Managing Disclosure through Social Media: How Snapchat is Shaking Boundaries of Privacy Perceptions

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Abstract

The rise of online human communication tools commonly referred to as social media apps are changing the dynamics of interpersonal relationships through self-disclosure and privacy management. However, little scholarly research is speaking to the broader role of social media as a method of privacy management in the context of interpersonal relationships. Therefore, this study focuses on Snap-

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chat, a smartphone photo-share app and its influences on privacy management and privacy boundaries centered around the process of building and strengthening relationships through disclosure of private information. Using qualitative interview technique, results from 75 Snapchat users led to the identification and discussion of three categories related to Communication Privacy Management Theory: privacy ownership, privacy control, and privacy turbulence. Finally, this investigation explores and describes a new way in which scholars can view Snapchat through McLuhan's claim that *the medium is the message*.

The following study discusses Snapchat, a smartphone application that facilitates photo-sharing person to person, and the ways in which it is changing our perceptions of privacy. More specifically, the study focuses on Snapchat through the lens of Petronio's Communication Privacy Management Theory (CPM) (2002) and how this form of communication is creating new privacy boundaries as well as new forms of privacy turbulence in relationships.

Communication is a process that never ceases in the sending and receiving of messages across different mediums (Seiler & Beall, 2005). Therefore, the medium remains tremendously important as it is not only the source for sending and receiving information, but also determines the shape and type of message. This assertion leads us to discuss McLuhan's (1967) claim that *the medium is the message*. While McLuhan made this claim in the 1960s when people were not introduced to today's technological

advances, the claim began making more sense to mass media and communication scholars during the shift to the information age where new forms of communication such as Snapchat began reshaping the way younger generations communicate.

Social media, as defined by Kaplan and Haenlein (2010), constitute "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content" (p. 61). Negroponte (1996) contends that a radically new culture is emerging at the juncture of human communication, digital graphics, and multimedia sources. Thus, for the purpose of this study, social media are conceptualized as internet-based human communication that allows the exchange of User-Generated Content (UGC) on a particular medium such as Snapchat.

The following investigation provides a review of current literature regarding privacy management and privacy boundaries centered on the process of building and strengthening relationships through disclosure of private information. Framed through the lens of CPM, this project also provides a thorough discussion on three privacy categories. Results of this study lead to a robust discussion on the implications of Snapchat on privacy management.

Review of Literature

Communication scholars have pursued systems that would describe the communication process for decades (Shannon & Weaver, 1949; Schramm, 1954; Katz, 1957; Barnlund, 1970). In the same instance, working definitions of communication continue to adapt to new mediums while the community of scholars expands its under-

standing of the communication process. Specifically, communication scholars have concentrated on the areas of gender and communication (Wrigley, 2004; Mayo & Henley, 1981; Sommer, 1959; Markel, Long, & Saine, 1976; Ivy & Backlund, 2000; Leventhal & Matturro, 1980), as well as relationship building through communication (Knapp, 1978; Knapp & Vangelisti, 2009; Johnson et al., 2004; Baxter & Montgomery, 1992; Rawlins, 1996; Conville, 1991), to name just a few. There is also much attention focused on the ways in which online communities and social media, such as Facebook, affect interpersonal relationships through communication (Hollenbaugh & Ferris, 2014; Zwier Araujo, Boukes, & Willemsen, 2011; Fox, Warber, & Makstaller, 2013; Bradner, Kellogg, & Erickson, 1999). Texting, and other channels of mediated communication, have been evaluated for marketing viability (Omkareshwar, 2012) and media richness (Kwak, 2012; Weisskirch, 2012). Additionally, there is a large body of research about the implications of photo-sharing smartphone applications on sexual behavior (i.e. sexting) (Parker, Blackburn, Perry, & Hawks, 2013; Benotsch, Snipes, Martin, & Bull, 2013). However, the literature is lacking regarding the use of smartphone photo-share apps and the ways in which they are changing our definitions and boundaries of privacy. Thus, this study examines how Snapchat, a smartphone photo-share app, affects privacy, boundaries and offers insight into the influence of Snapchat on the field's current understanding of privacy perceptions via CPM.

Snapchat as a Communication Tool

Snapchat began in the minds of Kappa Sigma

brothers Bobby Murphy, a Stanford alum, and Evan Spiegel, a later college dropout, in a product design class in the spring of 2011. This communication tool has provided a new avenue that may change the way millennials send photos to one another. The app allows users to chat, send a photo or video to another user for a set period of time (usually no longer than ten seconds for a photo, 15 seconds for a video), and once that time is up, the chat session, photo or video are supposed to disappear. This kind of short-term message can appeal to those who are trying to keep messages private from parents, teachers, or possibly even employers or government agencies. Because photos sent via Snapchat delete within ten seconds of receipt (Gillette, 2013), users have been encouraged to share data/images they would not have otherwise shared (Turner, 2013).

In an era where people are concerned about online privacy, Snapchat opens a new chapter in this conversation. According to Fertik, the ability to record and store content online has led many, including college and employment applicants as well as spouses flirting with online eroticism, to seek methods of data-deletion in hopes of managing their identity (Singer, 2012). This desire to secure online self-data (Boyles, Smith, & Madden, 2012) has led to numerous lawsuits and discussions around the world (Gillette, 2013; Majovski, 2013). It is pertinent to mention here that Snapchat is available in 15 different languages including Arabic, Korean, Chinese, and Spanish (Snapchat Inc., 2013).

Snapchat's provision of visual discourse that disappears upon receipt provides a new challenge regarding moral and ethical issues. Snapchat claims transmitted im-

ages erase within ten seconds, which provides peace of mind for those concerned about the longevity and potential publicity of their photos (Gillette, 2013). The smart phone app is supposedly for children 12 or older, and the company describes it as such:

> Snapchat is the fastest way to share a moment with friends. You control how long your friends can view your message—simply set the timer up to ten seconds and send. They'll have that long to view your message and then it disappears forever. We'll let you know if they take a screenshot! Build relationships, collect points, and view your best friends. Snapchat is instantly fun and insanely playful. Show your friends how clever you can be and enjoy the lightness of being (Poltash, 2013, para. 10 via Snapchat, Inc.).

An increasingly popular Snapchat feature is *My Story*, which allows users to add several videos and/or snaps in sequence to create a story for other users to view. These stories are viewable by as many as all their creator's *friends* simultaneously. Ekman (2015) considers Snapchat's My Story component a significant influence on today's cultural adherence to cinematic elements.

While snaps, Snapchat messages, are marketed as creative, and *My Story* considered complex (Ekman, 2015), there may be more significance to the field of communication lying under the surface of Snapchat. While it may be harmless or self-expressive to send a *selfie* or funny video of what a person did during the week, the more invasive snaps known as *sexting* continue to circulate. Poltash (2013) emphasizes the app's use for sexting between mi-

nors. While the app has various uses, with it come legal and non-legal implications when those minors send nude photos to one another, leading Snapchat to develop limited liability indemnification clauses dealing with child pornography.

Generation after generation has sought new ways to increase voyuerism, while decreasing its implications (Barss, 2010). Snapchat seemed like the solution to this ever-present dilemma until reports announced that images could actually be saved by the receiver, the receiver's phone, or even the Snapchat servers (Valinsky, 2013; Large, 2013; Hill, 2013; Rosen & Rosen, 2013). Even with concerns regarding a sexting app reputation and the realization by clients that images may not really be deleted within ten seconds, Snapchat continues to flourish.

Snapchat developers explain that "the allure of fleeting messages remind us about the beauty of friendship – we don't need a reason to stay in touch" (Snapchat Inc., 2013, p. 1). The app continues to rise in popularity, especially among young internet users, due to the fact that these messages disappear. However, nothing caught in the web ever really disappears. In late December 2014, Snapchat users were surprised to find out Snapchat was less than elusive, and was not as safeguarded as promised. Snapchat had been hacked, and several million usernames and private phone numbers were leaked. Snapchat was very slow to respond, and simply made a blog post to the effect that hacking of this kind is commonplace, and it was not really an issue. Fung (2014) stated:

> Snapchat hasn't replied to a request for comment Wednesday morning (we'll update this post if they do). But its Dec. 27 blog post didn't say that the ex-

> ploit had been conclusively resolved -- just that it had thrown some obstacles in the path of would-be hackers. If the accusations about Snapchat's response time prove true, it implies a pretty cavalier attitude on its part toward security -- not to mention the privacy its vanishing photos are meant to provide in the first place. (Fung, 2014)

Not only did Snapchat executives have an indifferent attitude about violating users' privacy, they did little to remedy the problem. The same was the case in another 2014 breach regarding nude images of users who used a third party app disguised as Snapchat (Lee, 2014). While Snapchat claimed to be taking on the third party apps, it still appeared as if the blame fell on the users, not the seemingly empty promise of disappearing photos. While at first the Snapchat breach seemed something users could never forgive, it somehow fell by the wayside. According to Wortham (2014), users were not directly affected by the violation of their privacy, as far as the company was concerned, as long as it did not come in the way of their friends being able to view their content and it coming in between them and their personal lives.

Communication Privacy Management Theory

Agreeing with Altman and Taylor's (1973) Social Penetration Theory, Petronio's (2002) CPM discussed the strengthening of relationships with significant others through self-disclosure. Revealing private information provides avenues for comfort and advice during distressing life events (Petronio, 2002). However, self-disclosure can also stress a relationship if it does not follow simple social guidelines or if the information is leaked to the public.

Self-disclosure

Self-disclosure plays a major role in the process of relationship development, and it patterns itself to each relationship stage and context (Altman & Taylor, 1973; Luft, 1969). Contrary to other theorists, Petronio regards self-disclosure rather as "disclosure of private information" (Griffin, Ledbetter, & Sparks, 2015, p. 152). For example, in Petronio's revealing stage, distrust in a partner is reduced through asking questions and disclosing more and more personal information in a mutual fashion, thus strengthening the relationship (Berger, 1987; see also Hofstede, 2003). A significant factor in self-disclosure is risk, which includes consequences such as rejection, giving an impression which is unwanted, and possibly hurting another (Greene, Derlega, & Matthews, 2006; Rosenfeld, 2000). Furthermore, extreme self-disclosure can concern one with how the information shared might be used in the future (Rosenfeld, 1979; Erbert & Floyd, 2004).

When sending a snap, a person is engaging in a form of self-disclosure. If the receiving user handles this information appropriately and responds in a positive manner, the two Snapchat users reduce their privacy. According to Petronio, this disclosure might strengthen the relationship, but it could also cause stress in the event the receiving user were to violate the sender's privacy by taking a screen shot of the snap and saving it, sending it to someone else, or posting it online. Sharing another's confidential information also reduces privacy, but can damage a relationship.

The three prominent factors of CPM are privacy ownership, privacy control, and privacy turbulence. Privacy ownership refers to privacy boundaries that include

information we have but others don't know. "These boundaries can range from thin and porous to thick and impenetrable, which shield deep, dark secrets" (Griffin et al., 2015, p. 151). Privacy control deals with decisions to share private information with another person. Our decisions to share private information or surrender some control also redefine the boundaries contained in the privacy ownership part of the system (Petronio, 2002). Privacy turbulence refers to the decisions made in the wake of a breach of privacy that are directed at reducing turbulence that occurs when things do not go the way one expects (Petronio, 2002; Griffin et al., 2015, p. 151).

Some of the benefits and rewards associated with sharing information online include interacting with old and new friends, receiving community support, and discovering interesting opportunities and information (Burke & Kraut, 2013; Steinfield, Ellison, & Lampe, 2008). Online disclosure can also bear negative implications. Revealing certain types of information can be potentially risky, especially if the information is shared out of context and with the wrong audience (Nissenbaum, 2011; Petronio, 2002). Social networking sites have provided a way for people to be more private in sharing information with one another by creating a faux safety net for privacy control (i.e. Snapchat's disappearing image). Yet, there are still methods to violate the shared private information; these create privacy turbulence.

The five corresponding principles of CPM are: 1) people think they own and can control their private information, and it is their right to do so; 2) through employing "personal privacy rules," people can control their own private information; 3) when this private information is

shared with others, they become co-owners of the information; 4) negotiations of privacy rules about sharing the information and telling others between co-owners of this private information need to be mutually agreeable; and 5) when the privacy rules agreed upon by the co-owners of the private information cannot be negotiated effectively or the rules are not followed, boundary turbulence is likely the end result (Petronio, 2002; Griffin et al., 2015, p. 152).

While this list may resonate with many, the growing popularity of social media may be changing users' conceptualization of privacy and control. People might consider the "pros and cons of the information they put online, but privacy management in the digital age is complex" (Litt & Hargittai, 2014 p. 520). Online environments like social network sites are now places in which people are communicating and sharing information with much larger, varied audiences as opposed to face-to-face settings. Such outlets make it almost impossible to decipher who will be receiving the messages sent (Litt & Hargittai, 2014 p. 520). While Snapchat has still stayed seemingly one-on-one, the integration of *My Story* moves Snapchat further toward a social app. Snapchat's social aspect ushers it into the social atmosphere.

Social media have been pushing the boundaries of privacy management for years through websites such as Facebook. Kennedy-Lightsey, Martin, Thompson, Himes, and Clingerman (2012) wrote that friends' boundary coordination and ownership about private information is modeled by CPM. Kenedy-Lightsey et al. studied one hundred pairs of friends regarding risk of a prior admission and the degree of dialogue about who could and could not know the information. In terms of CPM, disclosers engaged in

greater boundary coordination when the information was riskier. When the information was riskier, disclosers and receivers supposed that the receivers had less ownership rights over the information. Disclosers reported negative emotional reactions to hypothetical distribution of riskier information when they supposed their friends to have less ownership. Oppositely, positive emotional reactions of lower-risk information occurred when one supposed his or her friends as having more ownership. Receivers were more likely to distribute the information when they supposed they had ownership over the information.

The co-owner's reaction or response of a disclosure is also an important factor as it can lessen the amount of future disclosure while the message sender loses a sense of autonomy and control. Other privacy theories postulate that people want "selective control of access to the self" (Altman, 1975, p. 24), and that they try to regulate and differ who has access to their personal information through limitations, rules, and organization (Altman, 1975; Child, Pearson, & Petronio, 2009; Petronio, 2002). The implications of a message sent are beyond the initiator's control, thus creating a sense of sender-liability (Petronio, 2002).

According to Petronio (2002), users develop a set of rules for *concealing and revealing* information that provide hope for managing the amount of disclosure. There are five factors ruling disclosure decisions: 1) **Culture** discusses how different cultures have different views on what is considered private information. Some study results have shown individual differences like age, gender and internet experience, along with nationality and culture considerably influence internet users' privacy concerns. Also, older

female users from an individualistic culture were more alarmed about online privacy than other subjects (Cho, Rivera-Sanchez, & Sun Sun, 2009); 2) **Gender** states that women discuss more private information than men; 3) **Motivation** refers to a form of safety in sharing private information that might not have been there previously; 4) **Context** deals with comfort levels in disclosure based on a given situation; 5) **Risk/benefit ratio** is a process of calculation that adds benefits or deduct costs before the private information is shared to a potential co-owner.

Privacy turbulence due to disrespected social media privacy guidelines can lead to issues in interpersonal relationships. According to Madden and Smith (2010), approximately 4% of internet users have experienced a turbulent event because of something that had been posted about them online, and 12% of users had posted something online themselves that they later regretted.

CPM is an interpretive theory that searches the numerous manners in which private information is handled. A key element of CPM is its extensive open-ended interviews, several of which were held with sexually-abused children, a vulnerable population experienced in privacy turbulence (Griffin et al., 2015). Petronio's research created a reconstruction of the medical industry's policies on privacy abuse.

Privacy is valuable, but is rapidly slipping away due to social media. CPM can be confusing, given the multitude of classifications and Petronio's mixing of the terms *negotiation* and *mutual primary rules*. Yet, much of her argument remains viable and easy to understand for most readers (Griffin et al., 2015). Perhaps Petronio's greatest contribution has been helping us understand the theoreti-

cal underpinnings of privacy and the importance thereof (Griffin et al., 2015).

Snapchat and other social media outlets are not wholly to blame for privacy abuse. It is the responsibility of the private information holder to understand the complexity of autonomy and control over one's own life. When trusting someone with private information or compromising photo, a co-owner may carelessly share this information as in the case of Jessica Logan. Logan, an 18-year-old, sent nude photos to her boyfriend who then sent those images on to friends. The harassment Logan received led her to commit suicide (Poltash, 2013). Trust can be broken when boundaries are disregarded, yet even CPM does not provide the remedy for such events.

Rationale

The research surrounding privacy management and privacy boundaries has centered around the process of building and strengthening relationships through disclosure of private information. From the literature, it is evident that privacy and privacy management is affected through various social media outlets. Burke and Kraut (2013) and Steinfield et al. (2008) note the potential benefits accompanied with sharing information online through social media platforms like Facebook, from interacting with old and new friends, to receiving support and discovering interesting opportunities and information. Consequently, Nissenbaum (2011) highlights that though benefits exist in sharing information online, negative outcomes arise in revealing certain types of information which can be potentially risky, especially if the information is shared out of context with the unintended audience. This type of

mediated communication intended at moving a relationship from one phase to the next through self-disclosure brings risk (see Velten & Arif, 2016), and typically carries message permanence whether acknowledged or not.

However, the literature is lacking concerning the use of a social media apps such as Snapchat, which uses short time limitations, and how it might influence privacy boundaries and privacy management. Therefore, based on the literature, it is therefore reasonable to assume that Snapchat situates itself within the current understanding of the communication process through self-disclosure and disclosing private information and is a tool in which collective privacy boundaries will be reshaped and reformed. In an effort to discover the effect of Snapchat on communication and disclosure among people, the purpose of this study is to extend the current understanding of the link between social media and privacy boundaries through CPM (2002).

RQ1: How is Snapchat changing our perception of privacy on social media outlets?

Methods

Since this study is the extension of our previous work, the methods herein are reflective thereof in order to produce consistent results.

Participants

This study utilized qualitative interviews as a data collection tool because interviewing is a powerful way to gain insight into educational and other important social issues through understanding the experience of the individuals whose lives reflect those issues (Seidman, 2006).

Table 1
Qualitative Questions Regarding Snapchat Usage

1. What kinds of pictures do you take and send via Snapchat? (i.e. What do you photograph?)
2. Would knowing your Snapchat pictures could be "saved" change the kinds of pictures you send?
3. Would you say you have ever used Snapchat as a tool to manage your identity?
4. What do you think or feel when you send someone a Snapchat and he or she does not reply?
5. Who do you Snapchat – only close friends, new acquaintances, etc.? – And is Snapchat a way in which you advance relationships – how?

The key focus of the interviews was an attempt to understand people's changing behavior of communication while using online tools such as Snapchat.

A group of trained interviewers collected data from a convenience sample of 80 participants. There were no preset age, race, or religious parameters, but participants ranged from 18 to 60 years of age and created a cross-section of age and gender. All participants were residents of the Southwestern U.S., adults, and had to be familiar with and use Snapchat on a regular basis. Participants were selected based on social connections to the interviewers. Spanning four weeks of data collection, each participant was asked a series of five questions regarding their use of Snapchat (see Table 1).

Data Collection and Analysis

Participants were assured interview confidentiality and interview transcriptions were coded for record maintenance. Data analysis utilized what Dye, Schatz,

Rosenberg, and Coleman (2000) call the kaleidoscope model of constant comparative qualitative data analysis. According to Dye et al., a researcher can effectively analyze qualitative data through a series of steps, beginning with a grand sum of data and moving from large to smaller groupings of thematic materials. In so doing, researchers begin to observe thematic groupings and how these themes reach across groupings.

For purposes of this study, Dye et al.'s kaleidoscope model of data analysis was adopted to accommodate multiple data analysts. Following Patton's (1990) model of grouping same questions, each interviewer searched for themes across their respective five participants, question by question. Each interviewer then grouped with two co-interviewers for discussion regarding answer/thematic clusters across multiple participants in what Richards, Richards and Morse (2012) call a process of "examination, pattern identification, and interpretation" (p. 207).

Following this qualitative methodology, we collected the transcribed interviews and began searching for common words or phrases. As we highlighted these recurring words and phrases, themes began to emerge. We color-coded each respective theme which allowed us to clearly delineate between major categories. These categories led to our major findings below and provided valuable commentary regarding the role of Snapchat in privacy management.

Results and Discussion

How is Snapchat changing our perception of privacy on social media outlets? Results and findings from the previous study were analyzed, grouped, and put into

three categories of privacy: ownership, control, and turbulence. Taking a *selfie* or any image on a smartphone camera and keeping it to one's own self is complete ownership of that particular image, or information that could potentially be shared in that image; however, in the instance it is shared via social apps like Snapchat, we have initiated the parts of the privacy management system. Several participants of the previous study shared responses, which fit into these categories. Some responses were put into one or more categories, as they could not fit solely into one; this is quite possibly because the concept of privacy is no longer a concrete concept. The boundaries of privacy have been blurred and the concept is ever-changing as it can be negotiated via Snapchat, depending upon what kind of content the initiator sends. The following paragraphs discuss this investigation's findings in the context of privacy management paradigm.

Privacy Ownership

According to Petronio, Privacy Ownership is the first of the three main parts of the privacy management system which makes up Communication Privacy Management Theory; "it contains our privacy information which others don't know" (Griffin et al., 2015, p. 151). Ownership in terms of Snapchat comes in the form of choosing which relationship a photo is sent to, what kind of photo is sent, and perhaps how long the receiver of the photo and message perceived through the photo is allowed to be viewed. Several respondents' statements addressed ownership in and through the relationships of their "snapping." One respondent stated, "I only Snapchat those that I can trust." A majority of other participants shared the similar senti-

ment by stating they "sent Snapchat to close friends only", or "…would never Snapchat a rando [random person]." During the analysis of collected responses, it was evident that such statements delegate ownership over the information as well as the relationship in which that information is shared. It was observed that most of the responses were centered on the notion of privacy, which is expected in a relationship between the sender and the recipient, and ownership of the information being sent.

In connection with revealing and self-disclosure, the responses of Snapchat users also conformed to the theoretical paradigms of interpersonal relationship development. For example, a respondent stated, "I think it can help further a relationship by specifically connecting with the other person through sharing photos that are funny or something only they would find interesting." This participant confirms Knapp's (1978) theory of the development of interpersonal relationships, in which partners begin to become more intimate in their shared information having gained a more personal connection with the other. Likewise, such responses on the part of the participants of this study also conform to Petronio's (2002) theory, which argues that revealing private information could possibly strengthen relationships with people in your life. As one participant stated, "I use Snapchat to strengthen my existing one [relationships]." Another respondent noted, "with friends I don't see all the time in person . . . it [Snapchat] allows me to feel more connected with them because we send stupid pictures back and forth, it feels like they are still a part of my life."

Privacy Control

The second category, Privacy Control, addresses Snapchat as a way to send private images to another person or persons. It is the initiator's decision to share this private information with another person. This then is the "engine of privacy management" (Griffin et al., 2015, p. 151); our decisions to share private information or surrender some control also redefine the boundaries contained in the privacy ownership part of the system (Petronio, 2002). Once the initiator sends a "snap" to another, control of private information, from "selfie" to nude photo, has been relinquished. Regardless, controlling what information is sent through those images is seen in several responses similar to the following response of a participant: "I do not really send any risky pictures over Snapchat; it probably wouldn't change what I send knowing that people can save them."

On the other end of the spectrum, some participants seemed very picky about the content of the photos that they were sharing via their Snapchat accounts. As one respondent said: "Never pictures of myself, just pictures of my pets doing stupid things." Another said, "I like to Snapchat pictures of myself or whatever I am doing and my cat." These responses can be evaluated of our theoretical discussion, which states that control over these aspects of the images and information sent still, regardless of the initiator's wants, "creates a confidant and draws that person into a collective privacy boundary, whether willingly or reluctantly" (Griffin et al., 2015, p. 155). Once this collective boundary has been created, the initiator can never regain control of their information.

As Petronio echoes in that last statement, regard-

less of information and content, we will always lose some control once the message is shared. The following two responses by the participants of this study elaborate this point further as one person said, "Why would I want to send a photo of myself to some random stranger or someone that I do not know very well? Who knows what they would do with those photos." Another participant noted that knowing his images were savable would indeed change the content of his Snapchats: "…I send inappropriate ones, but if employers were able to get a hold of this, I would think twice before I send something funny." Revisiting the elements of Petronio's theory, five core principles of CPM were evident among the responses analyzed for this study. Because we have now made the recipients of those "snaps" co-owners of this information, there is no more control in what can be done once they are received, thus always lowering our control, even of our own information.

The second principle in Petronio's theory can be observed in the following statement of a respondent: "I do not send personable messages, but my Snapchats are different to my friends than my boyfriend." This respondent does so in creating rules about what kinds of photos are sent to different relationships. Another respondent noted, "Selfies are full-body mirror pics." She added said that knowing her Snapchats could be saved would not influence what she sends, stating, "Not really, I have people save them and I don't care. I send tasteful things so no worries." This response, which seems to fall in line with Privacy Turbulence, attributes itself more to the third and fourth core principles. Co-owners are created in receiving these photos with whatever content they may have, and they are given access to this by the initiator. Additionally,

the respondent is aware of the co-owners having this private information, and because the content was sent in a certain manner it was negotiated and was not an issue whether or not the photo was saved and shared.

Privacy Turbulence

The third category, and third part of the privacy management system, Privacy Turbulence, is evident not only through the responses analyzed for this study, but also across the history of Snapchat. As it was discussed in the literature review of this study, Privacy Turbulence occurs when someone breaches our privacy, and there are decisions we must make directed at reducing turbulence that occurs when things do not go the way we expect them to (Griffin et al., 2015; Petronio, 2002). Just as the example above in privacy control, with the female respondent who sends selfies that are "full-body mirror pics" and isn't worried about them being shared because she posts only "tasteful things." Though this is the case, turbulence has still occurred. It was important to address in both categories, as control was felt by the initiator in "tasteful things" sent, though the recipients are still saving the photos, violating the terms of "disappearing" photos, which is a negotiated contract between the two co-owners in sending the photos via this medium.

According to another respondent who was also aware of Snapchat photos being saved, stated:

> I know that people can take screenshots of the photos I send and that stops me from sending something TOO ridiculous. I don't need those rough looking photos of myself ending up on Facebook. Plus if the photos would be able to be saved, I

> would be able to save their photos as well and have photos to retaliate with if they posted one of my ugly photos.

To a certain degree, while control is being negotiated in terms of what photos are sent, the turbulence occurs when those photos are saved and shared to others over other social media platforms like the one mentioned in the respondent's statement. Additionally, it should be mentioned that the turbulence in a relationship when retaliation is mentioned in saving the recipient's photos as well, to share if such turbulence occurs in the initial photo-sharing scenario.

Most significant of both turbulence and the fifth and last of the five core principles is a participant's answer referring to how Snapchats might change if they could be saved – "I would probably not send so many ugly ... they would ruin me. My mom would make me come home from college because she would think I don't take care of myself anymore." The last principle touches on the effects of when the co-owners of the private information do not follow the mutually held privacy rules, and boundary turbulence is the likely result (Griffin et al., 2015; Petronio, 2002). The participant seems to be worried about his/her reputation, which is affected in the simple act of sending the photo through the medium of Snapchat.

More worrisome than "ugly selfies" is the thousands of nude photos supposedly leaked from Snapchat by hackers, which undoubtedly led to much privacy turbulence. It is worth-mentioning here that Dave Lee, in his article, "Nude 'Snapchat images' Put Online by Hackers" (2014) discusses the explicit images of users who used

a third party app disguised as Snapchat, which were leaked by hackers. Nearly half of those affected were between the ages of 13 and 17, leading to worries about images, which may constitute as child pornography. Though Snapchat claims to be doing its best to manage safety in monitoring and taking down third-party apps, executives say it is still the responsibility of the user to beware of those applications, which might be keeping their data.

Conclusion

Snapchat is not only used as a tool to build and maintain personal relationships, but also a means by which people manage their privacy. For example, this study reveals the significant role Snapchat plays in owning, controlling, sharing, and potentially harming relationships. There seems to be a place for the role of Snapchat in the new and continuously changing definitions of privacy, as well as within Petronio's Communication Privacy Management Theory.

Further, this study expounds upon the connections between Snapchat and the impacts of what seeing this medium of communication as non-traditional has on the ever-changing definition of privacy. In a non-traditional model, privacy seemed to matter less, as long as the respondents felt as though they were in some control of the photos they were sending and to whom they were sending and receiving photos. It was only in the loss of control of the information that created turbulence of some kind, whether it be in terms of their own reputation or in their relationship with others.

In summary, the results of this study affirm Petronio's Communication Privacy Management Theory

and provide greater insight to why people use Snapchat as a mode of communication. Even though Snapchat minimizes our likelihood to maintain our privacy, it seems to clearly decrease the likelihood that we will manage that privacy due to the amount and nature of the images we send. Further research should extend this work by strengthening the connection between privacy management and privacy turbulence in Snapchat as well as other popular social media applications.

There are two limitations to this study that should be identified. First, this study utilized the network of interviewers who were trained in the art of qualitative data collection. We utilized a large interviewer pool, but they were closely supervised and brought together into groups to synthesize the themes. Secondly, this study is regional in its scope and therefore not generalizable to the larger population. However, this research has provided an avenue for communication scholars to expand our understanding through further studies in this neglected area of social media and communication.

The study of communication via images and social media like that of this study and its approach is distinctive; however, there is much room for discovery as it relates to not only Snapchat, but also Snapchat's role in social media and visual communication. This research only offers a glimpse into this communication area, and its discussion on the implications of social apps on relationships and the ways in which they are changing perceptions of privacy. Other social applications (i.e. Yik Yak), with a similar communication phenomenon must also be studied. Additionally, Snapchat is consistently updating and upgrading, adding more features and policies to its privacy

agreement. However, the research is still necessary in studying the social implications of such changes and the breaches, which continue to surface. Finally, it should also be discussed the implications of identity management through the shaping and possible manipulations of photos (through filters, specific angles, etc.) not only in the photos sent to one other person, but also posted to the *My Story* function for many to view.

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