Personal Motivation Measures for Personal IT Security Behavior

Emergent Research Forum Paper

Byron Marshall
College of Business
Oregon State University
byron.marshall@bus.oregonstate.edu

Michael Curry
Carson College of Business
Washington State University
michael.curry@wsu.edu

John Correia
Carson College of Business
Washington State University
john.correia@wsu.edu

Robert E. Crossler
Carson College of Business
Washington State University
rob.crossler@wsu.edu

Abstract

While IT security research has explored explanatory models using risk/fear/efficacy drivers, this effort emphasizes assessments of personal security optimism/pessimism as drivers of personal security behavior. Technical solutions can help but many organizational vulnerabilities are exacerbated by non-compliance. Individuals neglect to or choose not to comply with security practices, placing organizations at risk. In this study, we explore a model that identifies likely non-compliers. We assess constructs over time, assess perceptions of the pros and cons of compliance, and deliver small training/motivational content. In our results measuring over time and including pro/con perception increased explanatory power for compliance behavior and prediction algorithms were able to identify non-compliers with a high degree of accuracy. We assert that this approach, which integrates training and assessment over time and uses measures that may be more palatable for real-world settings, is promising for organizations who seek to both understand and improve security behavior.

Keywords

Information Security, Compliance Behavior.