

Targeted Cybersecurity Education and Training Programs for Two Asiatic Minority Groups in the U.S.

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Abstract

Cybersecurity education provides the knowledge and skills necessary for consumers to navigate the digital world safely. This knowledge is not equally accessible for all consumers. There is currently a lack of cybersecurity education available for Asian minority groups in the U.S. Language and cultural barriers make it difficult for consumers in these groups to receive the knowledge that they need. The goal of our project was to create effective cybersecurity education and training programs for the Chinese and Vietnamese minority groups. We accomplished this by creating education and training materials in Chinese and Vietnamese and conducting education sessions through the help of nonprofit organizations. Our analysis also showed that the education sessions made an impact on the participants' intentions to improve their password hygiene and be more vigilant against social engineering attempts. The insight gained from this project can be used to expand the research and development of cybersecurity education to additional Asian minority groups, additional cybersecurity topics, and additional cities across the U.S.

1 Introduction

Cybersecurity knowledge is essential in the modern digital age. The Internet has become a critical aspect of our lives that connects everyone across the world. While this technology has many benefits, it is also available for criminals who use it maliciously. These cybercriminals employ social-engineering tactics and scams to exploit the human factor in cybersecurity. They have the ability to steal consumer information and data without needing to be within their proximity. The Federal Trade Commission (FTC) reports that consumers lost \$10 billion to scams in 2023 [5]. It is important for consumers to understand the tactics used by the cybercriminals and also the tools that they have at their disposal to increase their cybersecurity posture [17] [20].

There is currently a lack of cybersecurity awareness and training programs available for consumers in the U.S. who

belong to racial minority groups [21]. The training that is available for consumers are mainly designed by and for the majority population. Some challenges that stem from this are language and cultural barriers. There is a gap in cybersecurity education and training for racial minority groups and an opportunity for improvement. The goal of our project is to create effective cybersecurity education and training programs catered to Asian minority groups. This project focuses specifically on education for the Chinese and Vietnamese populations. We prepare education and training material for password security and social engineering prevention. These two topics are fundamental in cybersecurity, not technically complicated, and easy for consumers to start implementing. The effectiveness of our education and training is measured by determining if there is a significant level of cybersecurity behavioral change between pre-education and post-education.

2 Related Works

2.1 Password Security

A password is a type of authentication by knowledge because it is something you know. They are the oldest and most common method of authentication. The advantages of using passwords are that they are simple to set up and low cost. The disadvantage of passwords is that they are created by users. Depending the effort put in by the user to create the password, the strength of the password can vary. Password length, password reuse, and password sharing are important factors of password security [10] [7] [14] [13] [8].

2.2 Social Engineering Prevention

Social engineering involves tricking authorized users into carrying out actions for unauthorized users [13]. There are countless techniques and tactics that attackers use and many of them utilize impersonation [9] [19] [11]. The success of these attacks come from an action by the user such as clicking through a link or downloading an attachment. Because of this,

identity confirmation and suspicious links and attachments are important topics for social engineering prevention.

2.3 Effective Education

When designing education material, it is important to consider how to deliver the education effectively. Understanding the audience is crucial to achieving the desired outcome [4] [15]. Another factor to consider for the effectiveness of education and training programs is the medium used. A combined delivery method is more effective than using any single delivery method [3].

3 Methods

3.1 Education Material

3.1.1 Surveys

For this project, surveys were used to measure the impact of the cybersecurity education on participants. We created four variations of surveys: pre- and post-education surveys for both password security and social engineering prevention. The pre-education surveys had demographic questions, topic-related questions, and general cybersecurity questions while the post-education survey only had topic-related questions and general cybersecurity questions.

The demographic questions helped us understand the diversity of our participants. Specifically, these questions asked about a participant's gender, age, ethnicity, and if English is their first language. The demographic questions appeared in the pre-education surveys for both topics because participants were not required to attend both of the topic sessions.

For topic-related questions, we had questions specific to password security and social engineering prevention depending on the session. The password security questions in the surveys probed the participant's password hygiene. They correlate to the three important factors that we identified for good password hygiene: password length, password reuse, and password sharing. The questions in the pre-education survey asked about the participant's current habits; in contrast, the post-education survey asked about their future outlook. The social engineering prevention questions in the surveys were focused on the participant's habits and tendencies during social engineering attempts. These questions correspond to the best practices of identity confirmation and not opening suspicious content.

Two questions asked about the participant's view of cybersecurity: the first asked about the participant's thoughts on the importance of cybersecurity and the second asked if they wanted to learn more about it. These questions were designed to measure the participant's interest in the topic and their desire for education. These questions appeared in all four survey variations.

The education materials (education video and hands-on activities) were developed by the authors. The substance of the education materials were borrowed from other research and guidelines listed in the references.

3.1.2 Password Security Education

The education portion of the sessions contained a video on the topic and hands-on activities that applied the teaching. For the password security sessions, the sections of the video included: why passwords are used, issues with using passwords, the consequences of stolen passwords, password creation, password retention, using passwords, and password tools. These sections covered all the topics listed in the password ontology from the Prior and Renaud study [18]. The first hands-on activity was to test passwords using the website <https://www.security.org/how-secure-is-my-password/>. This activity gave the participants a chance to practice creating strong passwords. The second activity was to set up an account and learn how to use Bitwarden's password manager. Having a password manager mitigates the password security issues of password length and password reuse. We chose to use Bitwarden's password manager because the company is reputable, there is a free version, and the application is available on a wide variety of platforms and devices. Participants were also given instructions on how to change the language to Chinese/Vietnamese when setting up a Bitwarden account.

3.1.3 Social Engineering Prevention Education

The social engineering prevention sessions had the same format as the password security session; they included a video on the topic and hands-on activities. The sections of the video included: why attackers use social engineering, types of attacks, impersonation, social engineering principles, and how to prevent phishing, vishing, and smishing. The education material came from the CompTIA Security+ Study Guide, Kaspersky, and the Cybersecurity & Infrastructure Security Agency (CISA) [6] [1] [2]. The first hands-on activity asked the participant to review examples of email, phone, and text message social engineering attempts. This allowed the participants to have a chance to practice identifying attacks. The second activity asked the participants to share their social engineering stories (either their own experience or events that they heard about). These activities aimed to provide the participants additional practice and exposure to social engineering attempts to prepare them for future attacks against them.

3.1.4 Translating

The survey questions and education material (i.e., videos and hands-on activities) were translated into Chinese (both Mandarin and Cantonese) and Vietnamese. Professional translators were found through the American Translators Association (ATA), to provide reliable translations.

They also provided interpretations for the audio of the videos. The videos may be found at the following URLs: <https://youtu.be/Yv-hIoBIsVc> (Password Security in Chinese), <https://youtu.be/xg7cOpwN0IE> (Password Security in Vietnamese), <https://youtu.be/4yA66pd5Vk4> (Social Engineering Prevention in Chinese), and <https://youtu.be/6a-0lkKaDoE> (Social Engineering Prevention in Vietnamese).

3.2 Recruiting Participants

The target populations for our project were the Chinese and Vietnamese minority groups in Seattle, Washington. To find participants, we first identified local nonprofit organizations in the area. We chose this route because these organizations have a strong connection to the communities that they serve. The Chinese Information and Service Center (CISC) and Kandelia were two organizations who agreed to help. CISC is a nonprofit organization that supports immigrant families by creating opportunities for them to succeed. They mainly serve the Chinese immigrant community but also have resources for immigrants from Eastern Europe, Latin America, and other parts of Asia. Kandelia is also a nonprofit organization that provides support to immigrant and refugee families. They started as Vietnamese Friendship Association (VFA) but they have evolved to serve all immigrant and refugee communities. CISC and Kandelia helped advertise the education sessions and the sessions were conducted at each of the respective organizations' facilities. CISC held the Chinese sessions and Kandelia held the Vietnamese sessions. Due to the availability of the facility and staff, the sessions were conducted in a group setting. Attendance was voluntary, and participants did not receive any monetary compensation for their time. An Institutional Review Board (IRB) approval was obtained prior to any work with the participants. Participants' ability to understand English ranged from essentially no working understanding to some very basic understanding, which is typical of the population these organizations serve.

3.3 Education Sessions

A total of four group education sessions were conducted. There was one session for each education topic (password security and social engineering prevention) and for each language (Chinese and Vietnamese). The password security sessions were administered first; the social engineering prevention sessions followed one month after. All the sessions followed the same format and lasted roughly an hour each. They began with a sign-in sheet where we allocated each participant a unique identification number. This allowed us to track if a participant attended both the password security and social engineering prevention education sessions. Next, the participants spent 10 minutes completing the pre-education survey. The surveys were administered physically with pen and paper. Afterwards, participants would watch the education video for

15 minutes. The video was shown on a projector with speakers to provide the audio. The next 25 minutes were spent on hands-on training exercises. The participants were encouraged to ask any questions they had throughout the sessions. Finally, the session concluded with a post-education survey which took 10 minutes.

4 Results

4.1 Participant Demographics

For our project, 45 unique participants had attended our education sessions. There were 30 participants who attended the password security education and 32 participants who attended the social engineering prevention education. The majority of the participants were above the age of 60 with 40 participants falling into this category. Four were between ages 41 to 50 and one was between ages 31 to 40. With respect to gender, 34 identified as female, followed by nine for male, one for other, while one preferred not to say. For ethnicity, 38 participants identified as Chinese, six identified as Vietnamese, and one identified as other/multi-racial. All the participants indicated that English was not their first language.

4.2 Paired Sample T-Tests

Our goal for the analysis is to find out if the education sessions had any impact on the participants. To do this, the survey responses were mapped to numerical values so that we can perform statistical calculations on them. "Strongly Disagree" was mapped to 1, "Disagree" to 2, "Neither Disagree or Agree" to 3, "Agree" to 4, and "Strongly Agree" to 5. We used IBM's Statistical Package for Social Sciences (SPSS) version 29 for our calculations. We looked at the participant's pre-education survey responses and compared them to the post-education survey responses.

For our analysis, we used the paired t-test method. This method is used when the data values are paired measurements [12]. For our data, the paired measurements are the pre- and post-education pairs of survey responses. The null hypothesis for each pair is that there is no difference in the survey responses between before and after education. The alternative hypothesis for each pair is that there is an improvement in the survey responses from before to after education. We have chosen to use a significance level of 0.05 for our analysis. In our calculations, we look at the p-value for one-sided t-test because we are specifically looking for an improvement from pre-education to post-education.

4.2.1 Password Security Sessions

For the password length pair, there was a significant difference in the averages between pre-education ($M=2.83$, $SD=1.085$)

and post-education ($M=4.03$, $SD=0.890$). The t test supports this with $t_{29} = -5.067$, $p < 0.001$. The password reuse pair also had a significant difference between pre-education ($M=3.13$, $SD=1.042$) and post-education ($M=3.87$, $SD=0.571$) with $t_{29} = -3.832$, $p < 0.001$. Similarly, the password sharing pair for pre-education ($M=3.43$, $SD=1.223$) and post-education ($M=4.20$, $SD=0.484$) had $t_{29} = -2.935$, $p = 0.003$. The cybersecurity importance pair had a slight improvement in the average means pre-education ($M=4.17$, $SD=0.913$) and post-education ($M=4.50$, $SD=0.509$). This is reflected with $t_{29} = -1.980$, $p = 0.029$. The learning cybersecurity pair showed no difference in pre-education ($M=4.33$, $SD=0.606$) and post-education ($M=4.27$, $SD=0.583$) with $t_{29} = 0.494$, $p = 0.313$.

4.2.2 Social Engineering Prevention Sessions

For the identity confirmation pair, there was a significant difference in the averages between pre-education ($M=4.19$, $SD=0.896$) and post-education ($M=4.59$, $SD=0.499$). This is reinforced with $t_{31} = -2.881$, $p = 0.004$. The links/attachments pair also had a significant difference between pre-education ($M=4.13$, $SD=0.833$) and post-education ($M=4.50$, $SD=0.508$) with $t_{31} = -3.483$, $p < 0.001$. In addition, both the cybersecurity importance and learning cybersecurity pairs had slight improvements. The cybersecurity importance pre-education ($M=4.53$, $SD=0.567$) and post-education ($M=4.69$, $SD=0.471$) had $t_{31} = -2.396$, $p = 0.011$. The learning cybersecurity pre-education ($M=4.53$, $SD=0.507$) and post-education ($M=4.75$, $SD=0.440$) had $t_{31} = -2.946$, $p = 0.003$.

4.3 Discussion

In terms of the effectiveness of our education sessions, our t -test results showed that our education had a significant effect on the topic-specific survey questions (questions pertaining specifically to password security and social engineering prevention). The education material effectively conveyed the importance of password length, not reusing passwords, and not sharing passwords for password security. It also effectively communicated the importance of identity confirmation and not opening suspicious links or attachments for social engineering prevention.

Additionally, the results showed that our education had a slight impact on the general cybersecurity questions: increasing cybersecurity importance and increasing the desire to learn more about cybersecurity. One factor to consider is that the starting average scores before education were already high. The average pre-education responses were 4.17 for importance and 4.33 for learning in the password security sessions and 4.53 for importance and 4.53 for learning in the social engineering prevention sessions. This means that on average, participants had already put down "Agree" as the

response to these questions coming into the sessions. The reason for having only a slight improvement to these two questions is because we may have hit a limit on our scale with 5 ("Strongly Agree") being the highest response participants could answer.

5 Conclusion

Our project goal was to provide cybersecurity education to a portion of the U.S. population that have been underserved. We had set out to create effective cybersecurity education and training programs in Chinese and Vietnamese. We accomplished this by creating password security and social engineering prevention education materials in these two languages. We then recruited participants through nonprofit organizations to evaluate our education program. From the survey responses, we found that participants intended to improve password hygiene and be more alert for social engineering attempts after they have received the corresponding education. Also, we found that on average, participants agreed that cybersecurity is important and want to learn more about it. This shows that there may be a demand for cybersecurity education from the Chinese and Vietnamese minority groups in the U.S.

There were some limitations that affected our project and also our results. These limitations include: the number of participants available and the data collection method. We relied solely on nonprofit organizations to help recruit participants for the project. We might have been able to recruit more participants if we offered a monetary incentive to attend. In addition, we relied solely on surveys to gather our data. Surveys require the participant to disclose their own responses [16]. Because of this, there can be a difference in intended behavior change and actual behavior change that we cannot measure [22]. We can only say that participants of our education sessions have the intention to improve their cybersecurity posture but we cannot assert that they will actually apply what they have learned.

The insight that we have gained from our project can be used to expand the cybersecurity education that is available for Asian minority groups. For our project, we only translated our education material into Chinese and Vietnamese. There is an opportunity to have the education material translated into other languages. Languages such as Japanese and Korean would be good options because these minority groups share a similar collectivist culture as the ones from our project. Research can be conducted to see if similar results are achieved in additional languages. Another area for future research is additional cybersecurity topics that can be included in the education. The training series can be expanded with additional topics such as using virtual private network (VPN) and antivirus software. Lastly, we conducted our education sessions in Seattle, Washington. Additional education sessions can be held in different cities in the U.S. to determine if there are regional differences.

Our research showed that there was a demand for cybersecurity education for these groups. We started exploring some of the cultural factors that could impact the effectiveness of education for certain populations, but recognize that there are other factors that can be explored as well.

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Appendix

This appendix includes the four different instruments used in English, Chinese, and Vietnamese.

Password Security Survey Questions

Pre-Training

What gender do you most closely identify with?

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Male | <input type="checkbox"/> Other |
| <input type="checkbox"/> Female | <input type="checkbox"/> Prefer not to say |
| <input type="checkbox"/> Non-Binary | |

What is your current age?

- | | | |
|-----------------------------------|----------------------------------|-----------------------------------|
| <input type="checkbox"/> Under 18 | <input type="checkbox"/> 31 - 40 | <input type="checkbox"/> 51 - 60 |
| <input type="checkbox"/> 18 - 30 | <input type="checkbox"/> 41 - 50 | <input type="checkbox"/> Above 60 |

What ethnicity do you primarily identify with?

- | | |
|---|---|
| <input type="checkbox"/> Chinese | <input type="checkbox"/> White/Caucasian |
| <input type="checkbox"/> Vietnamese | <input type="checkbox"/> Hispanic |
| <input type="checkbox"/> Other Asian/Pacific Islander | <input type="checkbox"/> Native American/Alaskan Native |
| <input type="checkbox"/> Black/African-American | <input type="checkbox"/> Other/Multi-Racial |

Is English your first language?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

In general, my passwords are at least 14 characters in length.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I have different passwords for each website/application that I login to.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I have not shared my passwords with others.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Cybersecurity is important to me.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I want to learn more about cybersecurity.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Figure 1: English Version: Password Pre-Survey

密码安全调查问题

预期培训

你最认同哪种性别?

- 男
- 女性
- 非常规
- 其他
- 不愿说

您目前的年龄是多少?

- 18 岁以下
- 18 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 高于 60

您主要认同哪个民族?

- 华人
- 越南人
- 其他亚太裔
- 黑人/非裔美国人
- 白人/高加索人
- 西裔
- 美国原住民/阿拉斯加原住民
- 其他/多种族

英语是你的母语吗?

- 是
- 不是

一般来说, 我的密码长度至少为 14 个字符。

- 非常不同意
- 不同意
- 既不同意也不反对
- 同意
- 非常同意

我为登录的每个网站/应用程序设置了不同的密码。

- 非常不同意
- 不同意
- 既不同意也不反对
- 同意
- 非常同意

我没有与他人共享密码。

- 非常不同意
- 不同意
- 既不同意也不反对
- 同意
- 非常同意

网络安全对我很重要。

- 非常不同意
- 不同意
- 既不同意也不反对
- 同意
- 非常同意

我想进一步了解网络安全。

- 非常不同意
- 不同意
- 既不同意也不反对
- 同意
- 非常同意

Figure 2: Chinese Version: Password Pre-Survey

Các câu hỏi khảo sát bảo mật mật khẩu

Trước khi Đào Tạo

Quý vị nhận định mình theo giới tính nào rõ ràng nhất?

- | | |
|--|---|
| <input type="checkbox"/> Nam | <input type="checkbox"/> Khác |
| <input type="checkbox"/> Nữ | <input type="checkbox"/> Không muốn nói |
| <input type="checkbox"/> Phi nhị nguyên giới | |

Hiện tại quý vị bao nhiêu tuổi?

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> Dưới 18 | <input type="checkbox"/> 31 - 40 | <input type="checkbox"/> 51 - 60 |
| <input type="checkbox"/> 18 - 30 | <input type="checkbox"/> 41 - 50 | <input type="checkbox"/> Trên 60 |

Quý vị xác định chủng tộc chính của mình là gì?

- | | |
|---|--|
| <input type="checkbox"/> Người Trung Quốc | <input type="checkbox"/> Người da trắng/Đại Chủng Âu |
| <input type="checkbox"/> Người Việt Nam | <input type="checkbox"/> Người gốc Tây Ban Nha |
| <input type="checkbox"/> Người Châu Á/ Thái Bình Dương khác | <input type="checkbox"/> Người Mỹ Bản Địa/Thổ dân Alaska |
| <input type="checkbox"/> Người Mỹ da đen/Gốc châu Phi | <input type="checkbox"/> Khác/ Đa chủng tộc |

Tiếng Anh có phải ngôn ngữ đầu tiên của quý vị không?

- | | |
|-------------------------------|--------------------------------|
| <input type="checkbox"/> Đúng | <input type="checkbox"/> Không |
|-------------------------------|--------------------------------|

Nhìn chung, mật khẩu của tôi có độ dài ít nhất 14 ký tự.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi có các mật khẩu khác nhau cho mỗi trang web/ứng dụng mà tôi đăng nhập vào.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi không chia sẻ mật khẩu của mình với những người khác.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

An ninh mạng quan trọng đối với tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi muốn tìm hiểu thêm về an ninh mạng.

- | | | |
|---|---|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng cũng không đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Figure 3: Vietnamese Version: Password Pre-Survey

Password Security Survey Questions

Post-Training

I will use passwords that are at least 14 characters in length.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I will use different passwords for each website/application that I login to.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I will not share my passwords with anyone.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Cybersecurity is important to me.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I want to learn more about cybersecurity.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Figure 4: English Version: Password Post-Survey

密码安全调查问题

后期培训

我将使用长度至少为 14 个字符的密码。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我会为登录的每个网站/应用程序使用不同的密码。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我不会与任何人共享我的密码。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

网络安全对我很重要。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我想进一步了解网络安全。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

Figure 5: Chinese Version: Password Post-Survey

Các câu hỏi khảo sát bảo mật mật khẩu

Sau khi Đào Tạo

Tôi sẽ sử dụng các mật khẩu có độ dài ít nhất 14 ký tự.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi sẽ sử dụng các mật khẩu khác nhau cho mỗi trang web/ứng dụng mà tôi đăng nhập vào.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi sẽ không chia sẻ mật khẩu của mình với bất cứ ai.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

An ninh mạng quan trọng đối với tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi muốn tìm hiểu thêm về an ninh mạng.

- | | | |
|---|---|---|
| <input type="checkbox"/> Hoàn toàn bất đồng | <input type="checkbox"/> Không bất đồng cũng không đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Figure 6: Vietnamese Version: Password Post-Survey

Social Engineering Survey Questions

Pre-Training

What gender do you most closely identify with?

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Male | <input type="checkbox"/> Other |
| <input type="checkbox"/> Female | <input type="checkbox"/> Prefer not to say |
| <input type="checkbox"/> Non-Binary | |

What is your current age?

- | | |
|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> Under 18 | <input type="checkbox"/> 41 - 50 |
| <input type="checkbox"/> 18 - 30 | <input type="checkbox"/> 51 - 60 |
| <input type="checkbox"/> 31 - 40 | <input type="checkbox"/> Above 60 |

What ethnicity do you primarily identify with?

- | | |
|---|---|
| <input type="checkbox"/> Chinese | <input type="checkbox"/> White/Caucasian |
| <input type="checkbox"/> Vietnamese | <input type="checkbox"/> Hispanic |
| <input type="checkbox"/> Other Asian/Pacific Islander | <input type="checkbox"/> Native American/Alaskan Native |
| <input type="checkbox"/> Black/African-American | <input type="checkbox"/> Other/Multi-Racial |

Is English your first language?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

I always confirm the authorization or identity of someone before talking about any issues or giving out any of my personal information.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I do not open links or attachments in emails or text messages from people I do not know.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Cybersecurity is important to me.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I want to learn more about cybersecurity.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Figure 7: English Version: Social Pre-Survey

社交工程调查问题

预期培训

你最认同哪种性别?

- | | |
|------------------------------|------------------------------|
| <input type="checkbox"/> 男 | <input type="checkbox"/> 其他 |
| <input type="checkbox"/> 女性 | <input type="checkbox"/> 不愿说 |
| <input type="checkbox"/> 非常规 | |

您目前的年龄是多少?

- | | |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> 18 岁以下 | <input type="checkbox"/> 41 - 50 |
| <input type="checkbox"/> 18 - 30 | <input type="checkbox"/> 51 - 60 |
| <input type="checkbox"/> 31 - 40 | <input type="checkbox"/> 高于 60 |

您主要认同哪个民族?

- | | |
|-----------------------------------|--|
| <input type="checkbox"/> 华人 | <input type="checkbox"/> 白人/高加索人 |
| <input type="checkbox"/> 越南人 | <input type="checkbox"/> 西裔 |
| <input type="checkbox"/> 其他亚太裔 | <input type="checkbox"/> 美国原住民/阿拉斯加原住民 |
| <input type="checkbox"/> 黑人/非裔美国人 | <input type="checkbox"/> 其他/多种族 |

英语是你的母语吗?

- | | |
|----------------------------|-----------------------------|
| <input type="checkbox"/> 是 | <input type="checkbox"/> 没有 |
|----------------------------|-----------------------------|

在谈论任何问题或透露任何个人信息之前,我都会先确认对方的授权或身份。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我不会打开不认识的人发来的电子邮件或短信中的链接或附件。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

网络安全对我很重要。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我想进一步了解网络安全。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

Figure 8: Chinese Version: Social Pre-Survey

Các Câu Hỏi Khảo Sát Tấn Công Phi Kỹ Thuật

Trước khi Đào Tạo

Quý vị nhận định mình theo giới tính nào rõ ràng nhất?

- | | |
|--|---|
| <input type="checkbox"/> Nam | <input type="checkbox"/> Khác |
| <input type="checkbox"/> Nữ | <input type="checkbox"/> Không muốn nói |
| <input type="checkbox"/> Phi nhị nguyên giới | |

Hiện tại quý vị bao nhiêu tuổi?

- | | | |
|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> Dưới 18 | <input type="checkbox"/> 31 - 40 | <input type="checkbox"/> 51 - 60 |
| <input type="checkbox"/> 18 - 30 | <input type="checkbox"/> 41 - 50 | <input type="checkbox"/> Trên 60 |

Quý vị xác định chủng tộc chính của mình là gì?

- | | |
|---|--|
| <input type="checkbox"/> Người Trung Quốc | <input type="checkbox"/> Người da trắng/Đại Chung Âu |
| <input type="checkbox"/> Người Việt Nam | <input type="checkbox"/> Người gốc Tây Ban Nha |
| <input type="checkbox"/> Người Châu Á/ Thái Bình Dương khác | <input type="checkbox"/> Người Mỹ Bản Địa/Thổ dân Alaska |
| <input type="checkbox"/> Người Mỹ da đen/Gốc châu Phi | <input type="checkbox"/> Khác/ Đa chủng tộc |

Tiếng Anh có phải ngôn ngữ đầu tiên của quý vị không?

- | | |
|-------------------------------|--------------------------------|
| <input type="checkbox"/> Đúng | <input type="checkbox"/> Không |
|-------------------------------|--------------------------------|

Tôi luôn xác nhận sự ủy quyền hoặc danh tính của người khác trước khi nói về bất kỳ vấn đề gì hoặc cung cấp bất kỳ thông tin cá nhân nào của tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

Tôi không mở các đường dẫn liên kết hoặc tệp đính kèm trong email hoặc tin nhắn từ những người tôi không quen biết.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

An ninh mạng quan trọng với tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

Tôi muốn tìm hiểu thêm về an ninh mạng.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

Figure 9: Vietnamese Version: Social Pre-Survey

Social Engineering Survey Questions

Post-Training

I will always confirm the authorization or identity of someone before talking about any issues or giving out any of my personal information.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I will not open links or attachments in emails or text messages from people I do not know.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Cybersecurity is important to me.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

I want to learn more about cybersecurity.

- | | | |
|--|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Neither Disagree or Agree | <input type="checkbox"/> Agree |
| <input type="checkbox"/> Disagree | | <input type="checkbox"/> Strongly Agree |

Figure 10: English Version: Social Post-Survey

社交工程调查问题

后期培训

在谈论任何问题或透露任何个人信息之前，我都会先确认对方的授权或身份。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我不会打开不认识的人发来的电子邮件或短信中的链接或附件。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

网络安全对我很重要。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

我想进一步了解网络安全。

- | | | |
|--------------------------------|-----------------------------------|-------------------------------|
| <input type="checkbox"/> 非常不同意 | <input type="checkbox"/> 既不同意也不反对 | <input type="checkbox"/> 非常同意 |
| <input type="checkbox"/> 不同意 | <input type="checkbox"/> 同意 | |

Figure 11: Chinese Version: Social Post-Survey

Các Câu Hỏi Khảo Sát Tấn Công Phi Kỹ Thuật

Sau Đào Tạo

Tôi sẽ luôn xác nhận sự ủy quyền hoặc danh tính của người khác trước khi nói về bất kỳ vấn đề gì hoặc cung cấp bất kỳ thông tin cá nhân nào của tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không Bất Đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Hoàn toàn đồng ý |

Tôi sẽ không mở các đường dẫn liên kết hoặc tệp đính kèm trong email hoặc tin nhắn từ những người tôi không quen biết.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

An ninh mạng quan trọng với tôi.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

Tôi muốn tìm hiểu thêm về an ninh mạng.

- | | | |
|---|--|---|
| <input type="checkbox"/> Bất đồng hoàn toàn | <input type="checkbox"/> Không bất đồng hay đồng ý | <input type="checkbox"/> Đồng ý |
| <input type="checkbox"/> Bất đồng | | <input type="checkbox"/> Đồng ý hoàn toàn |

Figure 12: Vietnamese Version: Social Post-Survey