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Sexting in Context: Privacy Norms and Expectations

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This exploratory study examines young people's expectations of privacy when they share suggestive photos via mobile phones, also known as sexting. To investigate the social norms regarding privacy in sexting, we used a combination of online surveys and in-person focus groups. By asking participants about various sexting scenarios, we found that a large majority thought that sharing private images was never or rarely OK. Any tolerance our respondents had for privacy violations was dependent on the type of relationship between the sender and the recipient and the method of image sharing (off-line or online). These results suggest that particular technological design strategies and educational interventions could help young people better protect their private images.

Keywords: sexting, privacy, mobile phones, contextual integrity, youth

Introduction: Networked Privacy and Sexting

In 1999, Sun Microsystems' CEO Scott McNealy famously stated: "You have zero privacy. . . . Get over it" (Sprenger, 1999). Although the much-heralded and greatly feared end of privacy as we know it is not yet upon us, discussions of the death of privacy online are commonplace. Since at least the beginning of the modern Internet, individuals have been viewed as complicit in this so-called end of privacy for sharing too much information and exposing their private lives online. These judgments are sometimes gendered and typically centered on youth, who are both the early adopters of social media and the frequent focus of discourses about the decline of society and moral values (Goggin, 2006; Herring, 2007). Users are routinely told—through policy decisions, the terms of service they agree to by using social media, and in mainstream advice about online safety—that their personal information and content can be

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freely distributed and sold. While laws and precedents are still evolving, an increasing number of legal decisions reflect an assumption that personal privacy is impossible online (*People v. Klapper,* 2010; *Romano v. Steelcase Inc.,* 2010).

Discourses about online risk and safety often invoke youth vulnerability in recurring moral panics, typically around young women's sexuality and new communication technologies (Cassell & Cramer, 2008). In particular, young women have been identified as susceptible to the impact of social media and as both suffering from and causing the end of privacy (Herring, 2007; Livingstone, 2008). Such fears are amplified by mobile phones, which are personalized, intimate devices that can provide youth with a platform to articulate independent identities (Campbell & Park, 2008; Foley, Holzman, & Wearing, 2007; Goggin, 2006).

The response to sexting, the practice of sending sexually explicit images or messages via the Internet or mobile phones, has reproduced this familiar constellation of reactionary fears about privacy, technology, sexuality, and youth (Hasinoff, in press). Many laws and education programs designed to address youth sexting assume that the practice is always foolish and unsafe because people believe that content shared on mobile phones is inherently public.[2] Without an understanding of the privacy norms, well-intentioned observers simply advise strict abstinence from sexting (Hasinoff, in press). The unfortunate result of this is that when images circulate beyond their intended recipient, adults often chastise the person who produced the image for engaging in risky behavior while ignoring the privacy violators (Slane, 2010). In this study, we investigate young people's privacy norms for sharing suggestive images via mobile phones. Understanding these norms is a crucial step toward developing evidence-based policy reforms and harm-reduction programs.

Sexting Law and Literature

There are serious problems with the laws that apply to youth sexting; indeed some consensual teen sexters have been held legally responsible for producing child pornography of themselves.[3] One judge in a sexting case upholding a 16-year-old girl's conviction explains that she is responsible for producing child pornography because she could have no reasonable expectation of trusting her boyfriend to preserve her privacy (*A.H. v. State,* 2007). In this case, the teenage boy did not actually distribute the images—parents had found the private images on their child's computer and turned them over to the police. This judge argues that a "reasonably prudent" (*A.H. v. State,* 2007, p. 237) person should know better than to ever create a sexual image, and that no teenage boy can be reasonably be expected to restrain himself from distributing a nude digital photo of his girlfriend without her permission. But as we discuss shortly, our study indicates that reasonable expectations of privacy are subjective and contextual.

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[2] At the same time, lifestyle news articles aimed at adults promote sexting for its interpersonal benefits and often minimize the risks (Hasinoff, 2013).

[3] Sexting can be legally classified as child pornography if the image is explicit enough and depicts a person under 18 years old. In the United States, teenagers involved in sexting have been charged with producing, possessing, and distributing child pornography (Pavia, 2011; Wolak, Finkelhor, & Mitchell, 2012).

Much of the existing experimental literature on sexting has investigated its links to behaviors identified as risky or negative, such as illegal drug use, casual sex, and unprotected sex (Benotsch, Snipes, Martin, & Bull, 2013; Drake, Price, Maziarz, & Ward, 2012; Rice et al., 2012; Temple et al., 2012) and to psychological measures such as attachment anxiety (Drouin & Landgraff, 2011; Weisskirch & Delevi, 2011), impulsivity (Dir, Cyders, & Coskunpinar, 2013), and histrionic personality (Ferguson, 2011).[4] Most studies do not find significant gender differences in the reported rates of sending sexual images and text messages (e.g., Drouin & Landgraff, 2011; Temple et al., 2012). However, girls who sext may face harassment from peers and punishment from authorities, while the same behavior in boys is often ignored or even celebrated (Ringrose, Gill, Livingstone, & Harvey, 2012).

Given the disproportionate impact on girls, it is especially vital to avoid shaming young people for consensual sexting and to instead acknowledge that they, like adults, often engage in sexting for interpersonal intimacy, communication, and expression (Albury, Crawford, Byron, & Mathews, 2013; Hasinoff, 2013). Our study builds on research that highlights the distinctions between consensual sexting and privacy violations and aims to contextualize both the risks and benefits of sexting (Albury & Crawford, 2012; Albury et al., 2013; Cupples & Thompson, 2010; Hasinoff, 2013; Karaian, 2012; Powell, 2010a, 2010b; Ringrose et al., 2012; Salter, Crofts, & Lee, 2013).

Privacy, Reputation, and Norms

While norms of privacy online are indeed shifting and complex, a range of media and legal scholars argue that it is untenable to assume that everything digital is automatically public (Bartow, 2000; Levmore & Nussbaum, 2010; Madden et al., 2013; Nissenbaum, 2011; Solove, 2007). Much of the research on social privacy has examined users' preferences and practices with regard to their own personal information, especially on the issue of personal privacy and reputation management (boyd & Hargittai, 2010; Madden, 2012; Madden et al., 2013; Marwick, Murgia-Diaz, & Palfrey, 2010). Though not all users of social network sites understand or use the privacy settings (Debatin, Lovejoy, Horn, & Hughes, 2009), in a comprehensive literature review, Marwick and her coauthors (2010) assert that youth are indeed concerned with online privacy. Though many social media users share personal information and media content online, they remain interested in controlling what information is available to which audiences, and the majority of users take some steps to control their online reputations (Madden et al., 2013).

The safest way to maintain control of one's online reputation is to never create or share an image, text, posting, tweet, or e-mail that would be embarrassing if it were widely circulated. However, such strict abstinence from sharing any private content with any person in a digital format is unrealistic for most people. This means that one's online reputation also relies on the social norms among the people (and the media companies) one chooses to trust with private digital content. Problems can arise when people do not share the same assumptions about what content or information is private and what can be publicized or distributed. In a Pew study, around half of the 18- to 29-year-olds surveyed reported that

[4] One large-scale study found no correlations between sexting and sexual risk behaviors or psychological health (Gordon-Messer, Bauermeister, J. A., Grodzinski, A., & Zimmerman, 2013).

they had removed content from their social network profiles that others posted or tagged (Madden, 2012). Deleting another person's comments or tags on one's profile could indicate a difference in privacy norms—the poster or tagger may have thought it was acceptable but the subject did not.

The key risk for young adults who sext is the potential violation of their privacy. Although indeed this is an issue of interpersonal trust and intimacy, individuals' privacy expectations also rely on broader social norms and assumptions about privacy, which are the focus of this study. Nissenbaum (2004) points out that each social context has specific norms about information collection and circulation, whether they are formal or informal. The topics that are discussed, the distribution of information, and the directions in which information moves vary widely. For example, information that a patient shares with a doctor is formally protected, and the privacy of health information shared between friends or family members relies on informal norms and expectations. Nissenbaum (2004) conceptualizes privacy as "contextual integrity," explaining that respecting privacy requires a situation- and circumstance-specific regard for informational norms. For Nissenbaum (2004), a privacy violation is a disruption of expected norms of information flow or appropriateness.

Many of the activities people engage in online mirror preexisting social and commercial relations (Nissenbaum, 2011). As such, Nissenbaum (2011) argues that existing privacy norms for off-line social interactions can indicate what digital content should be considered private. Because people usually consider their sexual acts private, we suspected that they would also likely recognize that others' personal sexual images are intended to be private as well. Sexting is the latest digital incarnation of a long history of personal sexual media production, including love letters, diary entries, and Polaroid photos. The privacy of any of these objects is violable, but most people would consider such a violation unreasonable and unexpected. Digital images are far easier to distribute, making privacy violations more prevalent, but Nissenbaum's (2011) argument stipulates that existing information norms can and should remain salient when social behaviors become mediated and digitized.

Rationale and Research Questions

In this exploratory study, our central research question is: What are young people's privacy norms when they share sexually suggestive images on their mobile phones? Research on this topic is just emerging, but a number of studies (Albury & Crawford, 2012; Funnell, 2014; Tallon, Choi, Keeley, Elliott, & Maher, 2012) indicate that the unauthorized distribution of a personal sexual image is widely considered a serious violation of privacy. Furthermore, in another study, 16- and 17-year-old focus group participants discussed the importance of consent between sexters and criticized anti-sexting education curricula for not addressing recipients' obligation to respect senders' privacy (Albury et al., 2013). As Albury et al. explain: "When images are shared without consent, it is a very significant breach of trust, and should be considered as a serious invasion of privacy rather than an inevitable outcome of recording a sexually suggestive image" (2013, p. 17). Although unauthorized distribution is clearly a significant risk and is embarrassing or even devastating to some victims (Powell, 2010b; Ringrose et al., 2012), a large majority of teens report that the intended recipient of their private sexts did not distribute the images. In surveys,

around 10% of teens report that their private images have ever been forwarded.[5] This issue of forwarding is particularly significant in sexting, because it is the basis of many sexting-related harms, so in this study we explore whether young people viewed forwarding sexts as expected or as unreasonable.

Building on Nissenbaum's theory, we are interested in whether norms of sexual privacy do indeed translate to mobile phone photo sharing and forwarding. In other words: Do people agree with the judge quoted above that young sexters should have "no reasonable expectation of privacy?" In this study we investigate the specific norms people use to decide whether it is OK to distribute a suggestive personal photo. Based on the concept of contextual integrity, we suspected that young people would have a strong sense that any suggestive image received on a mobile phone is intended to be private and that sharing it with others would constitute a violation of privacy.

In examining a range of contextual variables that might modify these privacy norms, we further hypothesized that participants would accept privacy violations more readily under four conditions: (1) if the couple was in a short-term relationship (as opposed to long-term); (2) if the photo had already circulated among peers; (3) if the sender did not put a digital lock on the photo; or (4) if there was a lower risk of wide distribution given a specific sharing method (from lowest to highest risk: showing the photo to someone, sending it to someone, and posting it online). Finally, given previous research that women are generally more concerned about privacy than men and take steps to maintain their privacy more frequently (Fogel & Nehmad, 2009; Madden et al., 2013), we suspected that female respondents would report that they were less accepting of privacy violations.

Method

To conduct this study of privacy norms, we designed an online survey involving two sexting scenarios with a series of yes or no questions for each about whether the creator of a sext expects privacy and whether it is OK for the recipient to distribute the image under various circumstances. Asking participants about whether they think something is OK is intended to capture their sense of right and wrong and what they believe is the generally accepted practice among their peers. At the end of the survey, respondents were invited but not required to add additional comments in a text box. In total, 226 people 18 to 24 years old (60% female and 40% male) submitted complete surveys. Respondents were recruited online through a combination of group e-mail messages and Facebook, and were offered the chance to win a $25 online shopping gift certificate through an optional online drawing.

[5] A large representative peer-reviewed study reports: "Photographs were distributed in 10% of incidents when youth appeared in or created images" (Mitchell, Finkelhor, Jones, & Wolak, 2012, p. 5). However, the data vary considerably among different studies. In another peer-reviewed study, 25% of those who received a photo reported forwarding it, and 8% reported sending a sexually explicit photo they took of someone else to a third party, often without permission (Strassberg, McKinnon, Sustaita, & Rullo, 2013). Yet another study finds that 7% of people reported forwarding an image meant to be private (Hilinski-Rosick & Freiburger, 2012). Privately funded surveys have found that 2% (Cox Communications, 2009) and 14% (Gatti, 2009) of people who sent sexts report that they were later distributed.

To add depth to our online survey, we conducted three focus groups. We recruited undergraduates from classes at a large Canadian university, offering them snacks for their time. Our nine focus group participants were all female and between the ages of 18 and 22. Participants' statements are attributed in this article using pseudonyms to protect their privacy. In the focus groups, we posed the same questions as in the online survey, but asked participants to explain their answers in more detail. This facilitated general discussions about sexting and privacy expectations according to participants' interests and experiences.

Results and Discussion

Our key finding is that nearly all the respondents view maintaining privacy when sexting as an expected social norm. To provide an indication of the degree to which these respondents thought privacy was expected, we aggregated each participant's responses into a privacy expectation score. Based on their responses to seven survey questions, each yes or no answer was coded as either a 0 value (privacy is not expected or violations are seen as OK) or a 1 (privacy is expected or violations are seen as not OK). The responses to each question were added together to give each respondent a privacy expectation score between 0 and 7. Higher total scores indicate that a respondent believes that privacy is more important and that violations are rarely acceptable, and lower total scores suggest that a respondent does not expect privacy from others and is less concerned about privacy violations. The results of this measure show that most respondents expect a high degree of privacy when sexting (Figure 1). This widely held belief that sharing a suggestive image is rarely, if ever, considered acceptable is consistent with the finding, discussed above, that most sexters report that their images have not been forwarded to third parties, and it also aligns with Albury and Crawford's (2012) finding that many young people believe consent is vital in sexting.

None of the participants had a privacy score of 0 or 1 and most (79%) had privacy scores of 6 or 7, which indicates that they expect a high degree of privacy in sexting practices and believe that sharing a suggestive image is always or almost always not OK regardless of the circumstance. This suggests, as we suspected, that people tend to perceive sexts as private. Consistent with the idea that context mediates privacy norms, when the image involves suggestive content—regardless of other contextual factors—it seems to invoke a general obligation for recipients to protect the privacy of the parties involved. This suggests continuity between privacy norms in newer, networked communication activities and existing privacy norms regarding off-line sexual practices. At the same time, several categorical variables sometimes altered participants' expectations of privacy in sexting; these are discussed in further detail below.

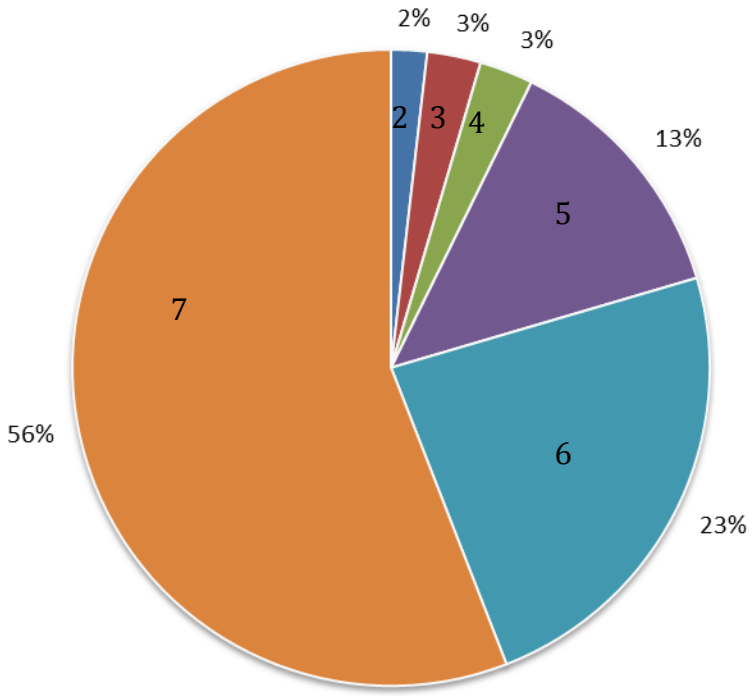

Figure 1. Distribution of privacy expectation scores on a scale from 0 to 7, with 7 indicating the highest expectation of privacy (n = 220).

Context-Specific Privacy Norms

Our study found that any tolerance respondents had for privacy violations was dependent on a range of specific contextual factors that influenced how participants think about privacy in sexting. Although our focus group participants, like our survey participants, were generally unwilling to accept most privacy violations, they also noted that in some situations they thought sharing a suggestive photo might be reasonable or expected:

> [The] personal, good, moral thing to do is to not share [a suggestive photo] further. As a good person, you should be responsible, but I think you have less of an obligation [if you don't know the person]. (Hanna, 21)

> I think you might not show other people [a suggestive photo that was sent to you], but you might tell them. (Meredith, 18)

> Maybe you'd show your friends. (Molly, 21)
>
> You wouldn't, like, send it to people, but you might be like, "check this out" on your phone, but she wouldn't be like, LOL, forward! (Meredith, 18)
>
> If you do show it, it's not the end of the world, but you should probably tell the person after. But you probably shouldn't show it to people, because most people wouldn't be OK with that. (Molly, 21)

We turn now to three contexts our study suggests are important factors that influence privacy norms in sexting: dating relationships, type of sharing, and demographic factors.

Dating, Relationships, and Trust

The focus group participants typically described expectations of privacy in sexting by referring to trust in the context of an intimate relationship. When we asked questions about image sharing in relation to the duration of dating relationships (one year versus one week), for example, the issue of interpersonal trust seemed to be the main variable in expectations of privacy when sexting.

> In a relationship you'd kind of assume that, the things that they say to each other, you don't have to say "oh by the way, don't tell anyone." The assumption is that there's a basic confidentiality. (Hanna, 21)
>
> I think if she feels strongly about the person she won't do anything, but if she's not really interested in this guy she might just laugh about it with her friends. (Maria, 19)
>
> I don't know if the time you've been together really matters. . . . Even in one week, I don't think he would assume that she was going to share the photo. (Lisa, 20)

Some of the focus group participants' comments indicate that, although length of time spent in a relationship could affect the degree of implied trust involved, there was some assumed basic trust either way. Yet others, such as Maria, indicated that in a shorter or less serious relationship, it is more acceptable to show a private photo to friends or at least discuss it with them. Likewise, survey respondents answered that sharing a photo from someone the recipient had met one week ago was OK twice as often (27%) as compared to someone the recipient had been dating for one year (14%) (Figure 2; $p < 0.05$ using a χ^2 test).

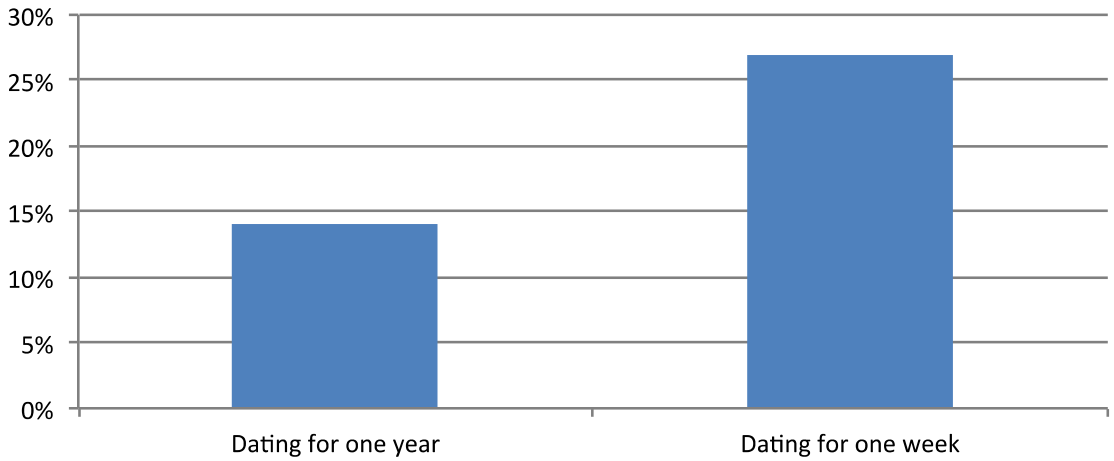

Figure 2. Time spent in a relationship: Percentage of respondents who answered, "Yes, it's OK to share the photo."

Many respondents felt that a suggestive image shared within an intimate relationship is obviously meant to be private. But in qualitative responses to the online survey, and especially in focus groups, some participants also noted that it is possible for recipients to later break the trust that enabled them to receive a suggestive photo. A survey respondent wrote:

> In an exclusive relationship there is trust between two people but things can change and you might regret your actions later (in essence people are honest and sincere but people are people, and people make mistakes). (Female, 23)

Likewise, as one focus group participant described, private photos may not always stay private:

> I think what makes the difference is the trust that you have established in your relationship. . . . I think in most situations if you're going to send someone a text like that, you expect it to stay private between the two of you. . . . [But] there's a problem with trust being the only thing that's protecting you. If all of a sudden, that relationship breaks down, then that property you've given that person is not private. (Amanda, 22)

Amanda's characterization of trust helps to explain why more survey respondents felt it was OK to share the photo if the characters in our scenario had only been dating for one week. In longer and more serious relationships, participants were more likely to expect privacy. Furthermore, focus group participants also discussed how the act of sending a photo might also impact the seriousness of a relationship:

> I feel like I would only do this if I was really trusting the person and like declaring my love to them . . . this is how much I trust you, I know you would never do anything. (Kathleen, 19)

> It is a symbol of your trust and what you feel about the person, if you're doing that you're showing them that, "I trust you and I really like you." (Meredith, 19)

In these cases, sending a suggestive photo functions as an expression of trust, regardless of the time spent in a relationship. This finding highlights how trust and the type of interpersonal relationship are key factors in these contextually dependent expectations of privacy when sexting.

We also investigated privacy expectations when the person sharing the sext is not one of the people involved in the relationship but rather a third party. We asked participants about a scenario in which a third party receives the photo and debates whether to forward it on to others. In this case, the recipient is an acquaintance of the person depicted in the image. Most survey respondents (80%) answered that it was not OK for this third party to show the image to anyone. Although the recipient in this situation has no specific intimate relationship to the person depicted in the image, a large majority of respondents still believe that forwarding the image is not acceptable. Focus group participants explained that, based on the sexual content, the third-party recipient should know and respect that the image was intended to be private:

> [If the person in the photo doesn't know about it] it would be morally wrong to send it out, knowing it's something that person didn't want. (Amanda, 22)

> The fact that all the people [sent it around] before doesn't change the fact that it's morally questionable. (Lisa, 20)

> I think people should just have the decency to not, just generally, when you have a picture and you're not exactly sure who gave it to who. I don't think it's OK. (Kathleen, 19)

> I wouldn't want anyone to do that to me, but then again I also understand that sometimes it can be funny. (Anna, 21)

> The decent thing to do would be to tell [the person]: "I have this picture of you—why do I have this picture of you?" (Meredith, 19)

Participants indicated that they believe that a third-party recipient with no direct obligation to the person depicted in the image would still be expected not to share the photo. This highlights that most of our participants believe that maintaining the privacy of a suggestive personal image is a common norm among their peers regardless of the relationship between them. We suggest that the relatively high level of privacy expected in such a situation reflects strong off-line privacy norms for sexuality, which aligns with Nissenbaum's argument that off-line privacy norms remain salient in digital contexts.

Digital Versus In-Person Sharing

Both the survey respondents and focus group participants reported that the method of image sharing was significant in expectations of privacy. We asked participants if it was OK to share the photo by: (1) showing someone the photo on a phone in person; (2) sharing the photo by sending it through a mobile phone's private messaging platforms; and (3) posting the photo to a website. Each of these three sharing scenarios is increasingly public and offers more potential for wide distribution, and, as such, survey respondents indicated that it is more inappropriate to share a suggestive photo in more public online contexts (Figure 3; $p < 0.001$ using a χ^2 test). The largest difference we found was between off-line and online sharing; 14% of respondents answered that it was OK to show the private photo to someone in person, and only 3% and 2%, respectively, thought it was OK to send the photo to a third party or to post it online.

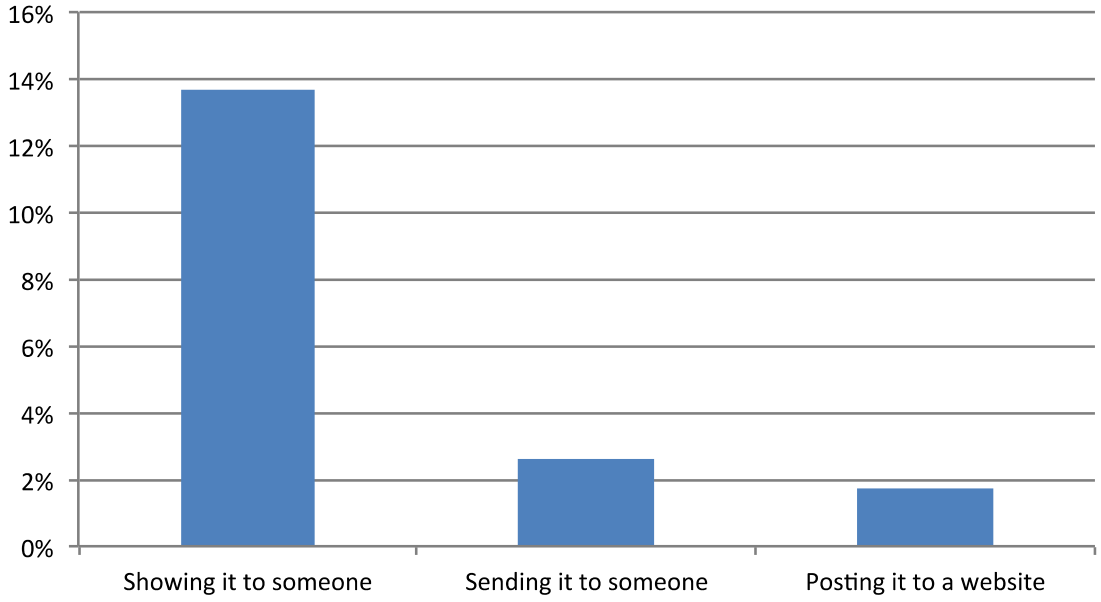

Figure 3. Sharing method: Percentage of respondents who answered, "Yes, it's OK to share the photo."

As the focus group participants explained, off-line sharing would be less of a problem, because it does not allow the third-party recipient to have a copy of the photo.

> I feel like showing a picture is personal and something very private about that person. Sending is worse—then they . . . can do whatever they want with it. (Amanda, 22)

> By showing it on your phone, it's still something that is yours. But sending it, other people become, like, owners of the picture. (Kathleen, 19)

> Showing it is a breach of intimacy and your body. I wouldn't want somebody to do that to me. Sending it is even worse. (Lisa, 20)

> Researcher: What about posting the photo on a website?

> Definitely not! That seems, like, super illegal to me. (Hannah, 21)

In our focus groups, comparing the two kinds of online sharing (sending a photo via mobile phone or posting it to a website), the more public practice of posting to a website was seen as even less appropriate. This corresponds to the previously discussed expectation around forwarding, and it indicates a strong normative—in essence, moral—judgment among the participants. Focus group participants were unanimous that posting the photo online was the worst violation of privacy and would never be acceptable. Hannah suggests that posting a private suggestive photo seems "super illegal," and Lisa suggests it would indicate clear malicious intent:

> I feel like if someone would do this, it would be really not with a good intention. I mean, to post it on Facebook would be like a revenge thing—I can't imagine someone having a happy relationship, or being healthy even, to be posting [it] online. (Lisa, 20)

A large majority of respondents expected that their peers would uphold the privacy of a suggestive image regardless of the type of image sharing, but even those who did not hold this universal expectation often still recognized that showing a private image to someone in person was less damaging to them than distributing it via mobile phone or on a website.

Gender and Age Differences in Privacy Norms

Our online survey revealed some differences related to the gender and age of respondents. The strongest gender difference we found in the online survey was in responses to a question about the least public sharing context (showing it to someone else in person): female respondents were significantly more likely to answer that sharing the photo is not OK (90%) than male respondents (80%; $p < 0.05$ using a χ^2 test). Consistent with previous research, as discussed above, that women are more concerned with privacy, male survey respondents were slightly more likely to have lower privacy scores than female respondents (Figure 4), though the difference in average privacy scores for men (6.08) and women (6.31) was not significant. The main difference we found was that 8% of male respondents had a low privacy score (between 0 and 3), while only 2% of female respondents had a score in that low range.

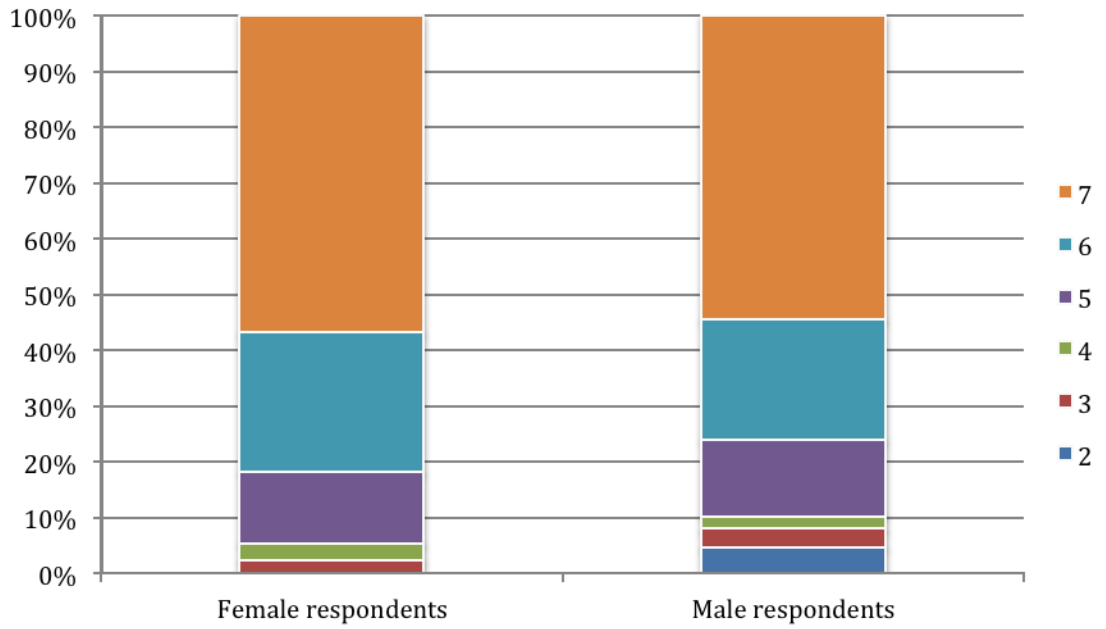

Figure 4. Privacy expectation scores by gender.

Although we expected greater gender disparities, the effect that other researchers found may have been influenced by the fact that most of the questions that make up the privacy score concern a scenario with a male image sender. Male respondents might be more concerned with respecting privacy if they directly identify with the potential victim. In the focus groups, all participants were female, and they shared some thoughts on why there might be gender differences in privacy expectations and repercussions in sexting:

> It could be bad for anyone, but yeah . . . I think there can often be worse consequences for a woman to have a photo like that on the Internet. (Amanda, 22)

> I feel like there are more sites for guys to send women's naked photos, like there is a site called ex-girlfriends.com and there's a whole bunch of sites dedicated to embarrassing women . . . [because] it's a more taboo thing for women. But that isn't to say that it wouldn't hurt a guy as well. (Molly, 21)

> There might be the assumption that a man doesn't care as much, that his naked body has a different connotation than a woman's. (Amanda, 22)

> Yeah, I think the assumption is that it would be less harmful for the guy, because there is this idea of like, the double standard sexually. (Lisa, 20)

> Her body is more sexualized. (Amanda, 22)
>
> I feel like he wouldn't care as much as her, just because she is a girl, and girls are not supposed to do all these things. (Anna, 21)

In addition to gender differences in our study, a few slight age differences emerged. The youngest and oldest respondents had the highest average privacy expectation scores (18-year-olds scored an average of 6.53, and 23-year-olds scored an average of 6.33), while the respondents in the middle of the age range had the lowest scores (21-year-olds scored an average of 5.8). More research is needed to determine whether age differences in privacy expectations among young people are significant and what their cause might be.

Privacy Management Techniques

Confirming the literature discussed above that young people are indeed concerned with online and mobile privacy, we found that youth are interested in ways to protect their privacy through technological means. Our online survey and focus group questions included a scenario in which a person had added a lock to her mobile photo before sending it, so that the intended recipient would not be able to forward the photo, at least through normal means. We asked participants whether someone who placed such a lock on a suggestive photo would expect that photo to stay private. The comparison shows that some respondents thought that locking a photo implied that the sender expects less privacy than for a photo without a lock (Figure 5; $p < 0.05$ using a χ^2 test). At the same time, the vast majority of respondents (94%) thought it was not acceptable to forward a photo that had a lock on it, which is very similar to the data for the other types of online sending discussed above.

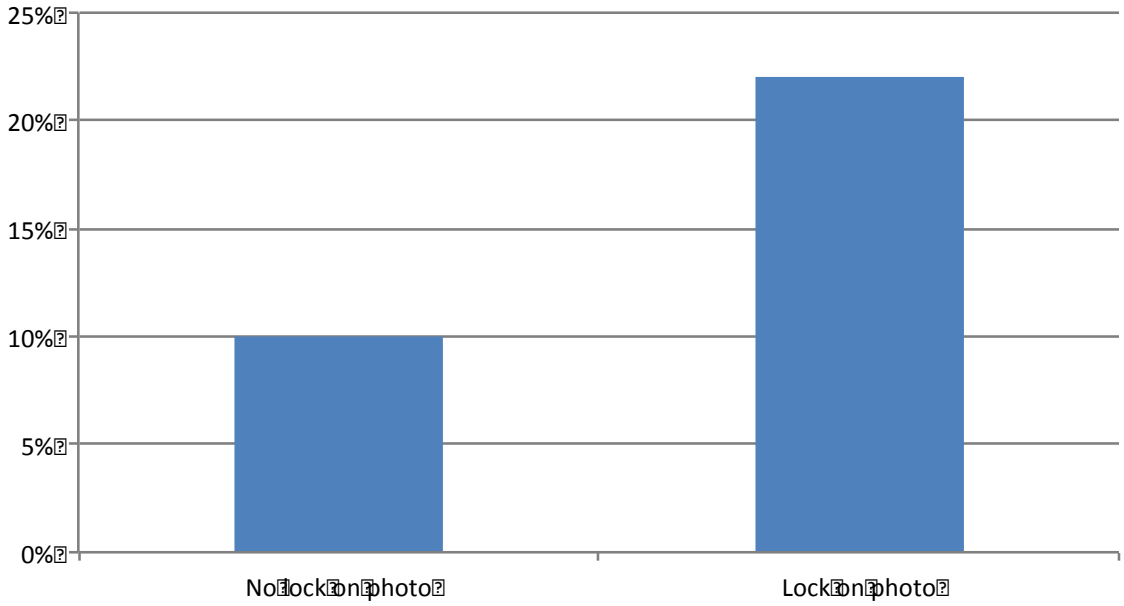

Figure 5. Photo locks: Percentage of respondents who expect the recipient to share the photo.

Focus group participants explained that senders might put a lock on a photo if they do not trust the recipient.

> The fact that she put a lock sort of suggests that she doesn't maybe trust him as much, because then why would you need a lock? (Anna, 21)

> If you need to put a lock on it, then you might not want to send it in the first place. Just, you don't trust the person enough to not send it. (Lisa, 20)

> I think it's a smart thing to do. I think that's really cool that you can do that. . . . If that was just part of our culture, like everyone was always putting locks on their pictures, that seems like a positive step, because obviously there are people who are—who you think are trustworthy and they're not. (Amanda, 22)

Focus group participants also discussed a range of uses for digital privacy protections. They noted that Snapchat, which allows users to send photos that are automatically deleted after a specified number of seconds, was useful not only for photos intended to be private because they are suggestive but for frivolous or unflattering photos.

> I know a lot of people will send, like, outfit pictures to each other . . . and a lot of my girlfriends will send you like a weird awkward picture that I don't want you to post, like, they don't want to take the time to put on makeup, or something less presentable for public viewing. . . . I think it's more used so that pictures are not saved on people's phones. Because people go through other people's phones a lot, that's normal. Snapchat takes the picture out of their photo stream. (Hanna, 21)

> I feel like the app was probably built for [suggestive] photos, in a way, because what else would you want someone to see just for like three seconds? (Anna, 21)

> Well, my cousin uses it, but she uses it for fun. Because it's more just, like, fun showing your friends photos to get their initial reactions to stuff, like fast chatting through images. (Kathleen, 19)

In line with our focus group participants' reported usage of Snapchat, most survey respondents (65%) also indicated that they would use a digital lock or privacy protection for images sent via mobile phones. Still, this means that a large minority of respondents (35%) said they would not use such a lock. Some of our focus group participants may have been skeptical about the security of such an application, because there are often ways around any digital restriction—indeed, sites dedicated to posting leaked Snapchat photos have emerged (Blake, 2013). One survey respondent's answer suggests that some young people who replied that they would not use such a program did so because they felt no need for it:

> I answered no . . . because I don't share pictures I wouldn't want to be shown to other people. However, I think such an app would be appreciated and used by other people. (Female, 22)

Participants' reported interest in a technological solution to help protect mobile image privacy suggests that many share photos that are not meant to be public, whether they are sexually suggestive or are private for some other reason. More generally, this interest in privacy protection and privacy management techniques indicates that young people are indeed aware of the implications of digital and mobile distribution and actively attempt to control privacy according to their expectations.

We suspect that one of the main barriers to developing better protections for privacy in sexting—whether by technological or social means—is the prevalence of victim-blaming attitudes. Although the privacy scores indicate that survey respondents expect a fairly high degree of privacy in the sharing of suggestive photos via sexting, in written comments a number of participants indicated that senders should ultimately be responsible for not sharing compromising photos:

> The responsibility lies with the person who originally took and sent a suggestive photo. They must understand the risk of the photo being shared once they have sent it. (Female, 22)

> Not everyone sends dirty pictures of themselves . . . and if you do something[,] you shouldn't be embarrassed about it, or simply don't do it. (Female, 22)

> People shouldn't be stupid enough to send inappropriate pictures of themselves in the first place. I think it is important sometime[s] to protect people from their own stupidity/naïveté . . . [but] you can't blame someone for sharing a picture when you shared it too in the first place. (Female, 23)

> If you take a suggestive photograph, common sense dictates that one way or another, somehow it'll end up on the Internet. Even though it might be a breach of privacy, once the picture is taken and especially once it's sent to another person, the situation is out of your control. (Male, 21)

Yet even these four survey respondents quoted above, like their peers, had high privacy scores (6 or 7). These people seem to be blaming the victim of a privacy violation in their written comments while stating that breaking someone's trust by distributing a suggestive image without permission is never or rarely OK in their survey answers.[6] This discrepancy also appears in attitudes about sexual violence, because while most people agree that rape is never acceptable, many still believe the common rape myths that hold victims responsible (Suarez & Gadalla, 2010). Thus, a goal for sexting education could be to strengthen existing privacy norms by encouraging people to reflect on their personal expectations of privacy and to resist the common impulse to blame victims of privacy violations.

Conclusion

Despite the supposed death of privacy in a digital age, this study's results support much of the recent research on youth and online privacy that has established that young people generally expect privacy, are concerned about privacy, and actively attempt to control the distribution of their content. Taking the specific example of sexting, we found that strong privacy norms were commonplace and situation specific, which is in line with Nissenbaum's theory of privacy as contextual integrity. The study results confirm our hypotheses that young people have greater expectations of privacy in longer and more serious relationships, that the type of image sharing impacts privacy expectations, and that women are (slightly) more concerned about privacy than men.

We did not anticipate that respondents would view different types of online sharing so similarly, as only a small number (2–3%) thought it was OK to share a private photo via any online method (sending or posting online). We were also surprised that the presence of a digital lock had no discernible

[6] In contrast to this handful of written responses, participants in our focus group rarely made comments blaming the victim of a privacy violation. Because the focus group participants were all female and most were students in communication studies and women's studies who had some prior exposure to research on sexting, their responses related to gender issues might be reflective of this prior knowledge. It is also possible that people who disagreed with the implicit assumptions of our survey (that sexting is not wrong but violating privacy is) may have been more likely to leave an optional written comment.

impact on respondents' general unwillingness to accept online distribution within a long-term relationship. The type of relationship appeared to be the most important factor: Respondents were more likely to think that letting others see the photo was acceptable for a recipient in a short-term relationship (27%) or for a third-party acquaintance of the person depicted (20%). Our results indicate that young people are attuned to the nuances of context in their uses of digital and mobile technologies, and they are both concerned with privacy and committed to participating in diverse modes of social engagement. Unlike the legal and educational authorities discussed in the introduction, none of our respondents thought that privacy is always irrelevant in sexting or that all digital images are inherently public.

This study raises a number of questions for further research. For example, building on our insights about social norms of sexting and privacy, additional research could examine the relationship of these norms to behavior. Moreover, our relatively small sample of all-female focus group participants may have limited our ability to interpret the survey results, especially in terms of gender differences. A larger-scale qualitative study would be useful for garnering a wider range of participant responses.

Ideally, such research could improve public understandings of sexting and the legal and educational responses. Given the criminalization of sexting and the counterproductive educational responses to it (Hasinoff, in press), it is vital for future research to further develop and evaluate educational interventions and legal policies concerned with youth privacy in digital communication. Privacy scholars such as Solove (2007) point out that a range of legal, technological, and social changes are necessary to adequately protect users' privacy as digital and mobile platforms evolve.

A combination of regulatory and market-based support for technological changes, such as the digital lock we proposed in one of the sexting scenarios (or applications like Snapchat), might enable users to exert more control over the distribution of their digital images. Although respondents indicated that using a digital lock indicated a lack of trust, regulations that require personal content like photos and text messages to be private by default on all mobile phones (and thus impossible to forward without changing a setting) might help shift these perceptions and ultimately better support users' existing privacy expectations (Hasinoff, in press). Other legal changes might include strengthening privacy laws to better enable victims to file lawsuits. Such a regulatory measure would need to be accompanied by public education campaigns that target a broad audience—not only teenagers and children—in relation to online privacy.

Developing a public understanding of sexting that avoids victim blaming and abstinence-only advice is vital for helping young people navigate identity and social development in a digital age. Popular perceptions of sexting are largely shaped by extreme and sensationalist news coverage of youth sexuality, teenage rebellion, and online risk (Angelides, 2013; Hasinoff, in press). The typically condescending tone of such coverage often advises young people to avoid sexting because it is a risky behavior. Yet risk is integral to the social and identity functions of sexting—for example, according to respondents, sharing suggestive content in long-term relationships can demonstrate and enhance feelings of trust. As Livingstone (2008) points out: "For today's teenagers, self actualization increasingly includes a careful negotiation between the opportunities (for identity, intimacy, sociability) and risks (regarding privacy, misunderstanding, abuse) afforded by Internet-mediated communication" (p. 407). Given that risk is

inherent to young people's digital practices, we suggest that a more effective approach to sexting—and indeed to sharing any type of private content online—would be to develop ways of balancing risk in relation to opportunity rather than attempting to eliminate risk altogether.

Since sexting abstinence is both unrealistic and unnecessary, reinforcing and promoting privacy norms for sexting that draw upon existing norms for sexual privacy off-line may be a more effective strategy. A key complication is that online practices can create different contextual expectations for privacy norms, so a direct translation of privacy norms from off-line to online might be not always be possible or desirable (Nippert-Eng, 2010). Yet, as our study has shown, young people hold strong context-specific privacy expectations in sexting. This implies that education and media literacy programs should promote respect for other people's privacy online through situated examples designed to invoke contextual integrity. Instead of focusing on abstinence, the discussion should involve questions such as: When is it OK to share a photo, and when is it not OK? What kinds of photos are intended to be private? Future research could develop and test the effectiveness of programs for online safety and protecting privacy that tap into existing off-line norms, reinforce the general perception that it is not appropriate to share personal photos without consent, and discourage those who might forward other people's sexts.

Consider one respondent's written answer on the online survey: "I am not letting my daughter have a camera-enabled device until she's 30" (Male, 24). The respondent implies that the recipient of an image cannot be trusted to respect the privacy of an image sender. It is striking that in response to a survey about privacy violations, this particular respondent had the highest possible privacy expectation score (7), but he did not state that he would vow to teach his children his values of respecting other people's privacy. Instead he wrote that he planned to enforce sexting abstinence for his daughter. His comment, however lighthearted, indicates the significant work to be done in changing the conversation about sexting.

As we have argued in this article and elsewhere (Hasinoff, 2013, in press), it is vital to move away from victim-blaming and sexting-abstinence messages and to instead pursue strategies of legal, educational, and social change that adapt and reinforce preexisting privacy norms for the context of digital media. The results of our exploratory study suggest that young people have a strong sense of privacy when they share suggestive images, though we believe the incidence of nonconsensual forwarding could be reduced through effective interventions. Perhaps the people who need educational intervention most urgently are adults—the policy makers, educators, and technology designers who assume that there is always no privacy in sexting.

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