Privacy Preferences vs. Settings: A Case Study of Android Permissions

Jacqueline White and Heather Richter Lipford
University of North Carolina at Charlotte

UNC CHARLOTTE

Motivation

- Users' stated privacy preferences often differ from actual behavior for a variety of reasons.
- Need an accurate understanding of preferences to aid in design and development of privacy mechanisms and interfaces.

Research Question

How much does expressed comfort and stated preferences differ from actual behavior?

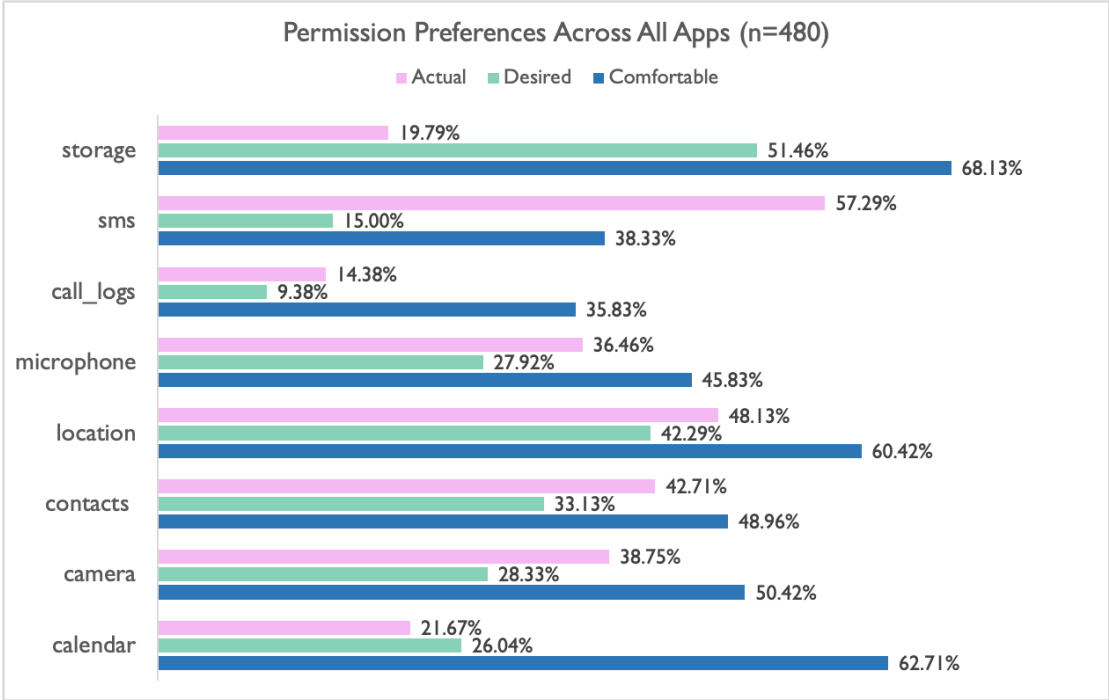
Method

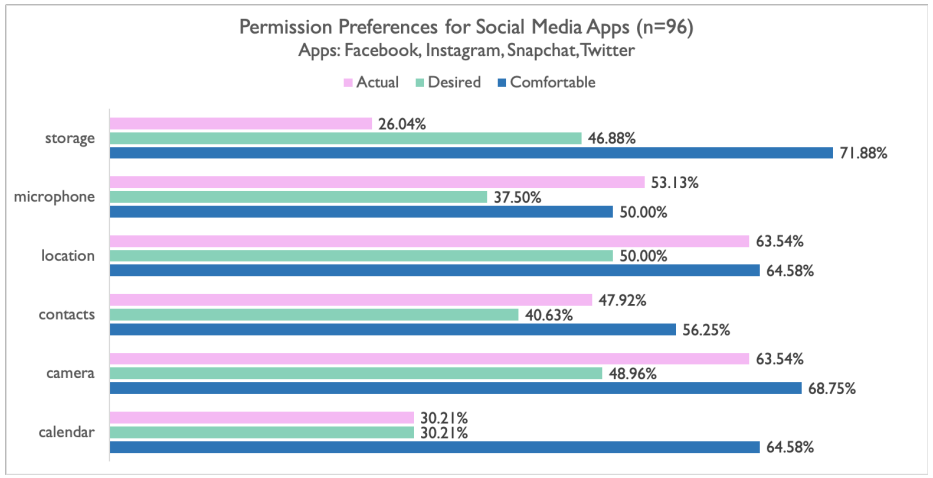
- Qualtrics survey of 96 people on Amazon Mechanical Turk
- Participants named 5 of their apps
- For each app, we asked questions about 9 specific Android permissions:

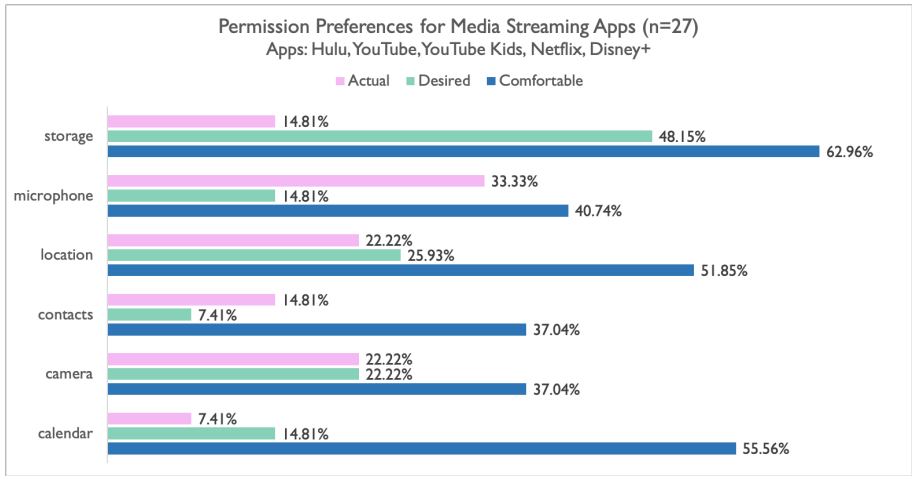
Comfort "*How comfortable are you with [App Name] having access to each of the following permissions or capabilities on your phone?*"

Desired Permissions "*Which of the following permissions would you like to be turned on for [App Name]?*"

Actual Permissions "*Please select each of the permissions you currently have turned on.*"







Preliminary Results

- Desired sharing is generally lower than actual permissions
- Comfort level with permissions is generally higher than actual and desired permissions
- Patterns similar with different kinds of apps

Conclusion

- Users are comfortable sharing data with apps, even though they would often prefer to leave permissions off
- More accurate indicator of privacy settings is desired permission settings rather than expressed comfort with permissions