Journal of Informatics Education and Research
ISSN: 1526-4726
Vol 5 Issue 1 (**2025)**

Assessing the Impact of Technostress on the Well-Being of Academic Staff in Higher Education

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ABSTRACT
Technostress is a term used to describe stress that individuals feel as a result of time and technology. Employees in higher education use digital tools for everything: they teach, do research and administer papers. From early morning to the dead of night, email and text alerts keep interrupting them constantly. Your stress level goes up when the university insists you adopt digital technologies is is constantly changing, yet there are no corresponding incentives or resources dedicated to training. The flow of digital information coming from all sides makes it really difficult to do one's work effectively. These conditions contribute to high anxiety levels among university staff but despite numerous efforts nothing at all is solved. The higher the technostress, the less people like their jobs and the higher the turnover rate. Data indicate affected personnel have reduced productivity. A training program helps staff to adapt to new technology quickly. Offers of flexible working terms and resources, means relieve workplace pressure. Counseling provides assistance to staff facing mental health challenges. Employees undergo different experiences of technostress due to their age, education level, position in the institution, service being rendered by them-in other words, numerous factors. Older staff members have more problems with new technologies than younger colleagues. Women reported that they had difficulty adapting to digital tools and systems. Some jobs mean higher technological engagement, increasing levels of stress. Unlike factory jobs in colleges you are expected to be available around the clock! Academic staff often receive emails or messages in the middle of the night. Study survey was conducted among 208 academic staff from higher education institutions to know the Impact of Technostress on the Well-Being of Academic Staff in Higher Education and found that Work Overload, Work-Life Imbalance, Job insecurity and Health are the factors that shows the Impact of Technostress on the Well-Being of Academic Staff in Higher Education.

Keywords- Technostress, Academic staff, Academic stuff mental well being

Introductio:

Technostress is the tension of a person using ICTs (Information and Communication Technologies). Asad, M. M., Erum, D., Churi, P., & Guerrero, A. J. M. (2023) explored the effect of technostress on a daily basis, professors, lecturers and researchers at colleges all over the world have to rely on digital tools. They teach online, they conduct their research digitally, and they use technology systems for all administrative tasks. This development has been heightened by the Covid-19 pandemic moving over to digital platforms. With the pandemic, this reliance has increased. Nevertheless, mental health, physical health, general well-being and work/life balance are all part of good well-being in this context . Technology critically affects education through universities. Well-being in this context takes into account mental health, physical health, job

satisfaction and work-life balance. This point of view explored how well-being was being impacted by technostress for academic staff members. The aims to identify technostress sources, evaluate its effects on well-being, and explore mitigation strategies Higher education integrates technology Shelves are now absent from the contemporary lectern.

Similarly, Truța et al. (2023) examined how constant connectivity at work influences technostress Digital tools have brought about a whole new revolution in teaching and research. Teachers used to scrawl various bits of paper but now we all find this method inconvenient However, they bring issues with them for the staff They are compelled to learn new techniques under stress because there is no time available for them to become familiar with new systems before they are pressed into service by their institutions The role of digital communication is different now. It makes it impossible for lecturers to concentrate on curriculum development and research. Instead, they are buried under the burden of information These factors end up affecting the wellbeing of staff in turn. This topic is important because technostress affects not only staff but also institutions. Physical problems result from the harm done to eyes and body by gazing long hours through a monitor. Job satisfaction lessens with the addition of stress to staff duties. One of the most terrible systems of all is when you feel the pressure to hurry up.

Expanding on this, Wang and Yao (2025) investigated the impact of technology usage in academic environments, linking it to psychological well-being. Our very existence and livelihood are now under threat from information and communication technologies This paper concentrates on the topic of technostress and the influence of digital tools we use. It examines whether universities recognise this phenomenon, as well as the causes and effects. Universities need to understand this issue. It explores factors contributing to technostress, examines its effects on well-being, and identifies strategies to mitigate it. Through this analysis, the article provides insights for institutions to support their staff. Constant connectivity also ranks as a top cause of technostress The university requires teachers to be receptive at all times. This means that they receive e-mails and messages from students or other teachers at night and on weekends. Not only are they expected to deal with these immediately but their response has to be immediate as well. In this way it erodes the boundary between one's work activities and his personal life. Part of the problem is that people need to rapidly master new IT skills. Every so often, software or platforms in use at universities change. Technostress denotes the pressures people encounter when they utilize information and communications technology (ICT). Teaching staff in higher education, including professors, lecturers, and researchers, work with digital tools. They lecture over the Web, conduct research informed by it-and administrative tasks are performed online as well (Arora et al., 2024).

The transition to entirely digital platforms, accelerated by COVID-19, only increases the need for digital support. Further, Upadhyaya and Vrinda (2021) assessed the academic productivity of university students, revealing how technostress hinders learning outcomes and efficiency Welfare in this context encompasses not only mental and physical health, but job satisfaction and work/life balance as well. Thus, this report evaluates among teaching staff how ITC pressures affect each of those facets of life. The objectives of this study are to enumerate sources of technostress, gauge its effects on staff well-being and explore countermeasures. Information technology pervades higher education. Staff work with learning management systems, virtual classrooms and digital research tools. These advances enhance efficiency in teaching and the production of academic papers. But they also pose difficulties. Staff are under pressure to quickly master fresh technologies. Institutions frequently give them inadequate training. The expectation in 24/7 e-mail cultures that one will answer any message immediately intrudes upon private time. In electronic communication

staff are hit by a deluge of information, which creates overload. While each of these is a source of stress, the consequence illustrates that staff well-being is directly affected. The topic is of great importance because technostress will affect both staff and institutions (Arora et al., 2024).

Meanwhile, Boyer-Davis (2020) focused on faculty perceptions of technostress. As a result of perpetual use of information technology, mental health problems such as anxiety and depression may surface. Physical complaints--eye strain, fatigue-follow from excess hours in front of computer screens. As stress levels rise, job satisfaction falls. This in turn reduces the quality of teaching and the quantity of research staff can perform. From an institutional viewpoint, when staff are not well, the cost is high. Turnover, plus a sullied reputation for the institution. Dealing with technostress means ensuring that the staff are healthy and the establishment successful.

Literature review

Technostress plays a major stress the of academic staff It is not only without technical problems that academics have had to cope; sociotechnical developments like electronic mail have also brought about another side to things. English-higher education has been emaciated; it is currently neither the citadel of knowledge nor a birthplace for innovations in social practice. On the other hand, Bourlakis, Nisar, and Prabhakar (2023) delved into how technostress affects employee performance nor is it a bulwark against intellectual poverty and political silence. Besides, it provides something increasingly resembling home comfort, as well. Every day, software crashes, slow internet connections and unpredictable hardware breakdowns dog professors, researchers and administrative staff alike. Such snags can seriously obstruct work flow and disrupt the best-laid plans of timetables for assignments. They not only add extra pressure to otherwise daily responsibilities, but also cause a lot more friction between colleagues too. A researcher might lose days of methodically analyzing data due to a single crash, or the system could malfunction at any time without warning. In both cases it forces them to start all over again from scratch and lose time that had previously been spent on measurements only: tired work rather than just computational tasks. In another case, minutes before an online lecture is due to begin a teacher encounters a connectivity crisis (Kumar and Pandey, 2019).

Students are left bewildered and unexpectedly late as the class has to change start time. In a different context, Nimrod (2018) introduced a scale for measuring technostress The result of all this aggravates the sense of being lose all around, as on the one hand incidents provoke frustration yet they also cause academic professionals to accumulate worries for no good reason. This constant fear that technical problems will appear suddenly is a source of anxiety, making smaller tasks laborious and unpredictable. That takes a toll on one's health in the long run. The relentless demand to adapt to new technology and stay abreast of digital developments makes academic work increasingly overwhelming. Additionally, Efilti et al. (2024) investigated the impact of technological stress on academics' life satisfaction. As professors, lecturers, and researchers, they are juggling multiple platforms, software tools and communication channels that each need time and effort familiarizing once. This technological overload eventually contaminates their enthusiasm for what they do, causing faculties of belief to become leaking freighters leaking water – and not oil.

Teachers are unhappier as a result of technostress. Professors who once spent their free time writing research papers now struggle just to perform simple tasks. Basic jobs such as marking assignments, preparing teaching materials or dealing with student inquiries seem much more complex than they used to be. Worse still, the quality of research slips as scholars spend more time

debugging technical troubles than doing serious work. Timeframes begin to slip, projects get held up, and in general the amount of output from academia falls. This in turn not only affects individual careers but also weakens the reputation of those institutions that rely on high-quality research and teaching excellence. But it's beyond professional challenges. Technostress also profoundly impacts work-life balance. Rodriguez-Barboza (2023) examined technostress effects on job performance, particularly among higher education Peruvian English teachers' Academic staff are increasingly unable to separate work from life, the boundaries blurred by digital communication technologies such as e-mail or instant messaging. They're receiving emails at night and at the weekend marking papers and grading homework but also having to take online meetings outside of normal office hours. The problem about being on the line all the time is that there really aren't any good points for faculty members to distinguish between work and leisure.

Many feel compelled by their jobs to stay connected even during family dinners or vacations, often because they fear that a delayed response will be taken as unprofessional or slack. The result is that personal relationships break down. Friends move away and then begin slowly disappearing. Furthermore, Mahmoud et al. (2024) analyzed how technostress influences work productivity among academic staff, providing empirical evidence from Zagazig University The inability to leave work behind starts a cycle of strain and fatigue, which keeps academic professionals as tired little mice in a hamster wheel-on -- forever. Never being "off" brings psychological pressures: burnout, heightened anxiety, long-range kirbid satisfaction with your work future as an academician. These negative effects of technostress human thought and also on mental and emotional states. physical health isn't spared either. Many hours are spent in front of screens by academic professionals. They may be reading research papers, preparing lectures or responding to emails. The modern disease "excessive screen time" leads to digital eye strain, frequent headaches and chronic fatigue. Sleep patterns are frequently disturbed by late-night screen exposure. An example would be returned to Watson. This sedentary lifestyle of digital work increases physical discomfort, so prolonged sitting is causing stiffness pain in the back and wrist strain.

Similarly, Zheng et al. (2022) have shown that prolonged exposure to technostress is related with increased physical illness and sleep problems, among other things And when those physical symptoms are combined with mental exhaustion, it's even harder for academic and administrative staff to work at their best Even so Fatigue becomes a daily struggle and attention declines, both in academic research and in teaching It's A vicious circle of compounded physical and psychological pressure which academic staff do not see how they can break themselves. In another perspective, Marrinhas et al. (2023) Academic institutions should arrange well-structured workshops, lay on thorough tutorials and set up special help desks to enable their teaching staff to acquire new tools and tackle computer problems. If training and support are well organized, staff members will feel prepared and confident as they start to use technology in their working practices.

A college could, for example, provide hands-on experience of a computerized classroom management system: Thus, teachers can practice before they are let loose in front of their own live student audiences. IT support teams should always be on hand so as not to lead to technical queries staying around. Things should be sorted out both quickly and efficiently. When staff members get needed guidance and assistance, they are less likely to approach new technologies with outrage. Another basic approach is implementing boundaries around use of technology. Universities should be taking pains to encourage teaching staff to limit their digital input outside work hours, to give them back a bit of time of their own. Moreover, Kuadey et al. (2024) leveraged machine learning algorithms An effective approach is setting 'unplugged' periods: for instance, after 7 o'clock in the

evening no more emails; no work-related communication at all on Saturdays and Sundays. With a clear understanding of the rules governing after-hours access, the institution empowers staff to feel free from moral guilt when they disconnect.

Such division leads to a healthier working life: And can enable those academics who want it to be a little bit closer with their families, take care of private hobbies they've been putting off for too long and simply get a mental break. Departments can strengthen this approach by establishing organized policies, so that classroom teachers don't feel coerced into being on-call all the time. Sharma and Gupta (2023) proposed a multidimensional transactional theory of stress Establishing certain working protocols are also an example of protecting staff from the overbearing pressures of technology. Universities need to establish clear policies on when faculty must respond to e-mail messages and texts Faculty members only. If a teacher has managed to be off-campus at 6 p.m., then he probably won't even check his email before he comes back to work tomorrow morning.

Objective

To know the factors that assess the Impact of Technostress on the Well-Being of Academic Staff in Higher Education

Methodology

Study survey was conducted among 208 academic staff from higher education institutions to know the Impact of Technostress on the Well-Being of Academic Staff in Higher Education. “Random sampling method” and “Factor Analysis” were used to collect and analyze the data.

Findings

Table below is sharing respondent’s general details. Total 208 people were surveyed in which male are 65.9% and 34.1% are female. Among them 33.2% are below 37 years of age, 43.7% are between 37-42 years of age and rest 23.1% are above 42 years of age. 34.1% are working from less than 5 years in higher education institute, 38.5% are working from 5-8 years and rest 27.4% are working from more than 8 years.

Table 1 General Details

Variables	**Respondents**	**Percentage**
Gender		
Male	137	65.9
Female	71	34.1
Total	**208**	**100**
Age (years)		
Below 37	69	33.2
37-42	91	43.7
Above 42	48	23.1
Total	**208**	**100**
Work experience		
Less than 5 years	71	34.1
5-8 years	80	38.5
More than 8	57	27.4
Total	**208**	**100**

Table 2 "KMO and Bartlett's Test"

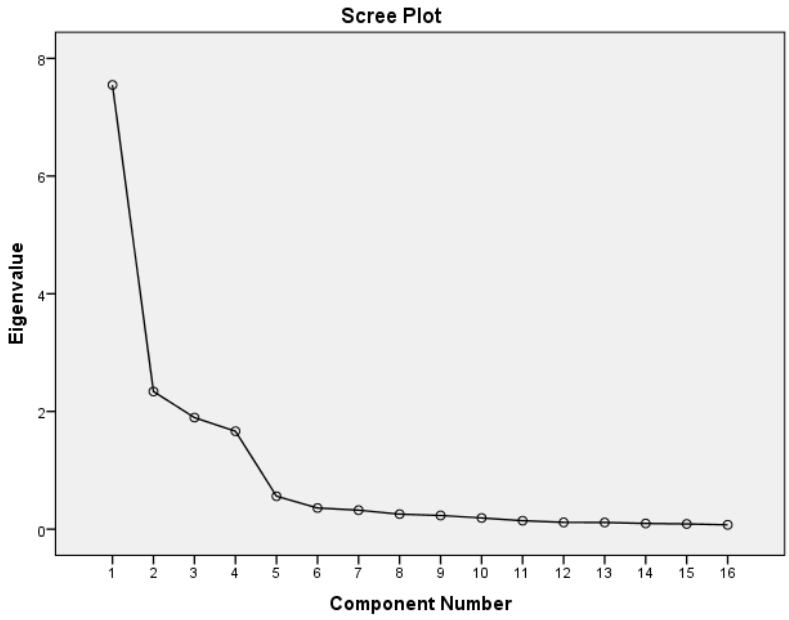
"Kaiser-Meyer-Olkin Measure of Sampling Adequacy"		.863
"Bartlett's Test of Sphericity"	Approx. Chi-Square	3381. 916
	df	120
	Sig.	.000

In the table above KMO value is 0.863 and the "Barlett's Test of Sphericity" is significant.

"Table 3 Total Variance Explained"

"Component"	"Initial Eigen values"			"Rotation Sums of Squared Loadings"		
	"Total"	"% of Variance"	"Cumulative %"	"Total"	"% of Variance"	"Cumulative %"
1	7.549	47.183	47.183	3.432	21.452	21.452
2	2.340	14.623	61.806	3.392	21.199	42.651
3	1.896	11.849	73.655	3.344	20.902	63.553
4	1.664	10.402	84.057	3.281	20.503	84.057
5	.560	3.498	87.555			
6	.359	2.246	89.801			
7	.322	2.015	91.816			
8	.255	1.594	93.409			
9	.232	1.450	94.859			
10	.191	1.191	96.050			
11	.144	.900	96.951			
12	.115	.720	97.671			
13	.113	.706	98.377			
14	.097	.603	98.980			
15	.090	.560	99.540			
16	.074	.460	100.000			

The "principal component analysis" method was applied to extract the factors and it was found that 16 variables form 4 Factors. The factors explained the variance of 21.452%, 21.199%, 20.902% and 20.503% respectively. The total variance explained is 84.057%.



The graph above depicts the Eigen values generated from the "Total Variance Explained table" for an elbow with 4 components.

"Table 4 Rotated Component Matrix"

"S. No."	**"Statements"**	**"Factor Loading"**	**"Factor Reliability"**
	Work Overload		**.939**
1	Flow of digital information coming from all sides	.889	
2	Constant connectivity creates technostress in staff	.877	
3	E-mails and messages from students or other teachers at night and on weekends	.865	
4	Electronic communication hits the staff by a deluge of information creating overload	.859	
	Work-Life Imbalance		**.936**
5	Compelled to stay connected even during family dinners or vacations	.900	
6	Online meetings outside of normal office hours	.864	
7	Staff goes through extended working hours	.856	
8	Remote working culture leads to Work-Life Imbalance	.845	
	Job insecurity		**.932**
9	Delayed response will be taken as unprofessional or slack	.882	
10	Fear to be replaced by automation system	.876	
11	Older staff members have more problems with new technologies than younger colleagues	.862	
12	Women face more difficulty in adapting digital tools and systems	.852	
	Health		**.927**
13	Technostress leads to increased physical illness	.873	

14	Academic staff goes through mental exhaustion	.868	
15	Sleep patterns are frequently disturbed by late-night screen exposure	.842	
16	Prolonged sitting causes stiffness pain in the back and wrist strain	.820	

Factors and variables that shows Impact of Technostress on the Well-Being of Academic Staff in Higher Education**.** Factor "Work Overload" includes the variables like Flow of digital information coming from all sides, Constant connectivity creates technostress in staff**,** E-mails and messages from students or other teachers at night and on weekends and electronic communication hits the staff by a deluge of information creating overload**.** Factor "Work-Life Imbalance" includes the variables like Compelled to stay connected even during family dinners or vacations**,** Online meetings outside of normal office hours**,** Staff goes through extended working hours and Remote working culture leads to Work-Life Imbalance. Factor "Job insecurity" includes the variables like Delayed response will be taken as unprofessional or slack, Fear to be replaced by automation system**,** older staff members have more problems with new technologies than younger colleagues and Women face more difficulty in adapting digital tools and systems**.** Factor "Health" includes the variables like Technostress leads to increased physical illness, Academic staff goes through mental exhaustion, Sleep patterns are frequently disturbed by late-night screen exposure and Prolonged sitting causes stiffness pain in the back and wrist strain.

"Table 5 Reliability Statistics"

"Cronbach's Alpha"	"N of Items"
.924	16

The reliability for 4 constructs with total of sixteen is 0.924.

Conclusion

Technostress plays a major role in reducing the well-being of academic staff in higher education, leading to higher anxiety, lower job satisfaction can lower productivity. People are literally changing how they work overnight, and without the necessary training and support, the article explains how that creates a certain kind of stress in the workplace. Even more so, tensions between work and personal life create additional disruption and mental and physical fatigue. Organizations that fail to manage these difficulties will experience high levels of staff turnover and reduced competency. By implementing structured training programs, clarifying policies around digital communication, and encouraging work-life balance, companies can alleviate the pressure of technostress. Counseling services and technical support can also help staff deal with stress in an adequate manner. Universities need to address the issue of technostress and find ways to support employees.

The study aims to know the factors that assess the Impact of Technostress on the Well-Being of Academic Staff in Higher Education and found that Work Overload, Work-Life Imbalance, Job insecurity and Health are the factors that shows the Impact of Technostress on the Well-Being of Academic Staff in Higher Education.

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