
Ning Yang  
Department of Information Systems, Statistics and Management Science  
Culverhouse College of Business  
The University of Alabama  
nyang@crimson.ua.edu

Tripti Singh  
Department of Information Systems, Statistics and Management Science  
Culverhouse College of Business  
The University of Alabama  
tsingh3@crimson.ua.edu

Allen C. Johnston  
Department of Information Systems, Statistics and Management Science  
Culverhouse College of Business  
The University of Alabama  
ajohnston@cba.ua.edu

Abstract:
This paper provides data used to analyze the methodological replication of Menard et al. (2017) by Yang et al. (2020). The replication paper studied organizational users’ intentions to install password management software when they faced different appeals/persuasive messages. There were three different types of appeals based on Protection Motivation Theory, Self-Determination Theory, and the integrated model of the two. We provide the description here to meet the open data standards. Our dataset contained three separate files. PMT_CLEAN file was on PMT appeal; SDT_CLEAN file was on SDT appeals; INTEGRATED_CLEAN file was on the integrated appeals. The PMT appeal contained 157 observations; the SDT appeal contained 156 observations; the integrated appeal contained 153 observations. There is a total of 466 observations, which includes the following constructs: behavioral intention to install password manager software, response performance motivation, threat severity, threat susceptibility, response efficacy, self-efficacy, response cost, autonomy, competence, and relatedness. Control variables include gender, ethnicity, age, employee status, educational background, occupation, and computing experience.

Keywords: Information Security, Protection Motivation Theory, Security model comparison, Self-Determination Theory, User security behaviors, Organizational users, Open Data

The manuscript was received 06/15/2020.
1 Data Description

All the scales we used in this replication study were from the original study (Menard et al. 2017).

1.1 Instrument Items

Behavioral Intention to Install Password Manager Software

Now that you have read the message above, please indicate the likelihood that you will install the password manager software described above:

☐ Likelihood to install slider scale, 0–10 (0 = Extremely unlikely; 10 = Extremely likely)

Response Performance Motivation (I would choose to install password manager software…)

☐ …because I think that this activity is interesting.
☐ …because I think that this activity is pleasant.
☐ …because I think that this activity is fun.
☐ …because I feel good when doing this activity.
☐ …because I am doing it for my own good.
☐ …because I think that this activity is good for me.
☐ …because I decided that this activity is beneficial.
☐ …because I believe that this activity is important to me.
☐ …because I am supposed to do it.
☐ …because it is something that I have to do.
☐ …because I don’t have any choice.
☐ …because I feel that I have to do it.
☐ …but I am not sure if it is worth it.
☐ …but I don’t see what the activity brings me.
☐ …but I am not sure it is a good thing to pursue it.
☐ …but personally I don’t see any good reasons to do this activity.

Threat Severity

☐ If my online passwords were discovered by hackers, it would be severe.
☐ If my online passwords were discovered by hackers, it would be serious.
☐ If my online passwords were discovered by hackers, it would be significant.

Threat Susceptibility

☐ My online passwords are at risk for becoming compromised.
☐ It is likely that my online passwords will be breached.
☐ It is possible that my online passwords will be compromised.

Response Efficacy

☐ Password manager software works for protection.
☐ Password manager software is effective for protection.
☐ When using password manager software, online accounts are more likely to be protected.
**Self-Efficacy**
- Password manager software is easy to use.
- Password manager software is convenient to use.
- I am able to use a password manager without much effort.

**Response Cost**
- Using password manager software is time consuming for me.
- Using password manager software is burdensome for me.
- Using password manager software is financially costly for me.
- Installing password manager software would require too much from me.
- Installing password manager software is not worth it.

**Autonomy**
- The software described is what I would choose to install on my computer.
- I feel that the software I’m told to install fits perfectly with what I prefer to use on my computer.
- I feel that the software described is an expression of my own software preferences.
- I feel that I have the opportunity to make choices with respect to what I am told to install in the message.

**Competence**
- I feel I have a better understanding of password manager software.
- I feel that I effectively learned about password manager software.
- I feel that I did a good job learning about password manager software.
- I feel that I can manage the requirements of learning more about password manager software.

**Relatedness**
- I feel a strong connection with my digital information.
- If the information contained in my online accounts is affected, then so am I.
- The thought of information contained in my online accounts being tampered with makes me anxious.
- Protecting the information contained in my online accounts is a way to protect myself.

**Computing Experience**
How many total years of general experience do you have working with a computer in any form (e.g., surfing the internet, spreadsheets, gaming, word processing)? (Text entry)
References


About the Authors

**Ning Yang.** is a Ph.D. student of Management Information System (MIS) Program, under the Department of Information Systems, Statistics, and Management Science in the Culverhouse College of Business at the University of Alabama. She received her M.A. and M.S. degrees at the University of Alabama. Her research interests include how technology influences people’s decisions and behaviors, Cybersecurity, and healthcare analytics.

**Tripti Singh.** is a Ph.D. student of Management Information System (MIS) Program, under the Department of Information Systems, Statistics, and Management Science in the Culverhouse College of Business at the University of Alabama. She received her M.B.A. and M.P.H. degrees at the University of Alabama at Birmingham. Her research interests include healthcare information systems, behavioral information security, and privacy.

**Allen C. Johnston.** is an Associate Professor of Management Information Systems (MIS) in the Culverhouse College of Business at the University of Alabama. The primary focus of his research is in the areas of behavioral information security, privacy, data loss prevention, collective security, and innovation. His research can be found in such outlets as MIS Quarterly, Journal of the AIS, European Journal of Information Systems, Information Systems Journal, Decision Sciences, Decision Support Systems, and Communications of the ACM, among others. He currently serves as Associate Editor for European Journal of Information Systems, Decision Sciences Journal, as well as serving on the Editorial Review Board for the Journal of the AIS. He is a founding member and current Chair of the IFIP Working Group on Information Systems Security Research (WG8.11/11.13). Dr. Johnston has also served as a consultant, visiting professor or invited speaker at several universities, workshops, panels, and companies in the U.S. and abroad, including as a Visiting Erskine Fellow at the University of Canterbury, Auburn University, Kennesaw State University, the University of Oulu, Mississippi State University, Nokia, Regions Financial Inc., the Birmingham, AL and Harrisburg, PA chapters of ISACA, and the Robert Wood Johnson Foundation New Careers in Nursing National Program Liaison’s Summit (2011, 2013), among others. He is presently a Visiting Erskine Fellow at the University of Canterbury.