Social Cybersecurity
Applying Social Psychology to Improve Cybersecurity
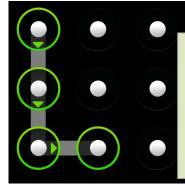
Carnegie Mellon University

Challenge

- How to get people to change cybersecurity behaviors?

Solution

- Interviews with 19 people to understand social influences

- Large-scale study with 50000 Facebook users

- Analysis of factors influencing adoption of cybersecurity features

Keep Your Account Safe
You can use security settings to protect your account and make sure it can be recovered if you ever lose access.

Improve Account Security

Standard notification in Facebook

Keep Your Account Safe
108 of your friends use extra security settings. You can also protect your account and make sure it can be recovered if you ever lose access.

Improve Account Security

Example social proof notification, higher clickthrus and adoption

Android 9-dot authentication. Many people learned about this feature by seeing others using it. High observability can improve adoption.

Scientific Impact

- Connecting social psych with cybersecurity

- Many behavior changes linked to observability, seeing others benefit

- NSA Best Cyberscurity Paper of 2015 (honorable mention)

Broader Impact

- New tools for researchers and practitioners

- Easy for orgs to adopt