Spotlight

Maintaining Privacy and Security while Connected to the Internet

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Introduction

The Internet enables users to participate in a variety of important activities such as keeping in touch with friends and family, completing financial and business transactions, and sending and storing documents, photos, videos, and emails. As of 2016, 88 percent of adult Americans connect to the Internet, with 87 percent of those ages 50–64 and 64 percent ages 65+ connecting.[2]

Meanwhile, new types of Internet-connected devices are increasingly becoming part of everyday life. Devices such as appliances, cars, thermostats, and wearable devices can now connect to the Internet. One estimate suggests that 127 new devices are connected every second.[3] As a result, more and more personal information is available on the Internet. This information can include details about online browsing habits, financial transactions, purchases, and communications with other people.

The privacy and security of online information is a key concern for those using Internet-connected devices. A Pew Research Center survey found 91 percent of adults strongly agreed that consumers have lost control of how companies collect and use their personal online information.[4] In addition, frequent media stories highlight examples of large-scale data breaches and hacking of Internet-connected devices. In fact, connected devices are so susceptible to hacking that the FBI released a public service announcement warning that connected devices in general are vulnerable to cybercrime and pose a security risk to consumers who use them.[5]

Internet users of all ages are concerned about security and privacy, and that concern is strongest among older Americans.

Consumers concerned about their privacy and security will be less likely to take full advantage of the Internet should they feel that their online information is at risk. For example, a National Telecommunications & Information Administration survey found many Internet users avoid at least some online activities such as making financial transactions and using social networks for fear of having their information compromised.[6]

To understand the extent of Internet users' concerns about the privacy and security of their information

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while using the Internet, AARP conducted a nationally representative survey of adult Internet users ages 18 and older (survey methodology provided in the appendix). The survey asked questions about the level of concern Internet users had for the privacy and security of their digital information, as well as how Internet users were managing their passwords as a means of protecting their digital information.

How People Are Connecting

When considering issues of Internet security and privacy, it is important to understand what devices people are using to connect, because different devices can collect different types of data. For example, a mobile phone user's precise geographic location is typically recorded by the device. Respondents reported using several different types of devices to connect to the Internet. Those under age 50 were more likely[7] to use a smartphone or mobile phone to connect, while those ages 50 and older were more likely to use a desktop computer (figure 1).

Some Internet users reported using Internet-connected devices such as smartwatches and activity trackers (13 percent), connected home devices such as thermostats and security systems (8 percent), and connected health devices (5 percent).

Types of devices that can connect to the Internet

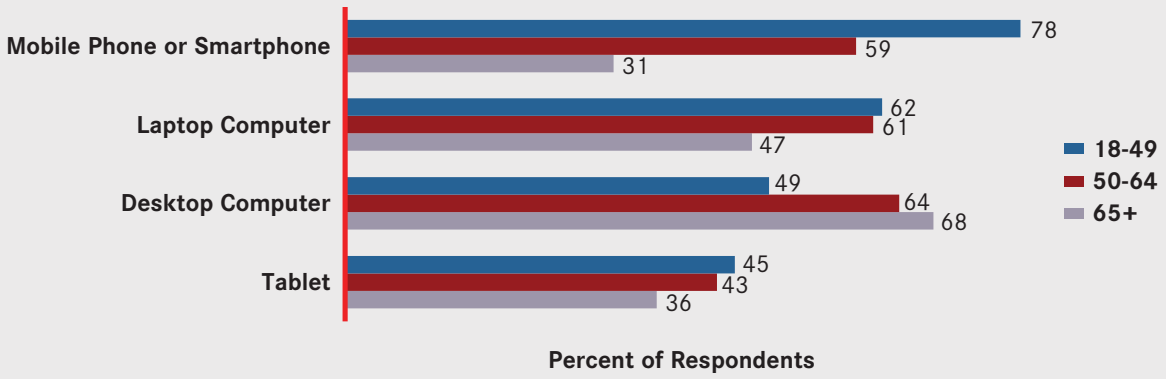
- Computers – desktops, laptops
- Mobile Devices – smartphones, tablets
- Wearable Devices – activity trackers, smartwatches, health monitors
- Home Devices – thermostats, cameras, security systems, appliances
- Automobiles – navigation and entertainment systems, diagnostics

A Concern among Consumers

The survey found that most Internet users expressed concern about information privacy and security while connected to the Internet.

Overall, more than three-quarters of adult Internet users (78 percent) expressed concerns about their privacy while using the Internet. Although concern was high across all age groups, Internet users ages 50–64 were more likely than those ages 18–49 and

FIGURE 1
Internet Users Reported Using a Variety of Devices to Connect



Base: 18–49 n = 960, 50–64 n = 661, 65+ n = 515

Q1. "Which of the following devices do you currently use to connect to the Internet (i.e., surfing the Internet, using email, using apps)? Check all that apply."

Source: AARP Public Policy study of Internet users.

65+ to express privacy concerns (figure 2).

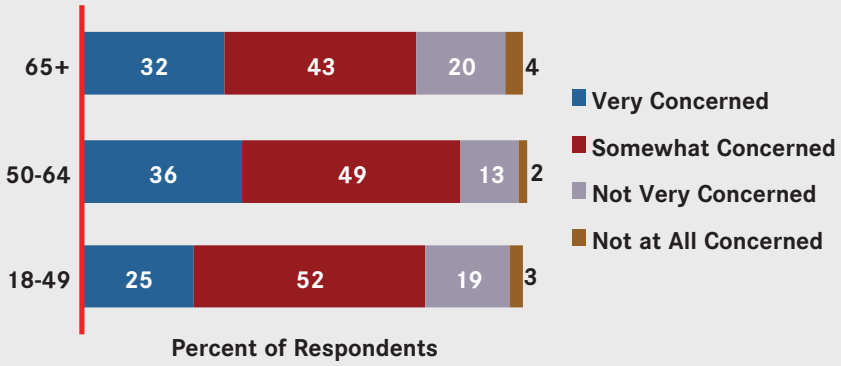
Among Internet users ages 50 and older, 47 percent of Hispanic and 46 percent of African American respondents said they were "very concerned" about their privacy compared with 31 percent of White respondents.

Similarly, respondents also had concerns about the security of their information. More than 8 out of 10 (84 percent) expressed concern about having their personal information hacked or stolen. As with privacy, respondents ages 50–64 were more likely than those ages 18–49 to be concerned about the security of their digital information (figure 3).

African American and Hispanic respondents ages 50+ were more likely to indicate they were "very concerned" about having their information hacked or stolen. Almost two-thirds (64 percent) of Hispanic respondents ages 50+ said they were "very concerned" about information security while over half of African American respondents (58 percent) said this. This compares to 40 percent of White respondents ages 50+.

FIGURE 2

Many Respondents Expressed Concerns about Their Privacy while Digitally Connected



Base: 18–49 n = 960, 50–64 n = 661, 65+ n = 515

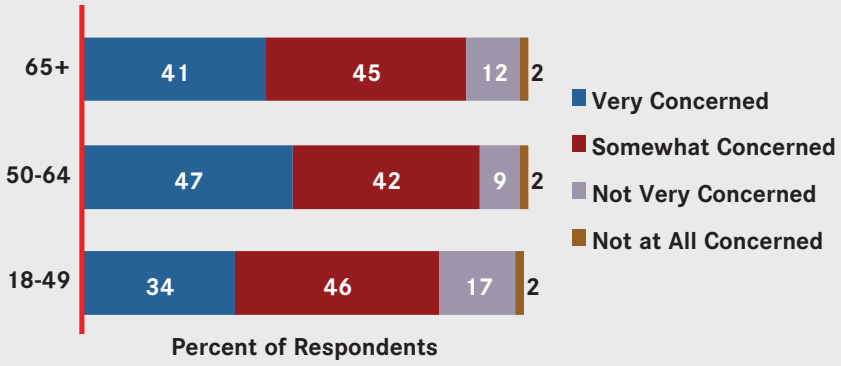
Q16. "Generally, how concerned are you about privacy when you are digitally connected?"

Source: AARP Public Policy Institute study of Internet users.

Note: Totals may not add to 100 due to nonresponses.

FIGURE 3

Many Respondents Expressed Concerns about Their Personal Data Being Compromised



Base: 18–49 n = 960, 50–64 n = 661, 65+ n = 515

Q17. "How concerned are you about your personal data being hacked or stolen?"

Source: AARP Public Policy Institute study of Internet users.

Note: Totals may not add to 100 due to nonresponses.

The Universal Challenge of Passwords

Many Internet users said managing passwords was frustrating. As was the case with overall concern levels, the survey revealed notable demographic differences.

Over half (57 percent) of Internet users ages 18 and older reported having between 1 and 10 online accounts, while over a third (38 percent) had more than 10 online accounts. Typically, the first step in securing digital accounts to prevent unauthorized access involves the use of passwords. Because each

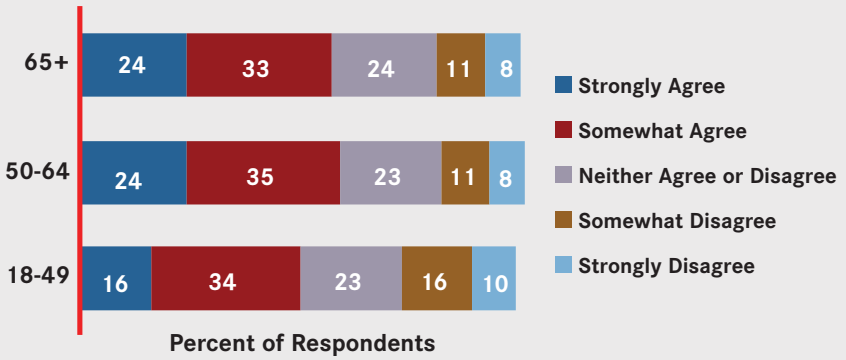
connected device and digital account should have a different password, remembering multiple unique passwords can be challenging.

Over half of all respondents said managing passwords was a frustrating experience (figure 4). Almost a quarter (23 percent) of those ages 65 and older reported "often" forgetting their passwords, versus 16 percent of those ages 50–64, and 12 percent of those under age 50.

When given a selection of different password management strategies, the most frequently selected response was "I keep a list of my passwords." Seventy-three percent of respondents ages 65+ reported keeping a list of passwords compared with 61 percent of those ages 50–64 and 38 percent of those under age 50. In addition, over half of all respondents (56 percent) said they reuse the same password for more than one account. Security experts recommend not writing down or reusing passwords, as this creates security vulnerabilities that can compromise Internet users' accounts and personal information.

FIGURE 4

Respondents Ages 50+ Were More Likely to Agree That Managing Passwords Is a Frustrating Experience



Base: 18-49 n = 960, 50-64 n = 661, 65+ n = 515

Q20. "Managing my passwords is a frustrating experience."

Source: AARP Public Policy Institute study of Internet users.

Note: Totals may not add to 100 due to nonresponses.

Conclusion

Although Internet users of all ages expressed high levels of concern about the privacy and security of their information, consumers ages 50+ were more likely to say they were "very concerned" about it. In addition, although the use of passwords remains an important part of protecting the privacy and security of users' information, managing multiple passwords is a frustrating experience for many—especially those ages 50 and older. As a result, most Internet users reported employing shortcuts like writing down passwords or reusing one password for more than one account. This suggests that the current password regime is not working well and likely puts the privacy and security of Internet users' information at risk.

Appendix

Survey Methodology

The research utilized GfK's KnowledgePanel® nationally representative online panel. Respondents were screened to ensure that they use the Internet for reasons other than taking KnowledgePanel® surveys.

For this study, a total of 2,998 qualified interviews were secured from the nationally representative KnowledgePanel® sample of Internet users. The overall sample was weighted by age, gender, race/ethnicity, education, Census region, metropolitan status, and household income (and primary language for Hispanics) to be nationally representative of Internet users ages 18+. In addition, due to the oversampling of certain groups (see descriptions below) and weighting, the survey also yielded samples of adults ages 50–64, adults ages 65+, non-Hispanic African Americans/blacks, Hispanic/Latinos, and non-Hispanic whites that were designed to be nationally representative of Internet users in each of those groups.

The general population sample included a representative sample of 2,042 respondents ages 18+ from different races/ethnicities and age groups. However, to make comparisons by race/ethnicity and by age, additional interviews ("oversamples") were completed among three groups—African Americans/blacks (n = 443), Hispanics/Latinos (n = 419), and Americans ages 65 and older (n = 94)—to secure an adequate number of respondents in each of these groups for analysis. Ultimately, a total of 605 interviews were completed among African Americans, 622 interviews were completed among Hispanics, and 515 interviews were completed among respondents ages 65 and older. Therefore, in the report, when making comparisons by race/ethnicity or age, the sample sizes of Hispanics/Latinos, African Americans, and adults ages 65+ are based on the total number of interviews completed for each group, which includes respondents from the general population sample as well as those from the oversamples. However, the results shown for the general population are based only on the nationally representative sample of 2,042, which excludes the oversamples.

1 The author would like to thank Lona Choi-Allum and Kathi Brown from AARP's Strategic Issues Research for their considerable assistance in developing the survey and analyzing the survey results.

2 Pew Research Center, "Internet/Broadband Fact Sheet," Pew Research Center, January 12, 2017. http://www.pewinternet.org/fact-sheet/internet-broadband/.

3 David Evans, "Introducing the Wireless Cow," *Politico*, June 30, 2015. http://www.politico.com/agenda/story/2015/06/internet-of-things-growth-challenges-000098.

4 Lee Rainie, "The State of Privacy in Post-Snowden America," Pew Research Center, September 21, 2016. http://www.pewresearch.org/fact-tank/2016/09/21/the-state-of-privacy-in-america/.

5 Federal Bureau of Investigation (FBI), "Internet of Things Poses Opportunities for Cyber Crime," Alert Number I-091015-PSA, September 10, 2015. https://www.ic3.gov/media/2015/150910.aspx.

6 Rafi Goldberg, "Lack of Trust in Internet Privacy and Security May Deter Economic and Other Online Activities," National Telecommunications & Information Administration, May 13, 2016. https://www.ntia.doc.gov/blog/2016/lack-trust-internet-privacy-and-security-may-deter-economic-and-other-online-activities.

7 Unless otherwise noted, differences are statistically significant at the 5 percent risk level.

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