
Toward Understanding the Privacy Needs of Marginalized Populations

Ada Lerner
Wellesley College
ada.lerner@wellesley.edu

Roberto Hoyle
Oberlin College
rhoyle@oberlin.edu

Abstract

Marginalized populations, such as minorities of race, ethnic origin, religion, sexuality, or gender identity, face unique privacy challenges. In this work, we describe our plans to study these particular privacy challenges, starting with one specific group, transgender Americans, and to expanding the lessons we learn from that group to respond to the privacy needs of other marginalized populations, as well as best practices for researchers seeking to continue study of the privacy needs of marginalized groups. We observe that ethical standards for human subjects research require that the benefits of research be spread justly across society, and we suggest that in order for marginalized groups to reap the benefits of privacy research, the type of work discussed in this paper is necessary.

Introduction

Privacy research often aims to crystallize design principles and best practices for designers and implementers of systems. However, such research often considers a non-specific population, aiming to design for the “average person” in a society, rather than considering the experiences of people from a variety of subgroups. In this work, we focus on the privacy needs of members of subgroups which are marginalized. Like people from all subgroups, members of marginalized populations often have different lived experiences and cultural norms, which may be lost when

Paste the appropriate copyright statement here. ACM now supports three different copyright statements:

- ACM copyright: ACM holds the copyright on the work. This is the historical approach.
- License: The author(s) retain copyright, but ACM receives an exclusive publication license.
- Open Access: The author(s) wish to pay for the work to be open access. The additional fee must be paid to ACM.

This text field is large enough to hold the appropriate release statement assuming it is single spaced in a sans-serif 7 point font.

Every submission will be assigned their own unique DOI string to be included here.

“averaging” across the general population. For example, people with a visual impairment think of their privacy needs very differently than those who have sight. For them, privacy preserving tools provide independence and reduce their reliance on others [1]. In addition to gaining different benefits from privacy, marginalized groups may also face different risks due to oppression. Thus members of marginalized groups are likely to consider privacy differently than the general population, and we expect them to differ in their privacy desires, behaviors, and needs.

In this paper, we describe our plans to study the privacy needs of transgender people, and argue for why it is critical to study marginalized populations: doing so fulfills an ethical imperative to spread the benefits of privacy research across society. Our plan is to perform in-depth, semi-structured interviews with transgender people to learn about their privacy experiences and needs. There are approximately 1.4 million people who identify as transgender in the United States, making up approximately 0.6% of the national population [5]. As members of a marginalized group, these people face privacy risks and challenges significantly different from those faced by the general population. First, transgender people may encounter privacy challenges which are similar to those experienced by the general population, but which are more *severe* for this particular population. For example, we hypothesize that such challenges might affect a larger fraction of transgender people; that they may occur more frequently for any given transgender person; or that the consequences of privacy compromise may be more harmful to the mental health and safety of transgender people. Second, we observe that transgender people likely experience *unique* privacy challenges, which rarely or never occur among the cisgender population. Through brainstorming, personal experience, and exploration of non-academic resources such as blogs,

we have developed a preliminary set of privacy challenges which motivate and demonstrate the need for this work.

Privacy Challenges

In this section, we describe our preliminary privacy challenges. These challenges serve as motivation for the work, and as nucleation points for our interviews: topics we will raise with participants to prompt them to explore their privacy experiences and needs. These preliminary privacy concerns include: “real name” policies, increased likelihood of harassment, concerns around medical information and records, audiences and privacy preferences which change rapidly through transition, the privacy sensitivity of large fractions of lived experience, the need to maintain multiple personas, and untrusted providers. As evidence that current practices may create or exacerbate these challenges, we observe that for several of these privacy challenges, some privacy-enhancing behaviors may be explicitly forbidden by today’s online apps and sites.

Real-name policies Some services require users to go by a “real” identity, and may require verification of that identity, often via government ID. Transgender people often lack government ID which matches the name, gender, and presentation by which they ordinarily conduct themselves. We observe that real-name policies are evidence that challenges faced by one subgroup often affect other subgroups as well. Activists have identified a large number of groups who may be harmed by these types of policies, such as victims of abuse, political activists, children, people who use a title as part of their “everyday” name (e.g., Friar), in addition to queer and transgender people [6]. Thus this is an example of a privacy challenge faced by many groups, but which may be particularly salient for transgender people, who experience cyber-harassment at very high rates [8].

Increased Likelihood of Harassment Transgender people are more likely to be harassed and bullied [8], suggesting that distribution of transgender status may expose people to serious mental health and safety dangers. Additionally, we note that on services which use user reports to manage abuse and real-name policies, reports have been used as harassment tools. This suggests that the combination of multiple privacy challenges may be particularly harmful to marginalized groups [9].

Medical Information and Records Medical records are usually considered private information. However, they may take on particular sensitivity for transgender people when medical records “out” patients even when their transgender status is irrelevant to care. With new policies in place that provide religious exemptions for medical professionals who may object to treating a transgender individual¹, revealing transgender status could impact treatment unrelated to that status, such as repairing a broken bone.

Preferences Change Rapidly During Gender Transition

As transgender people transition, many gradually come out to different audiences over time, such that the appropriate audience for information changes rapidly, over timescales of weeks to years. This rapid variation is an unusual use case, and we suspect that it is not well supported by the privacy settings models of most online services.

Large Fractions of Lived Experience may be Privacy

Sensitive Past work suggests that for most people, privacy-sensitive moments happen only occasionally [7]. We observe that this property may not hold for transgender people. Consider a person who is closeted at work but out

among friends and family. *All* of this person’s non-work time may be considered privacy-sensitive, since their non-work gender presentation is private from colleagues.

Multiple Separated Personas Many partially out transgender people present differently to different groups, such as with family, friends, and colleagues. Many users of sites such as Facebook have both professional and personal contacts, as the service is used for both purposes. However, using multiple accounts to create separate personas is not well supported by most online services. Convenience features such as automatic friend suggestion algorithms could be dangerous and break through strict separation between personas. Sharing information with separate lists is often not enough, since basic identifying information linked to an account, such as the user’s name, often varies between personas. Additionally, sharing information with separate recipients is challenging: past work has shown that it is easy to post items that one regrets afterwards [11], and that people consider posts more sensitive as the post ages [2, 3].

Untrusted Providers Adding to the harm that they may experience through inadvertent disclosures, or through policies which may not be beneficial to them, transgender and queer populations may have reasons to not trust authority figures. Given the history of anti-gay and trans persecution, violence, and abuse, studies have shown that they are reluctant to share information with medical personnel [10] because they do not know how the information may end up being used in the future. A solution that involves trusting another party to protect private information may not be trusted by a person that has experienced official persecution in the past.

¹<https://www.nytimes.com/2018/01/18/us/health-care-office-abortion-contraception.html>

Methodological Concerns

Care must be taken when working with members of marginalized groups. Here we consider some methodological concerns for working with transgender people.

Anonymization Because of the relative uncommonness of transgender people, anonymization may be more difficult: the mere fact that someone is transgender may deanonymize them within a small community. More information may need to be anonymized in transcripts and descriptions than would be necessary for cisgender subjects.

Trauma and Mental Health Qualitative research practices such as interviews may carry a high risk of revisiting past traumas related to privacy invasion, since privacy harms may be more severe for marginalized people. Additionally, transgender people experience extremely high rates of suicide and mental health problems due to their marginalization [4]. Researchers should be aware of the fact that participants may be or have been suicidal, and may suffer from other mental health problems.

Cultural Norms Whenever working with people from another culture or a subgroup of the researcher's culture, it is important to observe and respect cultural norms. In the case of transgender people, even researchers from the same culture (e.g., the United States) can easily make mistakes around cultural norms. For example, most transgender people agree that when referring to a person in the past, one should still use that person's *current* name and pronouns. Unfamiliarity with such norms is common and can easily cause emotional harm to subjects. Additionally, violating norms could cause participants to lose trust in researchers. Some transgender people will treat familiarity with such norms as a heuristic regarding who to trust, since

unfamiliarity may signal the possibility of further and more severe errors, such as outing people against their will.

Giving Back The issues raised in our interviews may be difficult for our participants to discuss, and care will need to be taken to minimize harm. Since some of the emotional harms of this research weigh on the very population it seeks to help, it is critical that we ensure ways to more directly give back to the people and communities we study, beyond simply performing the research for the general benefit of people like them.

Conclusion: Expected Contributions

The primary contributions of this work will be a better understanding of privacy concerns for transgender and other queer individuals. We believe that this group is a prime candidate for user-tailored privacy solutions, since the issues that we have highlighted are not addressed by the current privacy solutions and best practices, and because these issues are likely to be only the tip of the iceberg for this population. Since transgender and other queer populations are often closely related, we expect that many of our findings will carry over to other people under the queer umbrella. And, since several of our initial privacy challenges (such as "real-name" policies) also apply to groups outside of the queer umbrella, we expect that other challenges surfaced by our participants will also apply more broadly across the population, allowing us to analyze the types of privacy concerns which matter to a wide variety of marginalized groups. Our aim is that through understanding these problems, we will be able to design and promote the design of technical and non-technical solutions to a variety of privacy challenges faced by marginalized groups, and thus to fulfill the ethical imperative to spread the benefits of privacy research to all people.

REFERENCES

1. T. Ahmed, R. Hoyle, P. Shaffer, K. Connelly, D. Crandall, and A. Kapadia. Understanding the Physical Safety, Security, and Privacy Concerns of People with Visual Impairments. *IEEE Internet Computing*, 21(3):56–63, 2017.
2. O. Ayalon and E. Toch. Retrospective privacy: Managing longitudinal privacy in online social networks. In *Proceedings of the Ninth Symposium on Usable Privacy and Security*, page 4. ACM, 2013.
3. L. Bauer, L. F. Cranor, S. Komanduri, M. L. Mazurek, M. K. Reiter, M. Sleeper, and B. Ur. The post anachronism: The temporal dimension of facebook privacy. In *Proceedings of the 12th ACM workshop on Workshop on privacy in the electronic society*, pages 1–12. ACM, 2013.
4. W. O. Bockting, M. H. Miner, R. E. Swinburne Romine, A. Hamilton, and E. Coleman. Stigma, mental health, and resilience in an online sample of the us transgender population. *American journal of public health*, 103(5):943–951, 2013.
5. A. Flores, J. Herman, G. Gates, and T. Brown. How many adults identify as transgender in the united states? *Williams Institute UCLA School of Law, Los Angeles, CA*, 2016.
6. Geek Feminism Wiki, 2015. http://geekfeminism.wikia.com/wiki/Who_is_harmed_by_a_%22Real_Names%22_policy%3F, accessed 26 January 2018.
7. R. Hoyle, R. Templeman, S. Armes, D. Anthony, D. Crandall, and A. Kapadia. Privacy behaviors of lifeloggers using wearable cameras. In *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, pages 571–582. ACM, 2014.
8. J. G. Kosciw, E. A. Greytak, M. J. Bartkiewicz, M. J. Boesen, and N. A. Palmer. *The 2011 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual and Transgender Youth in Our Nation's Schools*. ERIC, 2012.
9. S. Levin, June 2017. <https://www.theguardian.com/world/2017/jun/29/facebook-real-name-trans-drag-queen-dottie-lux>, accessed 30 January 2018.
10. T. Stablein, J. L. Hall, C. Pervis, and D. L. Anthony. Negotiating stigma in health care: disclosure and the role of electronic health records. *Health Sociology Review*, 24(3):227–241, 2015.
11. Y. Wang, S. Komanduri, P. G. Leon, G. Norcie, A. Acquisti, and L. Cranor. “I regretted the minute I pressed share”: A Qualitative Study of Regrets on Facebook. *Symposium on Usable Privacy and Security (SOUPS '11)*, pages 1–16, June 2011.