Association for Information Systems

AIS Electronic Library (AISeL)

SIGHCI 2020 Proceedings

Special Interest Group on Human-Computer Interaction

12-12-2020

Technostress in Work-Related and Non-Work-Related Usage Contexts: A Systematic Literature Review

Marion Korosec-Serfaty

Pierre-Majorique Leger

Sylvain Sénécal

Technostress in Work-Related and Non-Work-Related Usage Contexts: A Systematic Literature Review

Marion Korosec-Serfaty
Tech3Lab, HEC Montréal
marion.korosec-serfaty@hec.ca

Pierre-Majorique Léger
Tech3Lab, HEC Montréal
pml@hec.ca

Sylvain Sénécal
Tech3Lab, HEC Montréal
sylvain.senecal@hec.ca

INTRODUCTION

Technostress, defined as the "as stress that individuals experience due to their use of information systems (IS)" (Tarafdar, Cooper and Stich, 2019:2), investigates how and why IS use causes various demands on individuals. Research showed that while the experience of technostress can stimulate positive outcomes, it can also significantly harm users and organizations (Tarafdar et al., 2019). It is thus essential to comprehend how to design IS to prevent negative consequences and increase positive outcomes. To this end, research must understand what individual and technological factors influence the experience of technostress depending on the usage context. Like other emotions, technostress is part of a spectrum of interactions with other emotions or types of stress (Godbold, 2015). It is thus crucial to explore the nature and extent of the relationship between technostress and other forms of stress. As any human phenomenon, technostress is a multidimensional situation, complex, and situated (Godbold, 2015), hence requiring investigating what factors influence the intensity of the stressful event and the probability of adopting specific coping strategies, and what coping strategies lead to what neuropsychophysiological and behavioral outcomes.

This systematic literature review aims to contribute to the advance of that knowledge by summarizing existing studies and examining: 1) approaches and measures used to evaluate technostress outcomes; 2) antecedents, factors, coping strategies, neuropsychophysiological and behavioral technostress outcomes identified in work-related mandatory and non-work-related voluntary technology usage context; 3) studies that have explored the interaction technostress and non-technological stress.

METHODOLOGY

This research was carried out by selecting relevant studies published in journals and conference proceedings. Articles were included in this review if they explored the relationship between antecedents and outcomes related to specific factors of technostress and analyzed, or not, consequential coping strategies. The list, references, and detailed analysis of articles included in this review is available on demand.

RESULTS AND CONCLUSION

Fifty-five (55) studies met our selection criteria: 39 on work-related technostress, 15 on non-work-related technostress, and 1 that attempted to develop a model on the interaction between technostress and non-technological stress but that was not pursued in an experimental study. Our results showed that only 3 studies explored simultaneously neuropsychophysiological and behavioral outcomes using biological and perceptual measures. We also found that on 39 work-related technostress articles: 30 covered the relationship between organizational characteristics, technostress creators and its psychological outcomes wherein only 2 articles considered its coping strategies and behavioral and neurophysiological outcomes; and 9 addressed neuropsychological outcomes in relation to task characteristics and context stressors. Out of 15 studies on non-work-related technostress: 9 considered individual and situational factors, coping strategies and psychobehavioral outcomes related to Social-Network-Services technostress; 3 investigated individual factors and technology characteristics as antecedents of online-shopping-related technostress and their neuropsychological outcomes and; 1 considered individual and technology characteristics in the intensity of the technostress effect, coping strategies and behavioral outcomes of mobile-application usage context.

In conclusion, research could gain a better understanding of the technostress phenomenon from expanding its focus to all three consequential outcomes and coping strategies, further investigating non-work-related technostress and by exploring the relationship between technostress and non-technological stress.

Keywords

Technostress, usage context, measures, outcomes

REFERENCES

1. Tarafdar, M., Cooper, C. L., and Stich, J. F. (2019). The technostress trifecta-techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Information Systems Journal*, 29(1), 6-42.

2. Godbold, N. (2015). Researching emotions in interactions: Seeing and analysing live processes. *Emotion Review*, 7(2), 163-168.