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## **THE TECHNOSTRESS REASONS OF TURKISH TEACHERS**

### **Abstract:**

This research aims to determine the affecting factors on technostress levels of Turkish teachers. For this purpose, after giving a brief information about the technostress, the teachers are asked to give an answer to the question of "What are the factors that affect your technostress level in your profession and life?". A qualitative method was used in order to determine the affecting factors on technostress levels of Turkish teachers. 64 teachers were participated the research. "Convenience sampling" method was used which is frequently preferred method in a qualitative research. While descriptive statics is used to analyze the demographic data of the participants, content analysis technique is used to analyze the qualitative data. As a result of the analysis process, 117 different expressions were summarized under 5 themes. Teachers stated the most important technostress factor as individual problems (43 expression) including the inability to use technology, lack of education, foreign language problem, etc. and technical problems (43 expression) including the needs of update, frequently crashing, software problems, etc. The other factors expressed by teachers are educational problems (21 expression), time problems (5 expression) and healthy problems (5 expression).

### **Keywords:**

Technostress, teachers, education, ICT

**JEL Classification:** I29

## **Introduction**

Recently, technology is rapidly changed and new technological products have been growing. But, the change rate of technology and transformation is increasing in history. Especially during the last 20 years, a period of rapid change has emerged, forcing people to keep up with the pace of change. Even before we get used to new notebooks, mobile phones and televisions, a newer, more advanced model is released (Al Shami, 2008). This rapid change is the cause of the greatest psychological pressure of our age, which may be taking place unnoticed. This pressure is generally defined as technostress.

### **1.1 What is Technostress**

Technostress is a sub dimension of stress, defined by Weil and Rosen (1997) as the direct or indirect negative effect of technology use on human behavior, thought, attitude and psychology. Champion (1988) stated that rapidly changing technology would have a negative effect on future living, and thereby described technostress as “The Price of Using Technology”. Brod (1982) who coined the term, defined technostress as a situation resulting in difficulty adapting, stemming from the use of a new technology by an individual or organization.

### **1.2 Causes of Tehcnostress**

Enis (2005) stated six fundamental factors technostress along with suggestions. The six factors are rapid change, lack of education, increasing workload, lack of standardization, reliability of technology, and changing roles of work. On the other hand, Brod (1982) stated the probable factors that have an effect on technostress are the level of technological experience of the user, age, pressure of supervision during use, and the general working atmosphere and environment within an organization.

### **1.3 Symptoms of Technostress**

Champion panic, anxiety, resistance, technophobia, mental fatigue, physical ailments, intolerance and perfectionism. emphasizes that technostress is a serious illness, and lists several of its symptoms: panic, anxiety, resistance, technophobia, mental fatigue, physical ailments, intolerance and perfectionism. Additionally, drops in work efficiency and limited utilization of technology are mentioned as preliminary symptoms. Brod (1984) expresses the most important symptom of technostress as being anxiety towards computer technologies. In other words, anxiety is given as the result of technostress. Brod also lists physical symptoms such as muscle cramps, headaches, joint aches, and lack of sleep/insomnia.

### **1.4 Research Purpose**

This research aims to determine the affecting factors on technostress levels of Turkish teachers. For this purpose, after giving a brief information about the technostress, the

teachers are asked to give an answer to the question of “What are the factors that affect your technostress level in your profession and life?”

## **2. Method**

In this section, research method, participants, data collection tool and data analysis were given.

### **2.1. Research Method**

In this study, a qualitative method was used in order to determine the affecting factors on technostress levels of Turkish teachers. A case study is a research pattern used for situations where the object of study is examined through its own context and in which there are no distinctive lines limiting the phenomena and its context and where more than one evidence or data source are available (Yildirim and Simsek, 2011).

### **2.2. Participants**

64 teachers were participated the research. “Convenience sampling” method was used which is frequently preferred method in a qualitative research. 35 of these teachers are female (54,2%) and 29 of them are male (45,8%). Besides, the number of teachers disciplines is 16 (eg. Mathematic, English, Music, etc.).

### **2.3. Analysis of Data**

Descriptive statics is used to analyze the demographic data of the participants. Content analysis technique is used to analyze the qualitative data, which is very frequently used in qualitative research. The content analysis is realized by preparing less distinctive themes under theoretical terms and also sub-themes, if there is any (Yildirim and Simsek, 2011). Two expert opinions (one researcher, one expert) are taken for the reliability of the data when coding the data collected from the teachers, preparing themes by using these codes and describing these themes

## **3. Findings**

The answers given by 64 teachers participated in the research were analyzed with the content analysis method. As a result of the analysis process, 117 different expressions were summarized under 5 themes. These factors which affected techno-stress levels of teachers, were showed at Table 1.

**Table 1: Factors Affecting Teachers' Techno-Stress Levels**

Factors	Problems	f	%
<b>Individual Problems</b>	Non-Usage	17	14,5
	Lack of Education	10	8,5
	Foreign Language Problem	3	2,6
	Financial Problem (Failure to Buy)	10	8,5
	Non-Interest	3	2,6
<b>Education-Oriented Problems</b>	Supply of Technology	16	13,7
	Negative Changes in Students	3	2,6
	Laziness	2	1,7
<b>Technical Problems</b>	Software Supply	4	3,4
	Connection Problem	8	6,8
	Requirement for Continuous Updating	4	3,4
	Security	5	4,3
	Content	1	0,9
	Needs of electric	2	1,7
	Noise pollution	2	1,7
	Instruments of Poor Quality	2	1,7
	Frequently crashing	10	8,5
	Unavailability of Technical Support	4	3,4
Failure to Meet Needs	1	0,9	
<b>Health Problems</b>	Eye Problem	2	1,7
	Addiction	2	1,7
	Headache	1	0,9
<b>Time Problem</b>	Time-Stealing	5	4,3
		117	100,0

The most significant problem which affected techno-stress levels of the teachers, can be expressed as individual problems under 43 expression (36.8%). Non-usage of technology, unwillingness about this subject, lack of education came first as the most important themes. Technical problems (43 expression – 36.8%) were stated as another source of techno-stress. The important titles such as software supply, internet connection problems, security were other examples studied at this dimension. The other factor affecting techno-stress level was education-oriented (21 expression - 17.9%) problems. Unavailability of technology at schools, disadvantages of classes for technological usage and negative effects of technological usage on students were significant expressions. Health problems (4.3%) was explained as other source of techno-stress. In particular, eye problems, low back pain and addiction were emphasized as techno-stress sources. Lastly, time problem occurred. The teachers suggested time loss (4.3%) as a factor affecting techno-stress levels.

The ideal teacher expressions were given as follows;

**Non-Usage** - "I do not generally understand electronical devices such as computer, etc..." (Female – Pre-School Teacher)

**Lack of Education** – "...Education related with technological usage is mostly enough. Therefore, we are having problems as teachers." (Female – Music Teacher)

**Supply of Technology** – "Unfortunately, classes are not equipped with technology" (Female – Science and Technology Teacher )

**Connection Problem** – “Unavailability and slowness of connection makes me very tired” (Male – English Teacher)

#### 4. Results and Conclusion

The aim of technological usage is considered to make life easier. With this aim, technological instruments are commonly used in each field. But there are some negative points such as techno-stress defined as a price of technology (Champion, 1988). In this research, technology based techno-stress reasons of teachers were investigated.

Teachers regarded themselves as a source of techno-stress. Non-usage, non-interest and lack of education were stated as important sources of techno-stress. Tools cannot be bought in education environments and can be inappropriate for class environments, which causes techno-stress. Problems such as software supply, internet connection problems, security were regarded as technical problems related with techno-stress. Eye, headache and addiction problems stated for ICT were among the teachers' techno-stress reasons. Finally, the teachers regarded technology as a time-stealing instrument and expressed this as techno-stress.

All these techno-stress problems given by the teachers are parallel with many research results in literature. Champion (1988) dealt with these problems as inappropriate working environments and social reasons. Enis's study (2005) suggested taking measures about these issues by stating similar six reasons of techno-stress.

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#### References

- AL SHAMI, A. (2008). “Coping with Technology”. *Slideshare Presentations*. Retrieved: 17 01, 2010. from [http://www.slideshare.net/alshami/techno-stress?src=related\\_normal&rel=1312523](http://www.slideshare.net/alshami/techno-stress?src=related_normal&rel=1312523).
- BROD, C. (1982). “Managing Technostress: Optimizing The Use of Computer Technology”. *Personel Journal*. 61 (10). ABI/INFORM Global, pp:753-757.
- CHAMPION, S. (1988). “Technostress:Technology's Toll”, *School Library Journal*, November, 1988, pp: 48-51.
- ENİS, L.A. (2005). “Much of What I Found Out about Technostress and Librarians”. *Computers in Librarians*.September, pp. 10-12.
- WEIL, M. & Rosen, L. (1997). *TechnoStress: Coping With Technology@Work@Home@Play*. John Wiley & Sons, New York.
- YİLDİRİM, A. & SİMSEK, H. (2011). *Qualitative research methods in social sciences*, Ankara: Seçkin Yayıncılık.