MISQ Archivist

The Bright and Dark Sides of Technostress: A Mixed-Methods Study Involving Healthcare IT

Christopher B. Califf, Saonee Sarker, and Suprateek Sarker

Abstract

Today's healthcare workers, specifically nurses, are experiencing technostress associated with the use of healthcare information technology (HIT). Technostress is often characterized by IS researchers as negative, or as being on the "dark side" of technology. However, a broader reading of the stress literature suggests that technostress may be both positive and negative, and can therefore have a "bright side" in addition to a "dark side." The objective of this study is to conceptualize a holistic technostress process that includes positive and negative components of technostress embedded in two subprocesses: the techno-eustress subprocess and the techno-distress subprocess, respectively. The study instantiates this holistic technostress model through a sequential mixed-methods research design in the context of HIT. Phase 1 of the design is a qualitative, interpretive case study involving interviews with 32 nurses. Based on the findings from the case study, the paper builds a research model that operationalizes the concepts embedded in the holistic techno-stress model and identifies contextually relevant challenge and hindrance technostressors and outcomes. In Phase 2, the research model is empirically validated by analyzing survey data collected from 402 nurses employed in the United States. Results reveal that several challenge and hindrance technostressors are related to positive and negative psychological responses, respectively, and that such responses are related to job satisfaction and attrition, which impact turnover intention. Contributions to theory and practice are also discussed.

Keywords: Technostress, healthcare IT, eustress, distress, nursing, stress, mixed-methods