CS-152 – Brand Vs Security: Mobile Application
Annotated Bibliography

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1. Elsantil, Yasmeen. (2020). User Perceptions of the Security of Mobile Applications. International Journal of E-Services and Mobile Applications. 12. 24-41. 10.4018/IJESMA.2020100102.
   - **Article Findings:** The study found that mobile users do not feel secure when installing mobile apps and that concerns about hacking personal and private information are pervasive. Users expressed more security concerns regarding entertainment apps such as games and communication rather than financial apps, such as banking.
   - **Relevance** : The paper aims to identify how mobile users perceive the security of different mobile apps and the extent to which different apps affect such perceptions.

   WebPage:https://www.researchgate.net/publication/344459404_User_Perceptions_of_the_Security_of_Mobile_Applications

2. Ons Al-Shamaileh, Alistair Sutcliffe, Why people choose Apps: An evaluation of the ecology and user experience of mobile applications, International Journal of Human-Computer Studies, Volume 170,2023,102965, ISSN 1071-5819, https://doi.org/10.1016/j.ijhcs.2022.102965.
   - **Article Findings**: Users' choices of mobile applications are also influenced by contextual factors, such as their social networks and recommendations from others. users' choices of mobile applications are often made quickly and without systematic comparison of products.
   - **Relevance**: It explores the factors that influence users' choices of mobile applications. Usefulness, usability, content, reliability, and contextual factors all influence users' choices of mobile applications.

   Webpage: https://www.sciencedirect.com/science/article/pii/S1071581922001835

3. Taylor, David G.; Voelker, Troy A.; and Pentina, Iryna, "Mobile Application Adoption by Young Adults: A Social Network Perspective" (2011) 60-70. *WCBT Faculty Publications*. 1.
   - **Article Findings**: The article's results suggest that a user's social network can influence their decision to download and use a particular mobile application. Also, it suggests that the user's most influential contact's usage also influences the decision to download and use the application.
   - **Relevance:** This article relates to our research as it is an extension of our hypothesis that a user goes by the popularity of an application while downloading it.

WebPage: https://digitalcommons.sacredheart.edu/wcob_fac/1

4. Ali Balapour, Hamid Reza Nikkhah, Rajiv Sabherwal, Mobile application security: Role of perceived privacy as the predictor of security perceptions, International Journal of Information Management, Volume 52,2020,102063,ISSN 0268-4012, https://doi.org/10.1016/j.ijinfomgt.2019.102063.
   - **Article Findings**: users who perceive that an app poses a high risk to their privacy are also likely to perceive that the app is less secure. the negative impact of perceived privacy risk on perceived security is stronger for users who have a higher level of perceived privacy awareness.
   - **Relevance:** examines the relationship between perceived privacy and security perceptions in the context of mobile applications.

   WebPage: https://www.sciencedirect.com/science/article/abs/pii/S0268401219309041

5. Das, Sauvik, Kim, Tiffany Hyun-Jin, Dabbish, Laura A., & Hong, Jason I. (2014). "The Effect of Social Influence on Security Sensitivity." Symposium On Usable Privacy and Security, July 9-11, 2014.
   - **Article Findings**: The article's results find that social influence can change a user's perceptions towards security, and making changes in the security tool can raise a user's security sensitivity.
   - **Relevance**: This article relates to our research, as we also take into account the user's awareness of the security of a mobile application.

   WebPage: https://www.usenix.org/system/files/conference/soups2014/soups14-paperdas.pdf

6. A survey on smartphone user's security choices, awareness and education Author: Frank Breitinger, Ryan Tully-Doyle, Courtney Hassenfeldt Volume 88,2020,101647,ISSN 01674048, https://doi.org/10.1016/j.cose.2019.101647.

   - **Article Findings**: They discovered that, although many users secure their phones from physical access, their performance in other security practices is poor. However, education alone proves insufficient, as even advanced users with greater security familiarity often exhibit weak security practices. To address these issues effectively, they propose the implementation of rules and regulations for secure default settings, easier-to-use security options, and a shift in public perception regarding security.
   - **Relevance**: This paper addresses various aspects of the privacy and security paradox by highlighting the gap like users' awareness and their actual security practices.

   WebPage: https://www.sciencedirect.com/science/article/pii/S0167404819301919

7. Kraus, Lydia, Tobias Fiebig, Viktor Miruchna, Sebastian Möller and Asaf Shabtai. "Analyzing End-Users ' Knowledge and Feelings Surrounding Smartphone Security and Privacy." (2015).

   - **Article Findings**: They indicated that the rationale behind end-users frequently abstaining from employing security measures might extend beyond the commonly acknowledged concerns associated with the balance between usability and security. It is more about how effectively these security measures cater to the fundamental needs of the users.
   - **Relevance**: They suggest there might not be a trade-off between usability and security which is similar to what we are trying to find, instead, they suggest that as long as the security measures meet the fundamental needs of the users, they will adopt it better.

   WebPage: https://www.ieee-security.org/TC/SPW2015/MoST/papers/s1p2.pdf

8. F. Parker, J. Ophoff, J. -P. Van Belle and R. Karia, "Security awareness and adoption of security controls by smartphone users," *2015 Second International Conference on Information Security and Cyber Forensics (InfoSec)*, Cape Town, South Africa, 2015, pp. 99104, doi: 10.1109/InfoSec.2015.7435513.

   - **Article Findings**: Contrary to previous studies indicating a lack of security awareness among smartphone users, the findings of this research challenge this notion. The paper suggests that designing user education in a user-friendly manner is essential to improve understanding and promote the utilization of security features.
   - **Relevance:** They demonstrated that users do prioritize security; however, they encounter difficulties in acquiring the necessary knowledge. This challenges the paradox wherein individuals express concerns about privacy and security but may not act accordingly.

     WebPage: https://ieeexplore.ieee.org/abstract/document/7435513

9. Chen, Charlie & Han, Jiangxue & Ractham, Peter. (2022). Cultural influence on using mobile instant messaging applications to develop and maintain friendships. Cogent Social Sciences. 8. 10.1080/23311886.2022.2141428.

   - **Article Findings**: It highlights distinct influences across four cultural dimensions: collectivism, masculinity, power distance, and uncertainty avoidance.
   - **Relevance:** The relativity of this article to ours is that we include instant messaging applications in the list of applications that we want to test and see what the different influences are.

   WebPage: https://www.tandfonline.com/doi/full/10.1080/23311886.2022.2141428

10. Vasileios Gkioulos , Gaute Wangen ,Sokratis K. Katsikas ,George Kavallieratos and Panayiotis Kotzanikolaou, Security Awareness of the Digital Natives Information 2017, 8(2), 42; https://doi.org/10.3390/info8020042. Received: 8 March 2017 / Revised: 4 April 2017 / Accepted: 5 April 2017 / Published: 8 April 2017

    - **Article Findings**: Users tend to prioritize access to services and the usability of their mobile devices over the enforcement of security measures, without major differentiations based on their background. Digital natives are willing to accept risks despite of their concerns about in order to obtain access to additional services.
    - **Relevance:** The paper addresses the importance of user security and data privacy in the context of mobile applications. It investigates the user behavior of digital natives from distinct educational backgrounds.

    WebPage: https://www.mdpi.com/2078-2489/8/2/42

11. Micinski Kristopher, Votipka Daniel, Stevens Rock, Kofinas Nikolaos, Mazurek Michelle L., and Foster Jeffrey S.. 2017. User interactions and permission use on Android. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI'17)*. ACM, New York, NY, 362–373.

    - **Article Findings**: The article makes suggestions on how to improve the authorization of permissions asked by Android applications by the users and how they can handle background authorization separately.
    - **Relevance:** Our research touches upon the user's awareness of the permissions that they give to a mobile application.

    WebPage: https://dl.acm.org/doi/abs/10.1145/3025453.3025706

12. Murat Koyuncu, Tolga Pusatli , Security Awareness Level of Smartphone Users: An Exploratory Case Study , May 2019 Mobile Information Systems 2019(4):1-11 DOI:10.1155/2019/2786913

    - **Article Findings**: The research unveils variations in awareness levels based on age, education, and cybersecurity training. It highlights the persistent issue of insufficient security awareness among smartphone users and emphasizes the necessity for focused educational initiatives and training programs to improve users' comprehension of IT security.
    - **Relevance:** They discovered variations in security awareness levels based on demographic factors, highlighting the significance of education. These are insights we can incorporate into our study.

    WebPage: https://www.hindawi.com/journals/misy/2019/2786913/

13. Erika Chin, Adrienne Porter Felt, Vyas Sekar, David Wagner, Measuring user confidence in smartphone security and privacy , SOUPS '12: Proceedings of the Eighth Symposium on Usable Privacy and Security July 2012Article No.: 1Pages 1–16
    - **Article Findings**: The paper identifies concerns among participants regarding performing privacy and financially sensitive tasks on their phones. These concerns stem from four key factors: fear of theft and data loss, misconceptions about network security, worries about accidental interactions, and mistrust of smartphone applications. Additionally, the study reveals that participants tend to install numerous applications from unfamiliar brands without reviewing privacy policies, contributing to their overall lack of trust in applications.
    - **Relevance:** The paper's findings reveal the complex interplay between individuals' concerns about privacy and security and their actual behaviors. While the users express apprehension about potential risks, they engage in practices that may compromise their privacy and security at the same time. This represents an alternative perspective on the privacy and security paradox compared to our own approach.

    Webpage: https://doi.org/10.1145/2335356.2335358

14. Kleek Max van, Liccardi Ilaria, Binns Reuben, Zhao Jun, Weitzner Daniel J., and Shadbolt Nigel. 2017. Better the devil you know: Exposing the data sharing practices of smartphone apps. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI'17)*. ACM, New York, NY, 5208–5220.
    - **Article Findings**: The article's findings suggest that giving the user's information about the tracking behaviour in applications helps them make better, more informed privacyrelated decisions.
    - **Relevance:** Our research also delves into whether users refrain from using an application after knowing its security and privacy concerns.

    Webpage: https://dl.acm.org/doi/10.1145/3025453.3025556

15. Sven Bock, & Nurul Momen (2020). A Study on User Preference: Influencing App Selection Decision with Privacy Indicator. In Proceedings of the HCI International 2020 - Late Breaking Papers (pp. 1-7). Springer Nature.

    - **Article Findings**: participants were more likely to choose apps that had a good privacy rating and less likely to choose apps that had a poor privacy rating. the impact of a privacy indicator was greater for participants who were more concerned about their privacy.
    - **Relevance:** The study found that the presence of a privacy indicator had a significant influence on the participants' app selection decisions.

    Webpage: https://link.springer.com/chapter/10.1007/978-3-030-60114-0_39