

Maryland Resident Cybersecurity Awareness and Practices Survey

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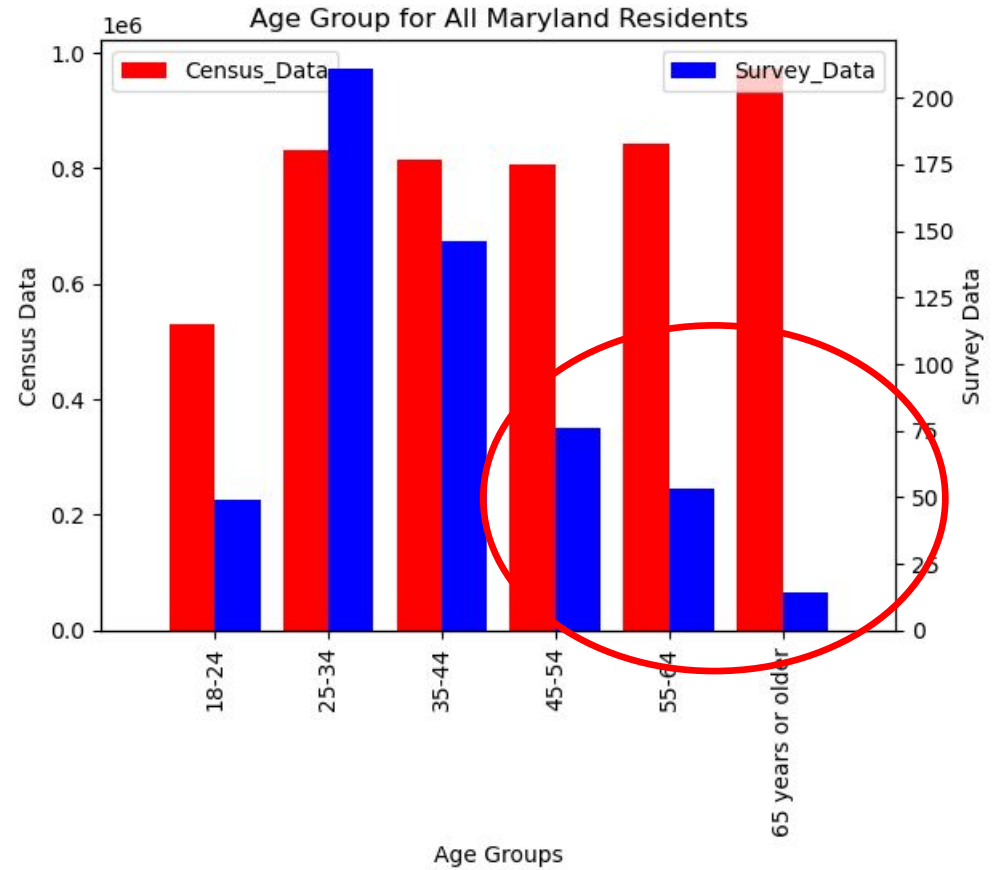
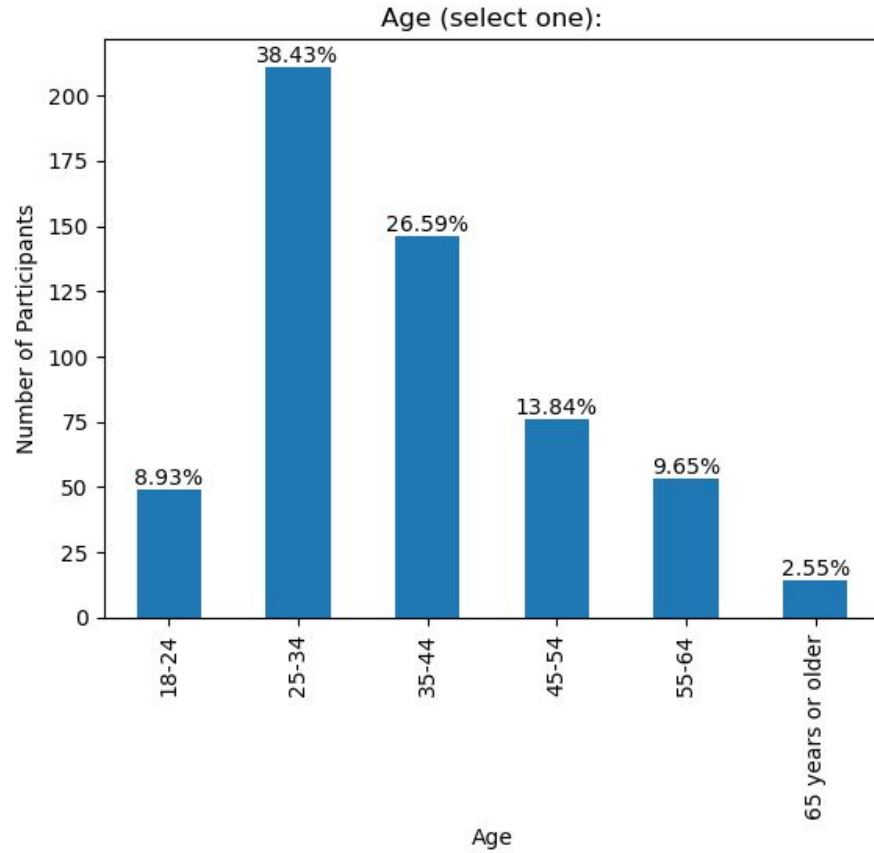
Background

- The survey was been conducted by member of the Johns Hopkins University Information Security Institute (ISI).
- Purpose: Survey Maryland residents to assess their familiarity with cybersecurity concepts and threats and to determine the extent to which they're using best practices to prevent cyberattacks.
- The survey allows participants to respond regarding their personal practices or their practices at their work, without distinguishing between the two.

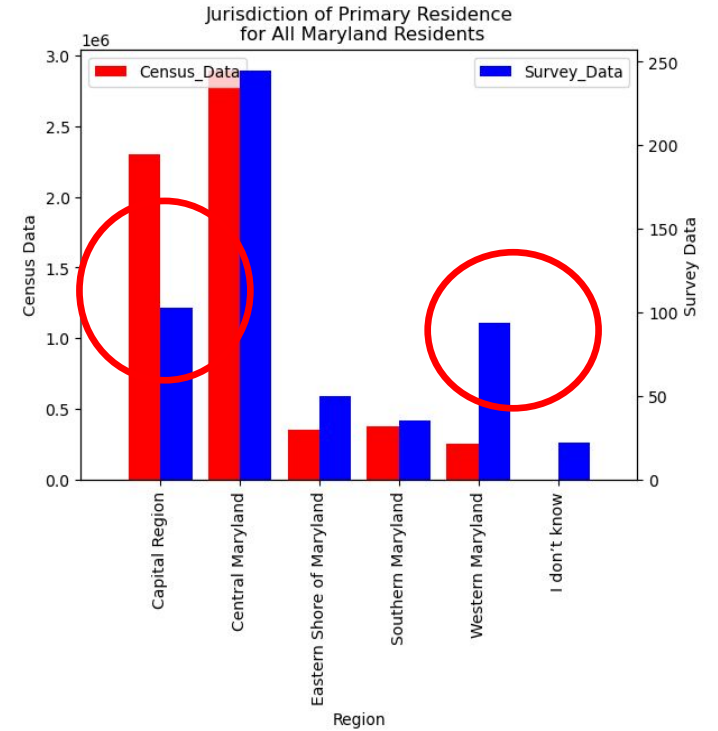
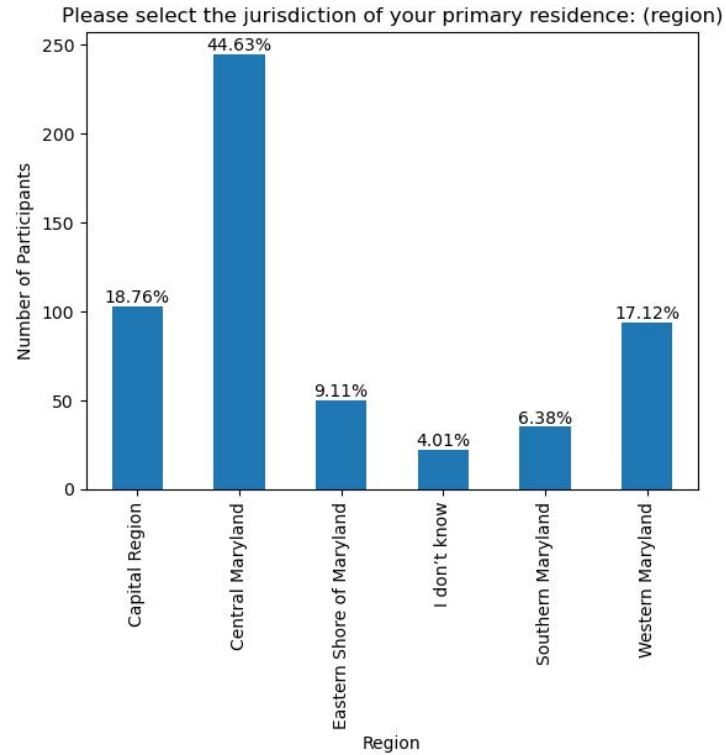
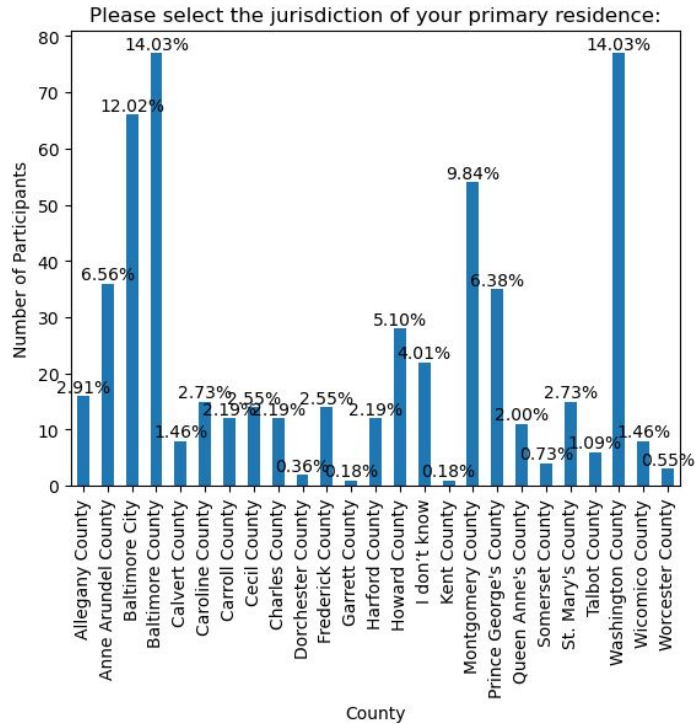
Background (cont.)

- The **Amazon Mechanical Turk (MTurk)** platform, a crowdsourcing website, was used to recruit participants, conduct the survey, and gather results.
- The survey was conducted on MTurk from October 2022 through February 2023.
- 549 participants completed the survey and were paid \$5 each.
- The survey was listed as “Survey About Your Cybersecurity Habits” and participants were told that the survey would require approximately 10 minutes to complete.

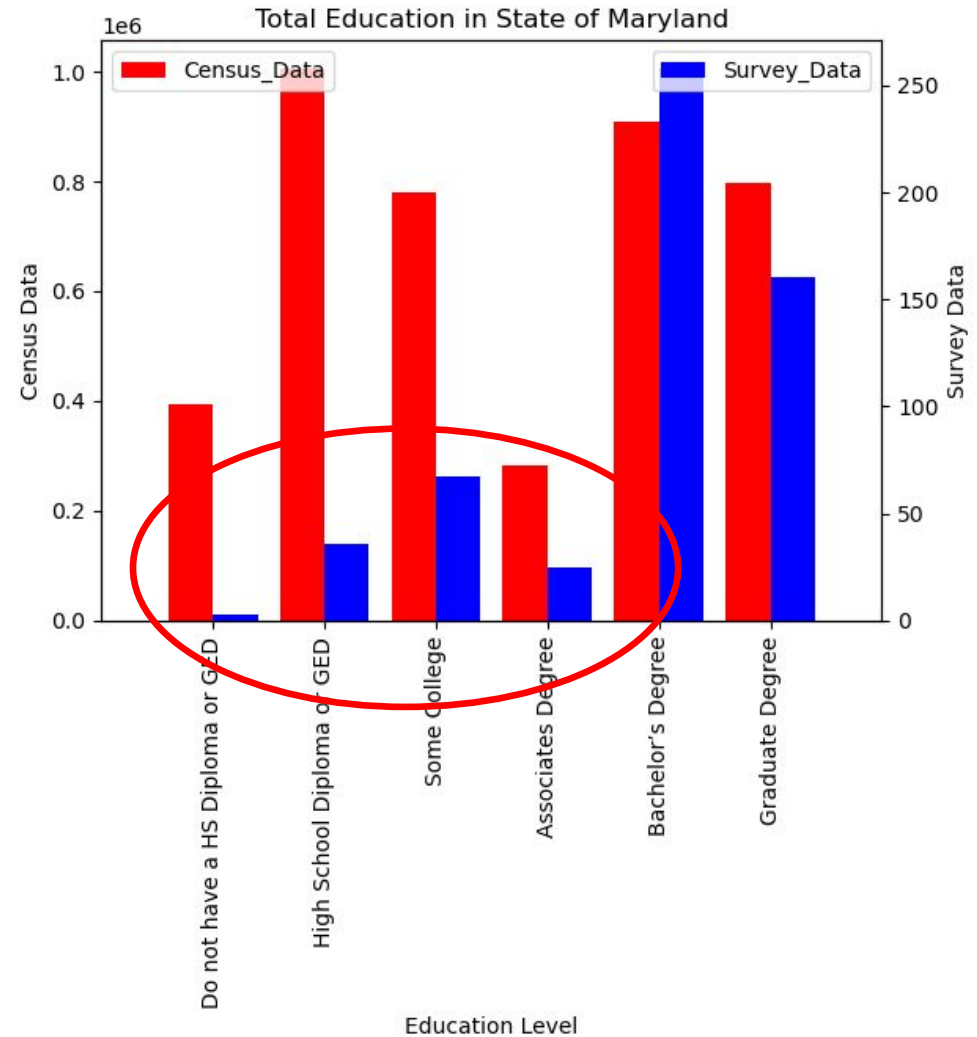
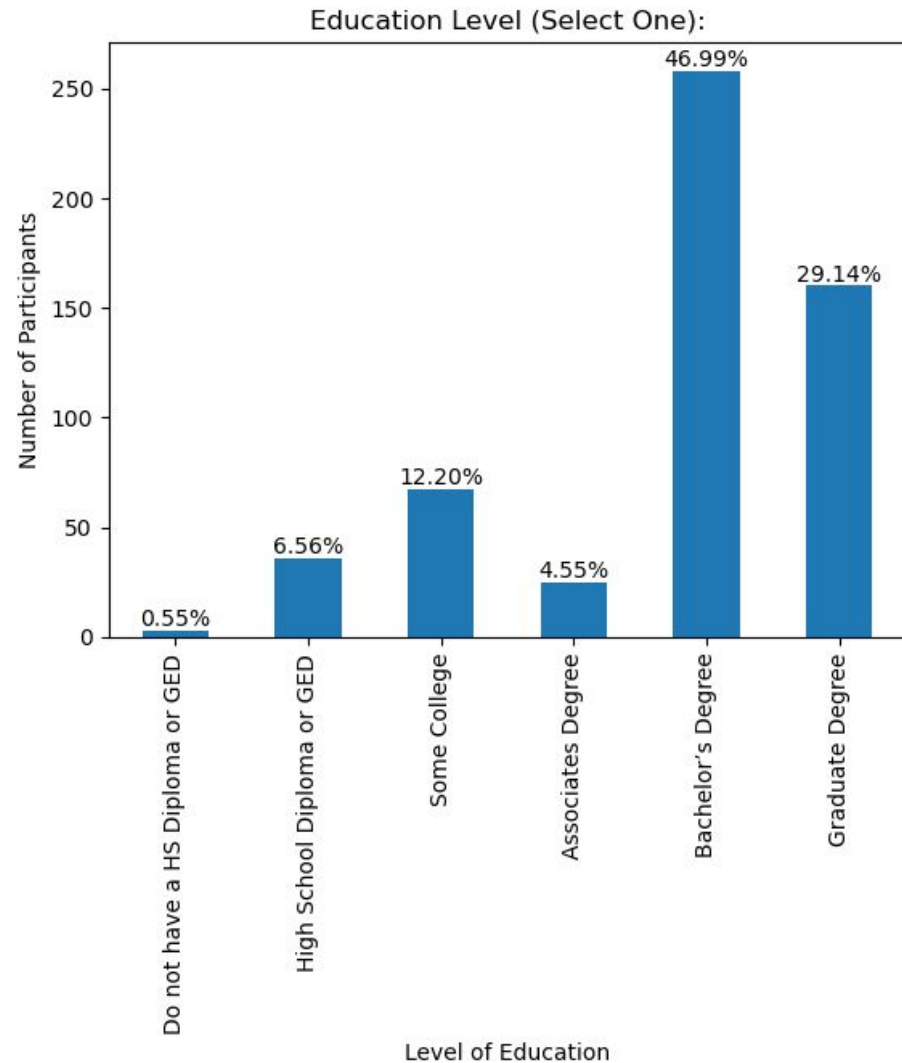
Participant Demographics- Age



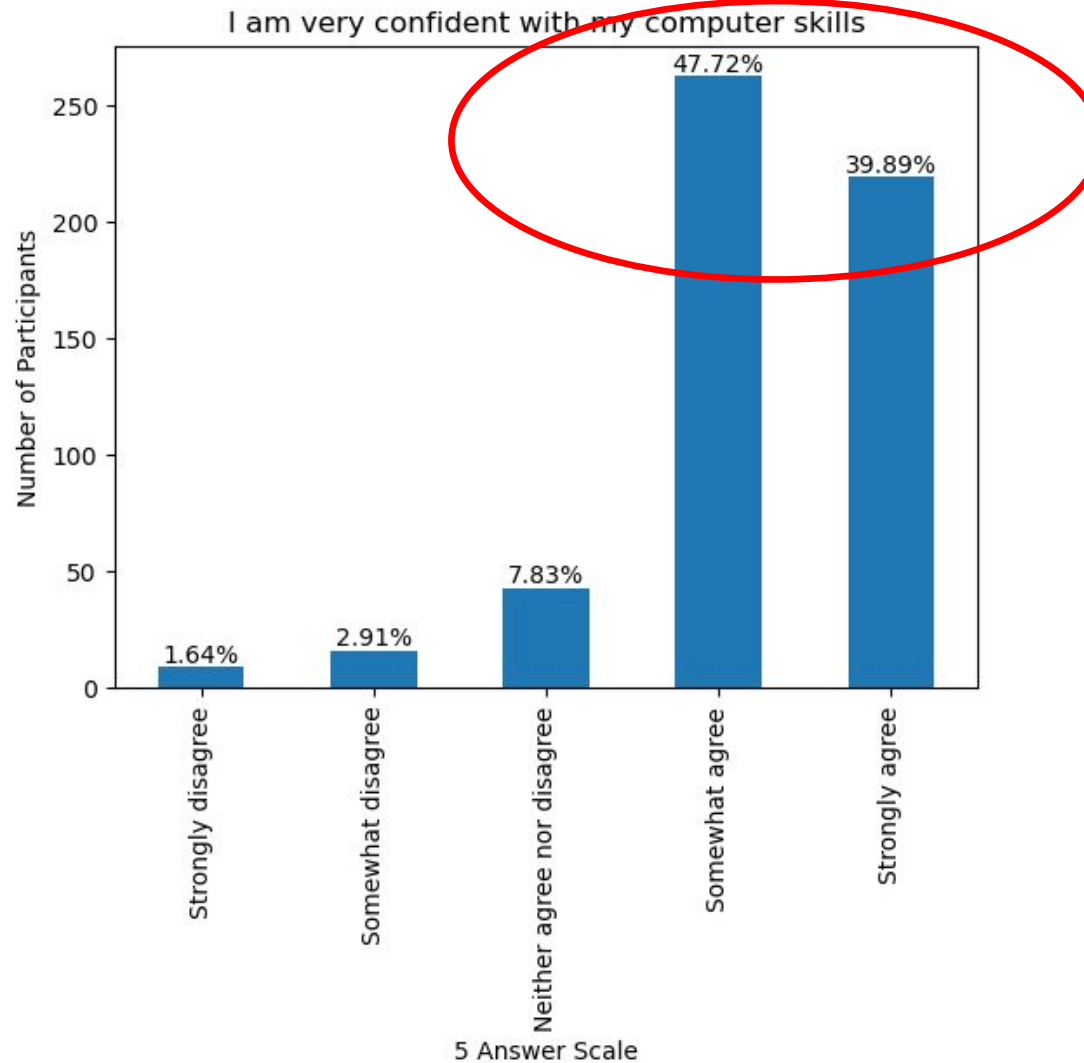
Participant Demographics- Location



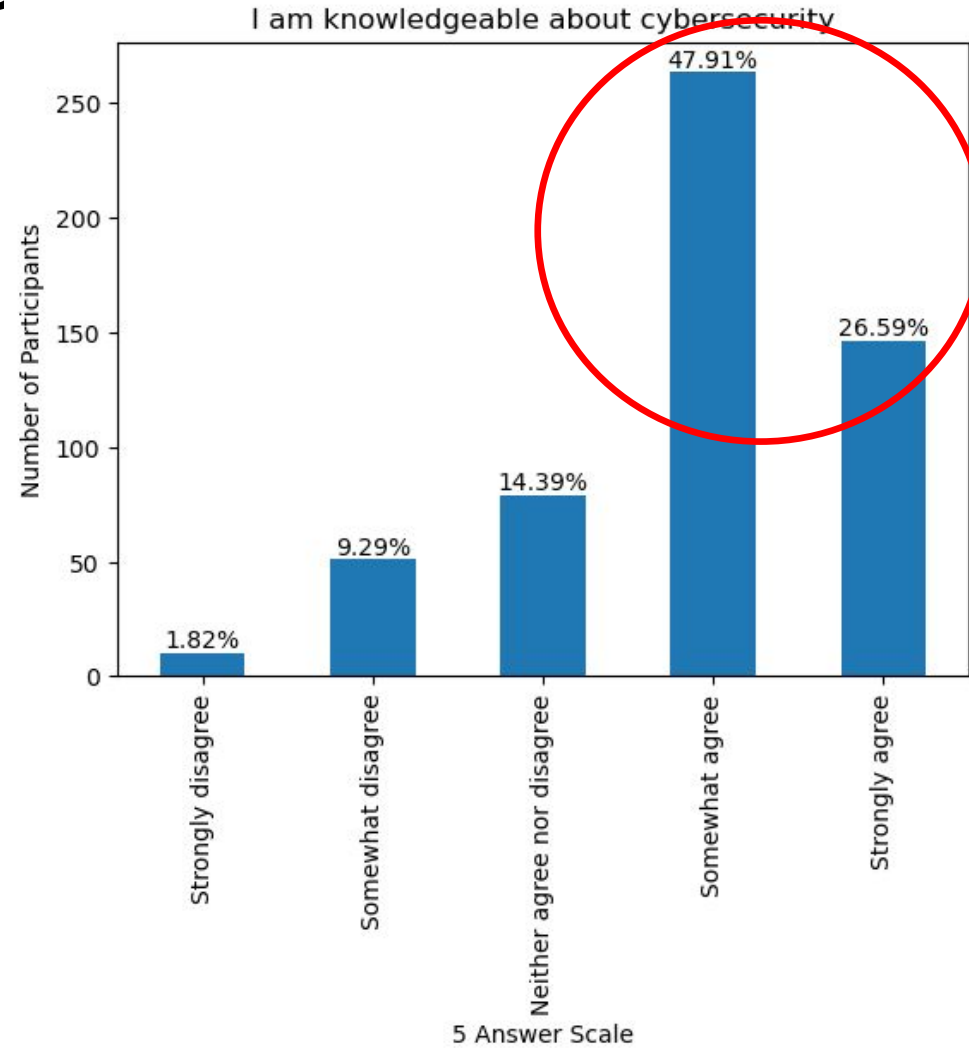
Participant Demographics- Education



Demographics- Self-Assessed Computer Skills

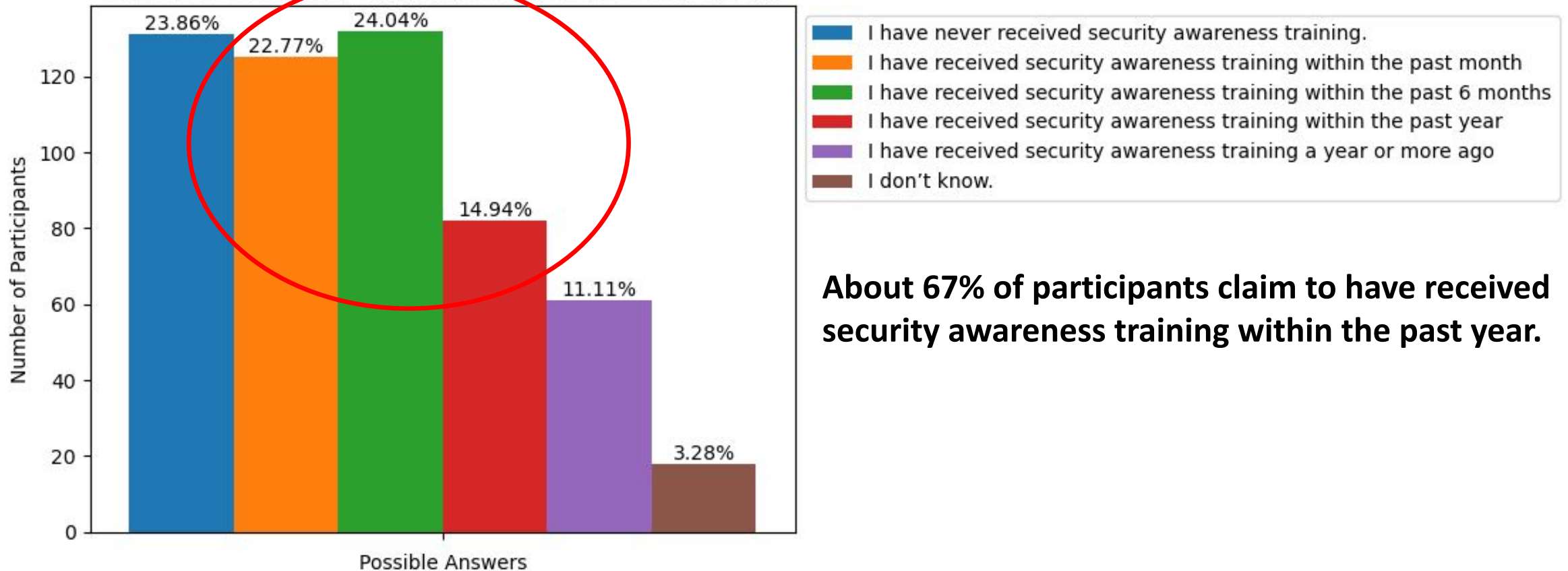


Demographics- Self-Assessed Cybersecurity Knowledge



Demographics- Cybersecurity Awareness Training

When have you ever received security awareness training at your place of employment or through other means such as a community organization or an advocacy group?



About 67% of participants claim to have received security awareness training within the past year.

Key Takeaways Part I

Backups

1. While nearly 40% of participants use a cloud service for back-ups, over 20% of participants back up their files on the same computer.
2. The vast majority of participants claim to have checked their backups within the last year.
3. Of people who do not back up their data, about 67% have not received security awareness training within the past year.

Passwords

1. Over 20% of participants use the same password for most of their accounts and another 40% use passwords that are similar. About 30% write their passwords down and 30% use a password manager.
2. Participants fared poorly on 4 multiple choice questions (social engineering, spear phishing, phishing and MFA). No one got all 4 correct and over 12% answered all four incorrectly

Takeaways Part II

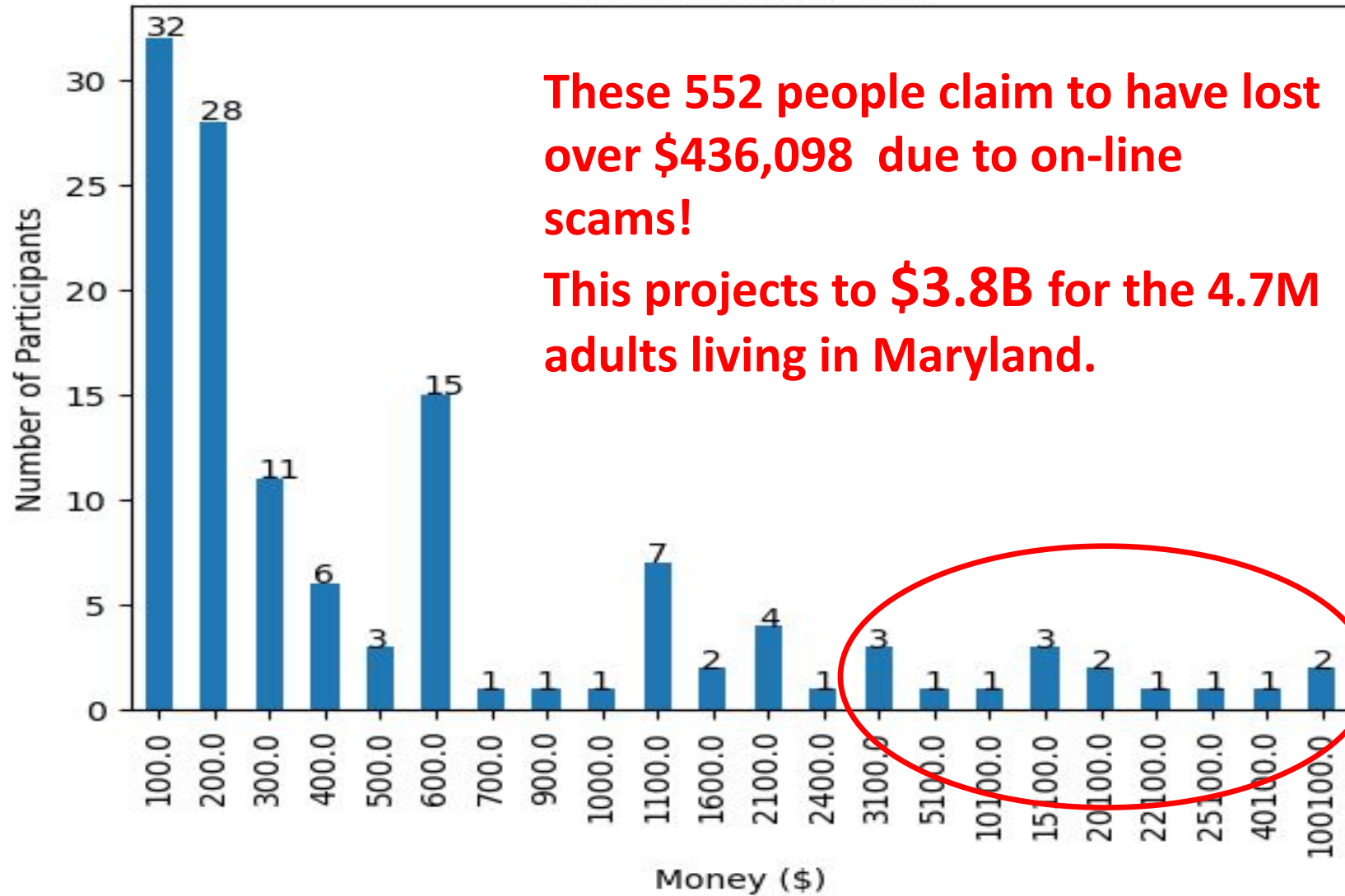
Cybersecurity Knowledge

- Participants fared poorly on 4 multiple choice questions (social engineering, spear phishing, phishing and MFA). **No one** got all 4 correct and over 12% answered all four incorrectly.

Scam Victims

1. Nearly 20% of participants claim to have been a victim of a ransomware attack and another 13% “don’t know”.
2. Only 44% of participants believe that their personal information has been disclosed to unauthorized persons.
3. 25% of respondents have lost access to an on-line account due to someone else taking it over.
4. Over 23% of participants have been a victim of an on-line scam where they lost money.

If so, about how much money did you lose as a victim of this scam
(enter 0 if you have not lost any money)?
(not including \$0)



Interesting Findings

- Even participants that self-assessed as knowledgeable about computers and cybersecurity had mixed cyber-hygiene practices and fared poorly on the basic knowledge questions.
- An alarming number of Maryland residents have:
 - been victims of ransomware
 - been scammed for significant amounts of money
 - had their on-line accounts taken over
 - been victims of other scams/attempts
- Younger participants (18-24) are more confident about avoiding being a victim of a cyber scam.

Recommendations

- **The State of Maryland needs to invest in more cybersecurity awareness and training for all of its residents!**
Participation with the private sector? School system?
- For a future survey:
 - change some of the questions
 - use interviews to obtain more accurate answers
 - collect gender data
 - if on Mturk (not recommended), find out more about Mturk participants
 - Partner with an organization that specializes in surveys
- Compare with surveys from other states and perhaps build a regional or national alliance.