

8-10-2022

## **Cyber Hygiene, Cyberpsychology, and Impacting the Future Workforce**

David Kocsis  
*University of Colorado - Colorado Springs, dkocsis@uccs.edu*

Daniel L. Segal  
*University of Colorado Colorado Springs, dsegal@uccs.edu*

Follow this and additional works at: [https://aisel.aisnet.org/treos\\_amcis2022](https://aisel.aisnet.org/treos_amcis2022)

---

### **Recommended Citation**

Kocsis, David and Segal, Daniel L., "Cyber Hygiene, Cyberpsychology, and Impacting the Future Workforce" (2022). *AMCIS 2022 TREOs*. 79.  
[https://aisel.aisnet.org/treos\\_amcis2022/79](https://aisel.aisnet.org/treos_amcis2022/79)

This material is brought to you by the TREO Papers at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2022 TREOs by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Cyber Hygiene, Cyberpsychology, and Impacting the Future Workforce

TREO Talk Paper

**David Kocsis, Ph.D.**

University of Colorado Colorado Springs  
dkocsis@uccs.edu

**Daniel L. Segal, Ph.D.**

University of Colorado Colorado Springs  
dsegal@uccs.edu

## Abstract

Cybersecurity contains two primary components: the technical side and the management/behavioral side. The focus of this research and education program fits the management and behavioral aspects, focusing on cyber hygiene and cyberpsychology. Cyber hygiene is conceptually defined as “the cyber security practices that online consumers should engage in to protect the safety and integrity of their personal information on their Internet enabled devices from being compromised in a cyber-attack” (Vishwanath, Neo, Goh, Lee, Khader, Ong and Chin, 2020). Cyberpsychology is an emerging field which examines how technology impacts human cognition and behavior (Howard and Jayne, 2015). This TREO talk aims to describe the development of a research and education program related to understanding and improving individual online behaviors.

The rationale for this research stems from previous research on organizational challenges due to security ignorance of many employees. Increasing training in organizations has been largely ineffective, as companies are under attack through viruses, password hacks, phishing attempts, etc. (Cain, Edwards and Still, 2018). The focus of this research expects to answer the following questions:

- What are key cyber hygiene and cyberpsychology principles and goals?
- How can trainers and educators develop training methods to improve cyber hygiene attitudes and behaviors?
- How can we prepare the next generation of students and employees in understanding the importance of effective and appropriate cyber hygiene?
- How can we research and measure the rewards and costs to individuals to improve attitudes and behaviors towards effective and appropriate cyber hygiene?

To achieve our research aims, we will create a hands-on module (focusing on cybersecurity) using the Salesforce Developer tool. Tim Hill from San Jose State University developed six modules to integrate Information Systems concepts into a series of hands-on activities (Hill and Nance, 2016). Students gain valuable skills and reinforce course concepts through an innovative activity by creating a mobile web application. The application they create comprises a Customer Relationship Management system for managing sales leads and a social media platform for internal communications. One important activity missing from the modules is a cybersecurity emphasis - our project will create a new module that contains this emphasis. An objective for the new Salesforce module will be to prepare the next generation on cyber hygiene best practices and principles through an engaging, hands-on class module. The authors have received a cybersecurity seed grant from the University of Colorado – Colorado Springs to support this project.

## References

- Cain, A. A., Edwards, M. E. and Still, J. D. (2018) An exploratory study of cyber hygiene behaviors and knowledge, *Journal of information security and applications*, 42, 36-45.
- Hill, T. and Nance, W. (2016) Innovating business systems labs for engaging igeneration students.
- Howard, M. C. and Jayne, B. S. (2015) An analysis of more than 1,400 articles, 900 scales, and 17 years of research: The state of scales in cyberpsychology, behavior, and social networking, *Cyberpsychology, Behavior, and Social Networking*, 18, 3, 181-187.
- Vishwanath, A., Neo, L. S., Goh, P., Lee, S., Khader, M., Ong, G. and Chin, J. (2020) Cyber hygiene: The concept, its measure, and its initial tests, *Decision Support Systems*, 128, 113160.