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A Study of the Connected Smart Worker's Techno-Stress

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Abstract

This study aimed to figure out the effects of 'technostress' and 'work continuity after daily work' on 'job satisfaction' and the influence of 'factors easing stress' through empirical research by taking 'work-life conflict' of connected smart workers who have emerged as a typical employment type in the 21st century hyper-connected environment as a parameter. For this, research hypotheses were set based on previous studies, and causal relations among the variables were empirically verified. In terms of the samples of this study, a questionnaire survey was conducted against office workers who use new and emergent technologies such as smartphone, mobile computing and SNS. Then, the results from the analysis of empirical data were interpreted. This study investigated technostress which may result from the use of new technologies even after work and during holidays (e.g., using smartphone, checking emails or continuing work through a messenger after working hours'), its influence on job satisfaction and work-life conflict.

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1. Introduction

With the recent growth and development of information technology, people are not able to take care of their tasks in the distance and even after work hours using mobile computer and network, compared to a traditional work fulfillment method in which they handled their job within a given time and space. This kind of environmental change has brought connected and smart types of work patterns such as quite new work culture and use of technology. Thanks to the information technology-aided work process, tasks can now be allocated to workers in a more flexible manner. In other words, connected workers are able to work more smartly depending on the time and space circumstances they want.

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Despite these positive aspects, however, the number of studies covering the negative aspect ‘technostress’ has increased as well. In particular, a concept of ‘technostress’ has emerged because of the application and education of new devices after hyper-connected technology advancement.

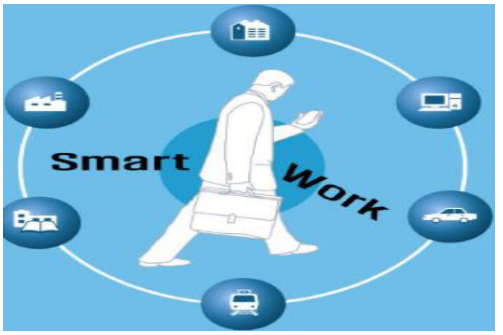

Fig 1. Connected Smart Worker (revised from http://eagonblog.com/543)

Brod (1984) said, “Technostress is a modern disease of adaptation caused by an inability to cope with the new technologies." He insisted that technostress is a difficult situation for adaptation, which is caused by the use of new technology by people or organization. Arnetz and Wiholm (1997) also defined, “Technostress is a state of arousal observed in certain employees who are heaving dependent on computers in their work.” Figueiredo (1994) said that technostress is closely related with computer literacy and acceptance of digital technologies.

In addition, Hudiburg (1989) said that technostress is a part of adaptation-related modern disease which is caused by inability to cope with these new technologies in using digital devices such as computer. William et al. (2002) and Tarafdar et al. (2007) insisted that technostress consists of the attributes arising from technology overload, invasion, complexity, insecurity and uncertainty. According to Tarafdar et al. (2011), people are easily able to get access to information through information communications such as mobile computing, network and work process system using the dichotomic approach of the information system. In addition, they can share knowledge with their colleagues in realtime anywhere. However, the same technologies should be kept connected with tasks and respond to job-related information on a realtime basis. At the same time, they need to take care of several tasks at the same time (multi-tasking). The stress arising from all these processes is named ‘technostress.’

Stefan and Haines (2013) introduced frustration and tension which occur due to non-consideration of user convenience based on the following aspects after review on conventional literatures: i) ordinary connection, ii) mobile information technology or collaboration tools for multi-tasking, iii) new information technologies which are continuously introduced as competition pressure and workers who should adapt themselves to them; iv) continuous learning through continued update of information technology; increase in vagueness regarding the matters demanded at work; v) customizing in order for most information technology products to become useful tools.

2. Research Model and Hypotheses

With the growth and development of information technology, people are now able to work anytime and anywhere. As a result, work-life boundary and roles have become vague because of technostress (e.g., techno-complexity, techno-uncertainty, techno-overload, etc.) and work continuity after daily work. These changes have caused a work-life conflict and had an influence on job satisfaction.