

MISQ Archivist

E-Mail Interruptions and Individual Performance: Is There a Silver Lining?

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Abstract

Interruption of work by e-mail and other communication technologies has become widespread and ubiquitous. However, our understanding of how such interruptions influence individual performance is limited. This paper distinguishes between two types of e-mail interruptions (incongruent and congruent) and draws upon action regulation theory and the computer-mediated communication literature to examine their direct and indirect effects on individual performance. Two empirical studies of sales professionals were conducted spanning different time frames: a survey study with 365 respondents and a diary study with 212 respondents. The results were consistent across the two studies, showing a negative indirect effect of exposure to incongruent interruptions (interruptions containing information that is not relevant to primary activities) through subjective workload, and a positive indirect effect of exposure to congruent interruptions (interruptions containing information that is relevant to primary activities) through mindfulness. The results differed across the two studies in terms of whether the effects were fully or partially mediated, and we discuss these differences using meta-inferences. Technology capabilities used during interruptions episodes also had significant effects: rehearsing (fine-tuning responses to incoming messages) and reprocessing (reexamining received messages) were positively related to mindfulness, parallel communication (engaging in multiple e-mail conversations simultaneously) and leaving messages in the inbox were positively related to subjective workload, and deleting messages was negatively related to subjective workload. This study contributes to research by providing insights on the different paths that link e-mail interruptions to individual performance and by examining the effects of using capabilities of the interrupting technology (IT artifact) during interruptions episodes. It also extends the experimental tradition that focuses on isolated interruptions. By shifting the level of analysis from specific interruption events to overall exposure to interruptions over time and from the laboratory to the workplace, our study provides realism and ecological validity.

Keywords: IT interruptions, individual performance, e-mail capabilities in use, survey study, diary study, PLS, multilevel modeling