Journal for Re Attach Therapy and Developmental Diversities
eISSN: 2589-7799
2022 July-December; 5 (2): 111-117

# Technostress: A Set of Negative Psychological Reactions to the Use of Technology in Teaching Profession

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Received 15-August-2022
Revised 25-October-2022
Accepted 30-November-2022

**Abstract**

Technostress is stress resulting from the use of technology. Education and organizational systems are being reinvented, and information and communication technology (ICT) is changing the way things are taught and learnt. ICT certainly brings unmatched advantages to the field of Education, nonetheless, this incorporation of ICT into the teaching-learning process has resulted in a certain degree of stress among college teachers, commonly termed "technostress". Teachers are under great pressure to work effectively and to continually update their knowledge and skill sets. In this context, our study aimed to perform an analysis of technostress among college teachers. The data was collected through a sami-structured questionnaire from college teachers. The major findings of this study revealed that a relatively high percentage of college teachers didn't feel comfortable using different technological gadgets in the teaching-learning process. Majority of them confused and frustrated while delivering content using various technological tools in classroom setting. Moreover, the they feel that there was a lack of preparation time with technological gadgets before using them in the actual classroom settings.

**Keywords:** Technostress, Reactions, Teaching, Profession, Collage, Teachers.

## Introduction

The adverse psychological and physical effects of using technology are referred to as "technostress." (Tarafdar, D., et al., 2015). Due to our growing reliance on technology and the need to keep up with its innovations, we are in a state of mental and physical strain (Ragu-Nathan, B. S., et al., 2008). Anxiety, irritability, and burnout are common symptoms of technostress, which can lower productivity and job satisfaction. (Turel, O., & Qahri-Saremi, H., 2016). Information overload, continual connectedness, and the need to learn and adjust to new technology are a few of the variables that contribute to technostress. (Tarafdar, D., et al., 2015). Technostress has also been connected to the usage of social media and mobile devices because users may feel under pressure to check for updates and notifications constantly. (Chen, Y., et al., 2019). Both individuals and organizations may be significantly impacted by technological stress. Research revealed that technological stress might result in lower organizational commitment, higher turnover intentions, and lower job satisfaction. (Ragu-Nathan, B. S., et al., 2008). Technostress can also have a significant impact on one's physical health, resulting in headaches, sleep difficulties, and musculoskeletal ailments (Turel, O., & Qahri-Saremi, H., 2016).

In general, technostress is an increasing issue in today's technologically advanced society, and people and organizations must be aware of its possible drawbacks and take action to lessen them. It is a type of technology-related stress that can be brought on by things like information overload, frequent interruptions, and trouble using technology. (Cao, Lu, & Yu, 2019). Technostress is a problem that is getting worse in modern settings, according to research. Brod, 1984; Tarafdar et al., 2007). Technostress can develop as a result of people being increasingly dependent on technology as it is used more frequently in our daily lives. (Brod, 1984). It is crucial to comprehend and control technostress because it can have substantial detrimental consequences on people and organizations. Overall, the word "technostress" refers to the adverse

impacts that technology may have on people and organizations, and it is a subject of significant concern in contemporary workplaces.

The word "technostress" is used to characterize the detrimental psychological and emotional effects of using technology at work. It is a type of stress brought on by a person's incapacity to deal with technical demands or adjust to changes in technological systems. (Tarafdar, Cooper, & Stich, 2019). Technostress, in the opinion of Tarafdar et al. (2019), can result from a range of factors, such as the complexity of technology, the rate of technological advancement, and the pressure to be always accessible and receptive via digital means. Indicators of technological stress include worry, burnout, and a decline in job satisfaction. Technostress can have serious adverse impacts on both people and organizations, according to research. For example, Tarafdar, Ragu-Nathan, & Ragu-Nathan (2019) found that employees' desire to resign more frequently and their job performance suffered as a result of technostress. According to Tarafdar, & Ragu-Nathan (2019), "A set of negative psychological reactions to the use of technology in the workplace," is what technostress is. According to Tarafdar et al. (2019), several things can contribute to technostress, including information overload, work interruptions, and social isolation brought on by technology use. The scientists discovered that technological stress might have a negative impact on job satisfaction, which can then result in decreased productivity and higher turnover rates. Technostress is a phenomenon that may be harmful to both people and profession. It can produce psychological and physical problems and is brought on by several technology-related issues. It is referred to as "the stress, anxiety, and emotional exhaustion resulting from the interaction between people and technology"(Tarafdar, D., et al., 2015) Information overload, continual connectedness, and the need to master new technologies are only a few of the causes of technostress. As stated by RaguNathan, T. S., et al. (2008)," The term "technostress" refers to the detrimental impact of technology use on people's wellbeing and productivity at work. According to Tarafdar et al. (2019), Information overload, frequent interruptions, the need to learn and utilize new technologies, and the inability to manage technology use are just a few of the elements that might contribute to technostress. The authors further contend that employees' well-being, work output, and organizational results may all be harmed by technostress. Similarly, Cavanaugh, Ma, and Lin (2018) asserting that technological stress can result in lower productivity, job unhappiness, and thoughts of leaving a job. They recommend that organizations take action to lessen technostress by setting clear policies and procedures, supporting work-life balance, and offering training and support for technology use. It's critical to offer assistance, instruction, and unambiguous rules for technology use to reduce technostress. Information overload, time constraints, and persistent interruptions from digital gadgets are just a few of the causes that may arise (Tarafdar et al., 2019). Technostress has been linked to lower productivity, burnout, and work dissatisfaction, according to research (Turel et al., 2020). Additionally, Tarafdar et al. (2019) showed that it has detrimental impacts on physical health, including elevated heart rate and blood pressure. Overall, as technology continues to play an increasingly essential part in our lives, technostress is a major worry in the modern office and daily life.

In particular Information and communication technology (ICT), causes unpleasant psychological and physiological reactions that are referred to as "technostress." It can result from several things, such as feeling overloaded, often interrupted, having trouble using technology, and the blurring of lines between work and personal life. Technostress, according to Tarafdar, Cooper, and Stich (2019), is a "distinctive type of stress that occurs as a result of using information and communication technologies." The authors point out that technological stress might result in detrimental effects including decreasing job satisfaction, poorer work performance, and higher intents to quit. Similar to this, Cavanaugh, Boswell, Roehling, and Boudreau (2000) defined technostress as "the stress and discomfort associated with the misuse or non-use of technology, as well as the feeling of being overwhelmed by the sheer volume of information and the need to respond instantaneously." As a result of the growing use of technology in education, it has become a regular problem for university instructors. Alshammari and Ali (2021) investigated technostress among university professors and revealed that low work satisfaction and a lack of commitment to the teaching profession were both correlated with high levels of technostress. The study also discovered that high levels of technostress were linked to lower levels of productivity and job quality. Huang, Liang, and Su (2020) investigated the effect of COVID-19 on technostress among university professors that levels of technostress significantly increased as a result of the abrupt switch to online instruction. According to the researchers, to effectively manage the use of technology in their instruction, university professors require proper assistance and training. The association between technostress and burnout among university instructors was examined in research by Al-Qudah et al. (2021). University professors with greater levels of technostress were more likely to feel emotional tiredness, depersonalization, and decreased personal accomplishment, according to the study, which also identified a significant correlation between technostress and burnout. According to this research, university professors have a serious

problem with technostress, which can harm their mental health, productivity, and level of job satisfaction. Colleges must offer assistance and tools to help instructors manage their technological stress and make sure that technology use in the classroom is balanced and acceptable. Technostress is the term used to describe the stress brought on by using technology, particularly when doing so causes emotions of being overwhelmed, irritability, and anxiety (Tarafdar, Tu, & Ragu-Nathan, 2019). The growing emphasis on technology in education, which has increased the use of online platforms and digital tools for teaching, grading, and communication, makes university lecturers particularly susceptible to technostress. University lecturers are becoming more concerned about technostress. For instance, Choudhury and Jaiswal's study from 2021 revealed that university instructors in India had significant levels of technostress, with the complexity of technology, a lack of training, and poor technical assistance all playing a role in this. Similar findings were made by You and Kang (2021), who discovered that the demands of online teaching and learning during the COVID-19 epidemic led to technostress among university professors. Mansour and Elkholy's (2020) technostress has a detrimental influence on work satisfaction among university lecturers, this may be a result of a lack of knowledge and instruction about how to use technology for teaching and learning in an efficient manner. Overall, these studies suggest that technostress is a significant issue for university teachers and that resolving it will require a multifaceted strategy that includes giving teachers the right technical support and training in addition to fostering a culture that supports the efficient use of technology in the classroom.

**Objective of the Study**

To explore the perspective of technostress among college teachers.

**Research Question** Is ICT-aided teaching the reason for technostress among college teachers?

**Research Design**

This research was based on a qualitative approach by adopting the exploratory design to understand the various insights regarding technostress among college teachers. The was to analyse technostress among college teachers. To achieve the purpose of this study, data was collected through a structured survey using Google Forms, a web-based survey tool. Fifty participants were selected through a purposive sampling technique. Questionnaires were used to understand their use of various technological gadgets for work and their learning and teaching-oriented issues and challenges.

**Results**

**Table 1.1 Item-Wise Analysis of the Study**

| S.No | Items | Frequency and Percentage | | |
|---|---|---|---|---|
| | | | YES | NO |
| 1. | Do you feel comfortable using different technological gadgets in the teaching-learning process? | N | 16 | 34 |
| | | % | 32% | 68% |
| 2. | Do you feel puzzled and frustrated while delivering content by using various technological tools in your classroom? | N | 40 | 10 |
| | | % | 80% | 20% |
| 3 | Do you feel there is a lack of preparation time to experiment with technological gadgets before using them in the classroom? | N | 33 | 17 |
| | | % | 66% | 34% |
| 4 | Do you think that technological gadgets make the teaching profession more challenging? | N | 28 | 22 |
| | | % | 56% | 44% |
| 5 | Do you feel that you do not have the ability to choose technological gadgets/tools during the teaching-learning process? | N | 25 | 25 |
| | | % | 50% | 50% |
| 6 | Do you feel you are better at understanding and using technology than young people? | N | 19 | 31 |
| | | % | 38% | 62% |
| 7 | Do you think there is a lack of support when technological errors arise? | N | 41 | 09 |

| | | | | |
|---|---|---|---|---|
| | | % | 98% | 18% |
| 8 | Are you familiar with the new technological innovations that can be used for effective teaching-learning processes? | N | 34 | 16 |
| | | % | 68% | 32% |
| 9 | Do you feel technology forced you to work with very tight time schedules? | N | 28 | 22 |
| | | % | 56% | 44% |
| 10 | Do you feel burdened due to the constant developments and upgradation in technology? | N | 25 | 25 |
| | | % | 50% | 50% |
| 11 | Do you feel forced to change your work habits to adapt to new technologies? | N | 32 | 18 |
| | | % | 64% | 36% |
| 12 | Do you feel you spend less time with your family due to technology? | N | 39 | 10 |
| | | % | 78% | 20% |
| 13 | Do you think you do not know enough about technology to handle your work satisfactorily? | N | 30 | 20 |
| | | % | 60% | 40% |
| 14 | Do you feel your colleagues know more about educational technology than you do? | N | 40 | 10 |
| | | % | 80% | 20% |
| 15 | Do you find enough time to study and upgrade your technological skills? | N | 21 | 29 |
| | | % | 42% | 58% |
| 16 | Do you often find it too complex to understand and use new technology? | N | 40 | 10 |
| | | % | 80% | 20% |

**Interpretation**

The table shows the response of the college teachers on the extent to which they feel comfortable using different technological gadgets in the teaching-learning process. From the conducted research and analyses made. As shown in Table 1.1, only 32% of college teachers feel comfortable using different technological gadgets in the teaching-learning process, whereas 68% do not feel comfortable using different technological gadgets in the teaching-learning process. Further table shows that a higher percentage 80% of college teachers feel puzzled and frustrated while delivering content by using various technological tools in their classroom and only 20% do not feel puzzled and frustrated. Moreover, 66% of college teachers feel that there is a lack of preparation time to experiment with technological gadgets before using them in the actual classroom settings while 34% do not feel that there is a lack of preparation time to experiment with technological gadgets before using them in the actual classroom settings. From the table, it can be seen that 56% of college teachers feel that technological gadgets make the teaching profession more challenging while 44% do not think like that. As far as the college teacher's ability to choose technological gadgets/tools during the teaching-learning process is concerned 50% of college teachers think that they do not have the ability to choose technological gadgets/tools during the teaching-learning process while 50% do not have any problem to choose technological gadgets/tools. Infact, the majority of college teachers 62% do not feel that they are better at understanding and using technology than young people while 38% feel that they are better at understanding and using technology than young people. Item no (7) presented in the above table shows that 98% of college teachers think that there is a lack of support when technological errors arise while only 18% have such experience. 68% of college teachers further respond on item no (8) that they are not familiar with the new technological innovations that can be used for effective teaching-learning processes only 32% responded positively. Respondents were further asked to indicate their response about technology forcing them to work with very tight time schedules 56% of college teachers feel technology forced them to work with very tight time schedules while 44% of teachers have opposite experience. The researcher asked whether the college teachers feel burdened due to the constant developments and upgradation in technology through item no (10) presented in the table 50% of college teachers expressed yes and 50% do not feel burdened due to the constant developments and upgradation in technology. When respondents were questioned about their change in their work habits to adapt to new technologies 64% of college teachers feel forced to change their work habits to adapt to new technologies while 36% have different opinion. Respondents further record their responses regarding the time spent with their family due to technology almost 78% of college teachers feel they spend

less time with their family due to technology while only 20% contradicts. As indicated in item no 13, 60% of college teachers think they do not know enough about technology to handle their work satisfactorily while 40% have indicated their agreement. 80% respondents further record their response that they feel their colleagues know more about educational technology while 20% do not feel like that. The table further reveals that 42% of college teachers find enough time to study and upgrade their technological skills while 58% have disagreement with this opinion. On the other hand, 80% of teachers indicated that they often find it too complex to understand and use new technology, whereas,20% often find it too complex to understand and use new technology.

**Discussion & Conclusion**

Technostress among college teachers is a growing concern in today's educational landscape. This phenomenon is characterized by the negative psychological and physiological effects resulting from the use of technology in their professional roles. In this conclusion, we will summarize the key points and findings related to technostress among college teachers. A relatively high percentage of college teachers do not feel comfortable using different technological gadgets in the teaching-learning process. The majority of college teachers feel puzzled and frustrated while delivering content by using various technological tools in their classroom moreover college teachers feel that there is a lack of preparation time to experiment with technological gadgets before using them in the actual classroom settings. The major sources of technostress include excessive workload, technical issues, lack of training, and the pressure to adapt to new technologies (Ayyagari et al., 2011). College teachers feel that technological gadgets make the teaching profession more challenging besides this they think that there is a lack of support when technological errors arise. Inadequate training and support for teachers in using technology exacerbate technostress (Ragu-Nathan, et al., 2008). Technology forces them to work with very tight time schedules they feel burdened due to the constant developments and upgradation in technology which forced them to change their work habits to adapt to new technologies Technostress negatively affects the well-being of college teachers, leading to symptoms such as anxiety, burnout, and reduced job satisfaction (Ragu-Nathan et al., 2008) college teachers feel they spend less time with their family due to technology. The blurring of boundaries between work and personal life due to technology use contributes to technostress (Reis, 2017). Moreover, workload management and the introduction of user-friendly technology can alleviate technostress (Cavanaugh et al., 2019). In conclusion, technostress among college teachers is a multifaceted issue with significant implications for their well-being and job performance. Addressing this problem requires a holistic approach, including training, support, and the development of user-friendly technologies to minimize its adverse effects. Technostress among college teachers is a significant issue in today's educational landscape. Institutions must provide adequate training and support to help teachers cope with technostress (Tarafdar et al., 2015). Institutions must invest in comprehensive training programs and ongoing support (Chen, et al., 2019). Institutions need to encourage a culture of adaptation and provide incentives to promote technology use (Chen & Bryer, 2012). Faculty should be encouraged to establish boundaries and practice effective time management (Chen, et al., 2017). Addressing this problem requires a holistic approach that includes proper training, support, and a culture of technology adoption, all aimed at improving the overall quality of education and the lives of college teachers. More research is needed to understand the long-term effects of technostress on college teachers and to explore the potential benefits of technology in education (Tarafdar et al., 2017). To mitigate technostress, colleges should implement policies that prioritize teacher well-being (Tarafdar, et al., 2020). Continuous research is necessary to identify emerging sources of technostress and develop effective coping strategies (Ayyagari, et al., 2011).

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