The Impact of Technostress on Users’ Responses to Security Warnings: A NeuroIS Study

Emergent Research Forum paper

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Abstract

Although technostress has clear implications for security behavior, little is known about how it influences the effectiveness of security warnings. The research objective of this study is to examine how responses to security warnings are affected by and may result in technostress. We use self-reported and neurophysiological (NeuroIS) measures in a series of laboratory experiments. In this study we use salivary stress hormones to measure stress, a leading method of measuring stress physiologically.

We expect our results will make several contributions. First, the methodological precision of physiological measures is likely to objectively show how technostress in the environment affects recipients’ processing of security warnings. Second, we intend to show how security warnings themselves induce stress in recipients. Finally, we anticipate that our findings will reveal under what conditions technostress improves responses to security warnings, and when it is detrimental. The findings of this study have potential to improve security practice.

Keywords

Technostress, NeuroIS, cortisol, alpha-amylase, security warnings