

Factors Influence The Techno Stress On Work-Life Balance Of Bank Employees In Cuddalore

K. Vijayalakshmi^{1*}, Dr. S. Arulkumar²

^{1*}Ph.D Research Scholar , Department of Business Administration, Annamalai University

²Associate professor Department of Business Administration, Annamalai University

Abstract

The present study explores the consequences of technostress on work life balance among bank employees in Tamilnadu. the researcher has determined a sample is 384 but the researcher has collected 450 for compensate the error of data. Finally, 415 responses are fit for further analysis. Hence, the sample of this study consist 415 respondents. The researcher has applied the Convenience sampling method to collect the questionnaire. The researcher has approached the employees to get permission for collecting data from their bank. Further, descriptive statistics, correlation and regression were applied. The highlight that while technology is integral to modern work environments, it also poses significant stressors that can impact employee well-being. Organizations must address these challenges by providing adequate training, support, and clear communication to help employees navigate and adapt to technological changes effectively. It is concluded that as technology continues to evolve, both employers and employees must adapt and implement strategies to manage technostress effectively. By fostering a balanced approach to technology use, we can create a more productive, healthy, and fulfilling work environment.

Keywords: Techno stress, Worl life balance, Bank Sectors, and Technology

Introduction

Technostress

The term technostress was coined in 1984 by a clinical psychologist Brod (1984) sees “technostress” as a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner. It manifests itself in two distinct but related ways: in the struggle to accept computer technology, and in the more specialized form of over identification with computer technology. Technostress refers to the state of mental and physiological arousal, and consequent pressure, observed in employees who are dependent on technology in their work (Weil, M.M. and Rosen, L.D. (1997); Arnetz, B., & Wiholm, C. (1997).

According to Hwang and Cha (2018); Atanasoff and Venable (2017), the concept of “technostress creators” has been used in many studies. The concept is about the factors that cause stress in organizational environment due to the use of ICTs and mismatch communication between the organizational and individual demands (Hwang & Cha, 2018). Sakthivel and M. John Jacob (2022) The concept has been used to identify and understand which aspects of ICTs have affected the employees in various context. “Technostress creators” include techno-overload, techno-complexity, techno-insecurity, techno-uncertainty, and techno-invasion (Hwang & Cha, 2018; Atanasoff & Venable, 2017). Technology advancements have not only added to the stress levels among IT employees but also provided with some new opportunities to the organizations. Priya and M.John Jacob (2020) It is important to mention here that the manufacturing and service industry were the first to adopt technological advancements. Very basic technology was used earlier in the form of telex machines, telephones, typewriters, fax machines etc. In the present study, we will discuss the modern technology trends in IT sector and its impact on the stress created by its usage.

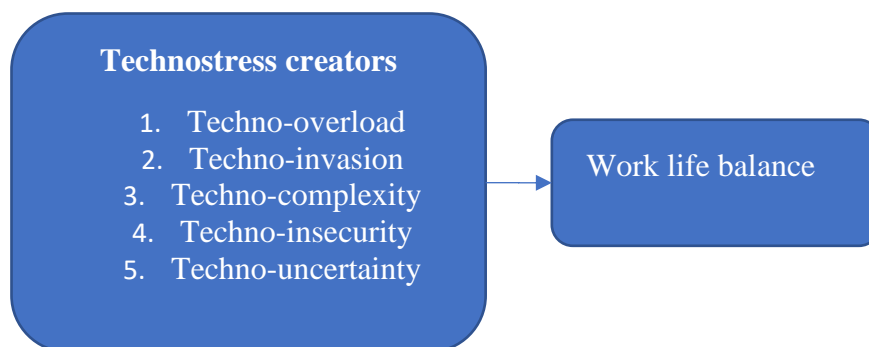
Work life balance

Healthy work-life balance refers to maintaining a harmonious relationship between your work and personal life. M.John Jacob (2020) It involves consciously managing your time and energy to meet both professional and personal commitments while prioritizing self-care and well-being. In an ideal world, this line of thinking goes: after work, we’re able to spend time on things that nourish us as people. This could involve spending time with friends and family or engaging in a hobby.

Objectives of the study

- To examine the employee perception towards technostress and work-life balance
- To test the relationship between techno stress and work-life balance
- To find out the factors influence the techno stress on work-life balance

Frame work of the study



The present study explores the consequences of technostress on work life balance among bank employees in Tamilnadu. Hence, the present study falls under the category of 'descriptive studies' as the nature. Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., and Tu, Q. (2008) questionnaire was used to collected the data from the bank employees. The study used the technostress on select organizational variables among bank employees to estimate proportion of the population uses at an approximate 95% confidence level. Based on the pilot study, the percentage of respondents having positive so technostress on select organizational variables among bank employees is found to be 60 % hence, $p = 0.6$ (and therefore $q = 1 - 0.6 = 0.4$). As this is a preliminary study you are prepared to accept a margin of error of $\pm 5\%$ so you set $d = 0.05$. To determine the minimum sample size formula is applied;

$$n = \frac{4pq}{d^2}$$

$$n = 4 \times 0.60 \times 0.40 / 0.05$$

$$n = 0.96 \div 0.0025 = 384$$

For this study, the researcher has determined a sample is 384 but the researcher has collected 450 for compensate the error of data. Finally, 415 responses are fit for further analysis. Hence, the sample of this study consist 415 respondents. The researcher has applied the Convenience sampling method to collect the questionnaire. The researcher has approached the employees to get permission for collecting data from their bank. Further, descriptive statistics, correlation and regression were applied.

Analysis and Discussion

Table 1 Techno-Stress

	Mean	Std. Deviation
Techno-overload	3.72	1.40
Techno-invasion	3.63	1.19
Techno-complexity	3.60	1.25
Techno-insecurity	3.56	1.20
Techno-uncertainty	3.98	1.25

The table presents the mean and standard deviation for five dimensions of techno-stress: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. The highest mean score is observed for techno-uncertainty ($M = 3.98$, $SD = 1.25$), indicating that employees are most affected by frequent changes and updates in technology, which can create confusion and stress. This is followed by techno-overload ($M = 3.72$, $SD = 1.40$), where employees feel overwhelmed by the excessive amount of technology and information they need to process. Techno-invasion, with a mean of 3.63 ($SD = 1.19$), reflects the intrusion of technology into personal life, causing a blurring of work-life boundaries. Techno-complexity ($M = 3.60$, $SD = 1.25$) indicates that employees struggle with the complexity of using new technologies, which can reduce efficiency and increase frustration. Lastly, techno-insecurity ($M = 3.56$, $SD = 1.20$) suggests that employees feel insecure about their job stability due to technological advancements. Overall, these findings highlight that while technology is integral to modern work environments, it also poses significant stressors that can impact employee well-being. Organizations must address these challenges by providing adequate training, support, and clear communication to help employees navigate and adapt to technological changes effectively.

Table 2 Work-Life Balance

	Mean	Std. Deviation
My personal life suffers because work	3.52	1.33
I struggle to balance between work and personal due to work	3.66	1.29
work make my personal life difficult	3.59	1.29
I put personal life on-hold for work	3.52	1.22

Table 2 show the employees opinion towards the Work-Life Balance. The researcher has applied average and standard deviation analysis to know the level of opinion towards the work-life balance. The mean values are as follows;
 The personal life suffers because work (3.52), and standard deviation value is 1.33
 The balance between work and personal due to work (3.66), and standard deviation value is 1.29
 The work makes them personal life difficult (3.59), and standard deviation value is 1.29
 The personal life on-hold for work (3.52), and standard deviation value is 1.22.
 It is revealed that personal life suffers because work, balance between work and personal due to work, work makes them personal life difficult, personal life on-hold for work are good level opinion towards the work life balance

Table 3 Correlation between Technostress and work life balance

	Work-Life Balance	Techno-overload	Techno-invasion	Techno-complexity	Techno-insecurity	Techno-uncertainty
Work-Life Balance	1					
Techno-overload	0.511**	1				
Techno-invasion	0.669**	0.636**	1			
Techno-complexity	0.609**	0.479**	0.496**	1		
Techno-insecurity	0.816**	0.520**	0.574**	0.644**	1	
Techno-uncertainty	0.680**	0.296**	0.299**	0.472**	0.629**	1

Table 3 explain the correlation between technostress and work life balance. Here, techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty are the dimensions of technostress creators. Further, technostress creators considered as independent variable and work life balance is considered as dependent variable.
 Ho: There is no relationship between technostress creators and work life balance
 Pearson correlation is applied to know the relationship between independent and dependent variables.
 The correlation values, it is observed that techno-overload (0.511), techno-invasion (0.669), techno-complexity (0.609), techno-insecurity (0.816), techno-uncertainty (0.680) are correlated with work-life balance. The P-values are significant level at one and five percent level. hence, hypothesis is rejected.
 It is show that techno-overload, techno-invasion, techno-complexity, techno-insecurity, techno-uncertainty are correlated with work-life balance.

Table 4 Factor affecting Technostress creators on Work-Life Balance

R	R Square	Adjusted R Square	F	Sig.
0.885 ^a	0.784	0.781	296.745	0.001*

Coefficients^a					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.768	0.134		-5.741	0.001*
Techno-overload	-0.042	0.041	-0.031	-1.013	0.312
Techno-invasion	0.429	0.042	0.334	10.313	0.001*
Techno-complexity	0.057	0.040	0.045	1.445	0.149 (NS)
Techno-insecurity	0.454	0.041	0.420	11.159	0.001*
Techno-uncertainty	0.301	0.030	0.303	10.114	0.001*

Table 4 discuss the factor affecting technostress on Work-Life Balance. Here, techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty are the dimensions of technostress. Further, technostress creators considered as independent variable and work life balance is considered as dependent variable.

The R value of 0.885 indicates a strong positive impact between the independent and dependent variables. The R Square (R^2) of 0.784 which accounts for the number of predictors in the model. An Adjusted R Square 0.781, suggests that approximately 78.1 % of the variability in the dependent variable can be explained by the independent variables like techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty, indicating a good fit of the model. The F-statistic of 296.745, with a significance level (Sig.) of 0.001. Hence, hypothesis is rejected.

Work-Life Balance = $-0.768 + 0.454$ (Techno-insecurity) + 0.429 (Techno-invasion) + 0.301 (Techno-uncertainty)

In this regression analysis, the impact of various forms of technostress on Work-Life Balance is examined. The significant predictors include Techno-invasion, Techno-insecurity, and Techno-uncertainty, as indicated by their low p-values (0.001). Techno-invasion ($\beta = 0.334$) and Techno-insecurity ($\beta = 0.420$) show strong positive relationships with the outcome, suggesting that as perceptions of invasion and insecurity due to technology increase, so does the outcome variable. Techno-uncertainty also positively influences the outcome ($\beta = 0.303$). In contrast, Techno-overload ($\beta = -0.031$) and Techno-complexity ($\beta = 0.045$) do not significantly affect the outcome, as indicated by their p-values (0.312 and 0.149, respectively). Overall, while some aspects of technostress significantly impact the outcome, others appear less influential.

It is shows that techno-insecurity, techno-invasion and techno-uncertainty are high level impact on work life balance of the bank employees.

Conclusion

Technostress, the stress induced by technology, has become a significant challenge in today's digital era, affecting employees' ability to maintain a healthy work-life balance. With the constant connectivity provided by smartphones, emails, and social media, employees often feel pressured to be available around the clock, leading to blurred boundaries between work and personal life. This perpetual availability can result in burnout, decreased productivity, and a diminished sense of well-being. To combat technostress, organizations should encourage policies such as flexible working hours, digital detoxes, and the right to disconnect outside work hours. Training employees to use technology efficiently and promoting a supportive work environment can also mitigate its adverse effects. On an individual level, setting clear boundaries, practicing mindfulness, and prioritizing self-care are essential strategies. Achieving a harmonious work-life balance in the face of technological advancements is crucial for maintaining mental health and enhancing job satisfaction. As technology continues to evolve, both employers and employees must adapt and implement strategies to manage technostress effectively. By fostering a balanced approach to technology use, we can create a more productive, healthy, and fulfilling work environment.

Reference

1. Ragu-Nathan, T. S., Tarafdar, M., Ragu-Nathan, B. S., and Tu, Q. (2008). The consequences of technostress for end users in organizations: conceptual development and empirical validation. *Inf. Syst. Res.* 19, 41
2. Weil, M.M. and Rosen, L.D. (1997) Technostress: Coping with Technology @Work @Home @Play. John Wiley & Sons Inc., Hoboken.
3. Arnetz, B., & Wiholm, C. (1997). Technological stress: Psychophysiological symptoms in modern offices. *Journal of Psychosomatic Research*, 43, 35–42. doi:10.1016/S0022-3999(97)00083-4
4. Brod, C. (1984). *Technostress: The human cost of the computer revolution*. Reading, MA: Addison-Wesley.
5. Hwang, I., & Cha, O., (2018) Examining technostress creators and role stress as potential threats to employees' information security compliance. *Computers in Human Behavior*, vol 81, pp 282–293.
6. Atanasoff, L.M., & Venable, M.A., (2017) Technostress: Implications for Adults in the Workforce. *Career Development Quarterly*, vol 65, pp 326-338, 2017
7. Sakthivel and M. John Jacob (2022) Work Stress and Drivers' Behaviour Among Drivers. *Journal Of Management & Entrepreneurship in Villupuram District*. Vol. 16, No.2 (IX),
8. Priya and M.John Jacob (2020) Factors Influence The Personality On Job Performance In State Transport Corporation, Karaikal Division At Pondicherry. *Solid State Technology*. Volume: 63 Issue: 6. Publication Year: 2020. PP 12250-12257.
9. M.John Jacob (2018) organizational commitment and work-life-balance of nurses. *DBJC Journal of Business Research – Jain Spire*, Issue No. 28, ISSN 2248-9711