The Effects of Techno-Stress in the Role Stress Context Applied on the Proximity Manager Performance: Conceptual Development and Empirical Validation

Min Feng, University of Lyon 3, France

ABSTRACT

The ubiquitous use of ICT can create "techno-stress." The purpose of the research is to examine the case of the specificity of the techno-stress phenomenon of local managers. The authors develop their research questions on the factors that create the techno-stress and the role stress of the proximity manager. How do the creators of techno-stress influence the performance of the proximity manager? Techno-stress creative factors of the managers have been adjusted thanks to the factorial analysis. The authors believe that 1) the role stress of local managers can be explored by ambiguity and role proximity, and 2) the creator of techno-stress negatively influences the performance of the managers of proximity by role stress.

KEYWORDS

ICT Impact, ICT Management, ICT Risks, ICT Stress Influences, ICT Usage, Proximity Manager, Role of Stress, Technostress

INTRODUCTION

Since 2005, rapid growth in access to information and communication technologies (ICTs) has been observed. According to the International Telecommunication Union, this trend reflects that international institutions that "consider information and communication technologies as the integration of telecommunications, computer, multimedia, and audiovisual technologies."

Opting for a new ICT, or NICT, is often a process of change and innovation (Bobillier-Chaumon, 2009). For two decades, this change has been permanent—that is, the growth of communication tools is exponential, indicating a state of a continuous change. Some companies are continuing this trend by developing and applying their own ICT portfolio.

Managers are currently facing the challenge of ICT diversification both from a managerial perspective and also because of their role as an intermediary between employees and the organization. On the other hand, we are interested in different ICTs, such as massagers (personal or corporate), software packages or application software, voice communication (e.g., Skype and WhatsApp), and digital social networks (e.g., Twitter and LinkedIn).

DOI: 10.4018/JOEUC.2021010101

This article, published as an Open Access article on January 11, 2021 in the gold Open Access journal, Journal of Organizational and End User Computing (converted to gold Open Access January 1, 2021), is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

The purpose of our research is to examine the specificity of "techno-stress" experienced by proximity managers (PM)². To better understand the problem, we develop the following research questions:

Research question I. What are the factors that create techno-stress and role stress among PMs? Research question II. How do the creators of techno-stress influence the performance of PMs?

First, we decipher the factors that influence the PM's techno-stress and role stress. Then, we examine the mechanism thereof by identifying the mediating effect of role stress between techno-stress creators and PMs' performance. To better reflect the research questions and establish our questionnaire, we begin by conducting a preliminary survey of telecommunications carriers in Canada³.

LITERATURE REVIEW AND THEORY

Phenomenon of Techno-Stress

ICT "designates tools for which the processing capabilities of computer processors are coupled with communication technologies" (e.g., telematics, electronic messaging, groupware, communicating office automation, Internet, and intranet) (Autissier et al., 1997). In reality, a large number of companies deviate from this original vision of ICT. Autissier and Lahlou (1999) call this phenomenon the "informational inflation of information and communication technologies." We can observe this phenomenon through temporal notions (Metzger, 2004), urgency (Aubert, 2004), and technostress (Tarafdar et al., 2007) if the information overload is a quantitative measure to define a mass mobilization of ICT that aims to perform tasks. The mixing effects of several modes of communication lead to the *millefeuille effect* (Kalika et al., 2007). As Steward Brand⁴ notes, "Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road."

Ayyagari et al. (2011) claim that the characteristics of ICT create stress, which, in turn, has an effect on health costs and productivity. Emerging academic research is beginning to focus on several areas that characterize this negative aspect of ICT use. The elements that can be linked to technostress include the stress associated with the use of information technology, dependence, misuse, overwork, and interruption (Tarafdar et al., 2015). Techno-stress is linked to adverse effects such as decreased job satisfaction, engagement, and productivity as well as an increase in work overload and labor disputes (Tarafdar et al., 2007).

Thus, we pose the question: Are you unable to go on vacation without a computer? Do you check your messages on your mobile phone every five minutes? Are you typing on the table because your Internet is idle or not working anymore? If you answer in the affirmative to any of these questions, you may be suffering from techno-stress.

Techno-Stress

There exist recent high-quality studies on techno-stress in the literature. These studies provide valuable insights into techno-stress, such as the main factors that contribute to its development (Lei & Ngai, 2014). Scholars also emphasize the link between techno-stress and job satisfaction and performance, while others believe that techno-stress generates a job-family conflict. Although ICTs can improve flexibility and work-life balance, it can facilitate the reversal of work in the family domain (Weil & Rosen, 1997).

According to Tarafdar et al.(2011), the creators of techno-stress and the associated results are the main findings that define techno-stresses such as "[a] manifestation of an undesirable phenomenon generated by the use of IS (information system)in the place working" (Tarafdar et al., 2015). The authors note that three key aspects of techno-stress are:

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <a href="https://www.igi-

global.com/article/the-effects-of-techno-stress-in-the-rolestress-context-applied-on-the-proximity-managerperformance/267933

Related Content

Quality of Use of a Complex Technology: A Learning-Based Model

Marie-Claude Boudreauand Larry Seligman (2005). *Journal of Organizational and End User Computing (pp. 1-22).*

www.irma-international.org/article/quality-use-complex-technology/3803

Object-Oriented Cost Accounting System Design

John E. Gessford (1993). *Journal of End User Computing (pp. 17-25).* www.irma-international.org/article/object-oriented-cost-accounting-system/55699

Knowledge Appraisal and Knowledge Management Systems: Judging What We Know

Hannah Standing Rasmussenand Nicole Haggerty (2008). *Journal of Organizational and End User Computing (pp. 17-34).*

www.irma-international.org/article/knowledge-appraisal-knowledge-management-systems/3835

Using a Blueprint in the Design of Instruction for Virtual Environments

Mauri Collins (2012). User Interface Design for Virtual Environments: Challenges and Advances (pp. 255-267).

www.irma-international.org/chapter/using-blueprint-design-instruction-virtual/62128

Classifying Web Users: A Cultural Value-Based Approach

Wei-Na Leeand Sejung Marina Choi (2008). *End-User Computing: Concepts, Methodologies, Tools, and Applications (pp. 2056-2072).*

www.irma-international.org/chapter/classifying-web-users/163876