

Implementation Intentions for Security and Privacy

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Abstract:

Most Americans express a desire for digital security and privacy. Americans feel a lack of control over their data, and express interest in tools to protect their personal information. However, the limited adoption of security and privacy tools appears inconsistent with these preferences. The fields of psychology and behavioral economics offer explanations for this apparent discrepancy, and suggest a potential solution to these challenges, in the form of nudging interventions. Nudges can take many forms, but what nudges have in common is that they should help people make decisions that align with their stated preferences.

The literature on nudging is rich and varied, so it should come as no surprise that some types of nudges have never before been tested in the field of computer security and privacy: my major contribution is the introduction of implementation intention nudges to this field. Implementation intentions are contextually activated plans which help people initiate behaviors and overcome obstacles. The effectiveness of implementation intentions has been demonstrated in many other contexts, but my work is the first to test them in the context of computer security and privacy. In my talk, I will describe two studies I have completed in this area, as well as my ongoing work. By studying implementation intentions in this context, I offer security and privacy advocates a greater understanding of how this type of nudge can help the public protect themselves from digital threats.

Bio:

Peter Story is a PhD student at the Institute for Software Research at Carnegie Mellon University. He focuses on designing educational interventions to help the public adopt security and privacy technologies. He proposed his thesis in December 2020, and he plans to defend and graduate in the summer of 2021. Peter is currently on the job market: he hopes to teach at a school where he can work with undergraduates on his research.