

## Social Media Use and Awareness of Privacy Concerns

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### Introduction

Although social media usage is at an all time high, the tools and technologies that provide security and protection can be compromised. Users of social media platforms should be made aware of the risks and pitfalls of these applications. Many social media platforms outline their intentions with user information and privacy interests in their terms of service agreements; however, as many of these agreements are long and difficult to understand, many users don't take the time to read them.

The purpose of this study was to see if increased awareness of privacy risks on social media influence college students' concerns or attitudes when it comes to decisions regarding safety and overall privacy on social media.

Research suggests that "concerns over control, collection, and access to personal information are associated with decreased intensity of social media use" (Cain & Imre, 2021, p. 2706). The researchers hypothesize that due to increased awareness of privacy risks, shown through the video, there will be a change in concern. Additionally, the researchers hypothesize that those with larger networks on social media will disclose less because of increased concern over privacy.

# Research Method Participants:

Participants were students attending a small, private university in the Midwest. The researchers used SurveyMonkey to create the survey and sent a link to it via email to all undergraduate students at the university. Of the 1,286 emails that were sent out, 50 responses were received. However, only 39 participants completed the entirety of the survey, giving the researchers a response rate of <1%.

### Procedure:

The experiment was a cross-sectional, self-administered survey. It consisted of a pre-test, followed by participants watching a short video on social media user data collection and potential privacy risks. This was followed by a post-test. Participants were asked to share their social media usage, network size, privacy protections, as well as concerns over privacy on social media platforms. Questions were largely close-ended, using Likert scales for participants to indicate their level of agreement.

## Hypotheses

H1: There will be a change in attitudes or concerns about privacy online after watching a short video about how their information is collected and used.

Research suggests that many social media users are unaware of privacy protections and how these platforms collect and use personal information (Cain, J. A., & Imre, I. (2021). Terms of service agreements are often lengthy and complicated to read, so many users agree to the terms of usage without fully understanding the contracts. Increased knowledge and awareness of how users' information is being used will lead to a change in concern or attitudes about privacy.

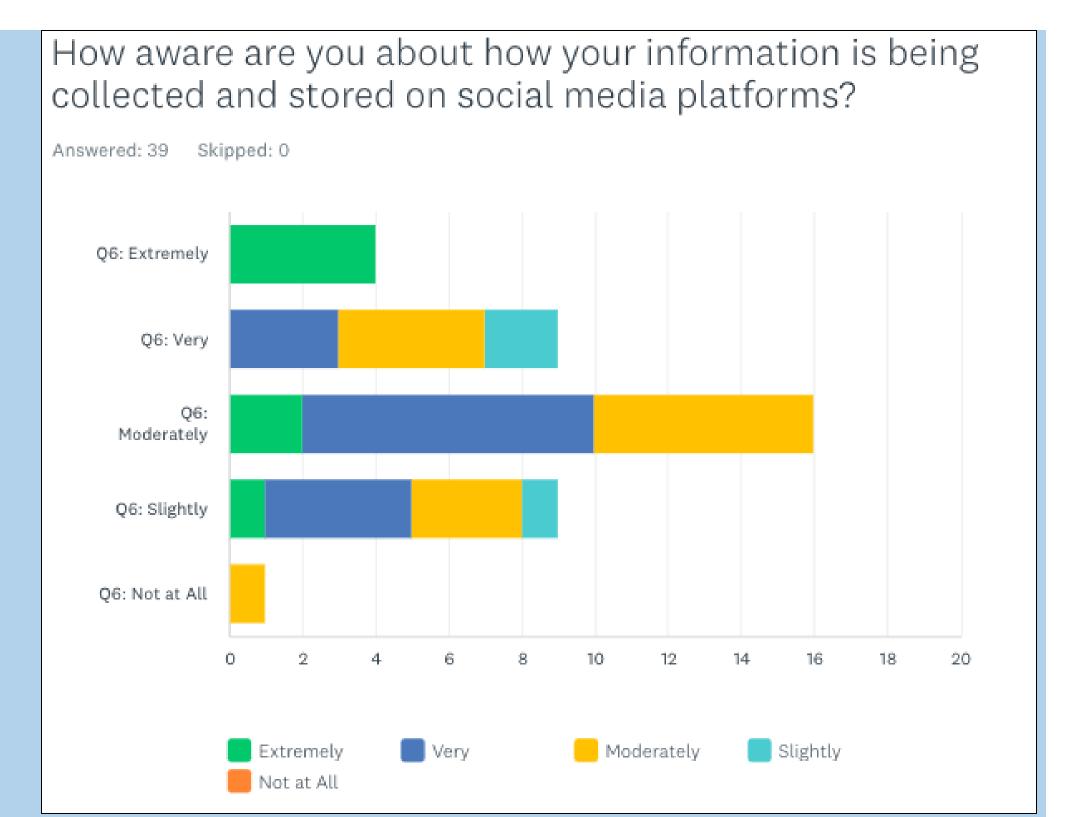
## H2: Individuals with larger social media networks will protect their profiles and disclose less private information.

As social media continues to grow more easily accessible to users across the globe, concern over self-disclosure in posts has become a prevalent issue. In a global study of privacy protection and self-disclosure (Liang, Shen & Fu, 2017), data suggests that cultural variations of privacy settings and self-disclosure differed by society. Individuals from more individualistic cultures tend to disclose less. A larger network usually implies a less familiar audience and thus is associated with higher privacy risks. So, individuals with larger networks will disclose less private information and likely have a private account.

### Results

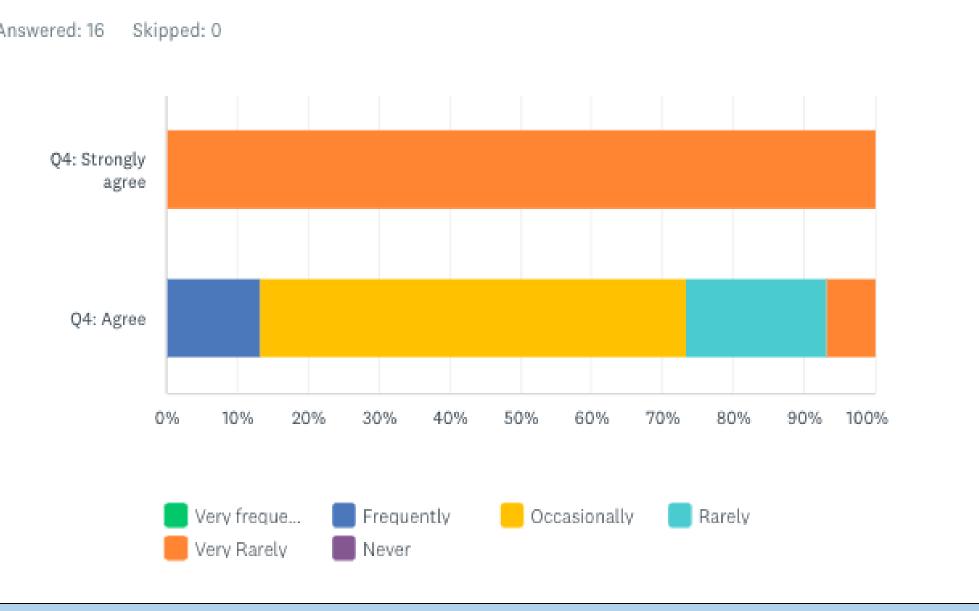
In order to measure if there was a change in attitudes or concerns about privacy online after watching a video, a single sample t-test was used for each corresponding set of questions on the pre-test and post-test. Each paired question had P-values < 0.5, leading the researchers to reject the null hypothesis.

For the second hypothesis, the researchers used a chisquare test to measure if individuals with larger social media networks disclose less on social media and have private profiles. Both tests had P-values > 0.5, leading the researchers to accept the null and reject the hypothesis that those with larger social media networks protect their profiles.



Comparison of responses for first corresponding question of pre-test and post-test

How often do you share personal information about yourself on social media?



Comparison of those who indicated having a large network to frequency of personal disclosures

#### Discussion:

The researchers utilized Sandra Petronio's Communication Privacy Management (1991) theory to illustrate the hypothesis and connect to the text.

Communication Privacy Management Theory: Investigates the amount of private information that people choose to disclose based on expected benefits or costs

- Privacy control involves decision to share personal information
- Individuals believe they have the right to own and control their personal information
- Individuals are less likely to disclose if they feel they aren't in control
  of their information
- Sharing personal information online means others are now co-owners of it

The researchers observed a statistically significant change in concern or attitudes about privacy online. This change was a result of an informative video about how their personal information is used online. Perhaps the video's contradiction to the theory's stance on individuals believing they control their information caused this change. Additionally, the researchers found that there was no significant relationship between larger social media networks and having a private profile/disclosing less private information. This rejects the stance of the theory that individuals are less likely to disclose if they aren't in control of their information. A multitude of factors could explain this such as peer influence and apathy towards online privacy risks.

The survey indicated that people are generally aware of online privacy, but there was a change in concern following a short video on online privacy risks. This suggests that increased awareness has an impact on an individual's attitudes, and potentially their online behaviors.

#### Limitations

With a sample that is both small in size (39 participants), and narrow in demographics, the results from this study will not be able to be generalized to a larger population. Another limitation was the researchers did not explicitly instruct participants to advance to the post-test after viewing the supplied video, leading to 11 incomplete responses.

#### **Further Research**

Studies conducted in the future should survey a larger sample to find generalizable results. The researchers suggest a longitudinal study where the post-test is administered at a later date. This would offer insight on whether increased awareness of data collection on social media, as a result of the video, has any lasting effects on participants' social media behaviors.

#### References

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