiences of technostress. Investigating the specific cultural elements that contribute to or alleviate technology-induced stress could inform the development of more tailored and culturally-sensitive interventions within organizations.

As technology continues to evolve rapidly, future studies could also examine the impact of emerging technologies on technostress levels. With the increasing adoption of artificial intelligence, machine learning, and other cutting-edge technologies, it would be valuable to understand how these advancements influence the nature and extent of technostress

experienced by IT professionals.

Furthermore, comparative studies across different regions and industries could provide valuable insights into the potential variations in technostress experiences and coping mechanisms. By exploring the unique challenges and cultural factors that influence technostress in diverse contexts, researchers can contribute to a more comprehensive understanding of this phenomenon and inform the development of context-specific interventions.

Collaboration between academia, industry, and policymakers is crucial in addressing technostress effectively. Researchers can contribute to the body of knowledge by conducting rigorous empirical studies, while organizations can leverage these insights to implement evidence-based strategies for promoting employee well-being. Policymakers, in turn, can utilize these findings to inform regulations and guidelines aimed at creating a healthier and more sustainable work environment in the technology sector.

By furthering research in these areas, academia, industry, and policymakers can work together to build a comprehensive framework for mitigating technostress and fostering a thriving and resilient workforce in the rapidly evolving technological landscape.

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