


Research Article

Job Characteristics and Task Performance: The Role of Technostress among Teleworkers

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ABSTRACT

Task performance remains a main issue for teleworkers in organizations during the COVID-19 and post-COVID era. The unique demands and challenges faced by teleworkers result in increased stress and decreased task performance. This study focuses on the relatively overlooked indirect effect of technostress during post covid and between job characteristics and task performance. The survey approach was used to collect the data from 248 employees from teleworkers working in the IT and telecom sectors of Pakistan's twin cities (Rawalpindi and Islamabad). The purposive sampling technique was used to collect data. The findings suggested that Task Autonomy and Task Identity had a significant positive impact on Task Performance. The research provides a unique set of lessons that the IT sector should implement to increase the task performance of teleworkers, which ultimately leads to achieving goals and gaining a competitive advantage. The study contributes to the existing literature on the contributing factor that improves the effectiveness of teleworkers in the IT sector of Pakistan. The study is unique in its scope and implications, focusing on the IT sector. This research will provide useful insight to better understand how task autonomy and task identity are necessary for the effectiveness of teleworkers' task performance where technology is the only source of communication between all the employees.

KEYWORDS

Task Autonomy, Task Identity, Technostress, Task Performance

1 | INTRODUCTION

Task performance is recognized as one of the fundamental indicators of organizational performance, and it contributes to the organization's productivity, competitiveness, and social and psychological work environment (Halbeslebe, 2008). According to research, stress and performance are adversely correlated with computer-based tasks (Chilton et al., 2005; Tarafdar et al., 2007), and hence, they harm employees' task performance. Technostress is a relatively new and neglected topic compared to the many studies available that examine the multiple benefits and potentials related to technology for organizations and individuals' personal and professional lives (Tarafdar et al., 2015). From the evidence of the research done during the pandemic related to teleworking (Belzunegui and Erro 2020; Fischer et al. 2021; Sako, 2021), there is a vast number of problems that need to be addressed to develop a knowledgeable teleworking environment.

During COVID-19, people are restricted from home and are not allowed to perform any activity in public places. Companies instruct employees to perform work activities from home (Belzunegui and Erro 2020). Using ICTs to work outside of the workplace is known as teleworking (Verbeke et al. 2008), and it became a substitute for most working individuals during the pandemic. Teleworkers are more susceptible to experiencing technostress due to their continuous reliance on technology, which results in harmful consequences for themselves and for the organization they are working for as well (Baruch, 2000). Hence, because of the COVID-19 pandemic, everyone who was compelled to work from home saw an exponential increase in the likelihood of technological stress.

Teleworkers have a unique work environment, which places certain demands on their employees, and if those needs are not managed properly, they might create stress for the employees (Weinert et al., 2015). Technostress rises due to the complex use of technology as well as the anxiety that comes with the continuous use of technology (McFedries, 2003; Maier et al., 2019). Additionally, it may cause withdrawal symptoms and impair the employees' performance (Yang et al., 2017). A lack of studies has examined the limitations in demands in the context of technology use, even after the significance of technostress and its effect on employees (Wei et al., 2020).

Job characteristics are a set of variables seen as significant contributors to the employees' job affection and conduct (Hackman and Oldham, 1976). In all the jobs, all characteristics are present to at least some degree and so the purpose of the job design is to regulate the levels of each characteristic to help any of the wanted results (Oldham and Fried, 2016). The five job characteristics are not meant to be the main objectives of the job, rather they are unique perceptions that reflect the many cues of the job and the information derived from the social context (Talat and Riaz, 2020; Salancik and Pfeffer, 1978). Task autonomy and Task identity have been disputed as important characteristics that provide individuals with vital information regarding their work, and such a process requires positive learning, which somewhat characterizes thriving (Pierce et al, 2009; Spreitzer et al., 2005). Task identity is known as the degree to which the job demands the completion of all the work from beginning to conclusion, whereas task autonomy is how much decision-making, freedom, and independence the task offers (Hackman & Oldham, 1976, 1980).

Focusing on the teleworkers in Pakistan and the organizations that employ them as well as the need to study different job characteristic dimensions in relation to task performance, we hypothesize technostress as a mediator. This indicates that job characteristics affect employee performance through their influence on technostress and its dimensions. High levels of technostress result in the employees feeling greater levels of loneliness and this results in reduced levels of performance (Taser et al., 2022). Research regarding task autonomy and task performance needs to be carried out in sectors like agricultural sectors, management and industrial sectors and private and semi-private health sector (Tabiu et al., 2018).

There is a need to study variables in relation to the mediating role of technostress (Brooks and Califf 2016). The said relationship has not been investigated and studied using technostress as a mediator in Pakistan's teleworking industry. Employee performance and job characteristics might influence the employee's well-being at work as well as the technostress and tele-pressure creators on well-being (Katharina et al., 2020). Technostress also impacts the other aspects of employee performance such as contextual or task performance and so it needs to be studied in their context to recognize the effect of technostress on the performance of teleworking employees (Saleem et al. 2021). Little research has been carried out regarding job characteristics, employee well-being and employee performance hence there is an open area to carry out research (Matilu and K'Obonyo, 2018). Research regarding job autonomy and performance needs to be conducted in more sectors, for example, agricultural sectors, industrial sectors, and private and semi-private clinics (Tabiu et al., 2018). To study task autonomy and identity of employees, it has been recommended to use non-student samples with the right mix of age and gender (Jiang et al., 2020). Hence, the study will focus on two dimensions of job characteristics, task autonomy and task identity, to examine how the influence of technostress impacts the task performance of teleworking employees.

2 | LITERATURE REVIEW

2.1 | Theoretical Support

The Person-environment fit (P-E fit) theory of stress is commonly used in organizational stress studies (Chuang, Shen, & Judge, 2015; Kaur & Dubey, 2014; Nguyen & Borteyrou, 2016). In other words, positive outcomes result from a high fit, between people and their environment, and negative outcomes, such as stress, result from a low congruence, or misfit. (Ostroff and Schulte 2007). Numerous stressors connected to fit, and misfit are identified in the literature, including the influence of technology and employment characteristics. (Ahuja et al. 2007; Ayyagari et al. 2011). P-E fit theory has been also considered about P-T fit, or person-technology fit, in the context of technostress. (Ayyagari et al. 2011). The P-T fit essentially explains how various technological characteristics might have an impact on various technological stressors and result in technostress. Technological stressors were identified by Tarafdar et al., (2007) and they represent technological misfits.

A teleworker may feel overloaded with information while continuously using technology which can also be complex to use and may cause techno-insecurity in the teleworking employee resulting in P-T misfit and becoming a cause of technostress which will eventually affect the job performance of the teleworker. The continuous use of different kinds of technologies as well as software causes stress for teleworkers as they feel compelled to work faster and multi-task beyond their abilities. The P-E Fit Theory is also discussed in terms of Job characteristics. Person-job fit (P-J fit) measures the relation between a person's qualities and a particular set of tasks performed at work, is a commonly used theory to examine job characteristics in organizational stress research. (Kristof-Brown et al. 2005). The P-J Fit can be discussed in two basic conceptualizations (Edwards 1991). The first one refers that the demands of the job fit the knowledge plus the abilities of the employee whereas the second concept refers to that the employee's needs or preferences are met by the job. Hence, within the context of this study, if the teleworker has an increased level of stress and the core job characteristics are not being met then it will lead to technostress in the teleworker.

2.2 | Task Autonomy and Technostress

According to Zhao et al., (2016), greater autonomy, task relevance, and task identification in the workplace may help employees feel more purpose in their work and minimize the negative effects of emotional labour on their levels of job stress. Employees having greater levels of autonomy would exhibit better work attitudes and experience less stress in the workplace (Tara & Iqbal, 2023). In previous studies (Steyn and Vawda (2014), Ragu-Nathan et al. (2008), and Morris and Venkatesh 2010), high levels of autonomy, job feedback, task identity, task significance, and task variety are associated with lower levels of technostress. Given that autonomous professionals have the freedom to control and manage their workloads, it has been suggested that autonomy in IT professionals can reduce stress (Ahuja et al., 2007). As a result, employees having greater levels of autonomy are less likely to experience P-J misfit and so have an adverse relationship between technostress and job performance.

Hypothesis 1: There is a relationship between Task Autonomy and Technostress.

2.3 | Task Autonomy and Task Performance

Employees who are naturally motivated are more engaged (Putra et al., 2016). Furthermore, employees have high task autonomy at work and enjoy more freedom to choose how to complete the task and this encourages creativity. In contrast, employees working in low-task autonomy environments have less freedom regarding the decision-making on task and this reduces creativity (Lopis and Foss, 2016). Employees with clear operational task autonomy and reasonable task accountabilities also possess the critical capabilities needed to ensure better performance and organizational success (Van et al., 2010). Recent research by Truss et al. (2013) found that employees whose jobs offer high degrees of task variety, autonomy, and task feedback significance are more likely to be highly engaged. Whereas, employees having more autonomy would exhibit better work attitudes and experience less stress at work (Zhao et al., 2016). This suggests that job characteristics could lessen emotional labour and job stress, which results in talent retention and improved job performance (Kuo et al. 2022, Tara & Iqbal, 2023).

Hypothesis 2: There is a positive relationship between Task Autonomy and Task performance.

2.4 | Task Identity and Technostress

Brooks et al. (2016) suggest that task identity significantly helps to lessen the influence of technostress on job performance. Employees will have a higher level of fit and a decreased technostress if they have a high identity in their tasks. As the task identity increases, employees can assess themselves in terms of the quality of work done (Johari and Yahya, 2016). According to research, task identity enables employees to perceive the value in their work as well as to identify more with the job, and this prompts them to maintain their energy and remain engaged (Sonnentag, 2017). According to Kuo et al., (2022) job characteristics exert favorable influences on job stress hence the greater the task identity the less the stress will be for employees. The employees' job characteristics of skill variety and task identity are significantly correlated with the well-being variables of anxiety, contentment and depression-enthusiasm (Sevastos et al., 1992). It has been discovered that a high level of task identity is linked to lower levels of stress (Kie and Johns 1995).

Hypothesis 3: There is a relationship between Task Identity and Technostress.

2.5 | Task Identity and Task Performance

According to previous studies, task identity is positively related to task performance and negatively related to alienation and job insecurity hence with the increase in task identity of employees the performance will also be better (Bamai and Reisel. 2007, Blauner. 1964, Fried and Ferris, 1987, Kirsch and Lengermand. 1972, Kohn, 1976). As task identity increases, employees can assess themselves better in terms of the quality of work done (Johari and Yahra, 2016). As per research, task identity enables employees to perceive value and meaningfulness of their selves in, and identify with, the job, and so it encourages employees to sustain energy and remain involved (Sonnetas, 2017). When the work has high levels of task autonomy, task diversity, task identity, task feedback and task significance, it can effectively stimulate the employee's enthusiasm and initiative and have a positive predictive effect on the perception of the employee's job meaning and well-being (Zhang & Zhao, 2021). Task identity is considerably related to innovative work behaviour resulting in improved performance (Coelho and Augusto, 2010).

Hypothesis 4: There is a positive relationship between Task Identity and Task Performance.

2.6 | Technostress and Task Performance

According to research stress and performance are adversely correlated with computer-based tasks (Chilton et al. 2005, Tarafdar et al, 2007), and it has adverse effects on the task performance of the employee. Studies show how technostress obstructs the employees' performance in organizations (e.g. innovation: Chandra et al., 2019; burnout and engagement: Srivastava et al, 2015). Technostress in teleworkers can occur due to several reasons. Employee performance may suffer as a result of the overload brought on by technology, which has been labelled as a P-T misfit associated with technostress (Aysagari et al. 2011). One may conclude from the study of interruptions when being applied by the P-E fit perspective, that interruptions create P-E misfit, which is visible by an increase in perceived mental workload (e.g., French et al., 1982). The result of this perception is an increase in stress, which in turn reduces task performance (Warburton, 1979). Work overload can be caused due to the adoption of new technologies (Ahmad and Scott, 2019). Second, users may believe that switching between several technologies while at work is extremely complex, which leads to technostress (Tarafdar et al. 2007). Stress has a negative impact on the employee's performance (Ram et al., 2011; Kinvita, 2015; Yunita and Saputra, 2019). Job stress is required to be released to maintain positive employee performance (Kuo et al. 2022). Negative emotional concerns, such as emotional exhaustion can result from these stresses (Wang et al., 2018).

Hypothesis 5: There is a relationship between Technostress and Task Performance.

2.7 | Technostress Plays a Mediating Role Between Task Autonomy and Task Performance

The continuous need to cope with and learn about new technologies leads to a loss of productivity (Seilheimer et al, 2000, Siegall et al, 2000) which can result in decreased employee performance. The significance of task identity and autonomy has been highlighted in encouraging a sense of success among the employees and in turn, it makes the workers happy (Jiang et al. 2020).

Technostress in teleworkers can occur due to several reasons. Technology users may believe that switching between several technologies while at work is extremely complex, which leads to technostress (Tarafdar et al. 2007). Studies show how technostress obstructs the employees' performance (e.g. innovation: Chandra et al., 2019; burnout and engagement: Srivastava et al, 2015) in organizations. Existing research argues that a basic job design alone cannot improve the task performance and that psychological elements as well as other aspects play a role in influencing performance of employees (Sonnetag et al., 2008). Technostress studies agreed that burnout has negative effects on performance of tasks (Tarafdar et al., 2014, 2017, Hwang and Cha, 2018).

According to evidence, technostress severely impacts several work outcomes including job satisfaction, productivity and organizational commitment (Avyagari et al., 2011; Ragu-Nathan et al., 2008; Tarafdar et al., 2007, 2010, 2015). Identifying more with job tasks and perceiving more autonomy helps employees to thrive more at work and hence shows improved task performance (Jiang et al. 2020). Employee's task performance may suffer because of the overload brought on by technology, which has been described as a P-T misfit linked to technostress (Ayyagari et al. 2011). Work overload can be caused due to the adoption of new technologies (Ahmad and Scott, 2019). Previous studies have unmistakably demonstrated that technostress can significantly impair an employee's performance when using IT for work-related tasks (Chen & Muthitacharoen, 2016). Additionally, because of techno complexity, it takes more time and effort for individuals to understand and learn new IT applications, which limits their ability to

complete more productive and creative work tasks. Hence, as a result, end-user performance is significantly decreased (Tarafdar et al., 2015). Earlier research has shown that user satisfaction and happiness have a positive impact on an individual’s performance in terms of productivity and task innovation within organizational contexts (Hon. 2012, Hsu et al., 2008, Tarafdar et al., 2010).

Hypothesis 6: Technostress mediates the relationship between Task Autonomy and Task Performance.

2.8 | Technostress Plays a Mediating Role Between Task Identity and Task Performance

Teleworking-related stress, anxiety, and sadness made it difficult for employees to focus at work and had a negative influence on their performance (Saboo et al., 2022). During the pandemic, the employees worked remotely and the employers prioritized and deeply worried about the psychological well-being of the employees (Hoff, 2021; Pradhan et al., 2021; Jaiswal et al., 2024). Task identity refers to the degree to which the entire task must be completed from start to finish, whereas autonomy measures how much the job provides discretion, freedom, and independence to the employee (Hackman & Oldham, 1976, 1980). These claims are supported by empirical studies which demonstrate a constructive relationship between both task identity and autonomy and the need for satisfaction at work (Moran et al. 2012).

The employee’s output in terms of goals and responsibilities related to the task is also known as task performance. To some degree, it can more clearly reflect an employee’s work aptitude and performance (Jia et al. 2022). The significance of task identity and autonomy has been emphasized to promote a sense of success in the employees and make the workers happy (Jiang et al., 2020). Task identity encourages the employees by instilling a sense of meaningfulness, purpose and value in their jobs (Coelho and Augusto, 2010b). The continuous need to cope with and learn about new technologies leads to a loss of productivity (Valta et al., 2024, Siegall et al, 2000) which can result in decreased employee performance. Sageer et al., (2012) propose that employees working under poor conditions and low levels of job characteristics negatively affect the technostress hence this means a high level of job characteristics decreases technostress.

Hypothesis 7: Technostress mediates the relationship between Task Identity and Task Performance.

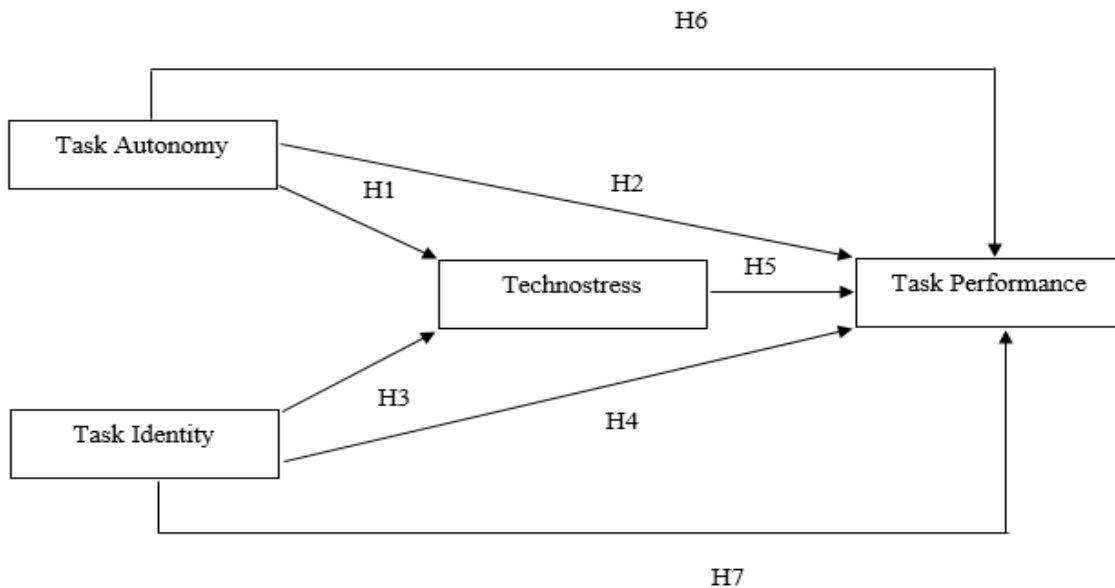


Figure 1: Conceptual Model

3 | METHODOLOGY

3.1 | Data Collection

The survey approach was used to collect the data through an online questionnaire. The study's target population was the teleworkers of IT and telecom companies operating in the twin cities of Pakistan (i.e., Rawalpindi and Islamabad). The formal consent from concerned companies has been obtained through WhatsApp and email. The data was collected from 248 employees of IT and telecom companies.

3.2 | Measurement

Task autonomy and task identity were measured using a three-item scale from the JDS by Hackman and Oldham (1980). Technostress was measured using a 23-item scale developed by Ragu-Nathan et al.(2008). A 5-item scale developed by Tarakci et al. (2016) measures employees' task performance. Supervisors were asked to indicate the extent to which they agreed with the description of their immediate subordinates' performance.

4 | ANALYSIS AND RESULTS

Table 1

Demographic characteristics of the participants of the study.

Variable	Category	Frequency	Percent
Gender	Male	197	85.7
	Female	32	14.3
Age	21-30	73	31.7
	31-40	76	33
	41-50	38	17
	50 and above	42	18.3
Education	Bachelors	118	51.3
	Masters	108	47
	Ph.D.	3	1.7
Marital Status	Married	214	94
	Unmarried	15	7

The measurement model of the variables (Table 2) can be assessed by calculating “Factor Loadings (FL), Cronbach’s alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). The FL of the items greater than 0.6 is good, but some items were kept with 0.5 FL. The values of Cronbach’s alpha are in the acceptable range of 0.6 or greater Murphy, (1989). All the composite reliability values are greater than 0.7 and are most accurate if greater than 0.7 (Werts et al., 1974). The minimum value of AVE that is acceptable is greater than 0.5 which explains that a minimum 50% measurement variance is explained by the latent variable (Cheah et al., 2018). All the constructs value of AVE are greater than 0.5 of required threshold.

Table 2

Measurement Model

First-Order construct	Indicator’s	Factor loading	CR	Alpha	AVE
Task Autonomy	TA1	0.828	0.873	0.865	0.788
	TA2	0.920			
	TA3	0.913			
Task Identity	TI1	0.938	0.937	0.914	0.852
	TI2	0.938			
	TI3	0.893			
Technostress	TS1	0.690	0.921	0.899	0.503
	TS2	0.710			
	TS3	0.774			
	TS4	0.780			
	TS5	0.787			
	TS6	0.705			

	TS7	0.817			
	TS8	0.809			
	TS10	0.509			
	TS11	0.570			
	TS16	0.564			
Task Performance	TP1	0.808	0.876	0.846	0.613
	TP2	0.804			
	TP3	0.824			
	TP4	0.756			
	TP5	0.715			

Table 3 shows the discriminant validity results using the Fornell and Larcker method. According to this method (Fornell & Larcker, 1981) “the squared root of average variance extracted (AVE) of a construct should be higher than its correlation with any other construct”. The variables are considered to have discriminant validity if the self-correlations values are higher than the variable's correlation values (Farrell & Rudd, 2009).

Table 3
Discriminant Validity

Variables	TA	TI	TP	TS
TA	0.887			
TI	0.288	0.923		
TP	0.292	0.201	0.782	
TS	0.351	0.211	0.136	0.709

Table 4 explains the direct and indirect effects of the constructs. The first hypothesis is regarding the direct and positive impact of Task Autonomy on Task Performance. The results indicate that the coefficients of the results for testing this hypothesis are 0.299 and the p-value in this regard is 0.000. This beta coefficient value indicates a positive relationship, and the p-value means that the relationship is significant, and hence our hypothesis has been accepted. The second hypothesis is regarding the direct and positive impact of task autonomy on technostress. The results indicate that the coefficient of the results for testing this hypothesis is 0.312 and p-value in this regard is 0.000. This beta coefficient value shows that the path direction is positive between task autonomy and technostress. Hence, our hypothesis has been accepted.

The third hypothesis is regarding the direct and positive impact of task identity on task performance. The results indicate that the beta coefficient of the results for testing this hypothesis is 0.156 and p-value in this regard is 0.021. These beta coefficient and p values show the significance of the results, which means that an increase in task identity will increase the chances of task performance. Hence, our hypothesis has been accepted.

The fourth hypothesis is regarding the direct and negative impact of task identity on technostress. The results indicate that the coefficient of the results for testing this hypothesis is 0.085 and p-value in this regard is 0.680. The p-value is insignificant. Hence, our hypothesis has been rejected.

The fifth hypothesis is regarding the significant, direct and negative impact of technostress on task performance. The results indicate that the coefficient of the results for testing this hypothesis is -0.210 and p-value in this regard is 0.000. This beta coefficient shows the negative relationship between technostress and task performance, which means that technostress reduces the task performance of the employees. Hence, our hypothesis has been accepted.

The sixth hypothesis suggested that Technostress mediates the significant relationship between Task Autonomy and Task Performance. Table 4 provides evidence for the mediation of technostress between task identity and task performance. This infers the existence of partial mediation, as all the direct and indirect paths are significant. The values in Table 4 describe the indirect effect in the presence of a mediator with a coefficient of -0.065 and a p-value of 0.043.

The seventh hypothesis suggested that Technostress mediates the significant relationship between Task Identity and Task Performance. The values in Table 4 describe the indirect effect in the presence of a mediator with a coefficient of -0.018 and p-value of 0.673. The results show that the indirect path is insignificant, so no mediation by technostress, and this hypothesis has been rejected.

Table 4
Direct and indirect effects

Relationships	Original Sample (O)	Sample Mean (M)	Standard Deviation	T-statistics	P value
TA → TP	0.299	0.306	0.066	4.502	0.000
TA → TS	0.312	0.314	0.145	2.151	0.032
TI → TP	0.156	0.154	0.068	2.308	0.021
TI → TS	0.085	0.076	0.207	0.412	0.680
TS → TP	-0.210	-0.209	0.088	2.386	0.017
TA → TS -> TP	-0.065	-0.068	0.038	1.736	0.043
TI → TS -> TP	-0.018	-0.013	0.042	0.422	0.673

5 | DISCUSSION

Hypothesis 1 explains the relationship between task autonomy and technostress. Wuet al., (2015) emphasized that task autonomy is affected by culture. Classical management styles and national culture are two detrimental impediments to task autonomy in some countries, organizations and companies. They lead to demotivated employees, lower production, and loss of trust and commitment (Mahmood et al., 2012; Wu et al., 2015). The relationship between task autonomy and technostress is also accomplished in the various studies according to research (Steyn and Vawda 2014, Ragu-Nathan et al. 2008, Tara & Iqbal, 2023, Morris and Venkatesh 2010), high levels of autonomy, job feedback, task identity, task significance, and task variety are associated with lower levels of technostress. Second, in previous studies, it was evident that task autonomy has a significant and positive relationship with task performance. Our research also supports the previous findings of the research. Because task autonomy helps to enhance task performance in organizations and nursing literature (Langfred & Moye, 2004; Xiao et al., 2024).

The relationship between task identity and technostress is also accomplished in the various studies as according to research (Steyn and Vawda 2014, Ragu-Nathan et al. 2008, Xie and Johns 1995, Morris and Venkatesh 2010), high levels of autonomy, job feedback, task identity, task significance, and task variety are associated with lower levels of technostress. The technostress has a negative effect on the task performance of teleworkers in IT sector of Pakistan. The possible reasons for this rejection are that the teleworking employees in the IT sector are least interested in technostress when they work virtually. Second, there is a possibility that understanding the level of employees about this particular type of stress is not sufficient to answer the required questions accordingly. Task Identity has a positive impact on Task Performance. According to JCM task identity is an important factor as task identity gives value to the tasks and boosts the inherent motivation of employees and therefore encourages motivation to innovate resulting in improved performance (Hartmann, 2006). Previous research on a similar aspect has provided the same results, which supports the current result (Zhang & Zhao, 2021).

According to evidence, technostress severely affects several work outcomes including job satisfaction, productivity and organizational commitment (Avyagari et al., 2011; Tara & Iqbal, 2023; Tarafdar et al., 2010, 2015). Identifying more with job tasks and perceiving more autonomy helps employees to thrive more at work and hence shows improved task performance (Jiang et al. 2020). Previous studies have unmistakably demonstrated that technostress can significantly impair an employee's performance when using IT for work-related tasks (Valta et al., 2024 ; Chen & Muthitacharcen, 2016). Additionally, because of techno complexity, it takes more time and effort for individuals to understand and learn new IT applications, which limits their ability to complete more productive and creative work tasks.

Although many components may play a role in improving the task performance of teleworking employees, one of the elements through which task performance can be influenced is task autonomy. Employees with clear operational task autonomy and reasonable task accountabilities also possess the critical capabilities needed to ensure better performance and organizational success (Van et al., 2010). Task identity encourages the employees by instilling a sense of meaningfulness, purpose and value in their job (Jaiswal et al., 2024) and the continuous need to cope with and learn about new technologies leads to loss of productivity (Seilbeimer et al, 2000; Siegall et al, 2000) which can result in decreased employee performance. Sageer et al. (2012) propose that employees working under poor conditions and low levels of job characteristics negatively affect the technostress; hence, this means a high level of job characteristics decreases technostress (Valta et al., 2024).

6 | CONCLUSION

This research has been conducted in the IT and telecom sectors of Pakistan to check the impact of task autonomy and task identity on task performance of teleworking employees. This study proves that task autonomy and identity are important for the effectiveness of task performance of teleworkers in IT and telecom sectors. If teleworkers can have more task autonomy and identity, then their effectiveness will also increase. This study is unique and novel. To sum up the results of the current research, it is concluded that the IT sector in Pakistan must provide a higher level of job characteristics dimensions (task autonomy and task identity according to current research) to motivate the employees and boost their confidence which will result in better task performance and will help them achieve their goals and objectives. While the technostress can reduce the task performance directly and indirectly.

7 | THEORETICAL AND PRACTICAL IMPLICATIONS

Current research theoretically contributes by filling the gap between the job characteristics (i.e., task autonomy and task identity) on task performance with the mediating role of technostress (Tarafdar et al., 2015). Furthermore, the addition of the context of the IT sector of Pakistan is also a novelty of the research and, certainly, a theoretical contribution of the study, as no prior study has been conducted to identify the impact of task autonomy and task identity on task performance in the teleworking sector in Pakistani context as per limited knowledge of the scholar. In terms of practical implications, the findings of this study disclose that task autonomy, along with task identity, plays an important role in increasing the task performance of teleworkers, especially in the absence of technostress. Most projects are performed virtually in the IT and telecom sectors, so this research will help managers and supervisors provide the best job characteristics for the teleworkers' effectiveness.

8 | LIMITATION AND FUTURE DIRECTION

The current study has a few limitations. First, data have been gathered from 248 respondents, which might not be enough to represent the overall population, including Pakistan's IT and telecom sector employees. Therefore, selecting a large sample size for the upcoming research is recommended. As the research design is cross-sectional, causality between variables could not be strongly validated because the data were collected at one time. Therefore, the longitudinal research model for the data collection can be used to extend the results of this research. Moreover, the scope of current research in Pakistan and more specifically in Islamabad and Rawalpindi as most of the data is collected from the twin cities. It is therefore recommended that the diversity of the data collection should be increased by collecting it from various cities of Pakistan and it should be extended to other countries as well to gain the respective as well.

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