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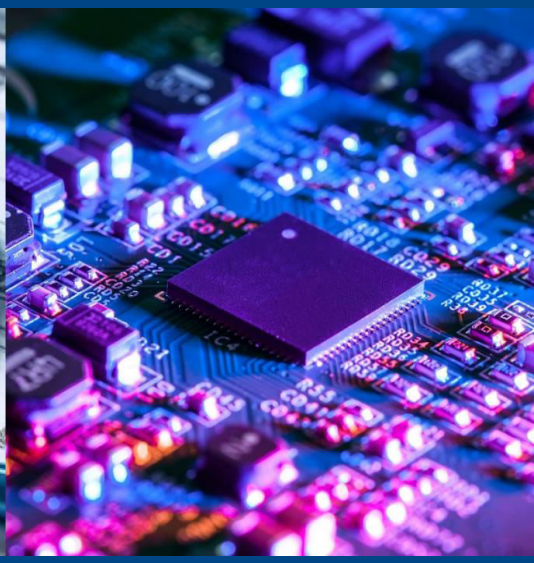

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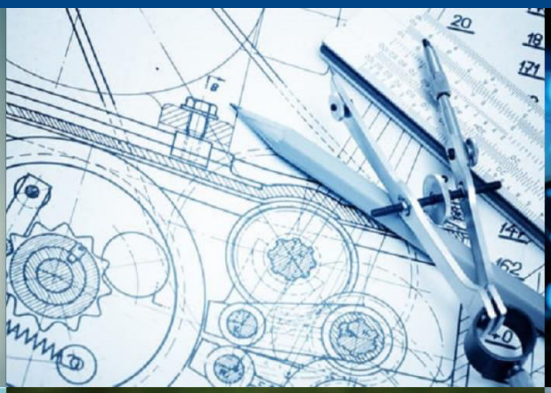

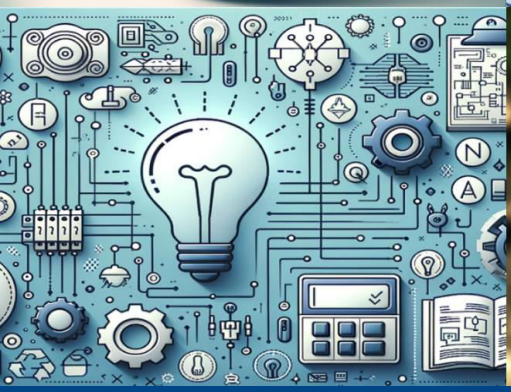

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Impact of Digital Overload on the Employees in Higher Educational Institutions – A Study in Coimbatore

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ABSTRACT: The rapid adoption of digital technologies in Higher Education Institutions (HEIs) has transformed academic and administrative functions, but it has also led to increased digital overload among employees. This study examines the extent of digital overload experienced by teaching, non-teaching, and administrative staff and analyses its impact on work performance, stress levels, and overall well-being. Data were collected through a structured questionnaire and analysed using statistical tools such as percentage analysis, Chi-square test, and ANOVA to identify significant relationships between demographic variables and digital overload. The findings indicate that continuous online communication, excessive emails, virtual meetings, and increased digital documentation contribute to moderate to high levels of digital overload, resulting in stress, reduced productivity, and work–life imbalance. The study concludes that although digitalization enhances efficiency in higher education institutions, effective digital management strategies and institutional support are essential to reduce digital overload and promote employee well-being.

KEYWORDS: Digital overload, Higher education institutions, Employee stress, Workplace digitalization, Technostress, Work–life balance, Organizational productivity, Academic staff well-being, Information overload, Digital work environment.

I. INTRODUCTION

The increasing integration of digital technologies in higher education institutions (HEIs) has fundamentally reshaped the way academic and administrative activities are conducted. From online learning platforms and virtual meetings to automated documentation systems and instant communication tools, digitalization has enhanced efficiency, accessibility, and connectivity within educational environments. Particularly after the global shift toward remote and hybrid work models, reliance on digital tools has become not only common but essential for institutional functioning. While these advancements have improved operational processes, they have also introduced new challenges for employees. One emerging concern is digital overload, a condition characterized by excessive exposure to digital communication, information, and technology-related tasks. Employees in HEIs are frequently required to manage multiple digital platforms simultaneously, respond to continuous emails and messages, attend virtual meetings, and complete online reporting and documentation. This constant connectivity can blur the boundaries between professional and personal life, leading to increased cognitive demands and psychological strain. Over time, such conditions may contribute to stress, reduced concentration, and diminished job satisfaction.

II. OBJECTIVES

- To identify the major sources of digital overload (e.g.: emails, digital reporting tasks) among teaching and non-teaching staff.
- To identify the digital policies that either worsen or reduce digital overload.

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III. REVIEW OF LITERATURE

1. Chatterjee & Das (2020) – "Information Overload in Indian Academia: A Conceptual Framework". Indian Journal of Educational Research, Vol. 12(3), pp. 33–47, Oxford University Press (India).
This theoretical paper develops a framework linking digital information overload to psychological strain and organizational outcomes in academia. It identifies moderating factors like digital literacy, institutional support, and job demands. The authors suggest future empirical testing to validate the model in Indian higher education contexts. Research Focus is on Conceptualizing digital overload in academia.
2. Ramesh et al. (2019) – "Digital Workload and Burnout among Administrative Staff in Higher Education". Asian Journal of Management Studies, Vol. 6(1), pp. 23–35, Elsevier (Asia) Ltd.
This mixed-methods study (surveys + focus groups) with 187 administrative employees in Indian universities links digital overload (especially from ERP systems) to emotional exhaustion (burnout). The authors recommend mindfulness programs and streamlined digital workflows to mitigate burnout. Digital overload is linked to burnout; mindfulness programs and workflow streamlining are recommended as key findings.
3. Singh & Patel (2020) – "Effects of Information Overload on Faculty Performance in Indian Universities". International Journal of Higher Education Research, Vol. 8(2), pp. 112–126, Springer Nature India.
This quantitative study (n=214 faculty) finds a significant negative correlation between digital overload and job satisfaction, emphasizing workload management strategies. Multitasking demands from digital platforms are identified as major contributors to overload. The study Suggests workload management strategies to mitigate digital overload
4. Kumar & Raj (2021) – "Digital Overload and Employee Well-being in Academic Settings". Journal of Educational Technology & Management, Vol. 15(3), pp. 45–58, Indira Gandhi National Open University Press.
Surveying 312 faculty and staff, the authors measure perceived digital overload and its impact on stress and productivity. They propose institutional digital-usage policies (e.g., "email-free hours") and wellness workshops. Research Focus is on Digital overload and employee well-being. Digital overload is linked to stress and reduced productivity are the key findings of the study. The study Suggests institutional policies and wellness workshops to mitigate digital overload.

DATA ANALYSIS AND INTERPRETATION:

TABLE 1.1

one-way Anova for designation of respondents and digital tools frequently used by respondents:
Null Hypothesis (H_0):
There is no significant association between the demographic variable (e.g., age group/designation/experience) and the frequency of digital tools usage among employees.
Alternative Hypothesis (H_1):
There is a significant association between the demographic variable and the frequency of digital tools usage among employees.

DIGITAL TOOLS FREQUENTLY USED AS PER DESIGNATION

		Sum of Squares	def.	Mean Square	F	Sig.
Digital tools frequently used	Between Groups	6.492	2	3.246	1.400	.253
	Within Groups	176.216	76	2.319		
	Total	182.709	78			
Digital tools frequently used	Between Groups	.016	2	.008	.016	.984
	Within Groups	42.427	85	.499		
	Total	42.443	87			
Digital tools frequently used	Between Groups	.207	2	.104	.264	.769
	Within Groups	32.595	83	.393		
	Total	32.802	85			
Digital tools frequently used	Between Groups	1.043	2	.522	.363	.697
	Within Groups	84.699	59	1.436		
	Total	85.742	61			

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INTERPRETATION:

A One-Way ANOVA test was conducted to examine whether there is a significant difference in digital tools frequently used among employees based on their designation in higher education institutions. The analysis revealed that for digitaltoolsfrequently_used1, the F value was 1.400 with a significance value of 0.253; for digitaltoolsfrequently_used2, the F value was 0.016 with a significance value of 0.984; and for digitaltoolsfrequently_used3, the F value was 0.264 with a significance value of 0.769. Since all the p-values are greater than the 0.05 level of significance, the null hypothesis is accepted. Therefore, it can be concluded that there is no statistically significant difference in the digital tools frequently used among employees across different designations. This indicates that employees, irrespective of whether they are teaching, non-teaching, or administrative staff, tend to use digital tools in a similar manner.

TABLE 1.2

Chi-square analysis for gender of respondents and stress level of respondents:

Null Hypothesis (H_0):

There is no significant difference in stress levels among employees across different groups (e.g., age group/designation/experience — based on your grouping variable).

Alternative Hypothesis (H_1):

There is a significant difference in stress levels among employees across different groups.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
gender * stress	130	99.2%	1	0.8%	131	100.0%

gender * stress Crosstabulation

			stress		Total
			no	yes	
gender	male	Count	12	56	68
		% within gender	17.6%	82.4%	100.0%
	female	Count	6	56	62
		% within gender	9.7%	90.3%	100.0%
Total		Count	18	112	130
		% within gender	13.8%	86.2%	100.0%

Chi-Square Tests

	Value	def.	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.727[a]	1	.189		
Continuity Correction	1.123	1	.289		
Likelihood Ratio	1.762	1	.184		
Fisher's Exact Test				.213	.145
Linear-by-Linear Association	1.713	1	.191		
N of Valid Cases	130				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.58.

b. Computed only for a 2x2 table

INTERPRETATION:

A Chi-square test of independence was conducted to examine the relationship between gender and stress. The results showed that there was no significant association between gender and stress, $\chi^2(1, N = 130) = 1.727$, $p = 0.189$.

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Therefore, gender does not significantly influence stress levels among the respondents. There is no significant association between gender and stress among the respondents.

This means stress levels do not significantly differ between male and female respondents in the study. Even though females reported slightly higher stress (90.3%) compared to males (82.4%), this difference occurred by chance and is not statistically meaningful.

FINDINGS:

1. Digital overload is commonly experienced by employees in higher education institutions due to continuous use of emails, online platforms, virtual meetings, and digital documentation.
2. Most respondents reported moderate levels of stress caused by constant digital connectivity and increased screen time.
3. Statistical analysis indicated no significant difference in digital overload levels across demographic variables such as age, designation, and years of experience.
4. The study found no significant association between demographic characteristics and the frequency of digital tools used by employees.
5. Although digital technologies improve efficiency and communication, excessive digital demands contribute to mental fatigue and reduced concentration.

SUGGESTIONS:

- Establish clear digital communication policies. Institutions should set proper guidelines regarding email usage, online meetings, and official communication platforms to avoid confusion and excessive digital interaction.
- Fix specific working hours for digital communication. Employees should not be expected to respond to emails or messages beyond official working hours. This helps maintain a healthy work–life balance.
- Reduce unnecessary online meetings. Meetings should be conducted only when necessary and kept short and structured to minimize screen fatigue and mental exhaustion.
- Encourage regular screen breaks. Employees should be encouraged to take short breaks after continuous screen usage to reduce eye strain, stress, and physical discomfort.
- Provide digital time management training. Training programs can help employees prioritize tasks, manage online workload efficiently, and use digital tools effectively.

IV. CONCLUSION

The study concludes that digital overload is a growing concern among employees in higher education institutions due to increased reliance on digital technologies for academic and administrative work. Although digital tools improve communication and efficiency, excessive usage has led to stress, mental fatigue, and work–life imbalance. The findings show that digital overload affects employees across all demographic groups, indicating it is an organization-wide issue. Even though no significant statistical differences were found among groups, its overall impact on well-being and productivity remains important. Therefore, institutions should implement effective digital management strategies and promote healthy technology practices to ensure a sustainable work environment.

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3. Greenberg, J., & Baron, R. A. (2008). Behavior in Organizations. Pearson Prentice Hall. The authors focus on stress management, organizational culture, and employee attitudes, which are relevant in analyzing the impact of continuous digital engagement in workplaces.
4. Luthans, F. (2015). Organizational Behavior: An Evidence-Based Approach. McGraw-Hill Education. This book provides evidence-based insights on employee stress, motivation, and workplace efficiency, supporting the conceptual framework of digital overload.

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