

Privacy Choices and Preferences Among Chinese International Students and Local U.S. Students on Instagram

Tiana Clemons, Wei Lin, Halong Wei, Ruichen Zhao

Duke University, Durham, North Carolina

Abstract

As technology advances, online privacy and security become increasingly crucial for people's experiences on social media platforms. In this paper, we aim to comprehensively analyze and compare the privacy setting preferences on social media platforms between Chinese international students and local US students, both currently studying in the United States. To accomplish the goals, we conducted a comprehensive survey on Chinese international students ($n = 15$) and local U.S. students ($n = 12$). This survey involves a detailed quantitative examination of the specific privacy settings chosen by each group on various social media platforms. Then, we conducted quantitative, statistical analysis on collected survey data using plots, and found significant insights into our two primary research goals: identifying patterns and preferences in privacy settings, such as profile visibility, data sharing choices, and friend/connection acceptance criteria; and understanding how these preferences align with or diverge from the general privacy behaviors observed in their respective cultural contexts. Finally, We discuss the findings of our findings, which found limited understanding of privacy tools & settings among both groups, and a more conservative privacy setting choice for Chinese students versus U.S. students. We further discussed the implications of these findings and future directions in the paper.

1 Introduction

Social media platforms have fundamentally transformed the way we interact, giving us new venues for communication, collaboration and community building on a global scale. These platforms facilitate connections between individuals, businesses, and organizations, fostering relationships and enabling exchange of information and ideas across timing differences and geographical boundaries. From uniting friends from different parts of the globe, to enabling virtually zero social distance globally, social media platforms have given us the real opportunities to engage in freedom of speech and communication. In addition, with the ever-increasing power and user base, social media platforms empower the marginalized voices, allowing their opinions and words to be heard. Also, social media platforms serve as the backbone of the Big Data Era, enabling data and opinions to be shared and collected for research purposes, business uses, etc. Finally, social media platforms have

revolutionized the way businesses analyze their customers, advertise their products, launch their sales events, etc.

However, the opportunity of building a global communication channel and community also comes with its own challenges and risks, particularly regarding online privacy and security. Nowadays, users often unintentionally or unknowingly share their personal, sensitive information on social media platforms, which could potentially range from general information like personal photos, age, phone numbers, to sensitive information like personal addresses, identification numbers, and financial information. These ubiquitous shares of various kinds of information could be used by adversaries or hackers against the users. For instance, parents who regularly share photos of their kids may unintentionally or unawarely expose the particular children's address, daily activities, and thus potentially be targeted by kidnappers. Also, people who share their social security numbers on social media could potentially face identity threats from attacks of identity thefts. Moreover, other than the possibility of being attacked by adversaries, the widespread share of personal information on social media platforms can also be used by businesses and organizations, who could use the information to tailor products and advertisements based on user characteristics and make profits accordingly.

For a safer online environment, these online privacy and security concerns regarding social media platforms are real and urgent. Multiple papers have been written to discuss the relationship between people's privacy concerns and their social media usage. In addition, those previous studies also tended to explore cultural differences in influencing people's privacy preferences and behaviors online. However, we found that there are some gaps in the prior research that we want to explore. Specifically, we found that few papers explored the comparison between Chinese international students studying in the U.S. versus local U.S. students currently studying in the U.S. We also found that almost none of the papers focused on different privacy setting preferences between Chinese international students and local U.S. students currently in University.

In this paper, therefore, we aim to explore and understand the underlying factors contributing to the differences in privacy setting preferences on social media platforms between these two groups. This includes investigating the impact of cultural background, education, social influence, and personal experiences with online privacy and data security. The goal is to uncover how these factors individually and collectively shape students' decisions regarding their privacy settings on social media. This exploration aims to provide insights into the motivations and reasons behind their choices, which could range from concerns about personal data security to the influence of peer behavior and the cultural norms of online engagement. Ultimately, this goal seeks to provide an understanding of the intersection between cultural identity, educational environment, and online privacy behavior.

To achieve our research goals, we recruited 15 Chinese international students, and 12 local U.S. students, both currently studying in U.S.

colleges. We then had them complete a self-reported survey, consisting mostly of close-ended questions. The main survey questions focus on participants' privacy setting preferences and privacy-related online behaviors on Instagram. To further understand participants' rationale behind their stated privacy preferences and actions, we added in a few open-ended questions. By quantitatively analyzing survey responses, we generated valuable insights into students' privacy preferences on Instagram, and the correlation between their preferences and their cultural background. Finally, we also provided explanation and rationale behind the differences in preferences based on qualitative analysis of participants' open-ended responses.

Based on the survey and the analysis, we came to two conclusions: (1) students in general have limited and insufficient understanding of existing privacy choices and tools; (2) Chinese international students are more conservative in their privacy setting choices and behaviors, when compared to local U.S. students. We will further discuss the implications of the findings and future directions below.

2 Background

In our initial review of pre-existing literature on the subject of behaviors regarding privacy on social media between U.S. and Chinese populations respectively, we found much of it focused on perceptions and social behavior. Findings included accounts of more privacy conscious behavior online among Americans compared to Chinese users (Yang et al., 2016). Yang (2014) found that due to negative experiences with disclosure, Chinese consumers had developed a heightened sense of concern with online privacy, yet did not significantly affect engagement with social platforms. Additional literature described culturally-contextual behavior on social media platforms Renren (a Chinese-based networking platform) Facebook (a U.S. based networking platform,) where more collectivist sharing practices were found to be most common on Renren.

In the literature specific to comparison between Chinese and U.S. based online users, Nemati, Wall, and Chow (2014) focus on differences between Chinese and U.S. users, exploring how national origin, internet addiction, and online identity perceptions affect privacy coping and information-sharing behaviors on social media, finding cultural and behavioral differences that influence privacy risks. Kostka (2023) explores the skepticism among citizens towards digital technologies in China, Germany, the UK, and the US, and reveals that a notable portion of the population in these countries expresses doubts about the benefits of these technologies, primarily due to privacy and surveillance concerns. While insightful, we found there to be a gap in exploring both behaviors and perceptions specific to Chinese and U.S. based users on the same platform.

From our review of existing work, we identified a gap that we aim to fill with our study. Given that prior research regarding the topic of privacy choices between American and Chinese users has not tackled the topic of students, specifically students studying in the United

States, we hoped to uncover insight into behaviors and perceptions amongst Chinese and local U.S. based students. Ultimately, we came to the following research question:

What factors contribute to the differences in privacy setting preferences on social media platforms between Chinese international students and local U.S. students?

Additionally, given our literature review and research questions, we understood there to be two research goals:

To comprehensively analyze and compare the privacy setting preferences on social media platforms between Chinese international students and local US students, both currently studying in the United States.

To explore and understand the underlying factors contributing to the differences in privacy setting preferences on social media platforms between these two groups.

Overall, our understanding of pre-existing research led to a curiosity in closing the gap in developing a better understanding of online choices between university students, specifically between Chinese international students studying in the United States and local U.S. students.

3 Methodology

We intended to conduct a survey with at least 40 participants, with approximately half of the participants being students who were born and raised in China and the other half being students who are local to the United States, and both groups should be currently studying in the U.S. as university students. We chose these two groups in order to analyze and compare the relationship between cultural backgrounds and people's privacy choices.

3.1 Recruitment

We contacted students within our network by sending texts, direct messages, or asking them in person to do our survey. In addition, we also posted anonymous survey links on social media platforms, including WeChat and Instagram. To be eligible for recruitment, participants had to answer a few inclusion/exclusion questions: they must be over 18 years of age; they must be current U.S. college students; they must belong to one of the two nationality groups in the study; and they also must be regular users of Instagram, for we focused on privacy preferences on Instagram specifically. Since the researchers in the study are all students at Duke University, the participants we recruited were also mostly Duke University students, master's and undergraduate. Thus, a potential limitation of the study would point to its representativeness, as Duke University is not representative of the general U.S. college student population.

During the recruitment process, we found it more difficult to recruit local U.S. students than Chinese international students. We suspect the reason behind it was that the researchers in the study had mostly a Chinese international student network and a much smaller local U.S. student network. As a result, we were able to recruit 27 participants, with 15 of the participants being students who were born and raised in China and 12 being students who were locally raised in the United States, and both groups are currently studying in the U.S. as university students.

3.2 Demographics

As mentioned, we were able to recruit 15 Chinese participants and 12 U.S. participants in the survey (Figure 1). The participants were mostly within the age range of 18-24 ($n = 24$), with only 3 in the 24-29 range (Figure 2). This age data confirmed that our participant group consisted of university students. Of the 27 participants, we had an unbalanced sample of gender, which included 19 female participants and 8 male participants (Figure 3). This unbalanced sample could potentially lead to results that skewed toward female privacy choices, while male voices were underrepresented.

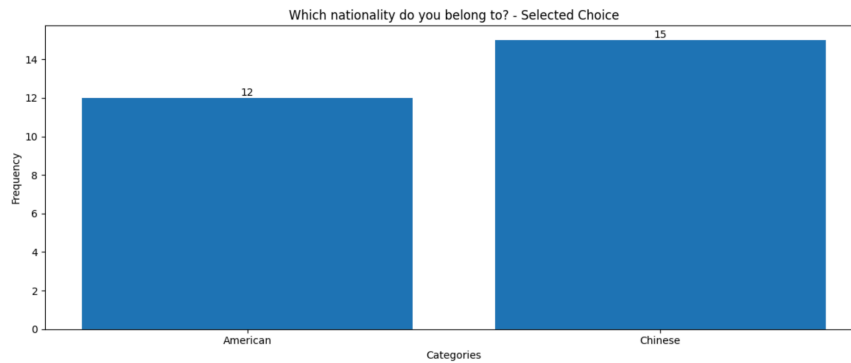


Figure 1: Frequency Plot of Participants' Nationality

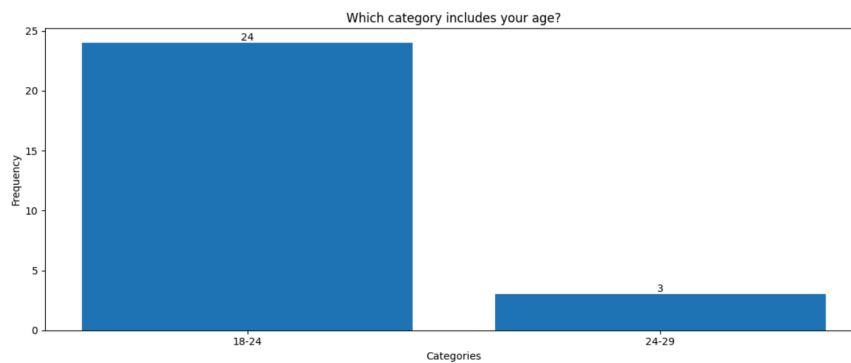


Figure 2: Frequency Plot of Participants' Age

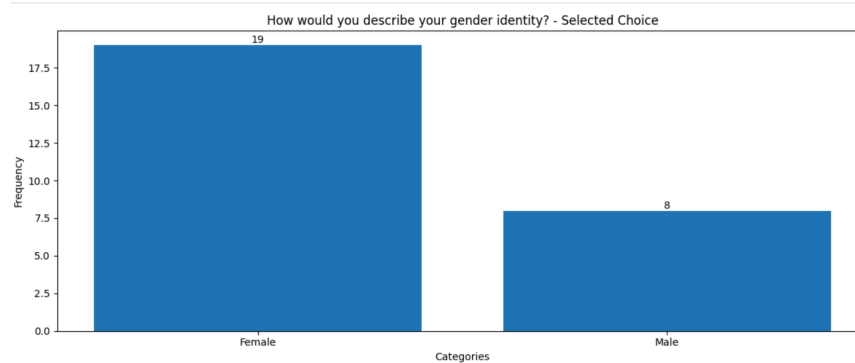


Figure 3: Frequency Plot of Participants' Gender

3.3 The Survey

Our survey included questions that are close-ended to allow for a quantitative analysis of respondents' answers. In addition to questions regarding participants' profiles directly, we also included open-ended questions regarding their experience on social media, and their reasons behind their privacy choices. The goal of this chosen methodology is to gain a multifaceted perspective by connecting our quantitative survey data to themes found within the open-ended responses provided by the participants.

The survey mainly focused on patterns and preferences in privacy settings, such as profile visibility, data sharing choices, friend/connection acceptance criteria, etc. Specifically, we used Qualtrics to conduct our survey, which included 6 consent questions, 3 demographic questions, and 31 main survey questions, of which 3 are open-ended and 1 is an attention check question. Examples of close-ended and open-ended questions:

- Closed-ended: *'Do you archive some posts on Instagram?'*
- Open-ended: *'Please specify why you archive some post on Instagram.'*

The survey was launched using Duke Qualtrics, and was expected to take five to ten minutes. Responses were only collected from participants that passed our screening demographic questions. Responses were further filtered on if participants passed the attention check question, which would ensure the quality of the responses collected.

3.4 Analysis

After collecting a total of over 30 responses, the research team of 4 gathered together to do the analysis.

First and foremost, we used Qualtrics to filter for valid responses that met our screening criteria and passed the attention check. After the data cleaning step, we have 27 valid responses left. Then, we moved on and exported the quantitative data from Qualtrics and imported them into Python. Within Python, we further prepared and

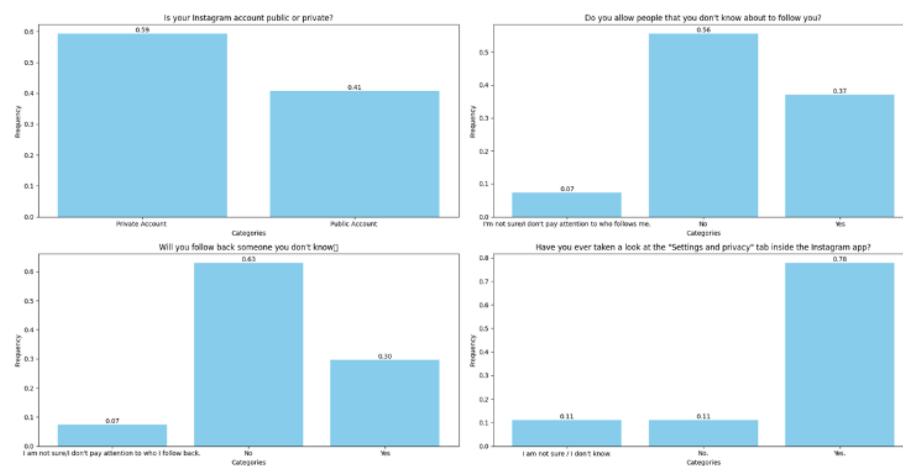
transformed the data for analysis. Moreover, we employed *Pandas* and *Matplotlib*, two Python libraries, in order to generate statistical aggregates and plots showing overall trends and comparisons in our quantitative data.

With regard to qualitative data, since the open-ended responses were small in quantities, the four of the researchers collectively generated a few themes.

4 Results

4.1 Overall Privacy Preferences

The following data in general demonstrates the privacy preferences of the overall participants on Instagram.



Security Consciousness:

About 59% of users have set up private accounts, while 41% have set up public accounts. The fact that the majority of users chose to set up private accounts indicates a high level of awareness of the privacy protection of their personal information. Users may be concerned about their content being viewed by unauthorized people, especially in the current environment of cybersecurity issues.

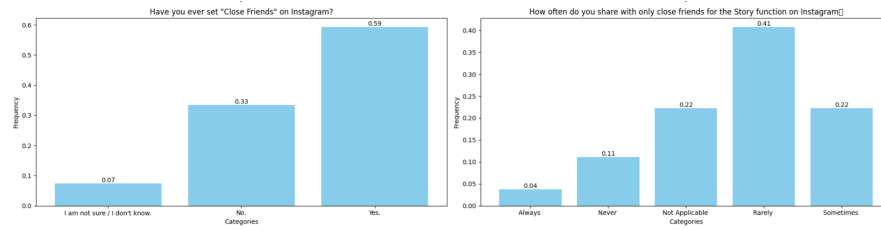
Concerns about preferences:

About 56% of users do not allow people they do not know to follow them, and another 37% allow people they do not know to follow them. Meanwhile, 63% of users said they would not close back to people they do not know, and 30% would close back. This result of following preference demonstrates a consistent privacy protection preference among users, who prefer not to leak their personal data to strangers.

Privacy Awareness:

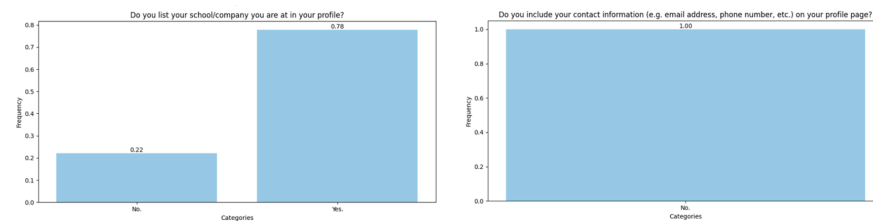
78% of users say they have checked the Settings & Privacy option, while only 11% say they have not. This shows that users are not only concerned about privacy protection, but are actively taking steps to manage their privacy settings. It also means that users are likely to

update their privacy settings regularly to adapt to the changing social media landscape and personal privacy needs.



59% of participants indicated that they had used the "Close Friends" feature, while 33% indicated that they had not used the "Close Friends" feature. This suggests that users tend to be selective in their use of the "close friends" feature when sharing content. This further suggests that users are consciously managing their social circles to more precisely control the flow of information.

While the majority of users have set up the "Close Friends" feature, the second chart shows that nearly 52% of users do not use the "Close Friends" feature much or at all. This shows the discrepancy between users' awareness and behavior, as they consciously pay attention to their information flow, but choose to ignore it in their specific behavior.

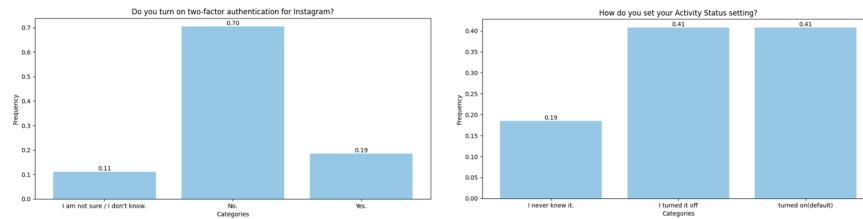


These two charts provide insight into how users handle the disclosure of their personal information on Instagram.

78% of users choose to list their school or company information on their Instagram profile. This suggests that most users consider school or career information to be an important part of their identity and worthy of displaying on social media. This high percentage of disclosure may also be related to career advancement, making business connections, or building trust on social platforms. In contrast, no participants included contact information such as email address and phone number on their profile pages. This reflects a high level of vigilance on the part of users in protecting themselves from potential online harassment, scams, or privacy violations.

Users seemed to generally view contact information as more sensitive than school or company information, and therefore chose not to disclose it on social media at all. This reflects the fact that users value different types of personal information differently. They seem to be willing to share information that contributes to social identity construction, such as educational and professional backgrounds, which may help them build a positive image and network on social platforms. On the contrary, users are very cautious

about information that may raise immediate privacy risks, such as contact information.

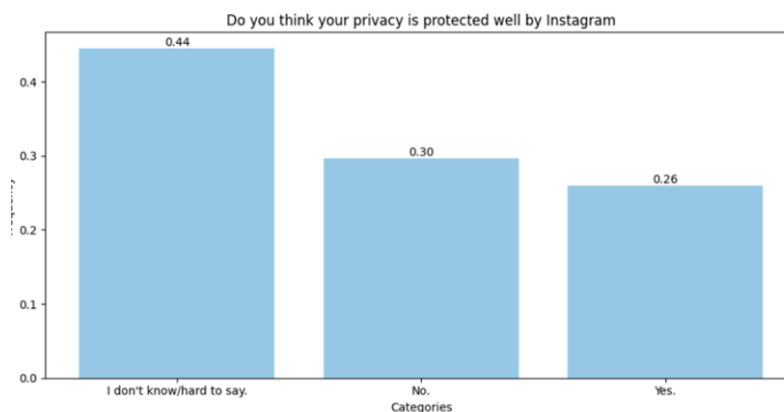


These two charts provide information about how Instagram users are using two-step verification and active status settings.

The first chart shows that 70% of users do not have Instagram's two-step verification turned on. Two-step verification is a feature that enhances account security by requiring additional information (such as a verification code in a text message from a cell phone) when logging in. Most users don't use this feature probably because they find the process of turning it on complicated, or because they think their account is less likely to be targeted.

Regarding activity settings, 41% of users keep this default setting, which allows others to see their online status or last active time. Another 41% of users said they actively turned off their activity status. Turning off the activity status hides the user's online status and increases privacy.

Combined with this data, we can see that while users are wary of making account information public (such as the contact information mentioned previously), many users are not taking all available steps to enhance the security and privacy of their accounts. This may point to a broader issue that users need better education and guidance to fully utilize the privacy and security features offered by social media platforms.



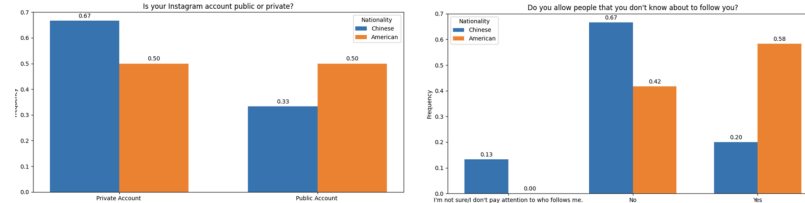
This chart reflects users' perceptions of the effectiveness of Instagram's privacy protection.

44% of users say they don't know or have difficulty judging whether Instagram protects their privacy well. This indicates that a large portion of users have questions or a lack of understanding about the social media platform's privacy protections. 30% of users believe that

Instagram does not protect their privacy well. This opinion may be based on dissatisfaction with privacy policies or on personal experiences such as being stalked or having information leaked.

4.2 Comparison of Privacy Choices and Preferences of Chinese International Students and Local U.S. Students

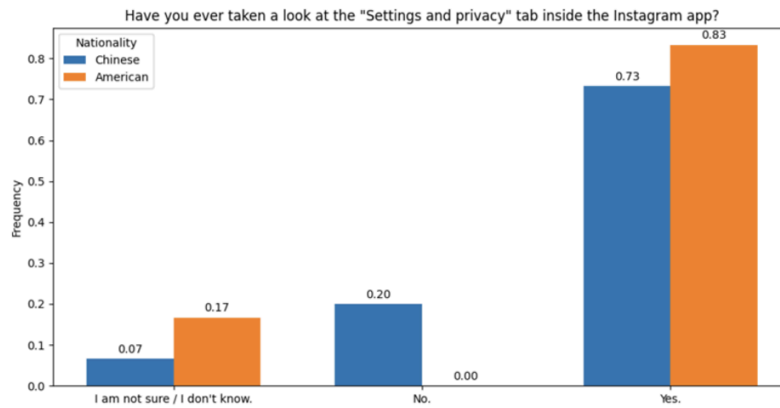
Privacy perception and attention level



The chart above shows the difference in Instagram privacy setting choices between Chinese and U.S. local students. 67% of Chinese international students chose private accounts, compared to 50% of U.S. students. This suggests that Chinese international students may be more inclined to protect their privacy, or they may have more concerns about privacy on overseas social media. For public accounts, a higher percentage of U.S. students (50%) than Chinese students (33%). This may reflect cultural differences in that American students may be more comfortable living openly and sharing information on social media. In terms of accepting attention from people they don't know, 67% of Chinese international students said they were not allowed to do so, compared to 42% of American students. This further supports the idea that Chinese international students place a relatively higher value on privacy.

In summary, Chinese international students are more conservative in their privacy settings on Instagram than US local students, which may be due to cultural differences, differences in concepts of personal privacy, or different levels of familiarity with the social media environment. These differences may also reflect different motivations for use: while Chinese international students may focus more on the private interactions of social media, American students may value the public nature of social media and expanding their social circles.

Privacy Settings Awareness

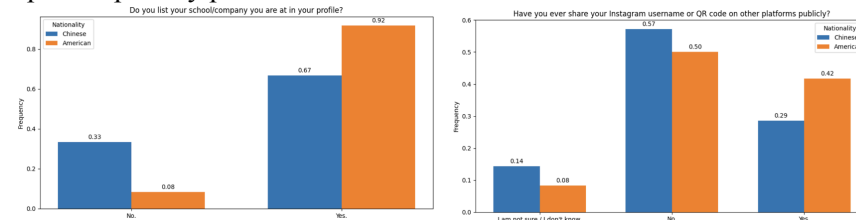


This chart shows a significant difference between Chinese and American students when it comes to checking Instagram's "Settings and Privacy" options.

Eighty-three percent of American students say they check Instagram's "Settings and Privacy" options, compared to 73% of Chinese students. This may indicate that American students are more proactive in exploring and managing privacy settings when using social media. In addition, 20% of Chinese students said they had not looked at the settings and privacy options, while all American students were more or less familiar with these settings. This suggests that American students have a higher level of awareness and familiarity with the privacy control features provided by Instagram.

Overall, American students are more aware of the privacy settings on an awareness level. This difference may be the result of differences in educational background, cultural values, or knowledge of social media platform features. These findings are valuable for developing more intuitive and accessible educational materials on privacy protection, especially when targeting users from different cultural backgrounds. It also suggests that social media platforms may need to educate and encourage users, especially the international student community, to use privacy protection features more effectively through different approaches.

Specific privacy protection behaviors

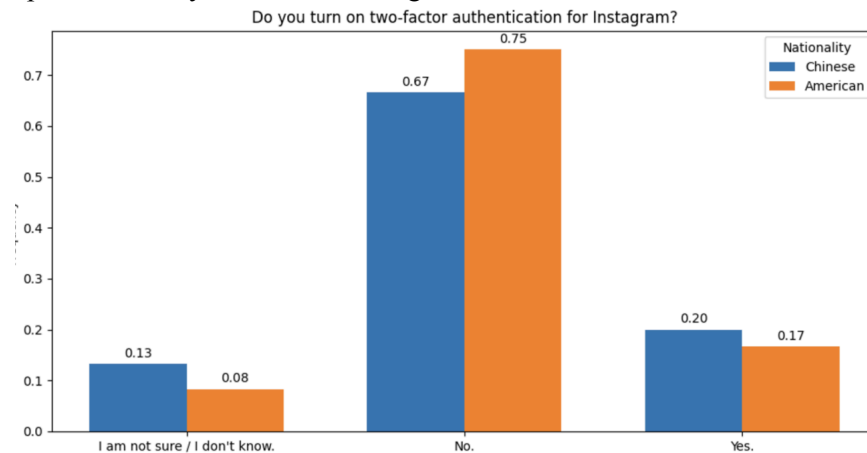


The majority of U.S. students (92%) disclose school or company information on their Instagram profiles, while a smaller percentage of Chinese students (67%) do so. This openness may put U.S. students at higher risk for information leakage, as educational and professional information can provide others with specific clues to a user's identity. In terms of sharing Instagram usernames or QR codes across platforms, nearly half of U.S. students (42%) share this information publicly, a behavior that may increase their vulnerability

to non-targeted cyberstalking or identification, compared to fewer Chinese students (29%) who do the same.

Both behaviors suggest that U.S. students may be more open to the disclosure of personal information on social media platforms. While this can be helpful in making social connections and enhancing personal or professional profiles, it also increases the risk that personal information may be misused. In contrast, Chinese students are more conservative in these areas and may be less exposed to privacy risks due to information disclosure.

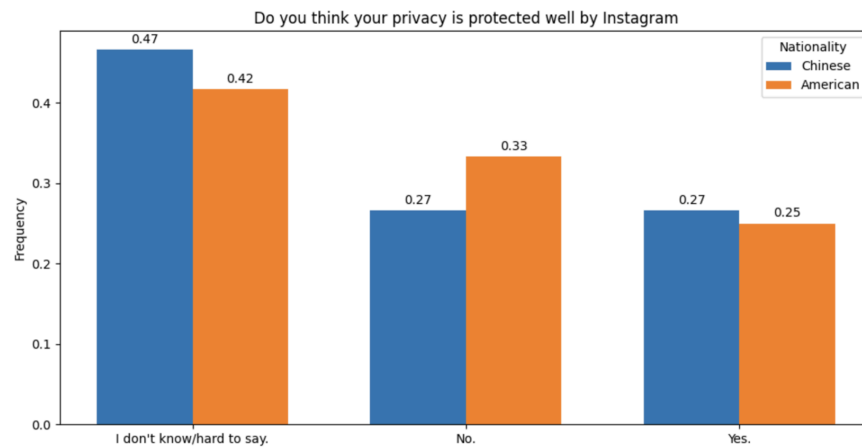
Specific Privacy Protection Settings



Among those who chose not to turn on two-step verification, the percentage of U.S. students was 75%, a significantly higher percentage than the 67% of Chinese students. This suggests that a relatively large percentage of U.S. students may not be taking this extra security measure to protect their Instagram accounts. Only 17% of U.S. students said they had two-step verification turned on, while 20% of Chinese students had this feature turned on. Although the difference is not significant, this data still shows that American students are less likely than Chinese students to adopt this security measure in terms of their actual privacy practices.

Two-step verification is an important security feature that prevents unauthorized access, so this data suggests that U.S. students are less protective in practice than Chinese students at the privacy setting level. These differences may reflect cognitive differences across cultural and educational contexts. The relatively low frequency of U.S. students taking account-specific protective measures suggests the importance of providing support at the privacy protection form the settings level within the U.S.-based student population.

Privacy Protection Recognition and Expectations



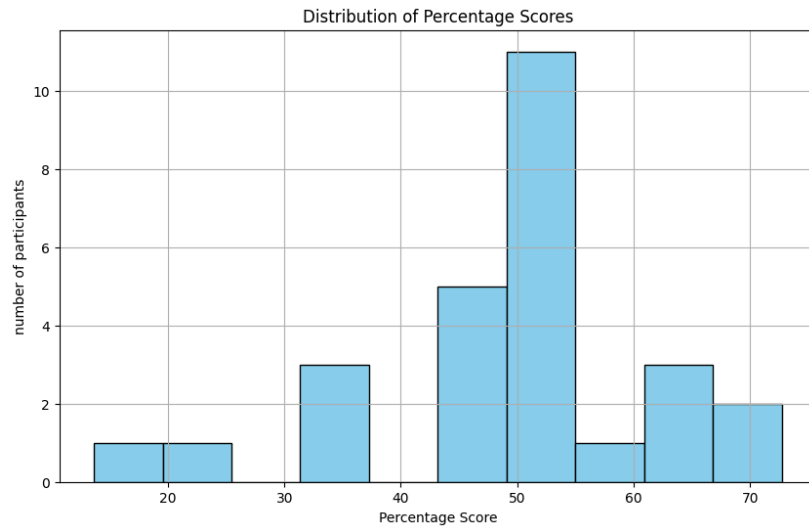
This chart presents the different views on the effectiveness of Instagram's privacy protection between Chinese and U.S.-based students. A higher percentage of U.S. students (33%) than Chinese students (27%) believe that Instagram does not protect privacy well. This difference may reflect a greater concern about privacy protection issues among U.S. students, or may indicate that they have higher perceptions and expectations of the privacy control tools provided by Instagram. The percentage of those who believe that Instagram protects privacy well is relatively close between the two groups, at 27% for Chinese students and 25% for American students. Despite the small difference, this similar percentage could mean that both have a similar level of trust in the social media platform's ability to protect privacy.

This chart shows that there are some differences between Chinese and American students in how they rate the effectiveness of Instagram's privacy protection. American students are more likely to express dissatisfaction, possibly because they have more specific expectations about privacy protection, while Chinese students' uncertainty may stem from unfamiliarity with the privacy control tools provided by the platform. These insights can help social media platforms improve their privacy features and user education to better meet the needs of different user groups.

4.3 Overall Privacy Scores for All Respondents

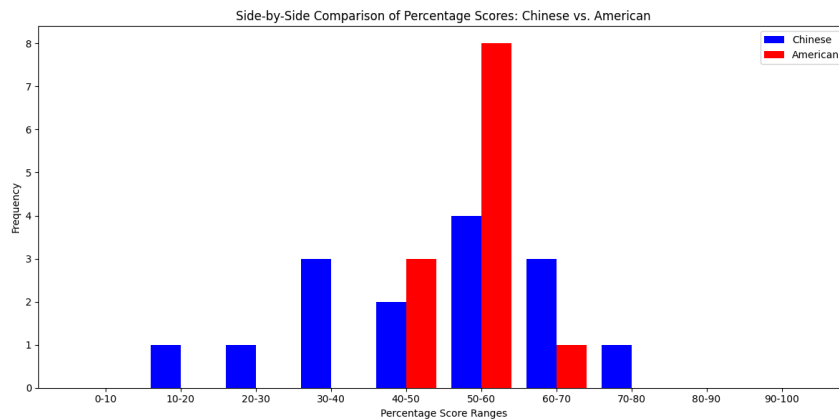
To compute the privacy score for respondents, all the questions were given a max score of 1 with the exception of the question regarding private accounts which was given a score between 0 and 2. Responses indicating a heightened privacy concern were given a 1 (or 2) while responses indicating a lower care for privacy were given a 0 with the exception of the response "Sometimes" being given a 0.5.

Privacy Score Percentages Among All Respondents



For all respondents, the average privacy score percentage was 49.16%. Additionally, most scores fall above the 40% range indicating heightened privacy behaviors and perceptions among all respondents.

Privacy Score Percentage Comparison



Between nationalities, the average percentage score for U.S. based respondents was 52.84% while the score for Chinese based respondents was 46.21%. Additionally, the privacy score distribution is higher amongst Chinese based respondents in comparison to U.S. based respondents. The difference in distribution may indicate a more diverse set of privacy perceptions and behaviors amongst Chinese based respondents in comparison to U.S. based respondents.

4.4 Analysis on the Responses to the Open Question

The responses to the open question “Is there anything that you would like Instagram to change to better protect your privacy?” indicate a mix of user concerns and behaviors related to Instagram's privacy protection. One participant suggests combating fake accounts or bots, while another admits to uncertainty about Instagram's privacy efficacy due to its association with Meta. There's also a participant who circumvents privacy issues by not using Instagram for personal

content, only for public postings like art or announcements. These responses echo our study's findings that users have varying levels of privacy concern and engagement, with some actively managing their content and others calling for better protection measures from the platform itself.

5 Discussion

Analysis of general privacy preferences and behaviors in section 4.1 shows the general uncertainty and distrust that users have about Instagram's privacy policies and features. Although the platform offers a number of privacy and security features, user perceptions suggest that these measures are either not fully understood or not perceived as effective enough. This emphasizes that social media companies have a great deal of work to do to increase user awareness and trust in privacy protection measures. Furthermore, it points to the importance of educating users on how to use these tools so that they can better manage their privacy and security.

When it comes to cultural comparisons, across various aspects of Instagram privacy, there is a noticeable divide between Chinese international students and local U.S. students. Chinese students tend to be more conservative with their privacy settings, reflecting a possible cultural inclination towards privacy preservation. They are less likely to share personal identifiers like educational or workplace information and are more cautious about sharing their Instagram handles or QR codes on other platforms. In contrast, American students show greater awareness of Instagram's privacy settings, but this does not necessarily translate into stricter privacy practices. They more frequently disclose personal details and are less likely to enable two-step verification, potentially leaving their accounts more vulnerable. While U.S. students express greater dissatisfaction with Instagram's privacy protection, their behaviors often do not align with a proactive privacy protection stance. This discrepancy highlights the need for enhanced privacy education tailored to cultural contexts, especially as it pertains to practical measures for safeguarding personal information online.

The findings in this paper reveal nuances that both align with and deviate from the existing literature on privacy behaviors among American and Chinese users of social media. In line with Yang et al. (2016), American students exhibited a high level of privacy awareness, yet this awareness did not consistently translate into more guarded privacy settings or behaviors, which diverges from the expected privacy-conscious profile for American users. This could be because while Americans are aware of privacy issues, their actions may be more influenced by social norms and the importance they place on social media as a tool for self-expression and networking, as suggested by Jackson and Wang (2013).

Contrary to the collective behavior highlighted in Qiu et al. (2013) on Chinese platforms, Chinese international students in the U.S. showed more individualistic privacy practices, akin to what might be

expected from users on American platforms. This suggests a possible adaptation to the privacy norms of the host country or a selective integration where international students maintain certain privacy preferences from their home country while adapting others to fit their new context.

6 Limitations & Future Directions

Although we tried to recruit participants of diverse backgrounds and experiences, due to the shared networks of our researchers, participants were mostly undergraduate or master's students at Duke University. As Duke University students are inherently different from the general U.S. college student population, our results cannot be easily generalizable to all college students in the U.S. Therefore, we suggest future researchers allocate more resources into recruiting for a larger, more representative sample from schools all around the United States.

In addition, the gender distribution of our participants were unbalanced, with significantly more females than males. This could potentially lead to an underrepresentation of male opinions in our study. For future works, researchers should try to recruit a balanced sample to minimize the bias.

Moreover, in the study, we defined Chinese international students as those who are currently U.S. college students, but were born and raised in China. During the study, we noticed that within this group, there are more nuanced differences. For instance, some students came to the U.S. as early as middle school, while others recently came for their master's degree. For future works, we suggest fellow researchers to explore the differences and their impacts on privacy choices and perceptions.

Lastly, based on the discussion above, we suggest future researchers and educators continue to explore the effectiveness of the existing privacy tools, make improvements to them, and educate users about the use and importance of various privacy tools.

7 Conclusion

In summary, while existing literature establishes broad trends in privacy preferences across cultural backgrounds, the specific context of Chinese international students in the U.S. reveals a complex interplay of cultural, environmental, and social factors influencing privacy behaviors. These students' unique position—as navigators of both their native and host cultures' norms—creates a distinctive pattern of privacy management on social media. This study thus contributes to a deeper understanding of how cultural backgrounds shape privacy practices in a global and interconnected social media landscape.

8 Answer to Feedback

From the invaluable interim project feedback thread, we found three major areas that demand improvements and changes. First and foremost, it was mentioned that we put demographic questions at the beginning of the survey, including questions regarding participants' ethnicity and Instagram usage. We agreed with our fellow peers that having these demographic questions before the main survey could potentially subject our participants to stereotype biases. However, our case was very special in that some of the demographic questions also served as screening questions for recruitment. Specifically, the question about participants' ethnicity helped us determine the eligibility of participation for each participant. We kindly asked them to exit the survey if answered no to the specific ethnicity question. Therefore, after careful consideration, we still chose to keep the demographic section at the beginning of the survey, and mentioned the potential biases caused in our limitation section.

Secondly, many suggested that we should recruit less people to reduce efforts and costs, as 40 seemed to be a quite aggressive goal. We sincerely appreciate the feedback, and relaxed our recruitment goal to 15 each for the two target groups. Indeed, the feedback was useful and realistic. At the end, the most we could recruit only went up to around 20 for Chinese international students and 15 for local U.S. students.

Lastly, our peers generally found the length of our survey and the number of questions in the survey to be overwhelming. We took the advice to heart and conducted a pilot study asking friends about the duration of the study. Most of the testing participants completed the survey within a reasonable amount of time. Therefore, for the quality of the survey, we chose to keep all the questions. For the efforts needed to complete our survey, our peers also talked about compensation and incentives for participants. We agreed that we needed to compensate the participants for their efforts, so we decided to increase the amount of the prize and decrease the number of prizes. The final amount of the prize was 20 dollars, and we would draw 2 winners from the participant pool.

9 References

Jackson, Linda A., and Jin-Liang Wang. "Cultural differences in social networking site use: A comparative study of China and the United States." *Computers in Human Behavior*, vol. 29, no. 3, May 2013, pp. 910–921, <https://doi.org/10.1016/j.chb.2012.11.024>

Kostka, Genia. "Digital doubters in different political and cultural contexts: Comparing citizen attitudes across three major digital technologies." *Data & Policy*, vol. 5, 2023, <https://doi.org/10.1017/dap.2023.25>

Lewis, Kevin, et al. "The taste for privacy: An analysis of college student privacy settings in an online social network." *Journal of Computer-Mediated Communication*, vol. 14, no. 1, Oct. 2008, pp. 79–100, <https://doi.org/10.1111/j.1083-6101.2008.01432.x>

Nemati, Hamid, et al. "Privacy coping and information-sharing behaviors in social media: A comparison of Chinese and U.S. users." *Journal of Global Information Technology Management*, vol. 17, no. 4, 2 Oct. 2014, pp. 228–249, <https://doi.org/10.1080/1097198x.2014.978622>

Qiu, Lin, et al. "Cultural differences and switching of in-group sharing behavior between an American (facebook) and a Chinese (Renren) social networking site." *Journal of Cross-Cultural Psychology*, vol. 44, no. 1, 9 Feb. 2012, pp. 106–121, <https://doi.org/10.1177/0022022111434597>

Wang, Yang, et al. "Examining American and Chinese internet users' contextual privacy preferences of behavioral advertising." *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, 27 Feb. 2016, <https://doi.org/10.1145/2818048.2819941>

Yang, Hongwei "Chris." "Prior negative experience, online privacy concerns and intent to disclose personal information in Chinese social media." *Standards and Standardization*, Jan. 2014, pp. 1053–1075, <https://doi.org/10.4018/978-1-4666-8111-8.ch050>.

Yangling, Wang, and Huan Liu. "Social Media use and privacy concerns: How do college students view internet privacy and information protection?" *Intercultural Communication Studies*, XXV, no. 2, 2016, pp. 46–62, <https://doi.org/10.2139/ssrn.4339992>

10 Appendix

Below is a copy of the distributed survey.

Start of Block: Part I. Survey Overview

Q1.1 Thanks for checking out the Qualtrics Surveys Question Walkthrough! This survey will help explain the question types and features offered with your free Qualtrics Survey account.

First things first, this question is a "[Descriptive Text](#)" question. In Qualtrics, each piece of a survey is considered a question, so this is a "question" that doesn't require any input from the user. It just allows you to provide instructions, clarify why you're asking questions, or add [handy links to outside sites that give more information](#).

You can also do further text editing by using the [Rich Content Editor](#) (the blue button above this question text when you click on it to edit), including *italics* and **bolding**. You can also change the color, size, or font of your text. Additionally, you can add images, files, or even videos - anything you need to show your participant or respondent before they answer a question.

There's another type of "Descriptive Text" question, but it doesn't actually allow for written

word. This question, the "Graphic" question, is pretty much just an image. You can see an example of this below! You can add a graphic you've uploaded from your library, or you can link one from another website using the image's URL.

Behold my beautiful placeholder below and then click the "Next" button to advance to the next page!

Page Break

End of Block: Part I. Survey Overview

Start of Block: Part II. Consent

Q2.1 I have read and I understand the information above.

Yes (1)

No (3)

Q2.2 I am 18 years or older.

Yes (1)

No (3)

Q2.3 I am a current University student studying in the U.S..

Yes (1)

No (2)

Q2.4 I am a local U.S. student born and raised in the U.S., or I am a Chinese international student born and raised in China. Please select **YES** if you belong to either one of the two categories, and **NO** otherwise.

Yes (1)

No (2)

Q2.5 I regularly use Instagram as a social media platform (e.g. use Instagram more than 2 times a week).

Yes (1)

No (2)

Q2.6 I want to participate in the survey and continue with the survey.

Yes (1)

No (2)

End of Block: Part II. Consent

Start of Block: Part III. Demographics

Q3.1 How would you describe your gender identity?

Male (1)

Female (2)

Other (Please specify) (3)

Prefer not to answer (4)

Q3.2 Which category includes your age?

- 18-24 (1)
 - 24-29 (2)
 - 30-39 (3)
 - 40-49 (4)
 - 50-59 (5)
 - 60+ (6)
 - Prefer not to answer (7)
-

Q3.3 Which nationality do you belong to?

- Chinese (1)
 - American (2)
 - Other (Please specify) (3)
-
- Prefer not to answer (4)

End of Block: Part III. Demographics

Start of Block: Part IV. Main Survey Questions

Q4.1 Is your Instagram account public or private?

- Public Account (Anyone can see my posts). (1)
 - Private Account (Only my approved followers can see my posts). (2)
 - I am not sure about my account settings. (3)
-

Q4.2 Do you allow people that you don't know about to follow you?

- Yes, I will allow anyone to follow me. (1)
- No, I only allow people I know to follow me. (2)
- I'm not sure/I don't pay attention to who follows me. (4)

Display This Question:

If Do you allow people that you don't know about to follow you? = Yes, I will allow anyone to follow me.

And Do you allow people that you don't know about to follow you? = No, I only allow people I know to follow me.

Q4.3 Please specify why or why not you allow people you don't know about to follow you.

Q4.4 Will you follow back someone you don't know ?

- Yes, I will follow back people I don't know. (1)
- No, I never follow back people I don't know. (3)
- I am not sure/I don't pay attention to who I follow back. (4)

Q4.5 Have you ever taken a look at the "Settings and privacy" tab inside the Instagram app?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.6 Have you ever set "Close Friends" on Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.7 How often do you share with only close friends for the Story function on Instagram?

- Always – I only share stories with my close friends. (1)
 - Often – Most of my stories are shared with close friends only. (2)
 - Sometimes – I occasionally share stories with close friends only. (3)
 - Rarely – It's not common for me to share stories with close friends only. (4)
 - Never – I never restrict my stories to close friends only. (5)
 - Not Applicable – I don't use the close friends feature / I don't share stories. (6)
-

Q4.8 How often do you share with only close friends for posts on Instagram?

- Always – I exclusively share posts with my close friends. (1)
 - Often – Most of my posts are shared with close friends only. (2)
 - Sometimes – I occasionally share posts with close friends only. (3)
 - Rarely – I seldom share posts with close friends only. (4)
 - Never – I do not share posts exclusively with close friends. (5)
 - Not Applicable – I don't use the close friends feature for posts / I don't share posts. (6)
-

Q4.9 How often do you hide the number of likes when you post on Instagram?

- Always (1)
 - Often (2)
 - Sometimes (4)
 - Rarely (5)
 - Never (6)
 - I don't know how to hide the number of likes (3)
 - Not Applicable: I don't share posts (7)
-

Q4.10 How often do you hide comments when you post on Instagram?

- Always (1)
 - Often (2)
 - Sometimes (4)
 - Rarely (5)
 - Never (6)
 - I don't know how to hide comments (3)
 - Not Applicable: I don't share posts (7)
-

Q4.11 Do you list your school/company you are at in your profile?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.12 Do you include your contact information (e.g. email address, phone number, etc.) on your profile page?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.13 Will you follow someone you don't know first on the Instagram?

- Yes, I will follow someone I don't know first. (1)
 - No, I only follow the people I know. (2)
 - I am not sure/I don't pay attention to who I follow. (3)
-

Q4.14 Do you archive some post on the Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Display This Question:

If Do you archive some post on the Instagram? = Yes.

Q4.15 Please specify why you archive some post on the Instagram.

Q4.16 Have you ever share your Instagram username or QR code on other platforms publicly?

- Yes. (1)
- No. (2)
- I am not sure / I don't know. (3)

Q4.17 How often do you add your story to story highlights on Instagram?

- Always – I add almost all of my stories to highlights. (1)
- Often – I frequently add stories to highlights. (2)
- Sometimes – I occasionally add stories to highlights. (3)
- Rarely – I seldom add stories to highlights. (4)
- Never – I do not add stories to highlights. (5)
- Not Applicable – I don't use story highlights. (6)

Q4.18 Has anyone tagged you in photos or videos? (not including @ in the story)

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.19 Have you been mentioned (@) by other users in their Instagram stories?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Display This Question:

If Have you been mentioned (@) by other users in their Instagram stories? = Yes.

Q4.20 How often have you been mentioned by other users in their Instagram stories?

- Very Frequently – I am mentioned by others in their stories almost every day. (1)
 - Frequently – I am mentioned by others in their stories several times a week. (2)
 - Occasionally – I am mentioned by others in their stories a few times a month. (3)
 - Rarely – I am mentioned by others in their stories once a month or less. (4)
 - Never – I have never been mentioned by others in their Instagram stories. (5)
 - Not applicable - I don't know what mentioning is in Instagram. (6)
-

Q4.21 Do you reply to direct message from strangers on Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.22 Do you reply to comments to your post from strangers on Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.23 Do you know that Instagram has "vanish mode" for chats on Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Display This Question:

If Do you know that Instagram has "vanish mode" for chats on Instagram? = Yes.

Q4.24 Do you turn on vanish mode for chats on Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.25 Do you turn on two-factor authentication for Instagram?

- Yes. (1)
 - No. (2)
 - I am not sure / I don't know. (3)
-

Q4.26 Have you ever tried to shop on the Instagram?

- I don't know there is a shopping function in Instagram. (1)
 - I know there is a shopping function in Instagram, but I never used it. (2)
 - I know there is a shopping function in Instagram, any I have tried it before, but never really bought one. (3)
 - I know there is a shopping function in Instagram, and have bought something. (4)
-

Q4.27 Please select "strongly agree" to show you are paying attention to this question.

- strongly agree (1)
 - agree (2)
 - disagree (3)
 - strongly disagree (4)
-

Q4.28 How do you set your Activity Status setting?

- I never knew it. (1)
 - I turned off my activity status (so others cannot see when I am online). (2)
 - It's turned on (by default). (3)
-

Q4.29 How did you set your story replies setting

- I have never post any story. (1)
 - I allow story replies from everyone (default). (2)
 - I allow story replies only from people you follow. (3)
 - I don't allow story replies. (4)
 - I don't know/I have not heard about story replies setting. (5)
-

Q4.30 Do you think your privacy is protected well by Instagram

- Yes. (1)
 - No. (2)
 - I don't know/hard to say. (3)
-

Q4.31 Is there anything that you would like Instagram to change to better protect your privacy?

End of Block: Part IV. Main Survey Questions
