

I have two primary streams of research: 1) behavioral information security and 2) online social interactions. Within these research areas, I try to develop research questions that have significant theoretical and, equally important, practical value for organizations, managers, or individuals.

### **Behavioral Information Security**

In the digital age, protecting an organization's digital assets from internal and external threats is one of their most important challenges. The primary focus of my behavioral information security research is on internal threats, particularly the security-related actions of an organization's well-intentioned (non-malicious) employees. Organizations spend significant time developing their security-related policies and procedures but only a fraction of their employees typically follow those rules. In my research, I investigate theoretically and empirically why this is the case. The secondary focus of my behavioral information security research is on personal users outside of any organizational context. Personal users are generally apathetic towards their information security. Seemingly, any security action that requires any amount of time and effort to implement is not performed, which leaves them vulnerable to a variety of online threats.

A few highlights from my published research in this stream are the following:

1. In my *J AIS* article ("Generally Speaking Context Matters"), we find that different security-related actions generate different attitudes and actions (or intentions thereof).
2. In my *Information Systems Frontiers* article ("A Cross Industry Study of Institutional Pressures"), we find that employees who work in different industries have different perceptions of their organizations' security environments.
3. In my *Computers & Security* article ("Exploring the Effect of Uncertainty Avoidance"), we find that employees from different national cultures have varying security-related actions (and intentions thereof).

My research in this area has proposed new individual-level, structural-level, and context specific factors that impact employees' security-related actions, which has advanced the research community's overall understanding of security-related behaviors. However, much more research is needed to understand why seemingly similar employees perform significantly different security-related actions. I have several additional working papers in this stream of literature. A few of the most notable ones include the following:

1. In a manuscript under second round review at *J AIS*, we investigate the effects of psychological capital on a personal user's adoption rates (and intentions thereof) of security related technologies. We find that higher levels of psychological capital positively impact both adoption rates and adoption intentions. However, we also find that those effects are moderated in certain contexts by how scared of the threat a personal user is.
2. In a manuscript targeting *ISJ*, we investigate the gap between intentions and actual actions for different security actions. In this qualitative paper, we find that individuals suffer from

a variety of self-regulation failures including ego-depletion when attempting to translate their intentions into actual actions. My coauthors and I hope to have this manuscript submitted in early 2022.

3. I also have an early stage manuscript predicting actual adoption rates as opposed to intentions using a variety of different machine learning algorithms. Most of the behavioral security literature uses some form of structural equation modelling to test theory-driven models so our paper has the potential to impact the field by providing a data-driven approach using machine learning, which has not been used in the prior behavioral security literature.

### **Online Social Interactions**

Organizations and individuals increasingly interact in virtual environments. Organizations use online platforms to engage with stakeholders in new ways, create new business processes, and form new markets (or new actors in existing markets). Individuals use these same platforms to disseminate information, learn, and interact socially or professionally. These platforms continue to change how individuals and organizations communicate, which has significant ramifications for organizations in all industries. The focus of my research in this space is to investigate how organizations and individuals use virtual platforms to interact online. To investigate these online social interactions, I have incorporated both qualitative and quantitative empirical methods along with multiple theoretical perspectives.

Two of my most significant findings in this research stream are the following:

1. In my *MIS Quarterly* paper (“Talking About Technology”), we find that online platforms allow individuals to tell stories about themselves and others, which has the effect of constructing the identity of a new actor category and establish the new category’s legitimacy within existing market categories.
2. In my *CAIS* paper (“Noise or Quality?”) about virtual knowledge exchanges, I demonstrate that cultural differences at the community, occupation, and national levels interact in unique ways to influence the propensity to give and receive a positive or a negative rating.

My publications in this research stream have created new knowledge by proposing innovative theoretical perspectives that explain how and why individuals or organizations interact the way that they do on virtual platforms. This area of scholarship will continue to be interesting and important as individuals and organizations continue to move face-to-face interactions to virtual environments. I am currently working on a manuscript where I predict the likelihood that a question will get answered successfully in online question and answer forums using different machine learning algorithms. Knowing the likelihood that a question will get answered is important to maximize the usefulness of the experts in these virtual environments. This manuscript is still being developed but I hope to have it submitted to a basket journal in early 2022.