When Privacy Notices Matters: Impact of Timing on the Salience of Smartphone Privacy Notices

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Privacy on Mobile Apps

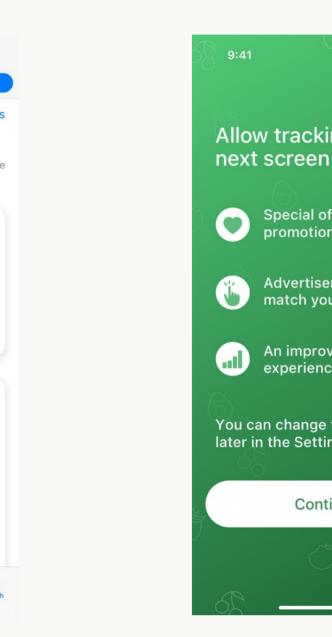


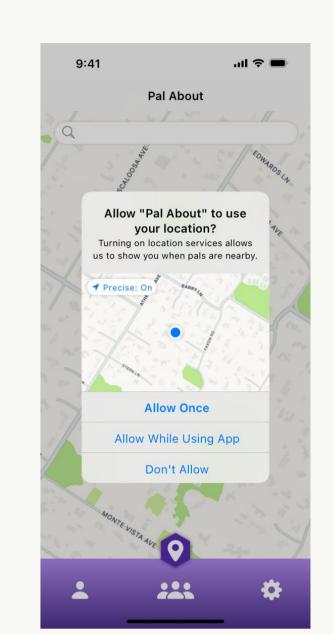
Research Questions

RQ1: What is the impact of timing on the salience of smartphone app privacy notices?

RQ2: What is the impact of timing on user satisfaction with smartphone app privacy notices?

Privacy Notices





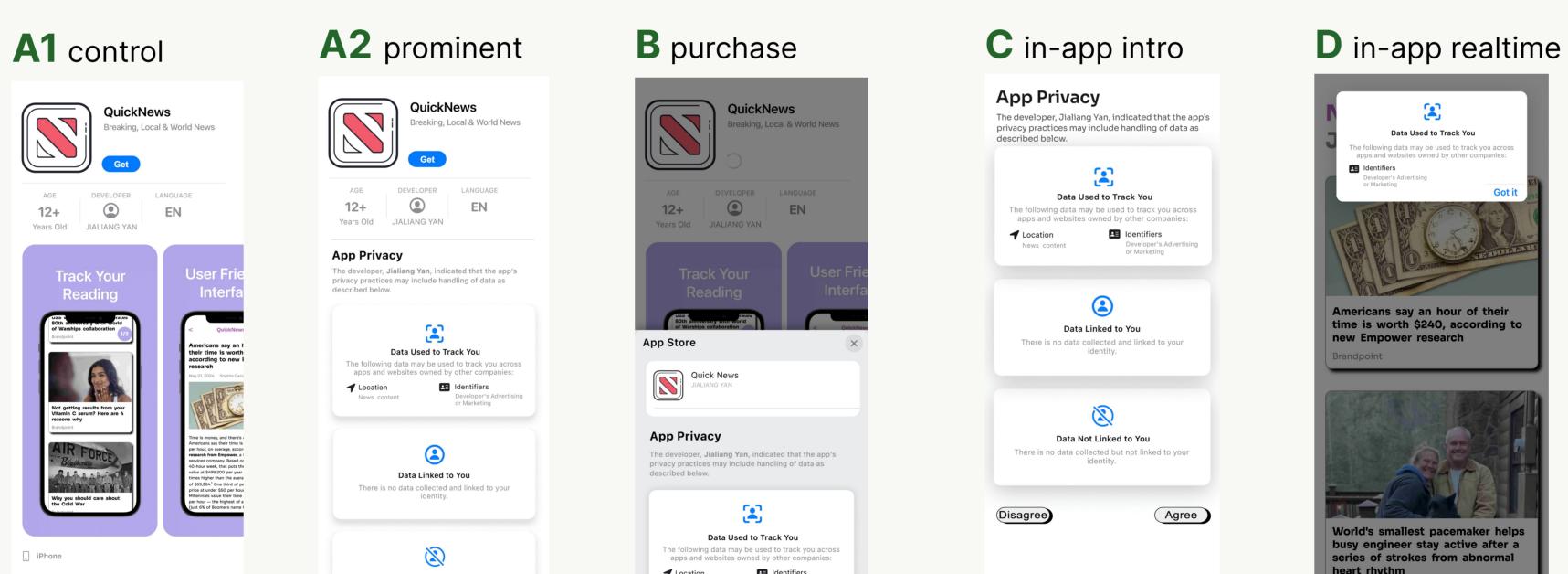
1) Privacy Nutrition Labels 2) First-use Notice 3) Runtime Permission Request

Study Design

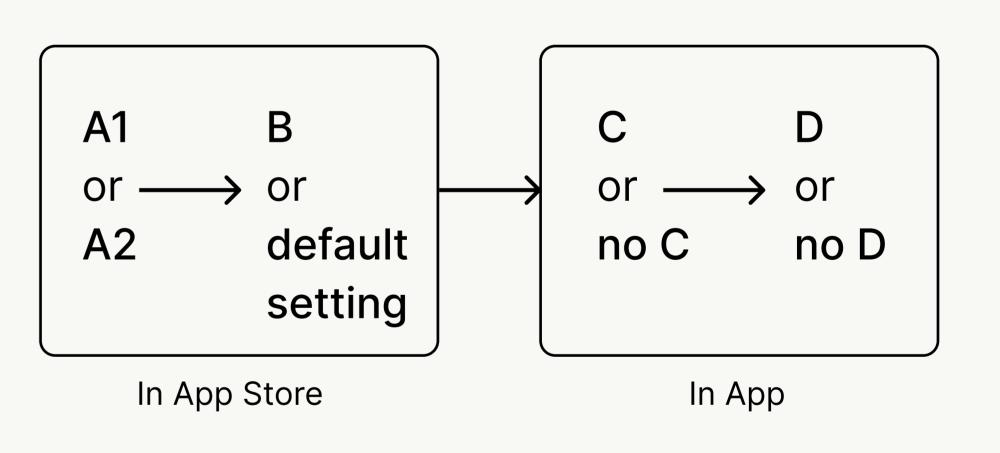
We validate and extend previous findings [1] through an online experiment (N = 300):

- We align with Apple Privacy Labels to investigate the privacy notices in accordance with current norms where privacy nutrition labels are promoted by both Android and iOS.
- We describe our study to participants as a survey aimed at improving the user experience from app installation to app use.

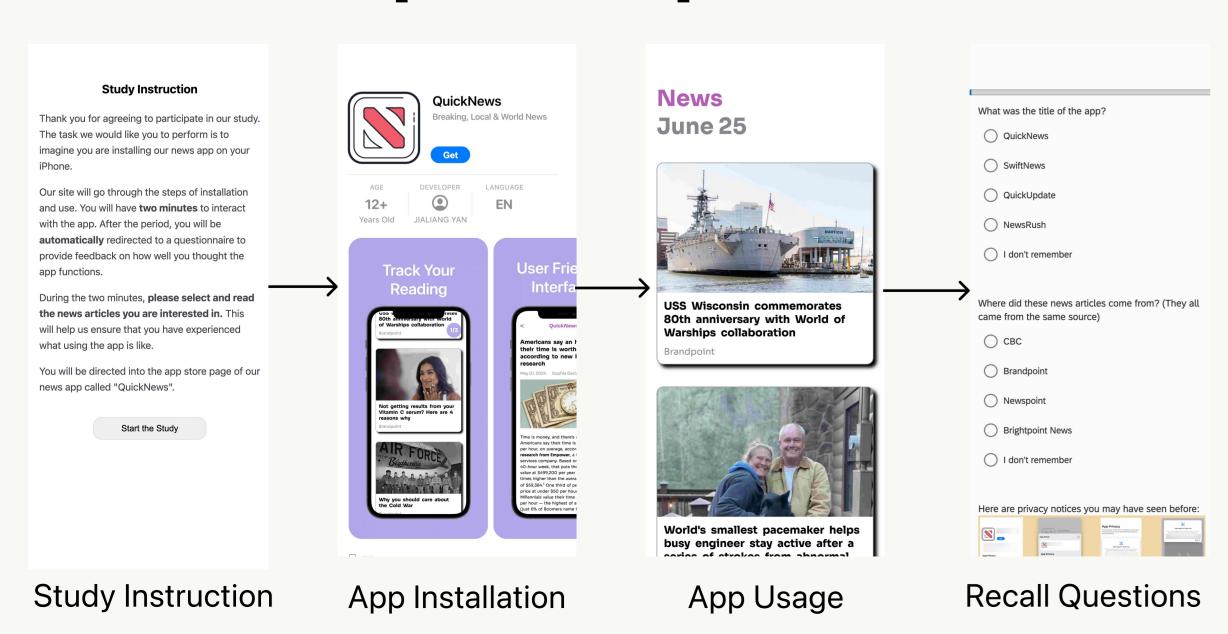
Timing Conditions



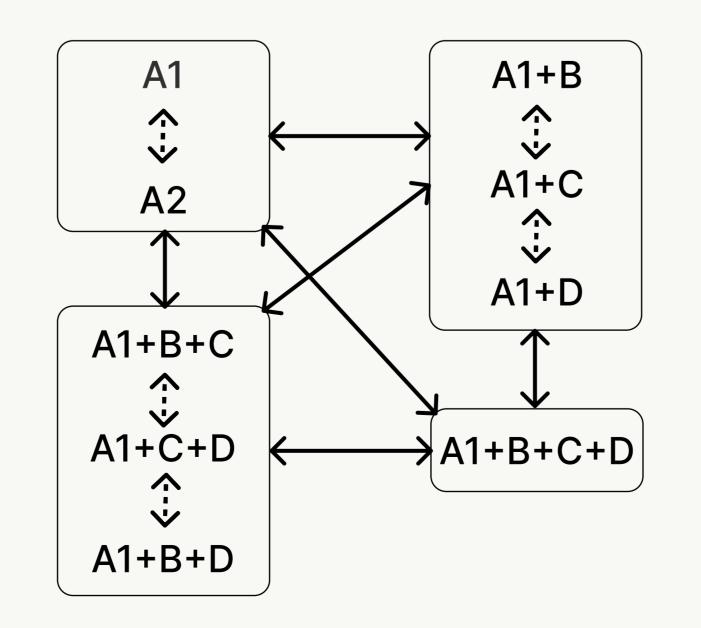
We have nine timing conditions after making combinations of basic timings:



Participant Experience



Data Analysis



From app installation to app use

← → 1. Between Group Comparison

⟨----> 2. Within Group Comparison

- The correct recall rate of the privacy information provided by the notice is used as a measurement of the salience of the notice.
- Mann-Whitney U and Kruskal-Wallis tests will be employed on the recall rate.

References

- 1. Balebako, Rebecca, et al. "The impact of timing on the salience of smartphone app privacy notices." Proceedings of the 5th annual ACM CCS workshop on security and privacy in smartphones and mobile devices. 2015.
- 2. Ebert, Nico, Kurt Alexander Ackermann, and Björn Scheppler. "Bolder is better: Raising user awareness through salient and concise privacy notices." Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems. 2021.
- 3. Schaub, Florian, et al. "A design space for effective privacy notices." Eleventh symposium on usable privacy and security (SOUPS 2015). 2015.



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