

Expert vs. Non-Expert Security Practices

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Based on I. Ion, R. Reeder, and S. Consalvo. "...no one can hack my mind": Comparing Expert and Non-Expert Security Practices. SOUPS 2015.

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Expert Interview

- Interviews with 40 experts
 - In-person semi-structured interviews of 40 security experts at the 2013 BlackHat, DefCon, and USENIX Security conferences
 - Expert = attendee who reported having at least 5 years of experience working in or studying computer security
 - Question: "What are the top 3 pieces of advice you would give to a non-tech-savvy user to protect their security online?"

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Expert Survey

- Survey of 231 experts via Mechanical Turk
 - Expert = survey participant who reported having at least 5 years of experience working in or studying computer security
 - Question: "What are the 3 most important things you do to protect your security online?
 - Asked about 14 pieces of advice mentioned frequently in the interviews
 - ◆ E.g., "Do you use two-factor authentication (e.g., 2-step verification) for at least one of your online accounts?"

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Expert Survey

- Survey of 231 experts via Mechanical Turk (cont.)
 - Asked to rate the "goodness" of 20 pieces of advice mentioned frequently in the interviews
 - Asked to consider both how effective the advice was at keeping the user secure and how realistic it was that users could follow it

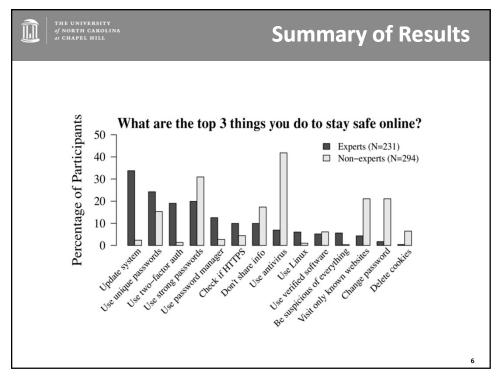


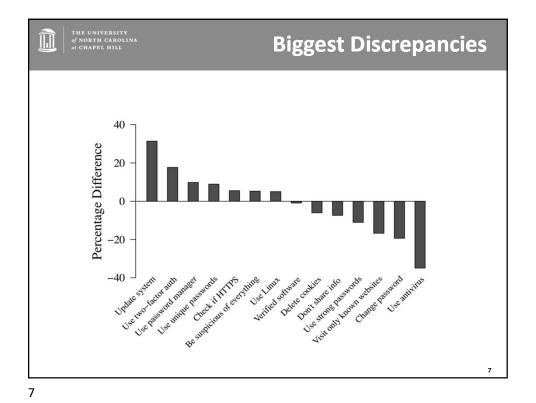
Non-Expert Survey

- Survey of 294 non-experts via Mechanical Turk
 - Called for participation in a Google study about Internet use
 - Survey content was largely the same as in the expert survey

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Good Advice? How good is this advice? Turn on automatic updates Install OS updates Be suspicious of links Don't enter passwords on links in email Don't open email attachments from unknown Update applications Use unique passwords Use strong passwords Use a password manager Use two-factor authentication Look at the URL bar Be skeptical of everything Don't click links from unknown people Use antivirus software Check if HTTPS Don't write down passwords Clear browser cookies Write down passwords Visit only known websites Save passwords in a file 100 Percentage of Experts (N=231) ■ 5 (Very good) ■ 4 ■ 3 ■ 2 □ 1 (Not good at all)

