

## VIEWS OF ACADEMICIANS RELATED TO TECHNOSTRESS

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**Abstract:** The purpose of this research is to reveal the opinions of academicians towards technostress. The study, which was designed with qualitative research in line with this aim, was conducted with 9 academicians working at Trakya University in the spring semester of 2016-2017 academic year. As a result of this research, it was seen that technostress perceptions of academicians were low and techno-invasion perceptions of academicians were high.

**Key words:** Technology, communication, information

### INTRODUCTION

In general, technostress is the stress condition that is caused by technology. This concept was first described by Craig Brod in 1984 as a modern adaptation illness due to the inability to adapt to new technologies (as cited in Akınoğlu, 1993). Champion (1988) sees technostress as an individual reaction to changing technology. According to Tarafdar et al. (2008), it is the struggle caused by the initiatives of individuals to cope with the Information and Communication Technologies (ICT) in the ever-evolving situation and the responses to the changing physical, social and cognitive demands. Tarafdar, Tu, Ragu-Nathan and Ragu-Nathan (2011) found five different dimensions of technostress by focusing on the dimensions and consequences of technostress:

- **Techno-Overload:** It is defined when the users of information and communication technologies are working more and faster.
- **Techno-Invasion:** Employees need to be connected and accessible everywhere and all the time.
- **Techno-Complexity:** Technologies that develop rapidly and continuously require the use of new applications, hardware and software. This is defined by techno-complexity, where users need to spend more time and effort to understand new applications.
- **Techno-Insecurity:** This is a situation where users are afraid of losing their jobs to those who use new applications and technologies better.

- **Techno-Uncertainty:** Constant changes and developing technologies do not give employees the opportunity to experience and specialize themselves in certain applications. In this case, employees get a "disturbing" feeling. Because the information they have is "old" in the face of rapidly changing information. Despite enthusiasm in the early stages, the need for constant renewal and updating results in disappointment and anxiety.

In today's society, most people are faced with mild forms of technostress, but technostress can have further negative effects for individuals who experience technostress at an extreme level. The effects of technostress and their indications; mental fatigue, depression, anxiety and impatience (Saganuwan, Ismail and Ahmad, 2014).

According to Taraftar et al. (2010); tensions, depend on techostress, can be psychological and behavioral. Psychological tensions are; motional reactions to triggering conditions and situations such as job dissatisfaction, depression and self-assessment. Behavioral tensions are; low productivity, increased business volume and absenteeism, low task performance.

The most common statements of technostress are stated by Clute (1998); panic, anxiety and abstraction or frustration; thirdly, negative attitude towards computers. Other indications; nervousness, anger, fatigue, increasing faults, absenteeism, low morale and confidence, burnout and lack of concentration.

Technostress is an important problem for organizations because of its effects on health and performance (Tarafdar, Tu, Ragu-Nathan and Ragu-Nathan, 2007). Technostores have severe negative effects such as perceived increase in workload, information exhaustion, demoralized and frustrated users, loss of motivation and dissatisfaction at work (Tarafdar et al., 2008).

Teknostres has the effect of reducing employees' productivity in a direct proportion by negatively affecting their job satisfaction and performance. At the same time, it causes occupational stress, so it leads to low productivity and job dissatisfaction among employees (Saganuwan, Ismail and Ahmad, 2013). When considering the importance and place of technology in our lives, precautions should be taken to mitigate or stop these negativities. For this reason, it was aimed to reveal the opinions of academicians towards technostress in this research and to suggest suggestions for reducing the technostre effects on academicians.

## **METHOD**

### **Research Design**

This research, which aims to reveal the opinions of academicians towards technostress,

has been designed with a qualitative approach based on semi-structured interviews and qualitative analysis techniques.

### **Limitations**

This research is limited to the academicians working at Trakya University in the spring semester of 2016-2017 academic year, firstly informing them about the concept of technostress and accepting the interview voluntarily.

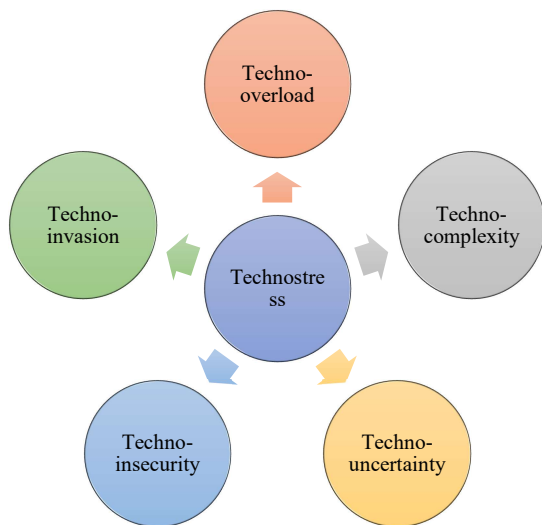
### **Study Group**

The study group of this research was composed of 9 academicians working at Trakya University in the spring semester 2016-2017 academic year. When the study group of this study is determined; easy accessible sampling technique, from purpose sampling method, is used. Careful attention has been given to the academicians in the working group to use the technology effectively; gender, age, duration of vocational service (seniority) and departments are given in Table 1. The academicians involved in the research were named "A1, A2, ..., A9".

**Table 1.**

**Characteristics of the Study Group's Academicians**

<b>Academician</b>	<b>Gender</b>	<b>Age</b>	<b>Seniority</b>	<b>Department</b>
<b>A1</b>	Man	45	20	Turkish education
<b>A2</b>	Man	43	15	Training programs and teaching
<b>A3</b>	Man	43	18	English language education
<b>A4</b>	Man	48	16	Special education
<b>A5</b>	Man	37	15	Computer and instructional technology education
<b>A6</b>	Man	49	25	English language education
<b>A7</b>	Woman	37	15	Computer and instructional technology education
<b>A8</b>	Man	39	16	Turkish language and literature
<b>A9</b>	Man	34	11	Social studies education



**Figure 1. Dimensions of Technostress**

### Data Collection Tools and Their Implementation

In this research, the data was obtained through a face-to-face interview with semi-structured interviews. While the interview form was being developed, the dimensions of the Technostress Scale (Figure 1) developed by Tarafdar, Tu, Ragu-Nathan, Ragu-Nathan (2007) and adapted by the Turkish cultural adaptation Ilgaz, Özgür and Çuhadar (2016) were taken as

basis in the relevant field. Also draft questionnaire was prepared based on the

feedback of the instructors who had expertise and experience related to the subject. There are four questions in the interview form. In the data collection process, firstly, preliminary information about the research topic and purpose was given to the academicians in the working group. The interviews were held in the rooms of the academicians, at times appropriate for them. The interviews were recorded with the voice recorder within the participants' information. Throughout the interview, situations where the researcher could negatively affect the data collection process were avoided from.

#### Analysis of Data

The data obtained in the study were analyzed by descriptive analysis technique. The voice recordings obtained from the interviews were transferred to the computer and written in their original form. In order to verify that the data was correctly transferred to the computer environment, the voice recordings and computer records were submitted to another researcher and confirming the data breakdown process. The data are summarized and interpreted under thematic structure. In addition, findings are directly supported by quotations.

#### Findings

Findings for the purpose of the study are provided below where necessary, supported by direct quotations from the participants' views. In the study, it was found that academicians generally have low technostress perceptions. The academicians who participated in the research stated that technology is an indispensable part of our life even though it is a negative

effect, and it is necessary to follow the technology by stating that it makes our life easier.

*A1: "New technologies bring a great advantage. The fact that employees who can use technological materials exist in an institution and they can give feedback immediately will bring that institution to make faster decisions. Both institutions will be able to make decisions faster, and employees will be able to handle their tasks in a tangled fashion and concentrate on their work."*

*A5: "I have to follow the technology well, take it and use it. It should be a cash machine style system where we can read our cards in the school. Our classes can be more technological. On the other hand, I think that fiber optics should come up faster and faster. No more artificial intelligence, no objects, we will pay for services. I mean, an environment where human-computer interaction is better, makes me really happy."*

*A6: "Technology is a part of life, indispensable. Today, we can not enter into an attitude that we do not use or want to use technology. The technology is definitely a part of us and we have to follow it on a daily basis."*

*A7: "Technology is already in your life and a tool to help us. There's nothing like being under pressure and having to use it. Since we have made our life easier, we are always using it in our business life and in our social life. And we're academicians. We have to work with technology in our work and this gives us a great contribution in our projects. Technology is in your life. It is necessary to own it, not to approach it with fear. But besides this, we should not be the only user of the technology. I have to think a bit; How can we be creative."*

### **The Perception of Techno-Overload and Techno-Invasion**

Techno-overload describes situations in which information and communication technologies force users to work faster and longer. Techno-invasion; defines the dominant influence of information and communication technologies in creating situations where users can potentially be reached at any given time.

#### **"IT OCCUPIES SO MUCH!"**

In the research, is there a repressive effect of the technology in your business or social life, and what kind of responsibilities or constraints they bring to you were asked to the academicians. Most of the academicians said that although the effects of facilitating the life and the positive aspects of the technology in general, the repressive aspects are too much and it occupies so much.

A1: "... The negative sides are also very crowded. Because people are narrowing their fields of motion. You can be reached at any time, you are always under surveillance, and this also creates anxiety. But the information is an important metotur immediately to reach. In social life, the person has very good use of technological materials, and because of the technology, the person has both positive and negative effects. It affects the original behavior of the person. Social media, in particular, brings both loss of time and reduces the amount of time people spend on them. The effect of technology is more positive in business life. Because it is much easier to reach any information and to do our operations on that information. Accordingly, when I compare the two, there are more negative effects in social life. It is because the amount of time that the person has reserved for himself is decreasing. In business life, it creates faster beat and faster production."

A3: "I think that if you are constantly in communication, a messenger from e-mail or different applications, and this messaging is about your workload, that can put pressure on you."

A4: "Students can reach us whenever they want, from mobile phones or from Facebook, Twitter. Even if it is late at night, it does not matter to them. They can call to ask for a note or ask something about the assignment. In this case, there is no such thing as private life. Wherever you go, they reach you in all kinds of ways. This can sometimes be uncomfortable. But you do not say anything. They can instantly call at a meeting or in a place where the phone should be off. This person can also be a different person not only student. This situation can create some trouble for us. The situation is also very disturbing: We have internet in our mobile phones and this is what we need to look at all the time. Let's see what happened. I need to see if I'm missing something."

A5: "There are constraints and effects on technology in business and social life, of course. For example, in a place with a camera, in a classroom or some other setting, I feel like I'm being watched and stressed. It's like talking more smoothly ...I can't be myself. Because I feel like someone is following me. If we look at smartphones, it's like an organ. If I use a metaphor for it, I can say "my sixth organ" for a smartphone. I constantly think about the possibility of accident when driving, especially when the message comes to me. When the phone is off or the charge is over I am stressed. So I'm running around with the charger. In addition to these, all of these tools work on frequency. So how much you talk with it is so much effect on the brain. In academic terms, I work better if I don't have a phone with me. Because the message is coming, everyone is asking something. It keeps me very busy."

### **The Perception of Techno-Complexity**

It defines complex situations in which information and communication technologies cause users to feel insufficient in terms of their skills and force them to spend time and effort to understand and learn about the various aspects of information and communication technologies.

#### **“I WANT HELP FROM SOMEONE WHO KNOWS!”**

When what they need to understand and use new technologies were asked to academicians, they often said that they had been used trial and error method or helped by someone who knows. Some academicians have stated that it may be beneficial to have training.

*A1: “I am trying to understand new technologies by trial and error method. Or I can get help from people who are more professional with technology. For example, I am trying to get help from the technology department chiefs when I have a computer or internet problem. But for that, in-service courses, explanatory meetings and informational meetings can be much more useful.”*

*A2: “I think it is important to get help from an expert when I think that this is the first time I have encountered and experienced difficulties in solving. Like formatting on a computer ... Although I can learn from the internet or I have preliminary information, I think that new technologies need an expert in that sense.”*

*A6: “We do it by trial and error method. First, we get a little difficult, but then we get used to it. But the main thing is to take education.”*

*A8: “I want help from someone who knows. At first, I consult them to find out how it is done. I don't have to try to find myself. I always get help.”*

*A9: “In the globalized world, I think it is useful to have a short training to understand and use new Technologies.”*

### **The Perception of Techno-Insecurity**

Users are in danger of losing their jobs, new information and communication technologies that may take their place, or situations where they can relocate with people who understand those technologies better.

#### **“SHOULD BE INNOVATIVE!”**

In the research, what kind of hesitations and fears they experienced in business life due to new Technologies was asked to academicians. Most of the academicians who participated in the research stated that they didn't live any fear.

*A3: "I can't say I have a hesitation or fear. Because the main purpose of technology is to accelerate our business, to facilitate our daily life and business life."*

*A6: "I don't live any fear. Because I think I follow the technology.... We can do as much in business life as it is, so there is no fear."*

*A7: "There is not any fear. Because the new technology is more developed than the existing technology. If you can use existing legacy technologies, you can easily adapt to new technologies as well. I need to be a little innovative in this regard. If you put a restriction on yourself, if you approach with fear, you can't use such technologies. You can't get right into your life."*

*A8: "I don't live so much fear. It's not a problem after you've learned to use as much as you can. What matter is how it's used, not a problem afterwards."*

### **The Perception of The Techno-Uncertainty**

It includes cases where changes and updates in information and communication technologies are disturbing users.

### **"THERE WERE VERY LARGE AMENDMENTS IN THE LAST 10 YEARS!"**

In the research, what kind of changes and developments related to technology in business life was asked to academicians. Most of the academicians have stated that technological developments are very good compared to the old ones, but some academicians stated that there is an inadequacy in this issue.

*A1: "There have been very big changes in business life especially in the last 10 years. It is especially access electronic documents or online contacts with people to give information about meeting or event, from smartphone/computer/mail/social media."*

*A2: "In the last 10 years in the world and especially in Turkey about the preparation of teaching materials, a great improvement has been made. We see that internet based materials for this have gained a great deal of intensity. Their use in the teaching-learning process is undoubtedly a situation that requires a certain effort. Of course, I think this could be done by following technology and internalizing that innovation."*



A3: *“There are serious differences between the technology we use in lesson 10 years ago and now. We’ve come to the projectors from overhead projectors right now. We have the opportunity to connect internet during the lesson. We can reach any information very quickly. Even if we are in lesson, we can project a video from Youtube. This wasn’t a possibility 10 years ago. The widespread use of the internet and smart technology makes our work easier.”*

A6: *“We have to use projections or smart boards constantly. For this reason, these must be provided to us. There is inadequacy in this respect.”*

A8: *“For example, the electronic document management system came. Previously, we were doing our in-house correspondence through secretariat. But now everything is done through the system. This caused me stress in the first place. Because I didn’t know how to use it. But after I learned it, it really came easier and I thought it was necessary.”*

A9: *“I can’t say that there are changes and improvements. There are times when we have problems with that. For example, a file is sent to us via mail or internet, but we can’t open that file because the program versions of the computers in the school are outdated.”*

## **RESULTS & SUGGESTIONS**

In the study, the opinions of academicians on technostress perceptions were discussed. The interviews conducted for the purpose of the research show that the technostress perceptions of academicians are generally low and it’s not change according to gender, age, department and seriority. However, as noted in the limitations of the study, there is just a woman academician voluntarily accepting interviews in this survey, so more women participants should be provided in future surveys for better outcomes on the gender factor.

Most of the academicians participating in the research expressed that technology is an indispensable part of our life, although it has negative effects, that it makes our life easier and should be followed up. According to this result, as the academicians have expressed, technological developments will greatly contribute to their self-improvement as well as to facilitate active learning by using technological innovations in the teaching environment. According to Jena and Mahanti (2014) have been found that gender, age, technology awareness, and job descriptions of academicians have significant influence on the technostress they experienced.

In the study, it was seen that the perceptions of the academicians towards the techno-invasion dimension were high. Most academicians who participated in the research (regardless of age, department, gender and seniority year) stated that technology occupies so

much and under constant pressure to be accessible. As Saganuwan, Ismail and Ahmad (2013) have stated, technostress can lead to low productivity for the workers as a result of occupational stress. According to this result, academicians can focus more on working in school with their colleagues or students at certain times by face-to-face interviews as much as possible or by temporarily disabling the use of technological communication tools during their work.

It was found from views of academicians about techno-complexity that they got help from people who are knowledgeable in this area to understand and use new technologies. Some academicians have indicated that training is necessary. Tiemo and Ofua (2011) also pointed out that users can come up with technological problems by providing regular training on information and communication technologies. According to this conclusion, if the faculties have departments related to technology and informatics, the fact that the academicians in these departments make informative meetings within the faculty or the faculty dean provides the in-service trainings to the faculty academicians about technology can enable the academicians to find solutions to the problems they encounter about the technologies.

In the research, it was seen that academicians had no fear due to technological improvements from their expressions of techno-insecurity. According to this result, we can say that academicians are comfortable working with technology without hesitation or fear.

The academicians' expressions about techno-ambiguity perceptions show that technological developments have gained momentum in the last 10 years; This situation provides great convenience and benefit in business life. The fact that academicians participating in the research have a positive attitude towards technological developments and they are willing to use the technology in business life can also lead to positive results in the educational process. According to Khan, Rehman and Rehman (2013), the dissemination and internalization of technological innovations has transformed traditional ideologies into a digital identity. As a result, it has become a requirement for individuals to acquire technological competencies, accept and innovate innovations, and constantly update their knowledge. However, there have been academicians in this study who stated that the technological developments were inadequate to them. For this reason, it is necessary for resource providers to give more importance to this issue and to ensure that technological tools and equipment are sufficiently provided.

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