
Background and Objectives: The ubiquity of instant messages and email notifications in contemporary work environments has opened a Pandora’s Box. This box is filled with countless interruptions coming from laptops, smartphones, and other devices, all of which constantly call for employees’ attention. In this interruption era, workplace stress is a pervasive problem. To examine this problem, the present study hypothesizes that the three-way interaction among the frequency with which interrupting stimuli appear, their salience, and employees’ deficits in inhibiting attentional responses to them impacts mental workload perceptions, ultimately leading to stress. The study, further, probes a related form of self-efficacy as a potential suppressor of interruption-based stress. Design: The study used a 2 (low vs. high frequency) × 2 (low vs. high salience) mixed model design. Methods: The 128 subjects completed a test of their inhibitory deficits and rated their mental workload perceptions and experiences of stress following a computer-based task. Results: Inhibitory deficits and increased interruption salience can alter the perception of mental workload in contemporary work environments for the worse, but interruption self-efficacy can help offset any resulting interruption-based stress. Conclusions: This study extends the literatures on work interruptions as well as on stress and coping in the workplace.

Keywords: interruptions; cognition; stress; selective attention; technology; self-efficacy