



TECHNO STRESS OF IT EMPLOYEES: EXPLORING THE INFLUENCE OF PERSONALITY TRAITS ON INDIVIDUAL PERFORMANCE AND EMOTIONAL WELL- BEING

¹Dr. C. Vijayabanu, ²R.Santhiya,

¹ Professor, ²MBA,

¹ School of Management,

¹SASTRA Deemed University, Thanjavur, India

Abstract: The study on techno stress among IT employees uncovers several significant findings about the impact of demographic factors, personality traits, and emotional well-being on techno stress levels. With a high Cronbach's Alpha, which indicates data reliability and validity, it is clear that techno stress is common among IT professionals, particularly among those with specific personality traits and levels of individual performance. While demographic factors like age and gender play a role, the study highlights the importance of addressing techno stress with tailored interventions. Implementing Employee Assistance Programs, conducting personality assessments, offering flexible work arrangements, providing technology education and support, and cultivating a positive organizational culture that prioritizes employee well-being are among the recommendations made. By implementing these strategies, organizations can reduce techno-stress and create a happier, healthier, and more productive atmosphere for IT employees.

Keywords – Techno stress, Individual performance, Personality Traits, Emotional well- Being and IT employees .

1. INTRODUCTION

The digital revolution has conclusively transformed the landscape of work; particularly for IT employee's .while the technology empowers us with unparalleled challenges for employees. Understanding the complications or difficulties of techno-stress is the highest priority as it not only affects individual performance but also has profound significance for emotional well-being in the workplace Within the organizational study of mind the complex individual personality traits and their ability to guide the intricate demands of IT sector is essential yet underexplored facet of organizational psychology. In the following sections, we will explore the current literature surrounding techno-stress, the conceptual framework of personality traits, and an outline of methodology for the empirical study within this domain. This research seeks to generate valuable appreciation that can communicate the development of witness-based strategies to relieve techno-stress, promote individual performance, and develop emotional well-being in the constantly evolving contexts of IT employees.

“Techno-stress” refers to the adverse impact on an individual’s well-being and performance due to the use of technology, particularly in the context of work or professional responsibilities. It is commonly defined as a modern disease of adoption caused by an inability to cope up with new technologies. It contains psychological (Headaches, muscle tension, sleep disturbances, fatigue, cardiovascular issues.), emotional strain (irritability, low mood, burnout, decreased motivation, lack of job satisfaction) and Mental stress

(Anxiety, frustration, feeling overwhelmed, difficulty concentrating, cognitive fatigue) resulting from the constant exposure and to interact with the technology in the workplace, such information is the constant connectivity or the rapid phase of technology change.

2. OBJECTIVES OF THE STUDY

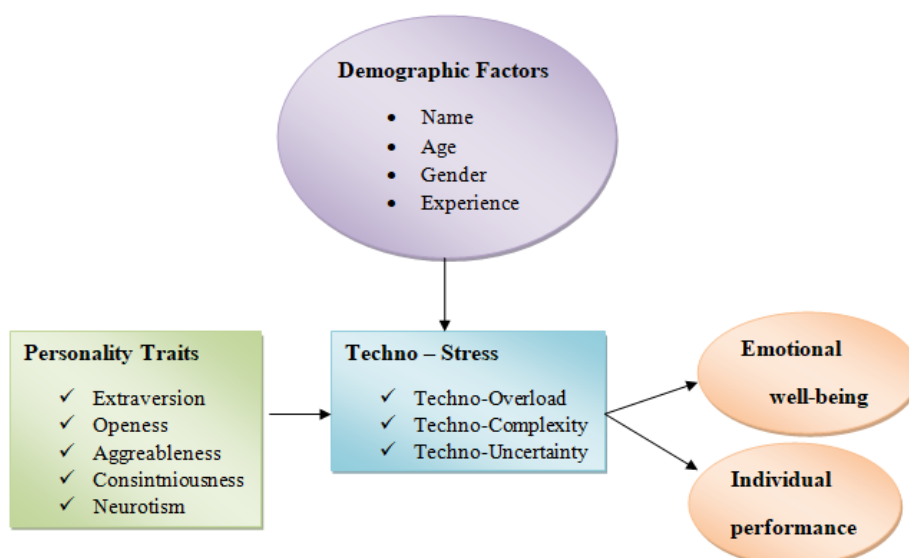
- To study about the demographic profile of the respondent of IT employees in Chennai.
- To study the relationship between demographic factors and Techno – stress of IT employees
- To investigate the relationship between personality traits and Techno – stress of IT employees.
- To study the relationship between techno stress and the emotional well – being.
- To study the relationship between techno stress and the individual performance.

3. LITERATURE REVIEW

The research on Technostress has been proved by various researchers and academicians. The related articles are as follows:

(Wang, W., et al., 2017) Businesses rapidly implement new technologies, resulting in employees experiencing techno stress as they continually adjust to changing information technology. In line with the Job Demand-Resources hypothesis, this study focuses on the combined effects of technology and non-technical stress on worker performance, recognizing that work-related stress is an outcome of utilizing IT and other demands. (Krishnan S 2017) This study explores the individual variations among techno stress makers by analyzing the influence of Hofstede's framework of cultural values and the Big Five personality traits. Results from a study of 322 full-time workers in India show that particular social conventions (masculinity, power distance) and personality qualities (agreeableness, neuroticism, openness to experience) predict who creates techno stress. Furthermore, the cultural significance of long-term orientation influences the associations between conscientiousness, extraversion, and agreeableness and those who cause technological stress. (Ali, F., Nisar et al., 2022) This study considers the moderating effect of techno stress, which has been disregarded in other research, between job stress and aggressiveness. By considering factors such as workplace stress, aggressiveness, and emotional outcomes such as emotional engagement, emotional tiredness, and negative emotional reactions, this study sought to investigate the effects of COVID-19 issues on workers' well-being. (DeLeon, A. F. 2021) With a focus on five techno stress elements, this correlational study investigates the effect of techno stress on the security compliance behavior of information technology workers. Using 150 individuals and a stepwise multiple regression technique, the study finds that techno-complexity is a major predictor of security compliance. The results highlight how important it is to consider techno stress variables when developing legislation and IT professional training curricula. (Harney, L. 2020) This study explores how employees' experiences of techno stress are influenced by their dispositional aversion to change and how this may affect workplace adoption of new technologies. To investigate this association, a survey with 356 part-time or full-time employed participants includes measures of occupational well-being, techno stress, and dispositional resistance to change.

FIGURE :1 RESEARCH FRAMEWORK



4. RESEARCH METHODOLOGY

This study implemented a Descriptive research approach and respondent's information was collected through a structured Questionnaire method. this research study is a Descriptive type of research in which a sample of IT employees across Chennai pertaining to a certain region of study is assed and how they affected by techno stress that can be projected towards a large number of IT employees in Chennai. The data were collected from 357 IT employees in Chennai.

5. DATA ANALYSIS AND FINDINGS

5.1 Frequency Analysis

The demographic details are analyzed by percentage analysis.

Table 5.1 Results of Frequency analysis

Age of the Respondents		
Particulars	No of Respondents	Percentage
18-24	107	30.0
25-34	137	38.4
35-44	96	26.9
45-`54	14	3.9
55 and above	3	0.8
Gender of the respondents		
Male	184	51.5
Female	169	47.3
Years of Experience		
0-2 Years	105	29.4
3-5Years	107	30.0
6-10Years	84	23.5
11-15Years	44	12.3
55Years and above	16	4.5
Frequency of the stress of the Respondents		
Rarely	107	30.0
Occasionally	133	37.3
Frequently	89	24.9
Almost always	27	7.6

Source: Primary data processed by SPSS

From Table 5.1 the respondents at the age of 25-35 has the highest working percentage of 38.4%, the male respondents have the highest percentage of 51.5, the highest years of experience of the employees are 3-5 years with 30% and the employees feel occasionally feel stressed

5.2 Chi-Square

Chi-square analysis for Demographic Profile with Techno stress -Techno overload

Table 5.2.1

Factor	Chi square	Sig	Result
Forced by the technology to work much faster	61.839	0.410	Accepted
Forced by the technology to do more work than I can handle	69.089	0.197	Accepted
Forced by the technology to work with very tight time schedules	67.595	0.032	Rejected
Higher workload because of increased technology complexity	57.679	0.159	Accepted

* = significance at 5% level

Source: Primary data

Null Hypothesis (H_0) – There is no significant association between the Demographic Factors and Techno overload

Alternate Hypothesis (H_1) - There is significant difference between the Demographic Factors and Techno overload

The table shows the result of chi-square analysis that had the relationship between demographic and feelings of technological overload . The chi-square values 61.839, 69.089 and 57.679 indicates the significant relationship as evidence by p value above 0.05 . This indicates that these variables are recognized as the feelings of techno overload. then the value of 67.595 indicates the value of significant relationship as p value is less than 0.05 so it is rejected and cause of technology overload.

Chi-square analysis for Demographic Profile with Techno stress - Techno complexity

Table 5.2.2

Factor	Chi square	Sig	Result
know enough about this technology to handle my job satisfactorily.	58.850	0.135	Accepted
Need a long time to understand and use new technologies.	42.974	0.678	Accepted
Find enough time to study and upgrade my technology skills.	55.290	0.218	Accepted
Find new recruits to this organization know more about computer technology than I do	55.020	0.226	Accepted
Find it too complex for me to understand and use new technologies	55.298	0.218	Accepted

* = significance at 5% level

Source: Primary data

Null Hypothesis (H_0) – There is no significant association between the Demographic Factors and Techno complexity

Alternate Hypothesis (H_1) - There is significant difference between the Demographic Factors and Techno complexity

The table shows the result of chi-square analysis that had the relationship between demographic and feelings of techno complexity . The null hypothesis is Accepted ($p > 0.05$).

Chi-square analysis for Demographic Profile with Techno stress- Techno uncertainty

Table 5.2.3

Factor	Chi square	Sig	Result
New developments in the technologies we use in our organization.	42.449	0.698	Accepted
constant changes in computer software in our organization.	41.854	0.721	Accepted
constant changes in computer hardware in our organization	59.694	0.119	Accepted
Frequent upgrades in computer networks in our organization.	54.326	0.246	Accepted

* = significance at 5% level

Source: Primary data

Null Hypothesis (H_0) – There is no significant association between the Demographic Factors and Techno uncertainty

Alternate Hypothesis (H_1) - There is significant difference between the Demographic Factors and Techno uncertainty

The table shows the result of chi-square analysis that had the relationship between demographic and feelings of techno Uncertainty . The null hypothesis is Accepted ($p>0.0.5$).

5.3 Correlation Analysis:

Correlation analysis between Personality Traits and Techno stress – Techno overload

Table 5.3.1

Factor	R	Relationship
Extraversion	0.324**	Positive
Openness	0.094	Positive
Agreeableness	0.056	Positive
Conscientiousness	0.345**	Positive
Neurotism	0.136**	Positive

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

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

Source: Primary data

Null Hypothesis (H_0) – There is no significant relationship between the Personality traits and Techno stress –Techno overload of IT employees

Alternate Hypothesis (H_1) - There is significant relationship between the Personality traits and Techno stress –Techno overload of IT employees

From the above table, it is identified that the Personality Traits have a significant positive relationship with the factors of Techno stress- Techno overload.

Correlation analysis between Personality Traits and Techno stress – Techno complexity

Table 5.3.2

Factor	R	Relationship
Extraversion	0.415**	Positive
Openness	0.197**	Positive
Agreeableness	0.146**	Positive
Conscientiousness	0.443**	Positive
Neurotism	0.340**	Positive

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

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

Source: Primary data

Null Hypothesis (H_0) – There is no significant relationship between the Personality traits and Techno stress –Techno complexity of IT employees

Alternate Hypothesis (H_1) - There is significant relationship between the Personality traits and Techno stress –Techno complexity of IT employees

From the above table, it is identified that the Personality Traits have a significant positive relationship with the factors of Techno stress- Techno complexity.

Correlation analysis between Personality Traits and Techno stress – Techno uncertainty

Table 5.3.3

Factor	R	Relationship
Extraversion	0.598**	Positive
Openness	0.342**	Positive
Agreeableness	0.187**	Positive
Conscientiousness	0.504**	Positive
Neurotism	0.540**	Positive

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

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

Source: Primary data

Null Hypothesis (H_0) – There is no significant relationship between the Personality traits and Techno stress –Techno uncertainty of IT employees

Alternate Hypothesis (H_1) - There is significant relationship between the Personality traits and Techno stress –Techno uncertainty of IT employees

From the above table, it is identified that the Personality Traits have a significant positive relationship with the factors of Techno stress- Techno uncertainty

6. RECOMMEDATIONS

This research highlights the Implementing employee assistance programs, conducting personality assessments; offering flexible work arrangements, providing technology education and support, and cultivating a positive organizational culture that prioritizes employee wellbeing are among the recommendations made.

7. CONCLUSION

The study on techno stress among IT employees uncovers several significant findings about the impact of demographic factors, personality traits, and emotional wellbeing on techno stress levels. With a high cronbach's alpha, which indicates data reliability and validity, it is clear that techno stress is common among IT professionals, particularly among those with specific personality traits and levels of individual performance. While demographic factors like age and gender play a role, the study highlights the importance of addressing techno stress with tailored interventions. Implementing employee assistance programs, conducting personality assessments, offering flexible work arrangements, providing technology education and support, and cultivating a positive organizational culture that prioritizes employee wellbeing are among the recommendations made. By implementing these strategies, organizations can reduce techno stress and create a happier, healthier and more productive atmosphere for IT employees

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