



Moderating Role of Psychological Resilience in the Relationship Between Technostress and Individual Work Performance Among Indian IT Professionals

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DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150800030>

Received: 13 August 2026; Accepted: 18 August 2026; Published: 05 September 2026

ABSTRACT

Technostress has emerged as a significant occupational challenge in the information technology (IT) sector due to rapid technological advancements and increasing digital work demands. This study examined the relationships among technostress, psychological resilience, and individual work performance and investigated the moderating role of psychological resilience among Indian IT professionals. A cross-sectional correlational design was employed with a convenience sample of 200 IT professionals aged 20–40 years. Data were collected using the Technostress Scale, the Brief Resilience Scale, and the Individual Work Performance Questionnaire. Spearman's rank-order correlation, Mann–Whitney U tests, and Hayes' PROCESS macro (Model 1) were used for data analysis. Technostress was significantly and negatively associated with individual work performance ($r_s = -.399$, $p < .001$), whereas psychological resilience was positively associated with work performance ($r_s = .222$, $p = .002$) and significantly moderated the relationship between technostress and work performance ($B = 1.528$, $p < .001$). Gender differences were observed in psychological resilience and work performance, while no significant differences were found based on educational qualification. These findings suggest that psychological resilience serves as a protective factor against the adverse effects of technostress and highlight the importance of resilience-building interventions to promote employee well-being and sustain work performance in technology-intensive organizations.

Keywords: Technostress, Psychological Resilience, Individual Work Performance, Information Technology Professionals, Moderation Analysis

INTRODUCTION

The rapid digital transformation of workplaces has positioned the information technology (IT) sector at the forefront of innovation while simultaneously increasing employees' exposure to technology-related demands. In India, the IT industry employs over five million professionals and continues to expand through advances in artificial intelligence, cloud computing, cybersecurity, and other digital technologies (NASSCOM, 2024). Although these developments improve organizational competitiveness, they also create substantial psychological demands, giving rise to **technostress**, defined as the stress experienced when individuals struggle to adapt to information and communication technologies (ICTs) and the increasing complexity of digital work environments (Nimrod, 2018). Previous research has linked technostress to burnout, reduced job satisfaction, impaired well-being, and poorer work performance.

Employees differ in their ability to cope with these technological demands. **Psychological resilience**, defined as the capacity to recover and adapt successfully following adversity (Smith et al., 2008), has been identified as an important personal resource that promotes effective coping and psychological well-being. According to the **Transactional Model of Stress and Coping** (Lazarus & Folkman, 1984), resilience may buffer the adverse effects of workplace stressors such as technostress.

An important organizational outcome affected by workplace stress is **individual work performance (IWP)**, which comprises task performance, contextual performance, and counterproductive work behaviour (Koopmans et al., 2015). While technostress may impair employee performance, resilient individuals are more likely to maintain effective work behaviours despite technological challenges.

Although previous studies have examined technostress, resilience, and work performance independently, limited research has investigated the moderating role of psychological resilience among **Indian IT professionals**. Therefore, the present study examines the relationships among technostress, psychological resilience, and individual work performance and investigates whether resilience moderates the relationship between technostress and work performance.

Research Variables

Technostress refers to the stress experienced when individuals struggle to cope with rapidly changing ICTs and digital work demands (Nimrod, 2018). It comprises five dimensions: overload, invasion, complexity, privacy concerns, and inclusion, and has been associated with reduced well-being, burnout, and poorer work performance.

Psychological resilience is the ability to recover and adapt successfully following stress or adversity (Smith et al., 2008). In organizational settings, resilience promotes effective coping, psychological well-being, and sustained work performance.

Individual work performance (IWP) refers to employee behaviours that contribute to organizational goals (Koopmans et al., 2015). It includes task performance, contextual performance, and counterproductive work behaviour, providing a comprehensive measure of workplace effectiveness.

Need and Significance of the Study

The increasing digitalization of India's IT sector has intensified technostress, making it a significant challenge for employee well-being and work performance (Li & Wang, 2021; World Economic Forum, 2023). Although psychological resilience has been identified as a protective factor, limited research has examined its moderating role among Indian IT professionals. Addressing this gap, the present study investigates the relationships among technostress, psychological resilience, and individual work performance and examines whether resilience buffers the negative effects of technostress. The findings are expected to contribute to occupational psychology literature and provide practical guidance for developing resilience-based interventions that enhance employee well-being and performance in technology-intensive workplaces.

REVIEW OF LITERATURE

Theoretical Review

This study is grounded in the **Transactional Model of Stress and Coping** (Lazarus & Folkman, 1984), which explains that individuals' responses to stress depend on their appraisal of stressors and the coping resources available to them. In technology-intensive workplaces, **technostress** arises when employees perceive that the demands of digital technologies exceed their ability to cope (Brod, 1984; Tarafdar & Ragu-Nathan, 2007). Technostress encompasses stressors such as techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty, all of which have been associated with adverse psychological and occupational outcomes.

Within this framework, **psychological resilience** serves as an important personal coping resource. Resilience refers to the capacity to adapt positively and recover from adversity (Richardson, 2002), enabling individuals to manage workplace stress more effectively and maintain psychological well-being. Employees with higher resilience are therefore expected to experience fewer negative consequences of technostress.

The study further conceptualizes **individual work performance (IWP)** as a multidimensional construct comprising task performance, contextual performance, and counterproductive work behaviour (Koopmans et al., 2011). Based on the Transactional Model of Stress and Coping, the present study proposes that psychological resilience moderates the relationship between technostress and individual work performance by buffering the adverse effects of technology-related stress. This theoretical framework provides the basis for examining how resilience influences employees' ability to sustain performance in digitally demanding work environments.

EMPIRICAL REVIEW

In the growing body of research on technostress, several studies have examined its impact on employees and the role of psychological resilience in reducing its negative effects. **Çelik and Düzgün (2022)** investigated the relationships among technostress, psychological resilience, digital literacy, and job performance among working professionals. Their findings showed that technostress negatively affected job performance, whereas psychological resilience significantly moderated this relationship by reducing the adverse effects of digital stress. The study emphasized the importance of resilience in promoting employee well-being and performance in technology-intensive workplaces.

Similarly, **Tarabah (2021)** examined the effects of technostress and COVID-19-related stress on employee burnout. The findings revealed that both stressors significantly increased burnout, while psychological resilience mediated their effects by protecting employee well-being and sustaining work performance. The study highlighted resilience as a key resource for managing workplace stress.

Likewise, **Srivastava, Chandra, and Shirish (2015)** explored the moderating influence of personality traits on the relationship between technostress and job outcomes among working professionals. Their results demonstrated that resilience and emotional stability reduced burnout and improved employees' ability to adapt to technology-related stress, leading to better job outcomes. The authors concluded that resilience is an important protective factor in technology-intensive work environments.

A related theme in the literature is the role of **coping strategies** in reducing technostress. **Upadhyaya and Vrinda (2021)** examined the relationships among technostress, coping strategies, and employee well-being using Structural Equation Modelling (SEM). Conducted among working professionals, the study found that problem-focused coping strategies and psychological resilience significantly reduced the negative effects of technostress, thereby improving employee well-being. The findings emphasize the importance of adaptive coping mechanisms in technology-driven workplaces.

Similarly, **Ibrahim, Osman, and Gusau (2021)** investigated the relationship between technostress, work-life balance, and job performance among media professionals. The results showed that technostress negatively affected both work-life balance and job performance. However, self-efficacy emerged as a significant protective factor, helping employees manage technology-related stress more effectively and reducing its adverse impact on performance.

Another major theme in the literature is the **negative impact of technostress on employee performance and well-being**. **Ragu-Nathan et al. (2008)** investigated the consequences of technostress among organizational employees and found that techno-overload and techno-complexity significantly reduced productivity and job satisfaction. Their findings highlighted the need for organizations to address technostress in technology-intensive workplaces.

Similarly, **Agogo and Hess (2018)** examined how information overload, IT anxiety, and task complexity affect employee productivity among IT professionals. The study found that these technology-related stressors increased perceived stress and reduced work efficiency by disrupting employees' ability to maintain consistent performance.

Likewise, **Salanova, Llorens, and Cifre (2013)** explored the psychological effects of technostress among information and communication technology (ICT) users. Their findings demonstrated that excessive technology

use adversely affected employee well-being and emphasized the importance of organizational support and effective coping strategies.

Ayyagari, Grover, and Purvis (2011) examined the technological and organizational antecedents of technostress among working professionals. The study found that increased workload, blurred work-life boundaries, and rapidly changing technologies contributed significantly to technostress, highlighting the importance of designing employee-friendly technological environments.

Similarly, **Tarafdar, Pullins, and Ragu-Nathan (2015)** investigated the impact of technostress on employee performance in technology-intensive workplaces. Their findings indicated that unmanaged technostress reduced productivity, while interventions such as user-friendly technologies and resilience-building initiatives could effectively mitigate its negative effects.

Several studies have also examined technostress in **specific occupational contexts**. **Le, Bishop, and Macrae (2024)** reported that digital upskilling and resilience-building strategies helped homecare employees adapt to technology-related demands during crises. In the financial sector, **Mokhtar and Yunus (2024)** found that psychological resilience mediated the relationship between technostress and employee well-being, protecting workers from adverse psychological outcomes. Similarly, **Tarafdar, Pullins, and Ragu-Nathan (2014)** demonstrated that technostress negatively affected behavioural performance among sales professionals, while resilience reduced these adverse effects.

Finally, research has extended to **educational settings**. **Al-Abyadh (2025)** examined technostress among university students and found that psychological resilience buffered the negative effects of technostress, thereby promoting well-being and academic vitality.

Efiliti and Çoklar (2019) examined the relationship between psychological capital and technostress among teachers. Their findings indicated that higher levels of psychological capital, including resilience, optimism, and self-efficacy, were associated with lower technostress and better job quality, highlighting the protective role of positive psychological resources.

Similarly, **Asad et al. (2023)** investigated the effects of technostress on the psychological well-being of postgraduate students. The study found that techno-complexity and task-related stress negatively affected academic performance and well-being, whereas resilience and adaptive coping strategies helped mitigate these adverse effects. The authors emphasized the importance of psychological support in digitally demanding learning environments.

Research Gap

Although technostress has been widely studied, most research has treated it as a unidimensional construct, with limited attention to how its individual components influence different aspects of work performance. Furthermore, existing evidence is largely derived from Western and East Asian contexts, limiting its generalizability to the Indian IT sector, which has distinct technological and organizational characteristics. In addition, while psychological resilience has been proposed as a protective factor against technostress, empirical evidence examining its moderating role in the relationship between technostress and individual work performance remains limited. Addressing these gaps, the present study investigates the relationships among technostress, psychological resilience, and individual work performance among Indian IT professionals and examines whether psychological resilience buffers the adverse effects of technostress on work performance.

Research Questions

- Is there a relationship between technostress and individual work performance among IT professionals?
- Is there a relationship between psychological resilience and individual work performance among IT professionals?
- Is there a relationship between psychological resilience and technostress among IT professionals?



- Does psychological resilience significantly moderate the relationship between technostress and individual work performance among IT professionals?

METHOD

Aim of the Study

The aim of this study is to examine the relationships among technostress, psychological resilience, and individual work performance, and to assess the moderating role of resilience and group differences based on gender and educational qualification among IT professionals.

Objectives

1. To examine the relationship between technostress and individual work performance among IT professionals.
2. To examine the relationship between psychological resilience and technostress among IT professionals.
3. To examine the relationship between psychological resilience and individual work performance among IT professionals.
4. To investigate whether psychological resilience significantly moderates the relationship between technostress and individual work performance among IT professionals.
5. To determine whether there is a significant difference in technostress between male and female IT professionals.
6. To determine whether there is a significant difference in psychological resilience between male and female IT professionals.
7. To determine whether there is a significant difference in individual work performance between male and female IT professionals.
8. To determine whether there is a significant difference in technostress between IT professionals with a bachelor's degree and those with a master's degree.
9. To determine whether there is a significant difference in psychological resilience between IT professionals with a bachelor's degree and those with a master's degree.
10. To determine whether there is a significant difference in individual work performance between IT professionals with a bachelor's degree and those with a master's degree.

Hypotheses

H1: There is a significant relationship between technostress and individual work performance among IT professionals.

H2: There is a significant relationship between psychological resilience and technostress among IT professionals.

H3: There is a significant relationship between psychological resilience and individual work performance among IT professionals.

H4: Psychological resilience significantly moderates the relationship between technostress and individual work performance among IT professionals.

H5: There is a significant difference in technostress between male and female IT professionals.

H6: There is a significant difference in psychological resilience between male and female IT professionals.

H7: There is a significant difference in individual work performance between male and female IT professionals.

H8: There is a significant difference in individual work performance between IT professionals with a bachelor's degree and those with a master's degree.

H9: There is a significant difference in psychological resilience between IT professionals with a bachelor's degree and those with a master's degree.

H10: There is a significant difference in technostress between IT professionals with a bachelor's degree and those with a master's degree.

Operational Definitions

• Technostress.

Technostress refers to the psychological strain resulting from difficulties in adapting to information and communication technologies (ICT). In this study, it is measured using Nimrod's (2018) Technostress Scale, which includes five dimensions: overload, invasion, complexity, privacy concerns, and inclusion pressure.

• Resilience.

Resilience is defined as the ability to recover from stress and adapt to adversity. It is assessed using the Brief Resilience Scale (Smith et al., 2008), which measures individuals' capacity to "bounce back" from challenging situations.

• Individual Work Performance (IWP).

IWP refers to behaviours under an employee's control that contribute to organizational goals. It includes task performance, contextual performance, and counterproductive work behaviour. This construct is measured using the Individual Work Performance Questionnaire (Koopmans et al., 2015).

Research Design

This study employed a **non-experimental, cross-sectional correlational design** to examine the relationships among technostress, psychological resilience, and individual work performance and to investigate the moderating role of psychological resilience.

Participants

A convenience sample of **200 Indian IT professionals** aged **20–40 years** participated in the study. The sample comprised **120 males (60%)** and **80 females (40%)**. All participants were Indian nationals, with **77.5% employed in India** and **22.5% working abroad**. Half of the participants held a bachelor's degree (50%), while the remaining half held a master's degree (50%). Eligibility criteria included Indian nationality, current employment in the IT sector, age between 20 and 40 years, and possession of at least a bachelor's degree.

Measures

Technostress was measured using the **Technostress Scale** developed by **Nimrod (2018)**. The 14-item instrument assesses five dimensions of technostress: overload, invasion, complexity, privacy concerns, and inclusion. Responses are rated on a 5-point Likert scale, with higher scores indicating greater technostress. The scale demonstrated good internal consistency ($\alpha = .81$).

Psychological resilience was assessed using the **Brief Resilience Scale (BRS)** (Smith et al., 2008). The scale consists of six items rated on a 5-point Likert scale, with higher scores indicating greater resilience. Previous studies have reported good reliability ($\alpha = .80-.91$).

Individual work performance was measured using the **Individual Work Performance Questionnaire (IWPQ)** (Koopmans et al., 2014). The 18-item questionnaire assesses **task performance, contextual performance, and counterproductive work behaviour**. Items are rated on a 5-point scale, with higher scores indicating better work performance.

Procedure

Data were collected through an anonymous online survey administered via Google Forms. Participants were recruited using convenience sampling through professional networks, email, and social media platforms. Prior to participation, informed consent was obtained electronically. The questionnaire included demographic information, the Technostress Scale, the Brief Resilience Scale, and the Individual Work Performance Questionnaire. All responses were anonymous, and ethical principles regarding voluntary participation, confidentiality, and data security were strictly maintained.

Data Analysis

Data were analysed using **IBM SPSS Statistics Version 25**. Normality was assessed using the **Shapiro–Wilk test**, which indicated that the data were not normally distributed. Consequently, **Spearman's rank-order correlation** was used to examine relationship among the study variables, while the **Mann–Whitney U test** assessed group differences based on gender and educational qualification. The moderating role of psychological resilience was tested using **Hayes' PROCESS macro (Version 4.2, Model 1)** with **5,000 bootstrap samples**, mean-centering of continuous variables, **HC3 heteroscedasticity-consistent standard errors**, and the **Johnson–Neyman technique**. Statistical significance was set at $p < .05$.

RESULTS AND DISCUSSION

Table 1 Test of Normality Scoring Using the Shapiro-Wilk Test.

Variable	Shapiro-Wilk Statistic	df	Significance
INVASION	0.939	200	.000
COMPLEXITY	0.935	200	.000
PRIVACY	0.935	200	.000
INCLUSION	0.953	200	.000
TECHNO	0.973	200	.001
TP	0.971	200	.000
CP	0.965	200	.000
CWB	0.934	200	.000
IWPQ	0.966	200	.000
RTOTAL	0.948	200	.000

Table 1 shows that the Shapiro-Wilk significance values for all variables were less than the threshold of .05, indicating that the assumption of normality was violated for each variable. Specifically, the p-values were .000 for Invasion, Complexity, Privacy, Inclusion, Task Performance, Contextual Performance, Counterproductive Work Behaviour, Individual Work Performance, and Resilience. The overall Technostress score also showed a significant result, with a Shapiro-Wilk statistic of 0.973 and a p-value of .001. The Shapiro-Wilk test statistics ranged from 0.934 to 0.973. For instance, Invasion had a value of 0.939 ($p = .000$), Privacy and Complexity both had 0.935 ($p = .000$), and Inclusion had a value of 0.953 ($p = .000$). Similarly, Task Performance had a value of 0.971 ($p = .000$), Contextual Performance had 0.965 ($p = .000$), and Counterproductive Work Behaviour had 0.934 ($p = .000$). The overall Individual Work Performance variable had a value of 0.966 ($p = .000$), while the Resilience score was 0.948 ($p = .000$).

These results indicate that none of the measured variables are normally distributed, as all p-values are below the conventional alpha level of .05. In such cases, the data violate the assumption of normality required for many parametric statistical tests, such as Pearson correlation or ANOVA. Therefore, non-parametric statistical methods—such as Spearman's rank correlation, Mann–Whitney U test, or Kruskal–Wallis test—are more appropriate for analyzing the relationships and group differences among these variables. The use of non-parametric tests ensures the validity and robustness of the study's findings despite the non-normal distribution of the data.

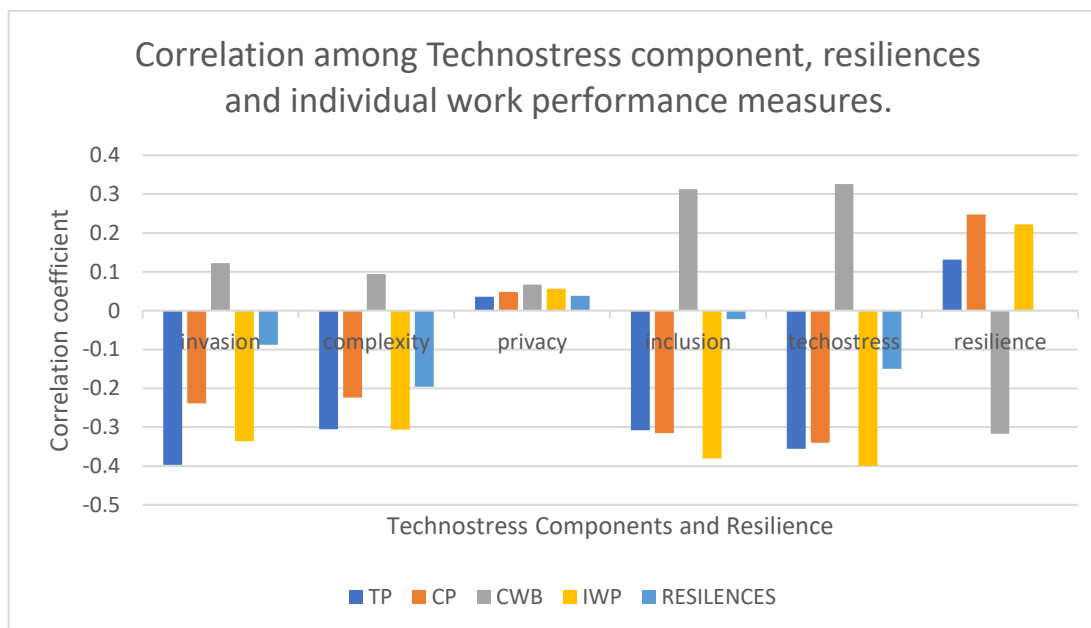
Table 2 Analyze the relationship among Technostress, Resilience, and Individual work performance among IT professionals.

Variables		TP	CP	CWB	IWP	RTOTAL
Invasion	r	-.397**	-.239**	.122	-.336**	-.088
	p	.000	.001	.084	.000	.214
Complexity	r	-.305**	-.224**	.094	-.306**	-.196**
	p	.000	.001	.184	.000	.006
Privacy	r	.036	.048	.067	.056	.038
	p	.614	.503	.346	.434	.596
Inclusion	r	-.308**	-.315**	.313**	-.380**	-.022
	p	.000	.000	.000	.000	.755
Technostress	r	-.356**	-.340**	.326**	-.399**	-.150*
	p	.000	.000	.000	.000	.034
Resilience	r	.131	.248**	-.317**	.222**	—
	p	.064	.000	.000	.002	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Figure 1 Correlations Among Technostress, Resilience, and Individual Work Performance.



As presented in **Table 2**, technostress was significantly and negatively associated with **individual work performance** ($r_s = -.399$, $p < .001$), supporting **H1**. Higher technostress was associated with lower **task performance** ($r_s = -.356$, $p < .001$) and **contextual performance** ($r_s = -.340$, $p < .001$), and with higher **counterproductive work behaviour** ($r_s = .326$, $p < .001$). Psychological resilience showed a significant positive relationship with **individual work performance** ($r_s = .222$, $p = .002$) and **contextual performance** ($r_s = .248$, $p < .001$), and a significant negative relationship with **counterproductive work behaviour** ($r_s = -.317$, $p < .001$), partially supporting **H3**. In addition, technostress demonstrated a weak but significant negative correlation with psychological resilience ($r_s = -.150$, $p = .034$), supporting **H2**, with the **complexity** dimension showing the strongest negative association with resilience ($r_s = -.196$, $p = .006$). As illustrated in **Figure 1**, these findings indicate that higher technostress is associated with poorer work performance, whereas greater psychological resilience is associated with better performance and fewer counterproductive behaviours. The results are consistent with the **Transactional Model of Stress and Coping** (Lazarus & Folkman, 1984) and previous

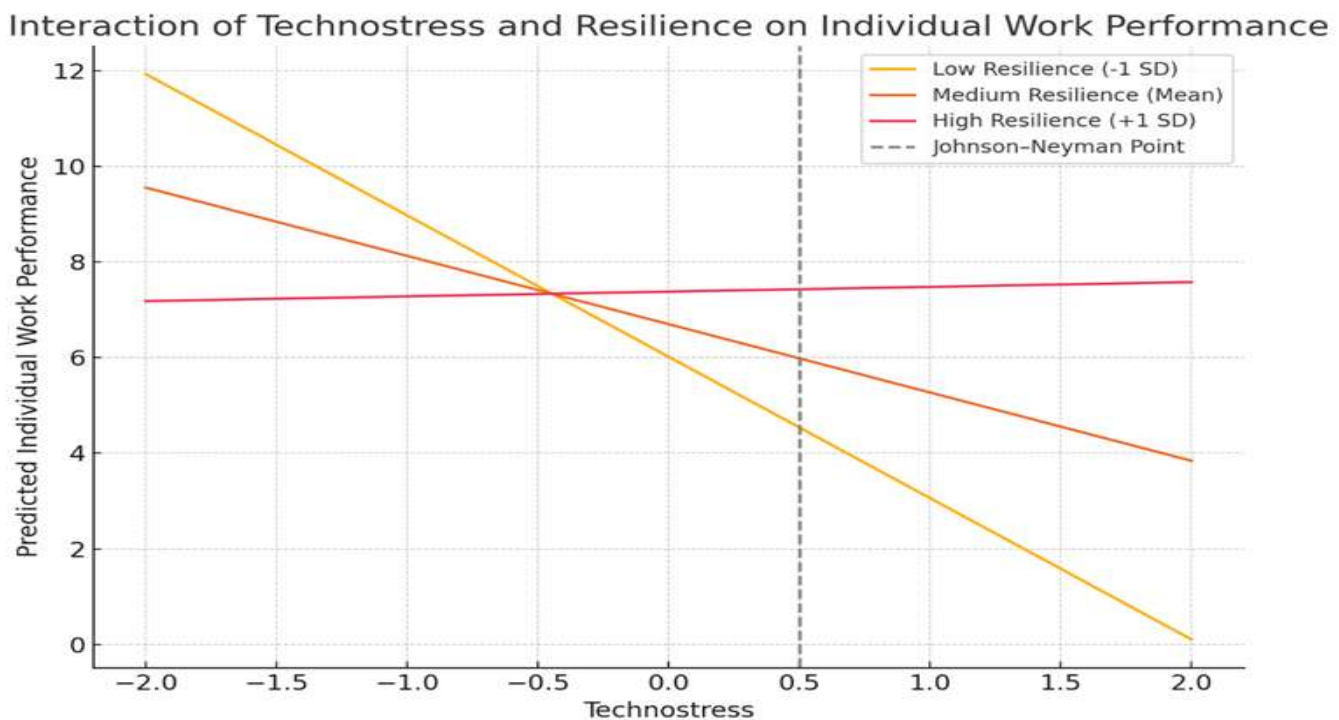
research (e.g., Çelik & Düzgün, 2022; Tarabah, 2021), suggesting that resilience functions as an important coping resource in technology-intensive workplaces.

Table 3 Analysis of Moderation: Analysis of the Effect of Technostress on Individual Work Performance with Resilience as a Moderator.

Component	Value	SE	t / F	df1	df2	p	95% CI
Model Summary	R = .512		F = 39.67	3	196	< .001	R ² = .262, MSE = 2.11
Constant	6.700	0.103	64.81			< .001	[6.497, 6.904]
Technostress (X)	-1.429	0.222	-6.44			< .001	[-1.866, -0.992]
Resilience (W)	0.682	0.231	2.95			.004	[0.227, 1.137]
Technostress × Resilience (X × W)	1.528	0.420	3.64			< .001	[0.700, 2.357]
Interaction Effect (ΔR^2)	.034		F = 13.24	1	196	< .001	
Conditional Effect at Low Resilience (-.52)	-2.225	0.281	-7.93			< .001	[-2.778, -1.672]
Conditional Effect at Mean Resilience (-.02)	-1.461	0.220	-6.63			< .001	[-1.895, -1.026]
Conditional Effect at High Resilience (.48)	-0.697	0.326	-2.13			.034	[-1.341, -0.053]
Johnson–Neyman Point	0.504						Effect non-significant > 0.504

Note. HC3 standard errors reported. Variables were mean-centered prior to analysis. Conditional effects represent resilience values at the 16th, 50th, and 84th percentiles.

Figure 2 Interaction between Technostress and Resilience in Predicting Individual Work Performance.



As shown in **Table 3**, psychological resilience significantly moderated the relationship between technostress and individual work performance. Technostress was negatively associated with work performance ($B = -1.429$, $p < .001$), whereas psychological resilience showed a significant positive association ($B = 0.682$, $p = .004$). The significant interaction effect ($B = 1.528$, $p < .001$) supported **H4**, indicating that higher resilience attenuated the negative impact of technostress on work performance. As illustrated in **Figure 2**, employees with higher resilience maintained relatively stable work performance despite increasing technostress, whereas those with lower resilience exhibited a steeper decline in performance. The Johnson–Neyman analysis further indicated that the adverse effect of technostress became non-significant at higher levels of resilience. These findings are consistent with the **Transactional Model of Stress and Coping** (Lazarus & Folkman, 1984) and previous research (e.g., Çelik & Düzgün, 2022; Tarabah, 2021), supporting resilience as a protective resource that buffers the detrimental effects of technostress on employee performance.

Table 4 Difference among Male and Female IT professionals, N value, Mean Rank, Mann-Whitney coefficient(U), Statistical Significance.

Variable	Gender	N	Mean Rank	U	Significance (2-tailed)
Technostress	Female	80	100.34	4787.500	0.975
	Male	120	100.60		
Resilience	Female	80	88.31	3825.000	0.014
	Male	120	108.63		
Individual Work Performance	Female	80	86.75	3700.000	0.006
	Male	120	109.67		

Figure 3 Mean ranks of Technostress, Resilience, and Individual Work Performance by Gender.

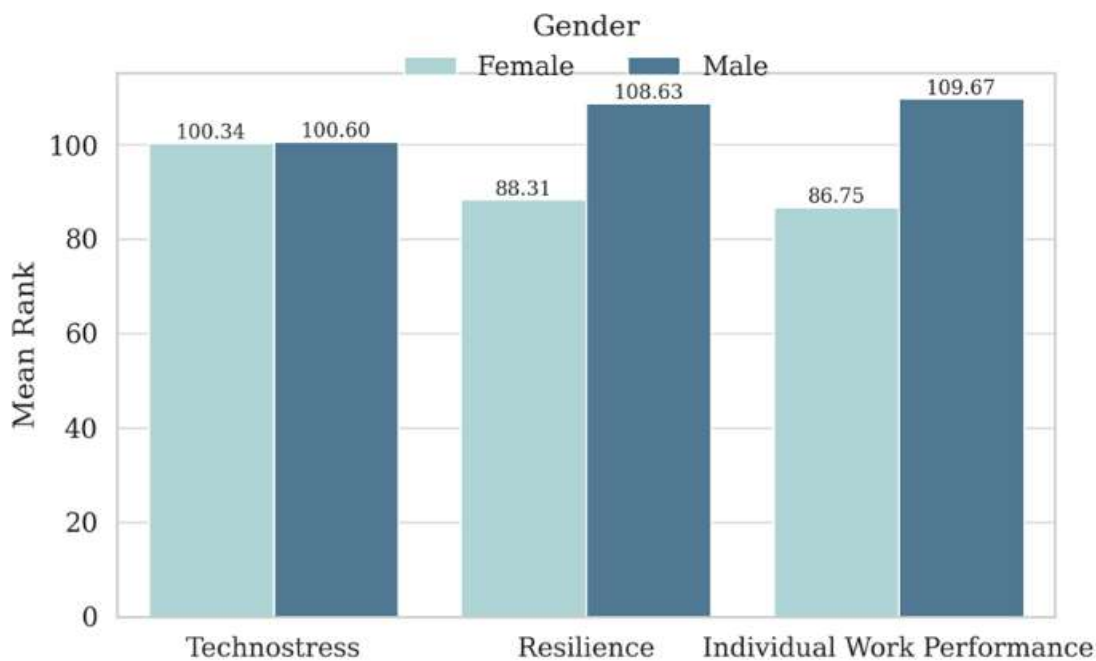


Table 4 presents the differences between male and female IT professionals in terms of technostress, psychological resilience, and individual work performance. The Mann–Whitney U test indicated no significant gender difference in **technostress** ($U = 4787.50$, $p = .975$), indicating that male and female IT professionals experienced comparable levels of technostress; therefore, **H5 was not supported**. However, significant gender differences were observed in **psychological resilience** ($U = 3825.00$, $p = .014$) and **individual work performance** ($U = 3700.00$, $p = .006$), with male participants reporting higher resilience and work performance than female participants. Accordingly, **H6 and H7 were supported**. As shown in **Figure 3**, the mean ranks for resilience and work performance were higher among males, whereas technostress levels remained comparable across genders. These findings are consistent with previous research (e.g., Çelik & Düzgün, 2022; Tarabah, 2021), suggesting that resilience may contribute to better work performance despite similar levels of technostress. The results highlight the importance of resilience-building interventions, particularly for supporting employees who may be more vulnerable to the adverse effects of workplace stress.

Table 5 Educational Qualification Differences in Technostress, Resilience, and Individual Work Performance

Variable	Educational Qualification	N	Mean Rank	U	Significance (2-tailed)
Individual Work Performance	Master's Degree	100	101.25	4925.000	0.855
	Bachelor's Degree	100	99.75		

Resilience	Master's Degree	100	95.38		
	Bachelor's Degree	100	105.63	4487.500	0.206
Technostress	Master's Degree	100	102.25		
	Bachelor's Degree	100	98.75	4825.000	0.668

Figure 4 Mean Ranks by Educational Qualification for IWP, Resilience, and Technostress

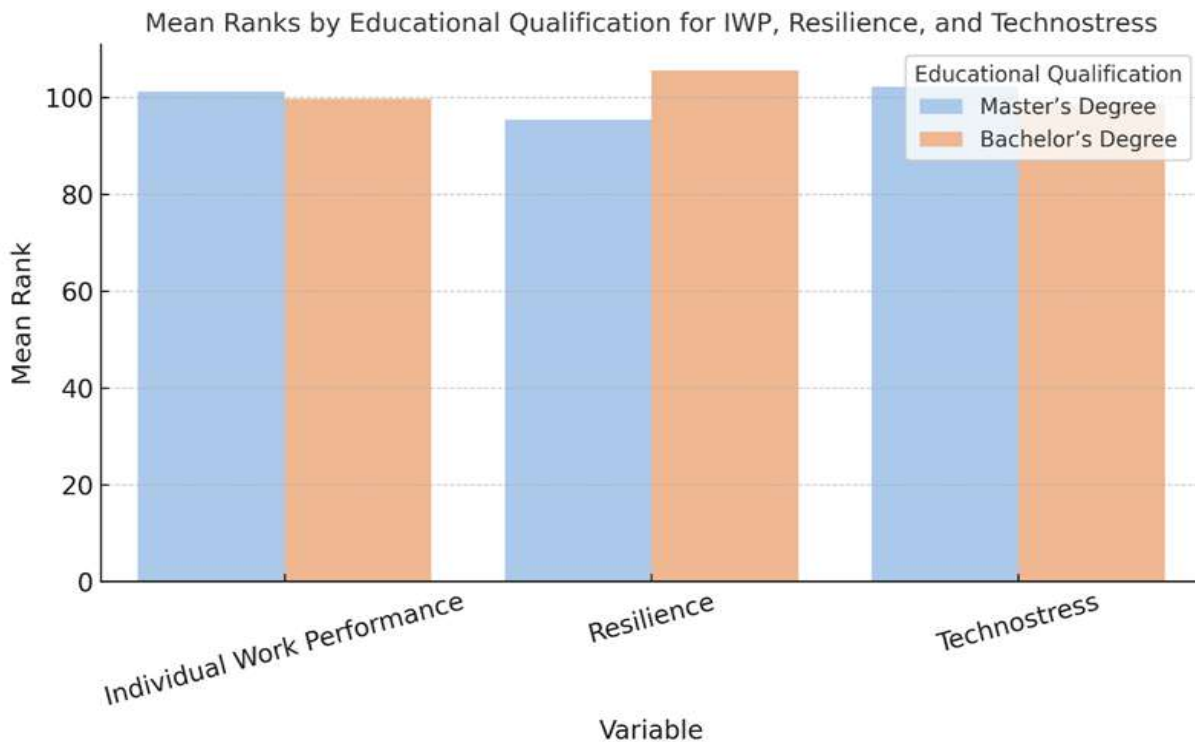


Table 5 presents the differences between IT professionals with a master's degree and those with a bachelor's degree in terms of technostress, psychological resilience, and individual work performance. Table 5 indicates that there are no statistically significant differences in individual work performance, psychological resilience, or technostress between IT professionals holding a bachelor's degree and those with a master's degree. The Mann–Whitney U test revealed no significant differences between IT professionals with bachelor's and master's degrees in **individual work performance** ($U = 4925.00, p = .855$), **psychological resilience** ($U = 4487.50, p = .206$), or **technostress** ($U = 4825.00, p = .668$). Therefore, **H8, H9, and H10 were not supported**, indicating that educational qualification was not associated with any of the study variables. As illustrated in **Figure 4**, both educational groups exhibited comparable mean ranks across all three constructs. These findings are consistent with previous studies (e.g., Çelik & Düzgün, 2022; Mokhtar & Yunus, 2024), suggesting that psychological and organizational factors may exert a greater influence on employee resilience and work performance than formal educational attainment. Consequently, interventions aimed at reducing technostress and enhancing resilience should be implemented across employees irrespective of educational qualification.

SUMMARY AND CONCLUSION

This study examined the relationships among technostress, psychological resilience, and individual work performance among Indian IT professionals. The findings demonstrated that higher levels of technostress were associated with poorer work performance, whereas psychological resilience was positively associated with better performance and significantly moderated the negative impact of technostress. Employees with higher resilience were better able to maintain their work performance despite technology-related stress. Although gender differences were observed in resilience and work performance, no significant differences were found based on educational qualification. These findings highlight psychological resilience as an important protective factor in technology-intensive workplaces and underscore the need for organizational interventions that strengthen

resilience and reduce technostress. The study contributes to the growing literature on occupational psychology by providing empirical evidence from the Indian IT sector and offers practical implications for enhancing employee well-being and organizational performance.

Implications of the Study

The findings indicate that technostress negatively influences individual work performance among Indian IT professionals, whereas psychological resilience acts as a protective factor by reducing its adverse effects. These results highlight the importance of implementing organizational strategies such as resilience training, stress management programs, digital well-being initiatives, and employee counselling to enhance psychological adaptability and sustain work performance in technology-intensive environments. The absence of educational differences suggests that interventions should be implemented across all employee groups, while the observed gender differences in resilience and work performance emphasize the need for inclusive workplace policies that address diverse employee experiences. The study also provides empirical support for the **Transactional Model of Stress and Coping**, demonstrating that resilience functions as a coping resource that buffers the negative effects of technostress. Overall, the findings contribute to the occupational psychology literature and offer practical guidance for organizations seeking to promote employee well-being, resilience, and sustainable performance in digitally evolving workplaces..

Limitations

The findings should be interpreted in light of several limitations. First, the use of a convenience sample of 200 Indian IT professionals limits the generalizability of the results to other occupational and cultural contexts. Second, the cross-sectional design precludes causal inferences, as the observed relationships are correlational. Third, the reliance on self-report measures may have introduced response biases, including social desirability bias. Finally, the unequal gender distribution and the absence of cross-cultural comparisons warrant cautious interpretation of the findings.

Future Research

Future studies should employ probability sampling and longitudinal designs to improve generalizability and establish causal relationships. Incorporating qualitative or mixed-method approaches may provide deeper insights into employees' experiences of technostress and resilience. Further research should also examine cross-cultural differences and explore additional organizational and psychological factors that may influence the relationship between technostress, resilience, and work performance.

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