

A Digital Footprint From Birth: New Mothers' Decisions to Share Baby Pictures Online

by

Priya Kumar

A thesis submitted in partial fulfillment

of the requirements for the degree of

Master of Science

(Information)

in the University of Michigan School of Information

2014

Master's Thesis Committee:

Assistant Professor Sarita Yardi Schoenebeck, Chair

Professor John Leslie King

Associate Professor Clifford Lampe

A Digital Footprint From Birth: New Mothers' Decisions to Share Baby Pictures Online

© 2014, Creative Commons Attribution-NonCommercial-NoDerivatives License 4.0 International

Priya Kumar

License information: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

ORCID Number: 0000-0001-9244-7915

Dedication

To Michael Paul Cutulle, for indulging my near daily musings on parenthood far earlier than I believe he expected the topic would become a subject of regular conversation.

Acknowledgements

First and foremost, I thank the participants for taking the time to talk with me and show me their pictures. This document grew out of the seeds of their generosity. I could not have asked for a better advisor than Dr. Sarita Yardi Schoenebeck. She provided detailed feedback on everything I wrote, organized the ideas when they felt like chaos, and helped me grow intellectually, all while adapting to motherhood herself. I thank her deeply.

Dr. John King and Dr. Cliff Lampe challenged me to think in new ways and occasionally confused me. Coursework and conversations with them included critical inquiry with a dash of humor, exactly what I hoped for in a graduate school experience. I thank them for that. I also thank Professor Julie Ribaudo for teaching me the foundations of infant and child development and for offering suggestions about the implications of this research.

I thank fellow researcher Tawfiq Ammari for his valuable feedback, advice, and booming laugh. I thank Jarrett Drake, whose coffee-shop conversation with me recommitted me to pursue the thesis. I also thank Dr. Ira Chinoy for saying, “There’s a thesis topic,” when I mentioned my fascination at seeing ultrasound images on Facebook.

I thank my parents Rajiv and Saloni Kumar for their unfailing encouragement and my brother Neeraj Kumar for bonding with me over our shared love of the agony of writing. Nani Ma and Priscilla Auntie always cheered me on as a writer, and I hope their spirits feel my gratitude.

Finally, I thank my husband-to-be Michael Cutulle for playing chef, cheerleader, and sounding board over what must have felt like several very long months.

Table of Contents

| | |
|--|-------------|
| Dedication | ii |
| Acknowledgements | iv |
| Table of Contents | v |
| List of Tables and Figures..... | viii |
| List of Appendices..... | ix |
| Abstract..... | x |
| Chapter 1: Introduction: Inheriting a Digital Footprint | 1 |
| Chapter 2: Related Work | 8 |
| Family Photography and Online Photo Sharing | 8 |
| Self-Presentation and Identity | 13 |
| Audience, Information Disclosure, and Privacy..... | 18 |
| Motherhood and Technology..... | 23 |
| Chapter 3: Methods | 27 |
| Interview Protocol..... | 27 |
| IRB Approval..... | 30 |
| Recruitment | 30 |
| Interviews | 31 |
| Participants | 32 |
| Transcription and Analysis | 35 |
| Chapter 4: Findings: What Is and Is Not Shared? | 36 |
| Photography and Photo-Sharing Habits..... | 36 |

| | |
|--|-----------|
| Pictures Shared Online | 38 |
| Cute or Funny Pictures | 38 |
| Milestone Pictures..... | 41 |
| Pictures with Family or Friends..... | 44 |
| Functional Pictures | 45 |
| Pictures Not Shared Online..... | 46 |
| Pictures That Expose Children..... | 46 |
| Pictures that Portray Negativity..... | 48 |
| Low Quality Pictures | 49 |
| Chapter 5: Findings: Factors that Influence Photo Sharing | 50 |
| Connecting with Family and Friends | 50 |
| Receiving Feedback from Others..... | 52 |
| Negotiating Expectations Around Photo Sharing | 53 |
| Considering their Husband’s Thoughts | 54 |
| Responding to Others’ Requests and Actions | 57 |
| Taking Advantages of Technology’s Affordances | 60 |
| Use of Other SNSs | 62 |
| Managing Audience Expectations, Identity, and Self-Presentation..... | 66 |
| Concerns About Oversharing..... | 66 |
| Motherhood and Participants’ Identities..... | 68 |
| Presentation of the Child..... | 70 |
| Addressing Privacy Concerns | 73 |
| Chapter 6: Discussion, Future Work, and Conclusion | 84 |
| A Growing Audience for Baby Pictures | 85 |

| | |
|--|------------|
| Baby Pictures and the Presentation of Identity | 89 |
| Privacy Concerns and Boundary Turbulence | 92 |
| Future Directions | 96 |
| Limitations | 97 |
| Conclusion..... | 98 |
| Bibliography | 100 |

List of Tables and Figures

| | |
|---|----|
| Table 3.1: Details about Participants | 34 |
| Table 4.1: Types of Facebook Profile Pictures At Time of Interview..... | 40 |
| Table 4.2: Types of Facebook Cover Pictures At Time of Interview..... | 40 |
| Figure 5.1: How Participants Shared Baby Pictures | 63 |
| Table 5.1: Instagram Followers and Baby Picture Album Mailing Lists | 65 |

List of Appendices

| | |
|--------------------------------------|-----|
| Appendix 1: Interview Protocol | 113 |
| Appendix 2: Recruitment Text | 117 |

Abstract

This research explored new mothers' decision-making processes to share baby pictures online, particularly on social network sites (SNSs). Semi-structured interviews with 22 new mothers around the United States and abroad uncovered the types of pictures they did and did not share online as well as the different SNSs and other communication platforms they used. The desire to connect with family and friends motivated participants to share pictures online, though many participants had to negotiate expectations regarding online photo sharing with their husbands, and, to a lesser extent, other family or friends. Participants' conception of their audience, both who was in it and what its members would want to see, as well as privacy concerns influenced their decisions. Participants also considered their own identities and opinions regarding their presentation of self when deciding whether to share baby pictures online. This study extends existing work on online photo sharing and describes how a growing online audience affects photo-sharing behaviors. It also explores the role of technology in the transition to parenthood, offering photo sharing as one potential lens through which to explore the mother-child relationship.

Chapter 1

Introduction: Inheriting a Digital Footprint

In the Fall of 2013, media consultant Amy Webb wrote a column in *Slate* explaining how she posts nothing about her daughter online. Doing so, she wrote, would create a trove of data that facial recognition applications, college admissions counselors, or future homecoming dates could scour, as well as rob her child of digital anonymity (Webb, 2013). On the other side of the spectrum, writer Alexis Madrigal wrote in *The Atlantic* (Madrigal, 2013, November 1) and *NPR* (Madrigal, 2013, December 4) that he had taken 15,000 baby pictures during his son's first five months of life and used a variety of online social network sites (SNSs) to share his experience of becoming a parent with family and friends.

Webb and Madrigal took different approaches to sharing pictures of their young children online, but both acknowledged the benefits and drawbacks of sharing. "I completely understood her parents' desire to capture Kate's everyday moments, because early childhood is so ephemeral," Webb (2013) wrote of friends who posted pictures of their child on Facebook (para. 3). But by doing so, Webb argued, those parents "created a trove of data that will enable algorithms to learn about her over time." (Webb, 2013, para. 8)

Madrigal (2013, December 4) summarized the conundrum as such: "most parents don't want photographs of their children widely available. You want *your* people to see them but not anyone else. The privacy issues that lurk in our daily lives cry out to be addressed when it comes to children" (para. 4, emphasis in original). The urge to share, however, is powerful. Baby "photographs and the stories they tell are an attempt to make meaning out of the rewarding difficulties of rearing a child." (Madrigal, 2013, December 4, para. 13)

Questions about sharing baby pictures abound. Parents and expectant parents wonder whether posting pictures is appropriate (“Ask Heidi: Baby Photos on Facebook”, n.d.) or if they can stop others from doing so (betsy12180, 2013; Yoffe, 2014). (“Unrealistic,” said one advice columnist (Hax, 2013)). Some ask whether sharing baby pictures online constitutes a violation of privacy (Klosterman, 2013), while those who feel subjected to see them have devised tools to scrub social media feeds of the pictures (Considine, 2012).

Use of SNSs is part of daily life for most Americans; nearly three-fourths of online adults use at least one SNS (Duggan & Smith, 2013). Ellison & boyd (2013) defined SNSs based on three components that differentiate them from other forms of computer-mediated communication:

“A social network site is a *networked communication platform* in which participants 1) have *uniquely identifiable profiles* that consist of user-supplied content, content provided by other users, and/or system-provided data; 2) can *publicly articulate connections* that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with *streams of user-generated content* provided by their connections on the site” (p. 7)

SNSs first emerged around 1997 and received mass media coverage in 2003 with the emergence of Friendster (Ellison & boyd, 2013). The launch of Facebook in 2004 popularized SNS use among college students. As Facebook opened itself to new users and eventually allowed anyone to join, it grew to be the most popular SNS in the United States (Duggan & Smith, 2013) and around the world (Ballve, 2013). But the SNS space has always included many players (see Figure 1 in boyd & Ellison, 2007), and 42 percent of online adults in the United States now use more than one SNS (Duggan & Smith, 2013).

As Ellison & boyd (2013) highlighted in their definition, SNSs are first and foremost venues for communication. People use these sites to connect with close friends and family members as well as keep in touch with acquaintances (Burke, Kraut, & Marlow, 2011). SNSs reduce the amount of

effort needed to communicate with close as well as distant connections, and this affordance helps users build social capital (Ellison, Steinfeld, & Lampe, 2011).

Social capital refers to the “benefits individuals derive from their social relationships and interactions: resources such as emotional support, exposure to diverse ideas, and access to non-redundant information” (Ellison, Steinfeld, & Lampe, 2011, p. 873). SNSs enable a variety of activities: communicating directly with individuals, passively consuming news, and broadcasting information to the network. Different activities yield different levels of social capital (Burke et al., 2011; Burke, Marlow, & Lento, 2010). Communicating directly with individual users on Facebook fosters bonding between people and reduces feelings of loneliness, while consuming large amounts of information on the site reduces social capital benefits and increases feelings of loneliness (Burke et al., 2010).

The transition to parenthood is among the most stressful events in a person’s life; LeMasters (1957) conceptualized it as a “crisis.” The arrival of a new person transforms the family system from a dyad into a triad. Even when two people are healthy, in a functioning relationship, and want a child, this reorganization is difficult. For the mother, this often involves loss of sleep, exhaustion, confinement inside the home, and a reduced level of social engagement (LeMasters, 1957). Additional research has advanced the view of parenthood as crisis, but such work has encountered some controversy over the way researchers measure the transition (Cohler, 1984).

Recent work has examined how mothers in particular undergo the transition to parenthood. In a meta-synthesis of qualitative research on the subject, Nelson (2003) found that active engagement in mothering enables women to achieve personal growth and undergo the transformation into becoming a mother. However, feelings of being overwhelmed and unprepared make this transition difficult (Nelson, 2003). Postpartum support from health care professionals focuses primarily on infants, leaving the needs of new mothers unmet (Nelson, 2003). New mothers

may also feel health care professionals are “monitoring their incompetence rather than supporting them” (Nelson, 2003, p. 473). The transition can cause many women to feel, “isolated, alone, and depleted rather than nurtured and supported” (Barclay, Everitt, Rogan, Schmied, & Wyllie, 1997, p. 727). Social support is essential to help new mothers adjust, but the intensity of the transition also affects their relationships (Barclay et al., 1997). New mothers typically turn to role models or use trial and error when determining how to best care for their child (Nelson, 2003). Technology, including SNSs, can potentially alleviate some of these stresses and offer additional sources of support (Gibson & Hanson, 2013). Emerging research has explored the role of SNSs in parenthood (Bartholomew, Schoppe-Sullivan, Glassman, Kamp Dush, & Sullivan, 2012) and motherhood specifically (Morris, 2014; Gibson & Hanson, 2013; Schoenebeck, 2013; Jang & Dworkin, in press; Balaam et al., 2013).

Despite its difficulty, becoming a parent also represents a valuable milestone for many. Pregnancy and childbirth are periods of “snapshot significance,” where the expectant mother and then the newborn are primary “on-camera participant[s]” (Chalfen, 1987, p. 89). With the formation of a family comes the rise of family photography (Chalfen, 1987; Holland, 1991; Rose, 2010). Since cameras rose to ubiquity, parents, particularly first-time parents, have been prolific photographers (Chalfen, 1987; Holland, 1991).

Advances in technology have dramatically reduced the cost to store and transmit data, enabling SNSs to incorporate photo and video sharing (Ellison & boyd, 2013). These sites have become popular venues for pictures, with Facebook users alone posting 350 million pictures a day to the site (Facebook, Ericsson, & Qualcomm, 2013). More than half (54 percent) of American Internet users post pictures or videos online, and young adults (ages 18-29) as well as women are more likely to post pictures (Duggan, 2013). In addition, Facebook users’ posting style tends to include more multimedia content after having a child (Morris, 2014). Among Facebook users, new

mothers use the site more than new fathers, and almost all (98 percent) new mothers upload pictures to the site (Bartholomew et al., 2012). Mothers of young children who use Facebook also report posting baby pictures on the site more often than baby-related status updates (Morris, 2014).

This thesis explores the information disclosure practices of mothers who share pictures of their young children online. Pictures convey intimacy; they offer a glimpse into someone's life. Baby pictures typically show a child's face, and a single picture can reveal a significant amount of information based on who it depicts, what it depicts people doing, and what emotions and body language the people in the picture display. Family pictures have typically remained in the home, with the exception of a chosen few sent to relatives and friends. Sitting in an album or a scattered in a box, family pictures reached limited audiences and provided sentimental value (Rose, 2010). However, the ability to share pictures on SNSs moves them into what boyd (2011) terms networked publics, or venues where information is persistent, replicable, scalable, and searchable.

Posting personal information online increases the potential for privacy violations (Nissenbaum, 2010; Buchanan, Paine, Joinson, & Reips, 2007). The World Wide Web's ubiquity and seemingly limitless ability to store and display information means such content is increasingly by default remembered rather than forgotten (Lessig, 2006; Mayer-Schönberger, 2009). But research suggests mothers employ distinct practices to mitigate concerns when posting information about their children on mommy blogs or online communities (Morrison, 2011; Schoenebeck, 2013). Existing research that analyzes parents' Facebook content tends to exclude pictures due to privacy concerns (Morris, 2014; De Choudhury, Counts, Horvitz, & Hoff, 2014). Little work focuses on new mothers' decision-making process to share baby pictures online.

Here, I present the results from a qualitative study of 22 mothers of young children. Through semi-structured interviews that included a review of participants' Facebook profiles, I discerned the

types of pictures new mothers did and did not share as well as the factors that influenced their decision. Two research questions guided this study:

- RQ 1: What baby pictures do mothers of young children share and not share online?
- RQ 2: What factors do mothers of young children consider when sharing baby pictures online?

This thesis is organized into six chapters. Chapter 2 reviews related work four areas: family photography and online photo sharing; self-presentation and identity; audience, information disclosure, and privacy; and motherhood and technology. Chapter 3 describes the methods used to carry out this study. Chapters 4 and 5 elaborate the results for each research question, respectively. Chapter 6 includes a discussion of the study's findings, its limitations, and directions for future work.

A note on terminology: This study primarily focuses on decisions related to photographs, which are pictures obtained through a camera ("Photograph," 2006). However, in this thesis I primarily use the more general term "picture" instead of "photograph" because participants typically used the term "picture" (e.g., take a picture, post a picture). I use the term "photo" or "photograph" in several other contexts, (e.g., photo sharing, photo albums, photograph collections) and I use the term "photography" when discussing the act of taking pictures. I use the term "image" when discussing ultrasounds as well as pictures that participants manipulated (i.e., an image that showed two different pictures). When discussing related work, I occasionally use the term "snapshots" interchangeably with "family pictures." Additionally, I typically use the terms "sharing" and "posting" interchangeably to denote the action of uploading a picture to an SNS or other online platform. Generally I use "posting" when focusing on participants' actions and "sharing" when focusing on their motivation.

This study builds on existing work and contributes toward our knowledge of how mothers navigate online space as they raise children in a digitally connected age. It complements quantitative

work in this arena and provides insight into how new mothers evaluate privacy concerns (Morris, 2014). It extends work on parenthood and Internet by explaining not only what mothers do online, but also how they incorporate aspects of the Internet, SNSs in particular, into their experience of parenthood (Daneback & Plantin, 2008).

Chapter 2

Related Work

In this section, I describe four areas of related work: family photography and online photo sharing; self-presentation and identity; audience, information disclosure, and privacy online; and motherhood and technology. I begin with a discussion of the history of taking and sharing pictures, especially within families. I then describe how the content of conventional and digital pictures shape self-presentation. In this section I also describe one function of baby pictures and review the psychological processes that foster an infant's ability to develop a sense of self. I then consider how individuals conceptualize their audience on social network sites and introduce one privacy theory through which to approach information disclosure on SNSs. Finally I summarize work in the emerging area of digital motherhood and also describe the significance of baby pictures in navigating the transition to motherhood.

Family Photography and Online Photo Sharing

Relatively little scholarly work has explored the content of family pictures, despite the immense popularity of taking these pictures (Rose, 2010). Examinations of the history of photography have also largely ignored the genre of snapshots, or photographs that are “cloyingly sentimental in content and repetitively uncreative as pictures,” (Batchen, 2008, p. 123). Hirsch (1981) was among the first to examine the history of family pictures, what they depict and represent, and why they are valued. Chalfen (1987) examined approximately 200 personal photograph collections and discerned how people take pictures, what they take pictures of, and what they do with their pictures. Halle (1993) described how family pictures replaced painted family portraits in wealthy households, though family pictures were not to be confused with art. Rose (2010) described family

photography practices in the United Kingdom and discussed the increasing public visibility of these pictures. This existing work focused on collections of physical pictures. Several studies over the past 15 years examined the use of digital tools to manage and share pictures as well as the evolution of photography on mobile phones. Research about photo sharing on social network sites is just emerging. The rest of this section offers a brief review of this work.

The widespread adoption of inexpensive cameras throughout the twentieth century gave rise to what Chalfen (1987) called “Kodak culture,” which includes the taking, organizing, and sharing of family pictures. These pictures fall under the “home mode,” of visual communication, which represents interpersonal and small group communication focused on the home (Chalfen, 1987). These pictures tend to be snapshots, captured quickly by amateurs, rather than artistic or professional photographs (Jacobs, 1981). Pictures of children are a staple of family photography (Chalfen, 1987; Holland, 1991; Van House et al, 2004; Van House, 2009; Tee, Brush, & Inkpen, 2009), and the birth of a child was among the most common reasons for families to buy a camera (Chalfen, 1987).

Family pictures rank among people’s most valued possessions, and as people age, they tend to place more value on those pictures (Rose, 2003; Chalfen, 1987). Such pictures tug on people’s emotions (Van House, 2009); they transport viewers into another place and time and play significant roles in memory and storytelling (Rose, 2003; Chalfen, 1987; Holland, 1991; Van House et al, 2004). Snapshots have received increasing attention from museums and art collectors, perhaps because they feel like historical relics, evoking nostalgia “of an earlier, industrial phase in modernity’s development” and speaking “of an time, not so long ago, when cameras still carried film and Kodak still dominated the photography market” (Batchen, 2008, p. 130). These snapshots typically occupy a variety of spaces in the home: boxes, drawers, wallets, picture frames, and albums (Rose, 2003).

In addition to collecting and displaying pictures in their own homes, people share pictures with nuclear family members, relatives, and friends (Jacobs, 1981; Tee et al, 2009; Rose, 2010; Van House et al, 2004). Sharing can occur in person, through viewing individual pictures, displays, albums, or slides, or at a distance, by mailing pictures via postal or electronic means or posting them online (Chalfen, 1987; Rose, 2010). Sharing family pictures fosters a sense of connection and helps maintain relationships (Frohlich, Kuchinsky, Pering, Don, & Ariss, 2002; Miller & Edwards, 2007; Van House et al, 2004). People express interest in having more regular engagement with family and friends through pictures; family members particularly enjoy seeing pictures of young children (Tee et al, 2009; Frohlich et al, 2002; Ames, Eckles, Naaman, Spasojevic, Van House, 2010; Rose, 2010). Indeed, parents may feel “pressure from extended families to keep a steady stream of images coming” (Ames et al, 2010, p. 104).

As digital technology emerged during the late 1990s and early 2000s, Kodak culture participants began adopting digital cameras and other tools, collectively known as photoware, to help them take, store, and disseminate pictures. Frohlich et al (2002) classified photoware into four categories, saying it allowed people to engage in:

- Co-present sharing, or viewing pictures synchronously and in the same location;
- Remote sharing, or viewing pictures synchronously in different locations;
- Archiving, or preserving pictures for someone to look at in the same place but asynchronously; and
- Sending, or allowing people in a different location to view pictures asynchronously

Photoware also helps individuals complete photowork, which is the “downloading, selecting, organizing, editing, and filing” of personal pictures (Kirk, Sellen, Rother, & Wood, 2006, p. 762).

Some people complete this work immediately after taking pictures, while others download pictures

and leave the remaining work for later. People tend to spend the most time sorting through pictures and deciding what to keep or share (Kirk et al, 2006). Dealing with photowork often feels overwhelming, and aspects of photowork with film-based pictures are similarly frustrating (Van House, 2009; Tee et al, 2009). People value photo albums but find them “complex and time consuming” to create and often have a backlog of pictures to be organized (Frohlich et al, 2002, p. 168; Van House, 2009).

Despite the effort involved in using digital technology to manage photograph collections, people appreciate that technology enables them to quickly and easily share pictures (Frohlich et al, 2002). Email has become a convenient way to send pictures to faraway relatives (Tee et al, 2009). But in the early 2000s, digital photography remained a complement to film photography (Frohlich et al, 2002). Some predicted that the rise of the camera phone, due to its near-constant proximity and increasing photo quality, would attract Kodak culture participants to adopt digital photography (Van House et al, 2004; Ames et al, 2010).

From 2000 to 2010, a dramatic rise in use of mobile phones as well as use of social network sites reshaped the landscape of online photo sharing. Critically, mobile phones included built-in cameras and were increasingly Internet-enabled “smartphones.” By 2013, 58 percent of Americans owned a smartphone (Duggan, 2013) and nearly three-fourths used a social network site (Duggan & Smith, 2013). More than half of American Internet users had posted original pictures online (Duggan, 2013).

People typically use camera phones to take snapshots of family (particularly children), friends, humorous instances or interesting sights (Van House, 2009). These “short-lived and ephemeral” pictures “capture the more fleeting and unexpected moments of surprise, beauty, and adoration in the everyday.” (Okabe & Ito, 2006, p. 15). Mobile phone pictures also support documentation and completion of tasks (Ames et al, 2010; Kindberg, Spasojevic, Fleck, & Sellen,

2005). Digital pictures, particularly those taken on camera phones, tend to depict more everyday actions rather than special occasions. This may stem from the reduced cost of producing digital pictures. People do not need to buy film, and they can transfer pictures from memory cards onto other devices or delete pictures entirely (Rodden & Wood, 2003). This offers “a sense of disposability and immediacy to the photographic image that was never there before” (Murray, 2008, p. 156). This also results in dramatically larger collections of personal photographs (Whittaker, Bergman, & Clough, 2010; Rodden & Wood, 2003).

Initially, people tended to share mobile pictures face-to-face rather than send them electronically (Kindberg et al, 2005). As SNSs incorporated photo and video sharing, the posting and viewing of user-generated pictures and other information became a central activity on SNSs (Ellison & boyd, 2013). Many SNSs also introduced mobile applications that allowed people to access the sites and post pictures via their mobile phone (Duggan, 2013).

While the Web hosts a variety of photo-sharing sites, Facebook is the largest in the world; its users upload 350 million pictures per day (Facebook, et al, 2013). Facebook also owns Instagram, another popular photo-sharing platform (Duggan & Smith, 2013). Digital photo sharing offers distinct affordances compared to face-to-face sharing; Oeldorf-Hirsch & Sundar (2010) identify three such features:

- **Asynchronicity:** People can view pictures while in different locations or at different times.
- **New Types of Interaction:** Viewers can engage with pictures and add tags, likes, or comments.
- **Wider Audience:** Many more people typically see a picture when it is posted online, and the person who posted the picture may not be aware of who sees their picture.

In short, some scholarly work has studied the content of family photography, but this has primarily examined physical photographs. Additional research has documented how advances in digital and communication technology have affected the way people take and share pictures. However, research on photo sharing and SNSs is in its infancy.

Self-Presentation and Identity

Considerations of self-presentation, or the “process by which individuals attempt to control the impressions others have of them,” (Dominick, 1999, p. 647) influence what pictures people take and share (Chalfen, 1987). Throughout the performance of daily life, people present various social identities, and pictures can enhance or detract from what they aim to portray about themselves (Goffman, 1959; Cunningham, Masoodian, & Adams, 2010). Family pictures are valued for their sentiment, but the taking of such pictures “strive[s] to construct and present idealised images of the family, both through careful selection of occasions and rigorous staging of events (Pauwels, 2008, p. 35).

Family photographs typically depict informality and leisure, and people use such pictures to record and remind them of “good times” (Halle, 1993, p. 115; Rose, 2004). While family photograph collections may contain many pictures, certain types of pictures are more prevalent: births more than deaths, young children more than older children, and firstborn children more than their younger siblings (Chalfen, 1987; Titus, 1976).

Chalfen (1987) inventoried how family photography records an individual’s life; the following paragraphs summarize his descriptions of the way a new child appears on film. Birth pictures typically depict the newborn after she has been cleaned and wrapped; blood and other biological aspects of the delivery process are “generally not snapshot material.” (Chalfen, 1987, p. 76-77). Pictures may also show the mother holding the new baby. Pictures of birth represent one of

the few instances where home mode communication depicts a hospital setting and a bedridden adult.

Pictures of “firsts” begin soon after the birth: first time going home and first time meeting various family members. Pictures may show the child eating, sleeping, playing, smiling, or bathing. The child’s physical development is also documented: rolling over, developing teeth, crawling, walking. Photo-taking crescendos at the child’s first birthday, with pictures showing cake, candles, gifts, relatives, and perhaps a messy attempt at eating. Behavior that is not typically acceptable in older people appears in baby pictures, sometimes as a form of comic relief.

Certain facets of a child’s early life do not appear in pictures. Occasionally, baby pictures may show crying or distressed facial expressions as token representations of difficulty. But moments of true concern, such as when a child is ill or injured, typically do not appear in pictures. Additionally, people might take pictures of a child sucking on a bottle, but they typically do not take pictures of a child breastfeeding. Pictures may show children in the bathtub but typically do not show them on the toilet. Family pictures rarely show dirty diapers, diaper rash, middle-of-the-night feedings, or health problems. Such patterns continue throughout a person’s life; certain moments are almost always documented in family pictures, others, rarely. While family pictures may seem to provide a record of people’s lives, in actuality they offer an extremely limited, highly structured look at the way people want their lives to appear:

“Snapshotters selectively use their cameras at specific times, in specific places, during specific events and for specific reasons...The redundancy within snapshot imagery, created by the patterned use of participants, topics, and settings, may thus be understood as a reaffirmation of culturally structured values.” (Chalfen, 1987, p. 98)

People who appear in snapshots generally know that someone is taking a picture of them. They implicitly recognize that the situation or moment is worthy of being preserved so they or other members of the family can revisit the memory in the future (Jacobs, 1981). Snapshots convey,

“conspicuous success, personal progress, and general happiness” (Chalfen, 1987, p. 99). Family pictures in particular are so predictable partly because, “we know what families are supposed to do and look like and how family photos are supposed to depict them,” (Van House, 2009, p. 1084). This familiarity may in part help explain why newspapers have used family pictures to depict people who have gone missing or died. Such a practice represents how family pictures may be taken out of context and placed in a more public arena, still generally serving to shape the way people see the person depicted in the picture (Rose, 2010).

Considerations of self-presentation appear to hold true with digital pictures as well. People typically delete low-quality or unattractive pictures (Kirk et al, 2006; Whittaker et al, 2010). Affordances of SNSs, such as the ability to untag or delete pictures, enable users to modify the content that appears on their profile, and thus, the way they present themselves to their audience (Mendelson & Papacharissi, 2011). Studies of Facebook photo sharing among college students suggest that pictures primarily focus on the user and his peer group, as if to say, “See me first and foremost in the context of my group” (Zhao, Grasmuck, & Martin, 2008, p. 1826, Mendelson & Papacharissi, 2011). However, the age and life stage of the participants in these studies may contribute to the focus on pictures of peers.

With the rise in popularity of SNSs and the increasingly pervasive presence of Internet-enabled objects in daily life, Elwell (2014) argued for a reconceptualization of self-identity that takes into account the distributed digital identities that people maintain across the Web. He described how various SNS platforms contribute to different expressions of the self, considering Facebook among the most reminiscent of Goffman’s (1959) metaphor of self-presentation as performance:

“The transparency of Facebook’s identity/information sharing model makes Facebook activity more performative as we carefully craft the identities and activities we want to share with others” (Elwell, 2014, p. 244).

Baby pictures, particularly those of the first child, also document the transition to parenthood. Pictures of holding, feeding, and observing the child (but not diapering or bathing), may provide tangible evidence that parents are adapting to their new role (Titus, 1976). This underscores the layers of presentation of self that are at play when considering baby pictures. These pictures typically focus on the life of a given individual (the child), but that individual is not controlling the way she is presented, nor is she capable of doing so. At the same time, baby pictures may advance the mother's presentation of self by representing her motherhood through the image of her child. The following paragraphs describe how infants begin their lives psychologically intertwined with their primary caregivers before developing their own sense of self.

Parenthood is a profoundly transformative experience, imbued with joy, frustration, and significant responsibility.

“The parent is completely responsible for the child biologically as well as sociologically. This is intrinsic to the self-concept of the human parent and is instinctual behavior in almost every species of animal...The instinctual wish to survive in one's child and the ethical command to love the child are in conflict with the hard task that rearing the child requires” (Parsons, 1975, p. 162).

From a psychoanalytic perspective, the developmental task of parents is to foster the formation of narcissism in their child; in doing so, they engage in the developmental process of transforming their own narcissism (Elson, 1984). Narcissism typically connotes negativity, but Kohut (1966) conceptualized an individual's identity as the outcome of the interaction between the ambitions of his narcissistic self and his ego ideal, which guides those drives to manifest in ways that fit with his values and ideals. Kohut (1966) also described how transformations in an individual's narcissism help him achieve such characteristics as creativity, empathic behavior, the ability to consider one's own impermanence, a sense of humor, and wisdom.

In their youngest age, infants cannot differentiate between their primary caregiver and themselves; the concept of “me” and “you” does not yet exist within them. Kohut (1966) describes this as primary narcissism. For example, when a mother coos at her infant son, he experiences her pleasure as part of his whole body. She is the object that participates and confirms his pleasure (Kohut, 1966). Winnicott (1956) theorized that a similar transformation, called primary maternal preoccupation, occurs within the mother toward the end of her pregnancy and lasts through the first few weeks of her infant’s life. This state, which he said would be considered an illness if it occurred outside pregnancy, enables a mother to, “feel herself in her infant’s place, and so meet the infant’s needs” (Winnicott, 1956, p. 304).

By about six months the infant begins to develop awareness of his own needs and how to express them, and by 18 to 24 months, the ability to differentiate himself from others emerges (Davies, 2011). The new mother thus allows her infant to use her sense of self as a scaffold until his own cognitive and emotional systems develop enough to support his own fledgling self. In addition, she must continue to remain aware of his evolving needs and “accept the child’s separateness,” (Elson, 1984, p. 299).

This need to maintain awareness of the child’s separateness highlights the challenge the mother faces throughout this process. She invests herself so fully in fostering the life of another human being, but in doing so ushers him to a point at which he no longer depends solely on her for his survival. In order to help a child reach this point, a parent must to keep the child’s internal experience and mental state in mind and use those observations to make sense out the child’s behavior. This is called parental reflective functioning, and it influences the developmental outcomes of the child (Slade, 2005).

In summary, pictures represent a carefully selected presentation of the self and family life. Family pictures tend to follow a particular script, with some events nearly always appearing in

pictures and others rarely. Baby pictures offer a particularly fascinating lens through which to examine presentation of self through photography, given the intense bond that exists between a mother and child.

Audience, Information Disclosure, and Privacy

Facebook and other SNSs represent what boyd (2011) called “networked publics.” They serve as spaces in which people gather and connect with others, but four key affordances differentiate these publics from their physical counterparts. Information shared in networked publics is persistent, replicable, scalable (i.e., more widely visible), and searchable (boyd, 2011). Papacharissi & Gibson (2011) added a fifth affordance, shareability, or the encouragement to share rather than withhold information. To manage the flood of information that SNS users generate, algorithms curate what users see (Hogan, 2010).

The audience that consumes this information is a user’s Friends, a term that has expanded from referencing close connections to signifying nearly any type of connection (Hogan, 2010). (Facebook calls a user’s connections Friends; other sites use such words as followers or connections. In this thesis, I use a capital “F” when discussing Friends as a user’s audience on SNSs and a lowercase “f” when discussing friends in the traditional sense of companions.) This results in context collapse, where the group of Friends includes people who typically occupy different “regions” of life (Marwick & boyd, 2011; Goffman, 1959). Consequently, friends who may once have gathered in-person to share pictures now post them on Facebook, where the audience may include a user’s aunt, neighbor, high school acquaintance, and former co-worker, in addition to their friends (Cunningham et al, 2010; Mendelson & Papacharissi, 2011).

Participation in social life requires that people disclose information about themselves even though information disclosure may heighten the risk of privacy violations (Palen & Dourish, 2003;

Papacharissi & Gibson, 2011). This paradox holds true on SNSs. To derive benefits from such sites, people must reveal information about themselves, but given the affordances of networked publics defined above, that information can be used in different ways compared to if it was disclosed in a face-to-face setting (Ellison, Vitak, Steinfeld, Gray, & Lampe, 2011; Walther, 2011).

For example, networked publics lack the visual and sensory cues people use to help them determine what information to share in face-to-face interaction. In the physical world, the act of pulling a picture out of a wallet or an album out of a closet reflect people's decisions that the time, place, and audience of that moment are suitable for photo sharing. In such mediated environments as SNSs, people typically do not know when the audience will view the information they post, where that audience is located, or even who is in the audience; they must construct an imagined audience (boyd, 2011; Bernstein, Bakshy, Burke, & Karrer, 2013; Litt, 2012). Bernstein et al (2013) discovered that Facebook users underestimate the audience size for individual posts by a factor of four and their overall audience size by a factor of three.

Pictures are the most frequently uploaded content on Facebook and also exhibit the most diverse privacy settings (Liu, Gummadi, Krishnamurthy, & Mislove, 2011). Liu et al (2011) collected data on people's desired and actual settings for a selection of 10 pictures they posted on Facebook and found that even when people adjusted pictures' privacy settings from Facebook's defaults, in 61 percent of instances, the new settings did not match users' expectations of the picture's visibility. Netter, Riesner, Weber, & Pernul (2013) compared Facebook users' perceived, intended, and actual privacy settings for a variety of content types and found that people's perceptions matched the actual settings more than 80 percent of the time. However, nearly half of people significantly underestimate the visibility of at least one piece of content they share on Facebook (Netter et al, 2013).

When deciding what to disclose in a networked environment, people must balance tensions between how public or private they want the information to be, what impact it could have on the past or the future, how the information would reflect on the self, and what potential responses the information could elicit from others (Palen & Dourish, 2003). Not surprisingly, people's willingness to share information varies based on their audience (Olson, Grudin, & Horvitz, 2005). Given the diversity of people in an SNS user's audience, how do users post information without suffering from "self-presentation paralysis" (Hogan, 2010, p. 383)?

Hogan (2010) argued that SNS users simply have to consider two groups within their audience: those for whom users seek to present an idealized self-image, and those who may find this self-image concerning. Users disclose information that satisfies the lowest common denominator of people in their audience and is least likely to cause problems. However, problems may still arise if a mismatch in people's imagined and actual audience results in their sharing information tailored for the wrong lowest common denominator (Litt, 2012; Netter et al, 2013).

Vitak & Kim (2014) identified six reasons why people disclose information on Facebook: social approval, social control, intimacy, identity clarification, relief of distress, and personal record. Photo sharing on Facebook highlights relationships and fosters social connection, and these reasons for sharing potentially outweigh the desire for self-promotion (Mendelson & Papacharissi, 2011; Oeldorf-Hirsch & Sundar, 2010). However, people are protective of pictures of children. They typically express concern over sharing pictures of children or information that reveals the location of children online (Miller & Edwards, 2007; Ahern et al, 2007; Ames et al, 2010).

Privacy and photography are deeply intertwined. Indeed, concern over the dissemination of pictures prompted Warren and Brandeis (1890) to pen an article in the Harvard Law Review calling for a right to privacy. Their highly regarded article influenced privacy discussions throughout the

following century and inspired the creation of four torts to protect privacy (Solove, 2008).

Additionally, it articulated the role of technology in upending social norms (Nissenbaum, 2010):

“Instantaneous photographs and newspaper enterprise have invaded the sacred precincts of private and domestic life; and numerous mechanical devices threaten to make good the prediction that ‘what is whispered in the closet shall be proclaimed from the house-tops.’ For years there has been a feeling that the law must afford some remedy for the unauthorized circulation of portraits of private persons” (Warren & Brandeis, 1890, p. 195).

More than a century later, privacy continues to influence the way people interact with pictures; it remains a significant factor that people consider when deciding whether to share pictures online (Miller & Edwards, 2007; Ahern et al, 2007; Ames et al, 2010). Privacy is a complex subject, made even more so by the introduction of new ways of interacting with pictures online (e.g., tagging) (Besmer & Lipford, 2010). In addition to its implications for the self, privacy management decisions affect social relations (e.g., deciding not to untag a picture so as to avoid offending the person who posted the picture) (Besmer & Lipford, 2010). Existing research on privacy in SNSs draws on Altman’s boundary-regulation theory of privacy (Stutzman, Capra, & Thompson, 2011; Tufekci, 2008) and Petronio’s communication privacy management (CPM) theory (Litt, 2013).

Altman (1975) developed his theory of privacy based on face-to-face individual and group actions, calling privacy, “the selective control of access to the self.” (p. 24). Palen & Dourish (2003) in discussing Altman’s framework in the context of networked technology defined privacy management as:

“[A] process of give and take between and among technical and social entities—from individuals to groups to institutions—in ever-present and natural tension with the simultaneous need for publicity” (p. 129).

This definition alludes to the complex relationship between privacy attitudes and privacy behavior, which may not always align (Stutzman et al, 2011). When interacting with others, people

want privacy in some cases and publicity in others, and people use the same SNSs for both types of interaction (Netter et al, 2013, Tufekci, 2008).

CPM theory extends Altman's work and has been applied to privacy considerations within families (Petronio, 2010) and on SNSs (Child, Haridakis, & Petronio, 2012). Margulis (2011) calls it the "most valuable privacy theory for understanding interpersonal computer-mediated communication" (p. 12). CPM theory focuses on the maintenance of privacy boundaries, which shift depending on the circumstances of a situation (Petronio, 2002). In addition, the theory encompasses five principles:

1. **Ownership:** People evaluate the privacy of information based on ownership, meaning that if people believe they own the information, they can deem it private.
2. **Control:** People believe they have the right to control the distribution of private information they own.
3. **Privacy Rules:** People develop their own privacy rules to control the flow of private information.
4. **Shared Ownership:** After people share private information, a collective boundary of privacy binds those who know the information and counts them all as co-owners.
5. **Boundary Turbulence:** Conflicts emerge if the rules of the original owner and the co-owners do not align (Petronio, 2010).

Petronio (2002) mentions that in American culture, "infants and babies tend not to be accorded much privacy...because they are not cognitively aware of such privacy needs" (p. 73). Family photograph collections align with this assertion. Not only do they contain many pictures of the child's early life, but also the pictures may depict situations, such as being nude or in the bath, that would be considered violations of privacy if taken of an older child or adult (Chalfen, 1987).

(The United Nations Convention on the Rights of the Child asserts, “No child shall be subjected to arbitrary or unlawful interference with his or her privacy, family, or correspondence, nor to unlawful attacks on his or her honour and reputation” (United Nations, 1989, article 16 paragraph 1). A significant body of literature explores children’s rights, for a complete review see Cohen (2005) or Freeman (2011)).

When baby pictures existed in physical form, parents could develop rules that would ensure these private pictures did not reach the public. They could avoid displaying them or putting them in an album; they could decide not to show them to visitors. Prior research describes how mothers mitigate privacy concerns when posting information about their children online. Mommy bloggers may disguise elements of their identity, avoid writing about particular topics, or posting certain types of pictures (Morrison, 2011). Anonymous networks such as YouBeMom offer a space where moms can ask questions or vent without disclosing personal information (Schoenebeck, 2013). This thesis aims in part to assess the degree to which privacy rules regarding information about children transfer to photo sharing on SNSs.

Motherhood and Technology

The transition to motherhood is typically challenging (Barclay et al, 1997; Lee, 1997; LeMasters, 1957). A mother must recover from the physical experience of childbirth, learn to meet her child’s needs, and adapt to a new family structure. This adjustment may be complicated by such social factors as, “unrealistic expectations, and cultural stereotypes of motherhood as easy, natural, and fulfilling, and of the mother-child relationship as immediately and unambiguously positive” (Lee, 1997, p. 94).

Social support can ease this process, but new mothers also report isolation during the early months of their child’s life (Barclay, 1997; Gibson & Hanson, 2013). Nevertheless, new parents

typically experience more contact with their own parents and with parents of other young children after the birth of their child, with women typically managing the contact (Belsky & Rovine, 1984). Belsky & Rovine (1984) also found that new parents who lived near their own parents typically had more contact but did not report receiving more material or emotional support than new parents who did not live near their family. Thus, new parents enjoy social capital benefits even if physical distance separates them from their social network.

Research suggests that sharing information about one's children online provides social capital benefits. Women who participate in "mommy blogging" "enjoy validation and solidarity" (Lopez, 2009, p. 742), develop a sense of community with others (Morrison, 2011), and may experience greater well being and increased feelings of connectedness (McDaniel, Coyne, & Holmes, 2012), all extremely important during the chaotic transition to life as a mother. While McDaniel et al. (2012) did not observe the same benefits from use of social network sites (SNS), Bartholomew et al (2012) conducted what they bill as the first study into new parents' use of Facebook and found the site, "appears to have become part of the fabric of family life for many new parents and may serve as a means through which new parents build and maintain social capital" (p. 467).

Researchers are just beginning to explore the role of SNSs and parenthood. SNS use provides social capital benefits to mothers, particularly helping them bond with others (Jang & Dworkin, in press). SNSs are popular among new mothers, who are 85 percent more likely than the average Web user to visit Facebook (Nielsen, 2009). Facebook users who are new mothers visit the site more often than new fathers, and more new mothers report an increase in their use of Facebook compared to new fathers (Bartholomew et al, 2012). Mothers of young children use Facebook far more than Twitter to post information about their children, though some include pictures or mentions of their children in their Twitter profile (Morris, 2014). Their Facebook posts tend to

become more positive after they give birth, and posts that mention the child tend to attract more attention from others (Morris, 2014).

Mothers of young children tend to use the Web and SNSs to seek information, advice, and support; this in turn helps them gain confidence in their abilities (Daneback & Plantin, 2008; Morris, 2014; Gibson & Hanson, 2013). In an analysis of Facebook posts from a subset of U.S. users, Morris (2014) found that mothers of young children also share information about their children, such as birth announcements and milestones. In their ethnographic study of Scottish new mothers and technology, Gibson and Hanson (2013) found that new mothers preferred not to use Facebook as a “baby diary” but rather as a place to share information about themselves, revealing a desire to “preserve their identity as a person in their own right” (p. 318).

Nevertheless, posting baby information, particularly pictures, on SNSs appears to be an emerging phenomenon. Morris (2014) also found that while new mothers tend to post fewer status updates after they give birth, their rate of posting pictures remains steady. In Bartholomew et al’s (2012) study of new parents and Facebook, 98 percent of new mothers had posted pictures of their children to Facebook, compared to 83 percent of fathers.

Rose (2004) discovered that mothers, who felt particularly compelled to take pictures when their children were very young, viewed baby pictures as “extraordinarily precious” and at the same time “silly and banal” (p. 559-560). Rose observed this paradox in the way mothers in her study described and responded to their favorite baby pictures. Mothers used such generic phrases as “it’s nice,” or “I just like it” to describe these pictures, but the intensity and emotion with which they viewed the pictures conveyed their value (Rose, 2004, p. 559). Mothers valued the sense of togetherness that baby pictures represented and treated the pictures as though they were a part of the people whose image they documented. Rose suggested that taking and viewing baby pictures helped the mothers in her study reconcile the love they felt for their children with the challenge of

caring for the child. Mothers could view baby pictures and construct narratives that fit what they wanted their experience of mothering to represent.

“Photographs can work to steady the ambivalent feelings of love and hate that most mothers have towards their children...Perhaps it is no surprise, then, that, as I have noted, children are photographed most frequently in exactly that period when they are most demanding and, therefore, their mother most ambivalent.” (Rose, 2004, p. 561).

Family pictures are meant to depict happy moments (Rose, 2010). This includes showing the people in the pictures as happy, but also capturing images that bring happiness to the person who takes and manages those pictures.

“Indeed, the importance of the latter feeling is part of the reason why the mums I interviewed could pay so little attention to how their kids felt about being photographed. The children’s views didn’t really matter: the important thing was how happy the scene made the photographer feel (or, or as well as, the need to make a record of that scene.)” (Rose, 2010, p. 130)

Thus pictures can be powerful tools to help women navigate their transition to motherhood. Rose’s work focused on physical pictures, and existing work on motherhood and technology has not examined the content of mothers’ digital pictures. As mentioned in Chapter 1, research analyzing parents’ Facebook profiles has excluded pictures due to privacy concerns (Morris, 2014; De Choudhury et al, 2014). With this study, I aim to examine the intersection of photo sharing, technology, and motherhood through the lens of how mothers decide to share baby pictures online.

Chapter 3

Methods

To obtain detailed, in-depth information on what pictures new mothers share online and what factors influence their decision, I designed a qualitative study that used hour-long semi-structured interviews with mothers of young children. I sought to understand mothers' perceptions of online photo sharing of baby pictures and learn about the role this type of photo sharing played in their life (Seidman, 2013).

Interview Protocol

I developed an interview protocol for that included five sections (See Appendix 1 for the interview protocol):

- Warm-up Questions
- Use of Facebook
- Perceptions of Norms around Photo Sharing on Facebook
- Decision-Making Process to Post Pictures on Facebook
- Opinions of Facebook

The interview protocol focused on Facebook because the site is the largest social network site (SNS) in the United States (Duggan & Smith, 2013) and the world (Ballve, 2013). However, use of the semi-structured interview format enabled me to ask participants follow-up questions if they mentioned using another online platform or method of communication (e.g., texting or email) to share pictures. After the first few participants mentioned doing so, I began asking participants directly if they used any additional networks or platforms to share pictures. While the findings and

implications of this study focus largely on SNSs, I framed the research questions around photo sharing online to reflect participants' experiences.

The warm-up questions asked participants who lived in their homes and what the participants did on a typical day. These questions were designed to encourage participants to feel comfortable talking with me. They also helped elicit demographic information (e.g., were participants married, did they work or stay at home) that may have been off-putting if asked directly. I decided not to inquire directly about age or income because I knew this sample would not be representative of the general population. Additionally, I did not want to risk making participants feel uncomfortable by asking them to share personal information. Some participants volunteered their age, education level, or occupation.

The second group of questions focused specifically on Facebook. They included when participants joined Facebook, what prompted them to join, how many Facebook Friends they had, who generally their Friends were, how often they checked Facebook, what device they typically used to check Facebook, and whether they had adjusted any of the Facebook profile settings that allow users to change who can see the information they post. The wording of the final question intentionally avoided use of the term, "privacy settings." I wanted to ensure that participants felt comfortable sharing their experience and their opinions on the visibility of information without feeling judged or concerned if they did not understand these settings on Facebook or did not adjust them. Taken together, the responses to these questions offered a sense of the role Facebook plays in participants' lives.

The next group of questions sought to discern participants' perceptions of norms and opinions about the baby-related content they see on Facebook. It included questions on whether participants' Facebook Friends were also mothers of young children and what baby pictures participants saw other people posting. In some cases, I asked participants follow-up questions about

how they felt when they saw this material; in other cases participants described their feelings or opinions without prompting.

The largest group of questions focused on what pictures participants shared, what they thought about when deciding whether to share pictures online at all, and how they selected which pictures to share. These included situational questions (e.g., did they share an ultrasound image online; had they ever taken down a baby picture they shared online; had anyone else ever posted a picture of their child online) as well as questions related to their thoughts and opinions (e.g., while they were pregnant, did they think they would continue to use Facebook once they became a mother; did they envision one day showing their child the pictures they shared of the child online?). These questions were designed to elicit anecdotes from participants as well as to provide a window into their thought process for sharing baby pictures.

The interview protocol did not explicitly include questions related to participants' husbands. However, this topic came up in several early interviews, and in later interviews I began asking participants if they had any conversations with their husbands related to sharing baby pictures online.

The final category of questions focused on participants' opinions of Facebook. It asked them to share any thoughts they had on how Facebook managed its users data and to what extent they trusted Facebook with their personal information. Similar to the earlier questions related to Facebook, these questions aimed to understand how participants perceived their relationship with the site. The questions were also a proxy for understanding participants' views on privacy, if those views did not emerge out of previous questions.

I intentionally avoided use of the term "privacy" throughout this interview protocol. Even in follow-up questions during the interviews, I refrained from using the word unless participants mentioned it first. I wanted to explore the role of privacy in participants' decision-making process,

but I also wanted to ensure they felt comfortable sharing their views. Privacy is difficult to define and can mean different things to different people. Furthermore, I wanted participants' own thought processes to emerge out of the conversation. I did not want to prime their responses by using the word "privacy" unless they themselves identified privacy as a factor in their decision to share pictures.

IRB Approval

After drafting an interview protocol, consent form, and recruitment text, my advisor submitted the project to the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board (IRB) for approval. After I made a few minor suggested changes to the recruitment text, the IRB approved the study (HUM00080547) for the period of October 17, 2013 through October 16, 2014.

Recruitment

This study focused on mothers for several reasons. Women have typically managed family photography (Rose, 2003; Rose, 2010; Halle, 1993; Kirk et al, 2010). They are more likely to share pictures online (Litt & Hargittai, 2014; Bartholomew et al, 2012) and are also more likely to manipulate privacy settings for pictures (Litt & Hargittai, 2014) and information on SNSs (Litt, 2013; boyd & Hargittai, 2010).

I sent recruitment text (included in Appendix 2) to local parent groups on the social network site Meetup, a local Yahoo! group for parents, and the University of Michigan graduate student parents group. I also posted fliers in local daycare centers and wellness centers as well as spread the recruitment message through word-of-mouth. I avoided recruiting people in my own Facebook

social network, but my advisor sent the study to members of her Facebook network. A few participants mentioned they saw information about the study on online “mommy groups.”

The recruitment text advertised this as a study of first-time mothers who use Facebook. It requested participants who were over age 18, first-time mothers with a child between 0 and 24 months, and who posted pictures of their child on Facebook. The focus on first-time mothers stemmed from the fact that this population would likely be considering questions of whether and how to share pictures of their child for the first time. Nevertheless I accepted participants who responded but fell beyond these criteria, provided they had at least one young child under age five. The recruitment text invited people to participate in an hour-long interview to help a research team better understand the role of social media in parenthood. Again, I avoided use of the term “privacy” in recruitment material. Participants did not receive compensation for participation, but I offered to share the results of the research with them.

Interviews

This study includes interviews with 22 women. Interviews took place between November 2013 and February 2014. I scheduled interviews with participants over email. Most interviews lasted around one hour, though two stretched to one hour and 20 minutes. Nine occurred face-to-face, 11 occurred over the phone, and the two interviews with participants who lived outside the United States took place on Skype. I gave face-to-face participants an option of where they wanted to meet (e.g., home, coffee shop). I interviewed three participants in their homes, four in meeting spaces on the University of Michigan campus, and two at coffee shops. Infants were present at four of the face-to-face interviews.

In the face-to-face interviews, I walked participants through the consent form, asked if they had any questions, and asked them to sign the form. I then gave them a copy of the form to keep

for their own records. I also obtained their signed approval to audio record the conversation for the purposes of creating a transcript. I asked participants to have their Facebook profile open during our interview, and all agreed. All face-to-face participants opened the profile on laptops, except one who used an iPad.

For participants on phone or Skype interviews, I sent an electronic version of the consent form before the interview and asked them to sign it electronically. When we began talking, I reviewed the consent form and asked if they had any questions. In email communication before the interview, I asked participants to have their Facebook profiles open in front of them while we talked. All participants except one did so. I also asked if they would allow me to become their Facebook Friend before the interview so I could see their profile while we talked. I told participants this was voluntary, and all agreed. I unfriended participants after the interview. I emailed follow-up questions to three participants, and all responded. During the interview I took notes on the pictures participants discussed, and I describe the pictures throughout this thesis. I chose not to collect participants' pictures or show them in this thesis in order to protect their privacy.

Participants

This study used a convenience sample of 22 mothers. I began the study with face-to-face interviews with participants who lived in Michigan and then broadened recruitment and conducted phone or Skype interviews with participants from around the United States or abroad. Ten participants lived in Michigan, 10 lived in other parts of the United States, and two lived abroad, in Colombia and Kuwait. Participants ranged in age from mid-20s to late-30s. All were heterosexual, married, and lived with their husbands and children. Seven participants were stay-at-home mothers and one participant was on maternity leave with her three-month-old son. Three participants were students and 11 worked.

Nineteen participants were first time mothers; one had twins and another was pregnant with her second child at the time of the interview. The remaining three participants had two children of different ages. The 26 children ranged in age from three months to nearly five years, and the mean age was 16 months. Eighteen children were male and 8 were female.

All participants had Facebook accounts, though they used Facebook to varying degrees. Table 3.1 displays information about each participant, including her name (a pseudonym) the name and age of her child or children (also pseudonyms), when she joined Facebook, and how many Friends she had on the network. Pseudonyms were used to maintain participants' privacy. During the interview I asked participants to check their Facebook profile and tell me how many Facebook Friends they had. One participant opened her profile on an iPad and could not find the Friend count on her Facebook profile, so the table includes her approximation of her number of Friends.

In general, when participants mentioned using Instagram, I asked how many followers they had. When participants described creating mailing lists of people to whom they would email pictures or information about pictures, I also asked how many people were included on those lists. However, I did not ask participants to confirm those exact numbers by opening up those accounts and looking at them. This information is included in Table 5.2.

Table 3.1 also identifies two unique cases regarding participants' Facebook profiles. One participant (Jimena) had two Facebook profiles. When she temporarily separated from her husband, she created a new Facebook profile. She actively used the second one but kept the first one because of all the information (e.g., pictures, status updates) it contained. Table 3.1 records the Friend counts of both profiles and dates of creation of both profiles. Another participant (Cara) created a Facebook profile for her son when he was born. The table records the Facebook Friend count and join dates of her profile and her son's.

Table 3.1: Details about Participants

| Name | Location | Child's Name | Child's Age | Joined Facebook | Number of Facebook Friends | Work status | Interview Type |
|-----------|-------------|--------------|--------------------|-----------------|----------------------------|-----------------|----------------|
| Ella | Michigan | Neil | 7 months | 2007 | 551 | Stayed at home | In-person |
| Clara | Michigan | Ryan | 1 year | 2008 | 444 | Stayed at home | In-person |
| Emily | Michigan | Randall | 6 months | 2005 | 332 | Stayed at home | In-person |
| Karen | Michigan | Brooke | 5 years | 2008 | 321 | Stayed at home | In-person |
| | | Brendan | 13 months | | | | |
| Christine | Michigan | Oliver | 2 years, 2 months | 2007 | 739 | Worked | In-person |
| Rebecca | Michigan | Louise | 1 year | 2005 | 364 | Student | In-person |
| Sabrina | Michigan | Owen | 2 years | 2009 | 265 | Stayed at home | In-person |
| Jimena | Michigan | Andres | 4 years | 2007/2012 | 428/505 | Student | In-person |
| Lee Ann | Michigan | Hunter | 16 months | 2007 | 553 | Worked | Phone |
| Judy | Michigan | Quinn | 14 months | 2005 | About 1,000 | Worked | In-person |
| Brianna | California | Abigail | 4 months | 2005 | 529 | Worked | Phone |
| Marina | California | Cooper | 10 months | 2005 | 1,268 | Worked | Phone |
| Jessica | New York | Matthew | 5 months | 2006 | 447 | Worked | Phone |
| Shelby | New York | Finn | 8 months | 2009 | 347 | Stayed at home | Phone |
| Lindsey | Arkansas | Charlotte | 16 months | 2005 | 599 | Student | Phone |
| Rita | Connecticut | Ava | 2 and a half years | 2007 | 280 | Worked | Phone |
| | | Michael | 9 months | | | | |
| Melissa | Georgia | Connor | 2 and a half years | 2007 | 351 | Maternity leave | Phone |
| | | Thomas | 3 months | | | | |
| Cara | Hawaii | Ye-jun | 2 years | 2007/2012 | 346/323 | Worked | Phone |
| Carrie | Maryland | Gabriel | 1 year | 2009 | 221 | Worked | Phone |
| | | Grace | 1 year | | | | |
| Wendy | New Jersey | Ashley | 4 months | 2007 | 352 | Stayed at home | Phone |
| Isabel | Colombia | Emiliano | 1 year | 2004 | 1,315 | Worked | Skype |
| Zainab | Kuwait | Nailah | 8 months | 2004 | 587 | Worked | Skype |

Transcription and Analysis

I transcribed each interview in Microsoft Word, assigning pseudonyms to participants and their children. After all were transcribed, I hand-wrote a list of codes to use when analyzing the interviews. I read the interview transcripts, refined the codes, and discussed the codes with my advisor and another researcher. I then loaded the transcripts into the qualitative data analysis software NVivo and coded the interviews based on the list of codes. I added a few more codes that emerged through the analysis and went back to ensure these codes were incorporated into the transcripts that had already been analyzed.

I then examined quotes from each code and aligned them to this study's research questions and the existing literature, selecting the best quotes for inclusion in the following chapters of this thesis. Based on the themes that emerged through these conversations, I identified categories of pictures that participants do and do not share, discerned reasons they share, and established several factors that influence participants' decisions to share pictures. These results are explained in the subsequent chapters.

Chapter 4

Findings: What Is and Is Not Shared?

This chapter presents findings that relate to the study's first research question: What baby pictures do mothers of young children share and not share online? As per the recruitment criteria, all participants took pictures of their children and had shared at least some baby pictures on Facebook. Several also used other SNSs or forms of electronic communication (e.g., email, texting) to share pictures.

Photography and Photo-Sharing Habits

In general, most participants took many more pictures than they shared, though Carrie and Zainab said they typically did not take pictures unless they intended to share the pictures with someone. Shelby observed that she took more pictures after the birth of her son. Eighteen participants used mobile devices to take pictures of their children, and many uploaded pictures directly from their devices. For most, this was a mobile phone. One participant primarily took and shared pictures on her iPad, and another primarily used her iPod. Some used mobile devices but turned to cameras when they wanted higher-quality pictures. Only one participant mentioned she regularly used her camera to take pictures of her son. In general, participants found mobile devices a convenient way to take and share pictures. The devices were generally nearby and sharing only required pressing a few buttons.

While most participants shared pictures on an ad hoc basis, several developed routines. Emily and Zainab took pictures once a day but shared them differently. Emily compiled the pictures and posted them on Facebook every few weeks. Zainab created an Instagram account for her daughter where she shared the daily picture. Occasionally, she shared videos instead of pictures.

Three participants posted baby pictures monthly, and Rita posted albums on Google + about four times per year. Ella created an album of her son's pictures each month in Picasa and shared it privately through Google+ with a group of about 50 friends and family. Rebecca maintained a running album of her daughter's pictures on Snapfish and added to it each month. She also uploaded videos to YouTube and emailed links to the album and videos to a group of about 30 close friends and family members. Shelby posted a monthly album of her son's pictures to Facebook. She sometimes posted additional pictures if a milestone occurred or if people asked for more pictures.

A few participants also adopted additional photo-sharing guidelines, primarily due to privacy concerns (discussed in Chapters 5 and 6). Ella preferred not to share pictures on Facebook that showed her son's face. Judy and her husband decided not to use her son's name on Facebook. This prevented her from posting many videos, since she often said his name while recording. Judy's husband also asked her to remove a picture of their son's birthday cake from Facebook because the cake showed their son's name. Zainab did not share pictures online of herself breastfeeding or her daughter taking a bottle.

In addition to sharing pictures online, about half of participants created physical photo albums or planned to do so. Emily, who adopted her son, created photo books for the birth mother and printed an additional copy for her son. Carrie distilled the pictures she shared on Facebook into physical albums and saw those albums as containing the most important pictures. Lindsey created a photo book of her daughter's pictures and sent it to her and her husband's parents and grandparents. When Marina's son was six months old, she ordered prints of the pictures she had taken on Instagram. Participants valued having a tangible representation of their child's life, and many planned to show those albums to their children as their children grew older.

Emily: “I think he’ll [her son] like that,...being able to have history for himself too like, well, what was it like for me as a baby, and what did I do, and where did we go, and who got to meet me?”

Pictures Shared Online

Participants primarily shared four types of photographs: cute or funny pictures, milestone pictures, pictures that depicted children with family or friends, and functional pictures. The last category comes from Kindberg et al’s (2005) taxonomy of reasons for taking pictures.

Cute or Funny Pictures

Almost all participants used the word “cute” to describe the baby pictures they had shared online. Several also said they posted funny pictures. Participants said that many of the pictures they shared show their children looking cute. Isabel shared a picture on Instagram of her son chubby-cheeked and open-mouthed while watching Sesame Street. Zainab posted a picture on Instagram and Facebook of her daughter wearing a cap and smiling widely in a stroller while Zainab jogged. Sabrina posted pictures of her son when he put on her glasses and when the wind blew his hair around his face. Lee Ann posted a picture of her son wrapped in a towel and sitting in a swing. He had just taken a bath and she wanted to show him feeling calm and happy. Several participants shared pictures of their children asleep, sometimes to show the funny expressions on their faces.

Funny expressions appeared in pictures where the children were awake, as well. Emily posted a picture of her son with a confused look on his face; he had begun teething and realized it hurt to chew his finger. Isabel posted a picture of her son being weighed in a doctor’s office. He stared at the scale wide-eyed, and she included a caption from his perspective, expressing surprise at his own weight. Her son was naked in the picture, but Isabel painted over his genitals in the image.

Participants also shared pictures that they said depicted their children doing cute or funny actions. These included pictures of children blowing bubbles, putting crayons in their mouth, eating dirt, crawling in and out of cupboards, climbing onto a coffee table, crawling under a living room rug, drawing at a table (but with marker on the wall behind him), and sitting naked in a tub of rainwater. Sabrina posted a picture on Facebook of the first time her son “threw the horns,” (curled in his middle and ring fingers), since she, “had some metal-head friends that would appreciate that.” Lindsey posted videos on Facebook of her daughter dancing on Christmas and of the two of them sledding down a snow-covered hill. Several participants also liked to share pictures on Facebook of their children with the family dog.

Food and clothing also featured prominently in pictures that participants shared online. Participants posted pictures of their children with Cheerios, chocolate, and other food on their faces and spaghetti on their head. Other pictures showed children eating cookies, broccoli mashed potatoes, and snow ice cream (fresh snow, milk, sugar, and vanilla). Some participants shared pictures of their children wearing cute or funny outfits such as a bear suit, a fedora, a superhero cape, Elmo pajamas and sandals, and what Wendy described as, “a really silly pink dress with a tutu and a bow.” Jessica posted a picture on Facebook and Instagram of her son wearing a pair of overalls that she wore as a baby. Carrie posted a picture of her twins disliking wearing shoes.

Cute and funny also characterized the baby pictures that participants used as their Facebook profile or cover pictures. While participants were slightly more likely to include their child in their profile picture compared to their cover picture, the cover picture was more likely to include only the child. Fifteen participants’ profile pictures included their child, and six pictures were of the child only (See Table 4.1.). Thirteen participants included their child in their cover pictures, and eight of these pictures were of the child only (See Table 4.2).

Table 4.1: Types of Facebook Profile Pictures At Time of Interview

| Profile Picture Content | Number of Participants |
|--------------------------------|-------------------------------|
| Picture of Child | 6 |
| Picture of Mother and Child | 9 |
| Picture of Mother | 7 |
| Total | 22 |

Table 4.2: Types of Facebook Cover Pictures At Time of Interview

| Cover Picture Content | Number of Participants |
|------------------------------|-------------------------------|
| Picture of Child | 8 |
| Picture of Mother and Child | 5 |
| Other Picture | 9 |
| Total | 22 |

Some participants voiced frustration at seeing a baby picture as another person's Facebook profile picture. Melissa said she did not mind including her family in the picture but that showing just the child in the profile picture stated, "my kid has taken over my whole life." Christine also said she felt fine including her son in her profile picture but did not want to put a picture of only him because the profile belonged to her and should be a reflection of her. In addition, she sometimes received Facebook Friend requests from people whose profile pictures showed only their children.

She did not know or remember who they were and the profile picture did not help her figure that out.

For Isabel, whose profile picture at the time of the interview showed only her son's face, being a mother became, "a central focus for my identity."

Isabel: "I like showcasing that...He represents me right now. You know, he represents what makes me the happiest, what my daily life is all about."

Marina called herself, "that mom that if my profile picture isn't of my baby, I have to have him up somewhere. Or else I feel like a failure." She felt the Facebook profile and cover pictures were supposed to represent what was most important to someone, and for her, that included her son.

Milestone Pictures

These pictures included ultrasound images as well as pictures that depicted the child's developmental milestones and other firsts. Nearly half of participants shared their ultrasound images on Facebook. For example, Isabel received a DVD of her ultrasound, and she posted a screenshot of it as her profile picture for a few months. Several participants shared the image in other ways. Ella, Rita, Marina, and Judy showed the physical copy to people in-person. Rebecca and Brianna emailed it to family, and Christine emailed it to family and a few close friends. Zainab and Wendy emailed it to family as well as shared it elsewhere; Zainab sent the image over WhatsApp, and Wendy posted the image to her moms group on another website as well as to the same group of mothers in a private Facebook group. Shelby was excited to see her 12-week ultrasound and she posted it to Facebook while at the doctor's office. Right after she posted, the doctor told her something was wrong with the fetus. Shelby felt overwhelmed by the news and also wanted to take the picture down.

Shelby: “And of course, as soon as you post it, you’ve got a million responses, and you’re like, ugh, why did I do that.”

Ultimately, her son was born healthy. She posted a new ultrasound image on Facebook and also described what she went through, sharing her thankfulness at having a healthy baby.

Many participants posted pictures on SNSs shortly after the birth of their child. These pictures frequently depicted the newborn on its own or in the mother’s arms. Some participants posted pictures of their newborns nude or in a diaper; others only posted pictures of the child wrapped up and covered. The first picture Isabel shared of her son Emiliano on Facebook was a black-and-white picture of Emiliano on her chest. Her hand was on his body, and her husband’s hand rested on top of her hand. She called the picture, “sweet” and “cute,” saying it represented “a moment where the three of us were, you know, the family.”

Isabel and her husband talked about what pictures they wanted to post from the birth. They decided that pictures showing Isabel pushing or in pain or pictures that showed the umbilical cord, the placenta, or the newborn immediately after exiting the birth canal, “aren’t necessarily appropriate or what people want to see.” However, Jimena recalled posting pictures of her son “just right out of my belly.”

Some participants who endured difficult or complicated deliveries were particularly thoughtful with regards to what pictures they shared of their newborn. For Clara, giving birth to her son Ryan took 48 hours and included a scare where doctors had to ventilate him. Clara said their first picture of Ryan was of him on the stand where the doctors worked on him, and while she was glad to have the picture as documentation, it was not one she wanted to share on Facebook.

The first picture Clara posted on Facebook of her son showed Ryan in a plastic incubator and her husband standing over the box, looking at the camera. The picture was taken after she slept

and when the emotion of the experience began to hit her. “This photo has so many positive emotions attached to it for me, she said. “[It] just makes me really happy to look at it.”

Melissa’s second child Thomas was born three months premature and was surrounded by medical equipment for his first few weeks of life. She and her husband took pictures of him but did not share them online because she wanted to “preserve [his] dignity a little bit.” The first picture she shared of him on Facebook was about a month after he was born. It showed him fully clothed and with a healthy coloring. He was asleep and had a feeding tube in his nose. Since no other objects were in the picture, a viewer could not see how small he was.

Melissa: “I more wanted people to see him and not all the equipment... I didn’t want a pity party, I wanted joy that he was doing so well.”

As their children grew, more than half participants took and shared pictures of developmental milestones. This included children making different facial expressions (e.g., smiling), developing new features (e.g. teeth), or learning new skills (e.g., holding his head up, sitting up, clapping, saying bye, crawling, walking). Additional milestone pictures included children meeting new people, doing new things (e.g., swimming, meeting Santa), and experiencing events (e.g., Thanksgiving, Christmas, the Superbowl, birthdays).

Several participants took what Jessica called, “progress pictures,” on the day their children turned another month older. Christine printed out 12 signs, one for each month of her son’s first year, and took a picture of him in his crib each month. She also took a picture with a sign when he turned 18 months and two years old. Jessica and Shelby typically photographed their sons sitting in the same armchair each month. Jessica also took weekly pictures, which she shared on Instagram. She occasionally shared progress pictures on Facebook. Clara and Christine stopped sharing monthly progress pictures after their sons turned one. Christine said people asked her for more monthly progress pictures, but she found it unnecessary to take them after her son’s first year.

Overall, participants shared fewer milestone pictures as their children got older, typically because their children changed at a slower pace. This also makes intuitive sense given that children hit first-time milestones only once. Isabel, whose son was one year old at the time of the interview, estimated she took the same number of pictures as when he was younger but she did not share as many because he displayed fewer day-to-day changes. Ella created monthly albums for her nearly seven-month-old son and shared them on Google+, but she predicted she would slow her rate of creating albums as he grew older.

Pictures with Family or Friends

Most participants posted pictures of their children with important people from their lives. These included posed pictures as well as spontaneous moments with family or friends. Ella posted a picture of herself with her husband and son while they celebrated the couple's anniversary at the beach. Melissa dressed her family for a winter walk around the neighborhood and posted a picture of herself and her husband with their two sons in strollers. Rebecca posted a picture of herself with her husband and daughter in a family Halloween costume, and Karen posted a picture of her two children dressed in matching Halloween costumes. Christine posted a picture of her husband and son at a museum, and Judy shared a picture of her son atop her husband's shoulders, both dressed in local university gear. Wendy posted a picture of her brother holding her son, which she said did not happen very often.

Many pictures of spontaneous moments occurred when children were relaxing. Clara, Sabrina, and Lee Ann posted pictures of their husbands asleep with their infant sons on the couch. Karen shared a picture of her husband holding her daughter holding her son on the couch. She also posted a picture of her daughter with several of her daughter's cousins as her brother-in-law set off a rocket. Melissa posted a picture of her two-and-a-half year old son kneeling on the ground, his chin

resting on the chair where his infant brother lay and his gaze focused on the baby. She said the picture “captured a really sweet moment.”

Several participants shared pictures on Facebook of their children with the children of friends. Emily posted pictures of her son playing with the children of her husband’s college friends. Christine shared a picture of her son with her friends’ children on New Year’s Eve. Cara posted a picture of her son with the daughter of a friend while they visited an aquarium. Melissa used to meet a group of friends for brunch every month, and someone in the group would always take a picture of all the children together and post it.

Functional Pictures

Though this was the least common type of picture shared, several participants posted pictures that served what Kindberg et al (2005) called a functional purpose. The pictures facilitated a particular task, including drawing a comparison or communicating a message. For example, Sabrina posted an image on Facebook that showed two pictures of her son taken exactly a year apart. Jessica posted a split-screen image on Instagram and Facebook that showed her 20-week sonogram on top and her son Matthew at 20 weeks in a similar position on the bottom. Jessica also posted on Facebook split-screen images that showed Matthew next to her husband and a nephew as infants to see who Matthew resembled.

Melissa posted pictures that showcased her sons’ development as well as compared her two sons. The first time Melissa took her son Connor to see Santa, Connor screamed and jumped off Santa’s lap. One year later, he sat in Santa’s lap and smiled. Melissa shared on Facebook a picture of a calm Connor meeting Santa to show, “how far he’s come in a year.” Melissa also posted a picture that showed both her sons when they were newborns, making the same furrowed expression that indicated they did not want any more milk. She enjoyed seeing how alike and different they were.

Jimena did something similar, sharing a side-by-side picture of her three-year-old son and her recently born nephew right after they were born.

Other participants used pictures to convey messages, such as to wish someone a happy birthday or thank someone. Wendy posted a picture of her daughter in a pink dress and tutu on the Facebook Timeline of a friend to wish that friend a happy birthday. Judy posted pictures of her son playing with toys that relatives had given as gifts, and Carrie did the same with outfits her twins received. Judy tagged the gift-giver in the caption, and Carrie sent pictures directly to the gift-giver in addition to posting them on Facebook. Zainab had recently traveled with her daughter to visit a friend, and she posted a picture on Instagram of the three of them as a way to thank her friend for hosting them.

Pictures occasionally communicated messages related to specific tasks involved in caring for a baby. Zainab recently shared a picture with her WhatsApp parenting group of her using a carrier with her daughter, since the group had been discussing the use of carriers. Other participants mentioned belonging to Facebook groups where parents posted pictures, for example, of a breastfeeding latch or a rash on their baby to supplement questions they asked the group.

Pictures Not Shared Online

In general, participants hesitated to share three types of pictures: pictures that exposed the child, portrayed negativity, or were low quality.

Pictures That Expose Children

Most participants took pictures that contained nudity, but nearly all said they would not share those pictures online. Rebecca did not take pictures of her daughter naked or in the bath due to her husband's privacy concerns. In general, participants felt these pictures were not appropriate

for wide dissemination. For example, Shelby had pictures of her son lying naked on a towel, his buttocks exposed. She said these were for her own records, and maybe for her mother to see, but no one else. Some participants shared pictures where their children were naked but did not appear to be. Lindsey posted a picture of her daughter in a pool where she was naked but covered. Her daughter was 16 months old at the time of the interview, and Lindsey felt she was “beyond that point” where nudity was appropriate. Jimena was adamantly against naked pictures, but she posted a picture of her son while he was naked at the beach. She felt comfortable sharing this picture because only his head was visible; the rest of his body was underwater.

Some participants mentioned they would not share bath pictures online, while others shared bath pictures provided the child’s genitals were not visible. Karen said she had a “really cute” picture of her two children in the bathtub, and she emailed it to her mother. The picture showed the upper-half of her children, but Karen said she did not post it on Facebook because her daughter was nearly five years old and it was obvious her daughter was naked in the picture.

Clara said her mother shared a picture on Facebook of her son Ryan receiving his first bath. The picture showed her son completely nude, and Clara said she would not have shared it. She would have deleted the picture if her son had been any older, she said, but she also wanted to “honor” her mother’s decision. She also liked having his first bath documented along with the rest of his milestones. Wendy’s husband also shared pictures of their daughter’s first bath on Facebook, but she told her husband to remove one picture that showed their daughter’s genitals, and he agreed.

Participants who shared bath pictures typically tried to cover their children’s genitals when taking the pictures. For example, Isabel shared a picture of herself and her husband with their son in the bath. Her husband positioned his arm around their son’s hips so his genitals were not visible. Once while Carrie was taking pictures of her twins in the bath, she took one where they had, “the

cutest expressions on their faces,” but the washcloth was not positioned correctly over their genitals, “so I couldn’t post that one because that one was indecent.”

A few participants took artistic pictures that incorporated nudity, and they did not share these online. Emily and Zainab had newborn photo shoots that included nude pictures of their children. Though Zainab described the pictures as, “tasteful,” both said they did not post them on SNSs. Emily included the pictures in a photo book. Melissa, who took a photography class before her son was born, took a few artistic pictures of him nude on a white sheet, but she did not share them on Facebook. Jimena described taking pictures with her husband and son on the beach before she left her family for school. She took one picture where her husband and her son, both nude, held hands and faced the ocean, looking at the sunset. She called it, “the most gorgeous picture I’ve ever taken,” but did not share it online. She shared it only with her parents and her husband’s parents.

Several participants mentioned pictures of diapers and swimsuits; some shared these and some did not. For example, Wendy sent a video to her friend of her daughter Ashley wiggling while wearing a diaper. She did not post this on Facebook, but rather took another video of Ashley doing something similar while fully closed and posted that one. Cara did not mind posting pictures of her son Ye-jun in a diaper. They lived in a warm climate, and Ye-jun often ran around in a shirt and a diaper. She did make sure pictures she shared did not include other inappropriate content such as cleavage or her husband in his underwear. Karen said she had posted pictures of her daughter in a swimsuit, but that she would probably stop sharing those at some point.

Pictures that Portray Negativity

Some participants explained that they would not post pictures that were humiliating or portrayed their children negatively. Most often, this included pictures of children crying or throwing a tantrum. A few participants did not keep any pictures that portrayed negativity. At the insistence of

her husband, Rebecca usually deleted any pictures that might have looked inappropriate or could be misinterpreted, such as those that depicted roughhousing.

Wendy said she posted a picture of her daughter screaming once because it was funny, but that she did not generally post those pictures. Once she posted a Facebook status when her daughter had a “poop explosion” in public, but she said she would not post pictures of bodily functions. Serious injury was also something participants discussed. Sabrina posted a picture on Facebook when her son Owen fell on the driveway and skinned his knee, but she said she would not post anything more serious. For example, Owen once cut his eyebrow open and she said she almost took him to the hospital for stitches. She took a picture and sent it to her stepmom to ask for advice, but the thought to share that picture never occurred to her.

Low Quality Pictures

Some participants mentioned that they did not share low quality pictures or pictures where their children did not look cute. Participants mentioned that they typically take several pictures in a given instance and post the best one. For example, Judy said she wouldn’t post a picture where her son was, “not smiling or his eyes aren’t bright or he doesn’t look like he’s paying attention.” Lindsey looked to make sure the picture was in focus and that her daughter was looking at the camera before posting. Emily said she deleted unflattering pictures, given that she was never going to use them for anything.

Chapter 5

Findings: Factors that Influence Photo Sharing

This chapter presents findings that relate to the study's second research question: What factors do mothers of young children consider when posting baby pictures on SNSs? Participants primarily shared pictures online as a way to connect with friends and family. Many received requests for pictures, and some had to negotiate expectations with their husbands or other family members and friends. All shared at least a few pictures on Facebook, but several also used other SNSs. Concerns about oversharing and privacy influenced their decision to post pictures.

Connecting with Family and Friends

All participants described sharing pictures as a way to connect with family and friends. Many participants had family and friends who lived across the United States or abroad. Sharing pictures online allowed participants to keep those people up-to-date on their lives, of which raising children was a significant part. Marina said she posted pictures of her son on Facebook for her family, especially for relatives who lived abroad and who might never meet him. Karen said that if more of her friends lived closer to her, she might not share as much on Facebook. Emily typically saw her out-of-state friends once a year, and seeing pictures of their children on Facebook helped her remember their children's names and recognize who they were, enhancing the in-person visits.

Sharing was especially helpful for participants who lived abroad or who moved to the United States from abroad. Isabel, who lived in South America, posted pictures of her son on Facebook and Instagram to, "maintain a sense of community with my family and friends that I'm not with every day." She wanted people to feel part of her daily life and to see her son grow up, as well as for her sisters to be able to show pictures of her son to their children. Jimena, who was originally from the

Caribbean, used Facebook primarily so that family and friends at home would not miss out on seeing her son grow up. Both participants mentioned that they might not post as much if they lived closer to their family and friends.

Jimena: “You know, my Facebook is him. It’s him and my family...It’s to share those moments with my family that I wish they were there with me.”

For some participants, sharing pictures was a way to acknowledge the support of friends and family. Carrie had difficulty conceiving, and she endured a miscarriage before becoming pregnant with twins. She described herself as, “not a private person,” and she felt comfortable sharing information about what she endured. This also influenced her decision to post pictures of her twins on Facebook

Carrie: “So many people were with me through the struggle of conceiving...And then my pregnancy was rough. You know, people followed that. So then I feel like, if you stuck with me through that, you should reap the benefits of seeing how cute these babies are.”

She recognized that seeing baby pictures might be difficult or irritating for others. Before she had children, she also found it, “extremely painful to watch everybody else post about their baby.” However, she posted pictures of her children to make people smile and also to honor her own personal growth.

Carrie: “I’ve finally [gotten] to that place where I can be the people I was so jealous of, and now I’m not apologizing for that. Like, it took me a while to get there.”

Sharing pictures also helped participants communicate with people more often. About a month after her daughter Nailah was born, Zainab created an Instagram account for Nailah and began posting a daily picture or video. The account had about 50 or 60 followers, mostly friends and family. She set the account to private, meaning she had to approve requests from people who wanted to follow it. She gained regular contact with people through interactions on the account,

such as comments turning into discussions. Zainab, who said she had not missed a post in more than 250 days, occasionally received messages late in the day from people worried that she would miss a day and break the streak.

Receiving Feedback from Others

Participants enjoyed receiving feedback from family and friends on the pictures they shared. Their pictures typically received likes or comments related to the child looking cute or growing up, and participants said they generally received feedback from the same people. Participants also said their baby pictures tended to elicit more feedback than other types of posts.

Judy: “It [was] rare before Quinn, you know, for a random picture to get 97 likes unless it was, like, our wedding picture. I mean, this is a kid eating breakfast.”

For Clara, seeing baby pictures and receiving feedback on her pictures made her feel like she was belonged to a community. Christine said hundreds of people responded to a Facebook picture she posted after giving birth, an arduous process that involved several trips to the hospital. She had not heard from some of those people in years, and said, “the warmth... It’s so artificial, but it’s kind of not.” Melissa, whose son Thomas was born three months premature, said that the pictures she posted of Thomas on Facebook were among the most liked and commented pictures she had ever posted. She felt gratified to receive messages of support on Facebook and through private messages. Carrie occasionally received comments such as, “That’s totally awesome, Carrie, you’re the coolest mommy,” on pictures she posted.

Carrie: “And I’m like, that’s right. I am the coolest. I mean,...it’s like you know that you’re doing a good job, but it always feels better when somebody else confirms that...I don’t post to feel validated, but I always do after I post.”

Brianna posted an album of 10 pictures on Facebook two months after her daughter was born. She did not want to post pictures of her daughter online, but enough people asked for pictures that she did. She received likes and comments on the pictures as well as phone calls from people thanking her for posting the pictures. She said the feedback was nice but that she did not care about it much. The people who commented and liked the pictures were people with whom she closely interacted, Brianna said, and she already knew they loved her daughter.

Receiving feedback also influenced some participants' decisions to continue posting. A few wondered whether they were posting too many pictures, but they decided to continue posting because they said they said the responses were positive. No participant recalled an instance where they received negative feedback on a baby picture.

Some participants wanted to preserve the responses to show their children in the future. Shortly after her son Emiliano was born, Isabel had a picture taken of herself and her husband with their son in the hospital room. She posted it on Facebook, where it received nearly 140 likes and almost 30 comments. She took a screenshot of that picture on Facebook with the feedback, and she planned to give it to Emiliano when he was older to show how many people knew when he entered the world.

Negotiating Expectations Around Photo Sharing

Photo sharing involved several actors. The child was typically the subject of pictures, and participants were usually the ones taking and posting them. However, participants' husbands as well as others also took and shared pictures. In addition, friends and family often requested to see baby pictures. For some participants, these requests prompted them to post pictures; for a few others, these requests felt like pressure to share pictures when they did not want to.

Considering their Husband's Thoughts

In general, participants said they posted more pictures online compared to their husbands. Some said their husbands did not use social media or that their husbands did not post pictures of their children very often. About half of participants reported having conversations with their husbands about baby pictures and posting to SNSs.

Cara talked with her husband about creating a Facebook page for their son. He agreed, but since he used Facebook less frequently than her, she generally maintained her son's profile. Melissa and her husband both shared pictures of their children online, and she said they had a brief conversation before their first child was born about what types of pictures they felt were appropriate to share. As mentioned in Chapter 4, Judy and her husband talked a few months before their son was born and decided they did not want to use the son's name on Facebook. Ella, who said her husband shared a lot more information with people in general than she did, told her husband she felt strongly about not sharing her son's picture on Facebook, and she said he was fine with that. After their daughter Nailah was born, Zainab and her husband conversed about sharing Nailah's pictures on Instagram. Her husband's Instagram was set to public, and while he hardly shared pictures of Nailah, they talked about whether he should make it private. Nailah's Instagram was set to private, and they also talked about whom they wanted to allow as followers.

Isabel and Christine frequently discussed photo sharing with their husbands, who did not have Facebook accounts. Before their son Emiliano was born, Isabel talked with her husband about what pictures they should post on Facebook of the pregnancy and birth. Such conversations arose naturally as they took pictures, she said. They continued to talk about what pictures to post as Emiliano went through his first year, but their conversations became less frequent.

Isabel: "It's a little bit more casual because I think we've come to understand what we define as, like, an appropriate and a good picture to put up of Emiliano, so we don't need to have a conversation as much. That being said,

it also could be due to the fact that we post fewer pictures now that he's older than we did when he was, you know, brand new.”

Christine did not recall talking about photo sharing with her husband before their son Oliver was born. After her son was born, Christine said her husband was interested in what pictures she posted on Facebook. He often logged onto her profile since he did not have one. She recalled one conversation with her husband about what privacy settings to put on her YouTube account, which featured 250 or 300 videos, most of her son.

Marina did not find it necessary to talk about photo sharing with her husband because she did not think he would have a problem with her sharing, especially since he also used SNSs and shared pictures of their son online. Carrie did not discuss photo sharing with her husband, who she said rarely shared pictures of their twins online. She assumed that if her husband ever had any concerns, he would mention them to her.

A few participants incorporated their husband's views into their photo sharing practices. This ranged from letting the husband manage most of the family's photo sharing online to considering the husband's opinion when deciding where online to post pictures or what pictures to post. Lee Ann relied on her husband to manage posting pictures of their son on Facebook because he had more experience with the site than her. She said her husband, an active Facebook user, never had any “stalker problems or, like, public Facebook fails,” things she worried about. Consequently, she trusted his judgment when it came to posting pictures of their son. She also felt he was a better photographer and said he was faster at uploading and posting pictures than her.

Rebecca primarily shared baby pictures on Snapfish because her husband was, “adamantly anti-Facebook;”

Rebecca: “He's always been anti-Facebook. He just thinks that there's absolutely no need to share information with a wide audience.”

Every month, she added pictures of her daughter Louise to an album on Snapfish and emailed the link to a group of about 30 family and close friends. At the time of the interview, she said the Snapfish album contained between 300 and 400 pictures, and there were 22 pictures of Louise on Facebook. The baby pictures Rebecca shared on Facebook primarily showed Louise with other people. Rebecca expressed some privacy concerns about sharing on Facebook but also said she would probably share more on Facebook if it weren't for her husband's opinion. Their difference of opinion regarding Facebook did not appear to cause tension between Rebecca and her husband.

Karen said her husband was becoming less active on Facebook; she said he had professional colleagues as Facebook Friends and was concerned about what they could see on his profile. He did not mind Karen posting pictures of him or their children but preferred not to be tagged in them, she said. When posting a picture of their children, Karen said she noted whether her husband was in it or if it showed something that would make her husband upset.

Photo taking and use of Facebook caused tension between two participants and their husbands. Jimena said she used to have, "a little bit of an addiction to social media." She said she constantly checked Facebook and Instagram and shared pictures there. Her husband found this annoying because he did not feel the need to show people pictures of what they did all the time, she said. But she felt pictures were an important way to preserve moments. The two separated for a few months, during which time she deactivated her Facebook account, deleted her Instagram account, and created new accounts on each. This time overlapped with her moving to the United States from the Caribbean, and she did not post for a few months. Eventually, she and her husband reunited, and he moved to the United States with her. She still took pictures but said she posted weekly instead of daily. Many of her pictures were selfies of herself with her son, she said, because if her

husband took a bad picture, she would keep making him retake it until it turned out well, which irritated him.

Shelby said her husband was “adamantly against Facebook” and that he felt the people who needed to know information about his life already knew without him needing to post the information on Facebook. She said he did not ask her to stop posting pictures of their son but that he would be happy if she stopped using it. She said many of her Facebook Friends were having children, and she enjoyed seeing updates from friends and acquaintances. She also actively participated in parenting groups on Facebook and enjoyed providing advice to others on the site.

Responding to Others’ Requests and Actions

More than half of participants received requests from family or friends to see baby pictures, especially from their children’s grandparents. Judy’s parents lived nearby and saw her son often while her in-laws lived on the other side of the United States. Her in-laws often shared on their own Facebook profiles the pictures that she posted of her son. She said she felt fine about this because she understood their desire to connect their grandson with their own network.

Judy: “She’s [her mother-in-law] always asking for more pictures. What we do on Facebook does not satisfy her desire at all for pictures.”

Hearing requests from family and friends reminded Emily to post pictures online, and, if enough people asked for pictures, she went through the “cumbersome” process of uploading pictures from the camera and posting them. But she also teased her friends, telling them to come visit instead.

A few participants who preferred not to share baby pictures online felt frustrated by constant requests for pictures. Brianna originally intended to keep her daughter Abigail off social media entirely, saying she felt, “more private about her than I’ve ever felt about anything else in my

life”. But she noticed that people posted and tagged pictures of other people’s children on Facebook, and she felt it was impossible to keep pictures of her daughter off the Internet. A few weeks after Abigail was born, Brianna’s sister-in-law posted a picture of Abigail, much to Brianna’s frustration. She said her husband’s side of the family actively used Facebook, and she did not want to hurt anyone’s feelings by requesting they not post pictures of Abigail. Brianna also heard complaints from friends, relatives, and her mother about not seeing pictures of Abigail. About two months after Abigail was born, Brianna created a list of about 80 or 90 people on Facebook and only allowed those people to see pictures of the baby. To satisfy the requests, she posted an album of ten pictures of Abigail. One month later she posted another picture, this one of Abigail’s toes in the sand.

Brianna: “When I realized I could make that closed group...I said, fine, I’ll just put some pictures up even though I’m still uncomfortable with it...I don’t love the fact that I put those ten pictures up.”

Lindsey hesitated to share baby pictures on Facebook due to concerns that people beyond her Facebook network could access them. She also did not want others to share pictures of her daughter Charlotte because she did not know what privacy settings they had. She said her husband did not know how to use Facebook well, and he occasionally asked her to post a picture so he could share it with his network. Her parents did not use Facebook, but her husband’s parents and grandparents did. For about seven to nine months she felt “pressure” to post. She often received requests for pictures via text and Facebook.

Lindsey: I felt kind of guilty for withholding, I guess...[for] not giving them the pictures, and I was probably just too lazy to email them ‘cause it takes too long to upload.

Lindsey said the requests slowed after she sent the parents and grandparents on both sides of the family a physical album of Charlotte’s pictures. She said she took more videos of Charlotte

and was better about sending emails with video links to relatives. She also joined Instagram because she “didn’t want to go deleting people off Facebook, but I didn’t want to share all of the pictures of everybody on Facebook.” Lindsey invited family and friends to follow the private Instagram account to see pictures of Charlotte.

Some participants communicated their photo sharing preferences to family and friends soon after their children were born. The first time Rebecca sent a link to her Snapfish album of baby pictures, she informed people that she and her husband preferred to keep baby pictures off Facebook due to her husband’s discomfort with the site. Judy sent an email and a picture to about 150 family and friends announcing the birth of her son. In this, she included a paragraph about how she and her husband preferred to keep their son’s name off of SNSs. In the 14 months since her son was born, she said only about three people, including her mother-in-law, posted her son’s name on Facebook, and Judy deleted those comments. Judy said she was surprised that so few people mentioned her son’s name. She attributed it to people picking up on the behavior she saw, since neither she nor her husband used their son’s name when posting.

Lindsey read an article about how people could access information such as location from pictures online, and she posted it on her Facebook Timeline as a way to explain why she preferred not to post many baby pictures and for others not to post them. Some of her friends asked her permission before posting pictures of her daughter, which Lindsey appreciated. Other family members dismissed her concern. Lindsey felt upset when her sister-in-law, who was about 20 years old, reposted baby pictures that Lindsey had posted. She figured her sister-in-law had misunderstood her request, thinking that it related to unflattering pictures and that if Lindsey had posted the picture, it was alright to repost. Lindsey did not say anything to her sister-in-law, figuring it was not worth it since they lived several states apart.

A few participants mentioned talking to their parents or in-laws about posting or sharing baby pictures. When Judy's mother-in-law posted her son's name on Facebook, Judy sent her mother-in-law a text message. Ella's mother-in-law posted on Facebook about being excited for her coming grandchild, a post Ella asked her to remove. Ella did not share information or pictures of her pregnancy on Facebook, and she felt it was too private for her mother-in-law to share. Wendy's mother occasionally shared pictures of her daughter on Facebook, and Wendy occasionally noticed that people she did not know commented or liked the picture. She said her mother had friended random people while playing Facebook games, and Wendy did not like that people whom she did not know could see and potentially do something with pictures of her daughter. She explained this to her mother and asked her mother to review the privacy settings on her account.

Christine and her husband faced a decision when they found their babysitter had posted a picture of their son Oliver as her Facebook cover picture. Seeing the picture initially made Christine feel "uncomfortable" and "weird." Christine considered sending a Facebook Friend request to the babysitter or talking about it with her, but ultimately Christine and her husband decided to do nothing. They realized that while they spent very little time with the babysitter, the babysitter spent a significant amount of time with their son. They viewed the babysitter's actions as a demonstration of how much she loved Oliver and decided it was more important to have someone who cared about their child watching him. In addition, Christine did not want to make the babysitter feel like she was being watched. The two did not share any overlapping friends, so the babysitter would likely know that Christine had searched for her specifically online.

Taking Advantages of Technology's Affordances

In general, participants found SNSs a convenient way to disseminate pictures of their children to many people. Some said they tended to post pictures immediately after they took them,

while others said they were typically too busy in the moment and posted pictures later. On a practical level, a few participants found storing pictures on SNSs a good backup. Jimena's computer recently crashed, and she planned to download her pictures from Facebook. Lee Ann's husband created a backup system for their pictures but she could not figure out how it worked, so posting pictures on Facebook was a way for her to remember where the pictures were.

For many participants, Facebook was a place to post at least some baby pictures because it reached a wide audience. Rebecca acknowledged that her audience on Facebook included people she with whom she was not very close, but she posted a few baby pictures there because she felt people were curious. She also knew that people were busy; for example, she did not have the time to call or email her best friend from high school and ask her friend for pictures of her children. Posting pictures on Facebook felt natural to Sabrina, since the people with whom she shared in real life were all on the site.

Sabrina: "This is what you do with the Internet is you share your life."

Clara and her sister discussed ways to share baby pictures online before Clara's son was born. Clara liked the convenience of having information in the cloud, but she knew that using an SNS would mean conceding some privacy. Her sister tried to set up a local server, but that turned out to be more complicated than they realized. Once Clara gave birth, she said Facebook was the most convenient place to post pictures. She had always used the site as a journal, and it became her baby book. Marina felt guilty about not keeping a baby book until she realized that Facebook was her baby book.

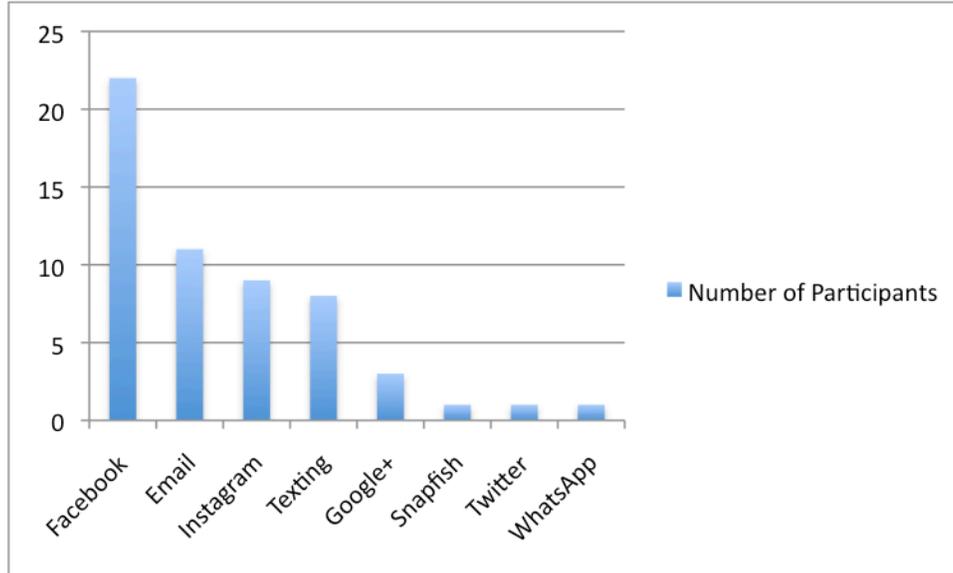
Marina: "I have a modern day baby book. I can go back to my Facebook profile and tell you the exact day that Cooper took his first step...If I ask my mom for pictures of me the first time I took a step, she would laugh in my face."

Participants valued how SNSs enabled them to richly document and store moments from their children's lives, something that was not possible during their own childhoods. As mentioned in Chapter 4, Marina ordered all of her Instagram pictures when her son was six months old, and she appreciated having them in physical and digital format. Wendy said that many of her own baby pictures were lost in basement floods. She was happy that technology allowed her to easily capture and store moments to which she could look back and remember what her first child was like. Christine looked forward to showing her son Oliver memories from his early years. For example, her family had a 16-year-old cat whom her son loved, but the cat would probably die before Oliver could remember it. In addition, Christine said that if anything ever happened to her son, she would be glad to have the pictures and videos of him.

Use of Other SNSs

Figure 5.1 shows the different platforms and technologies participants mentioned they used to share pictures of their children. Only half of the platforms and technologies (e.g., Facebook, Instagram, Google +, and Twitter) fit the definition of SNSs (boyd & Ellison, 2007; Ellison & boyd, 2013). Snapfish is an online photo service typically used for printing digital pictures and WhatsApp is a mobile phone-based messaging application. Email and texting are types of electronic communication. However, Figure 5.1 shows all the ways that participants mentioned they share baby pictures.

Figure 5.1: How Participants Shared Baby Pictures



Recruitment materials sought participants who used Facebook, and all 22 participants did. Eleven used email; nine used Instagram; eight used texting; three used Google+, and one each used Snapfish, Twitter, and WhatsApp. Among participants, Instagram was the most popular non-Facebook SNS to share baby pictures. Jessica, Lindsey, Isabel, Zainab, and Rita had private accounts that included family and friends as followers; Jessica also had members of her online moms group on Instagram. Jimena and Marina had public Instagram accounts.

Jessica and Lindsey said they shared more pictures on Instagram than Facebook. Jessica said she used Instagram more often because it was designed for photo sharing. If she liked a given Instagram picture a lot, she would also share it on Facebook. Lindsey liked that she could share with a smaller audience on Instagram. She originally thought users could not copy and paste pictures from Instagram, and though she realized that was not true, she continued using Instagram because the people with whom she was close were already following the account. Isabel said she posted more random, in-the-moment pictures on Instagram, while she was more deliberate about the ones

she shared on Facebook. She said this was in part because the audience on both networks was largely the same, and she wanted them to see different pictures.

As mentioned in Chapter 4, Zainab created an Instagram account for her daughter Nailah where she posted a daily picture. Zainab's aunts and grandmother did not use Instagram; she tried to take a screenshot of the daily picture with its caption and email it to her grandmother. Zainab, who lived in the Middle East, also maintained several groups on WhatsApp, which was where she shared most pictures she took throughout the day. She occasionally shared pictures, such as monthly progress pictures or pictures of Nailah at holidays, on Facebook. Since Facebook had the widest audience, Zainab tended to post pictures there that did not say much about Nailah's life. For Jimena, Instagram was a place for her own pictures, such as selfies, while pictures of her son went on Facebook. When her son was younger, she typically did not post pictures of just him on her Instagram, though she would share pictures on Instagram that featured both of them.

A few participants used Google+ to share pictures. Ella shared albums through Google+ because she felt she had more control over who saw the baby pictures she posted. Emily, who took a 10-month break from Facebook, used Google+ during her hiatus. She had about 30 connections on the network, which included her son's grandparents and birth grandmother. She typically posted the same pictures on both networks, but she posted status updates on Google+, such as information about adopting her son, that she felt were too personal for the wider audience of Facebook. Rita found the interface on Google+ "cleaner" in comparison to the "frenetic energy" of Facebook. Her Google+ connections were people she was close to in real life, and she felt more comfortable sharing information there than with the wider audience she had on Facebook. Rita also liked using Instagram because of its convenience; she always had her phone in hand, and sharing from her phone to the SNS was simple.

While Karen and Melissa shared baby pictures on Facebook, they said they sent more pictures through text message and email. For example, Karen’s parents did not use Facebook, but Karen’s mother’s sister did, and Karen said, “sometimes I’ll get shit if something’s on Facebook and my mom doesn’t see it but her sister does.” Melissa’s parents and other older relatives used Facebook but did not comment on the platform; she said they sent comments via email instead.

A few participants also posted video of their children. Christine had a public YouTube account; Rebecca and Lindsey set their YouTube accounts so that only people who had the link could watch the videos. Shelby once took a video on her phone that she wanted her sister to see, but since the file was too big to send through email, she posted it on Facebook instead.

Table 5.1 contains information on how many Instagram followers participants reported they had. Not all participants who mentioned using Instagram are included in the table because I only began asking for follower counts in later interviews. Two participants reported sending monthly emails with links to a photo album of baby pictures; Table 5.1 includes how many people participants said were on this mailing list.

Table 5.1: Instagram Followers and Baby Picture Album Mailing Lists

| Name | Instagram Followers | People Who Receive Links to Baby Picture Albums |
|-------------|--|--|
| Jimena | About 500 (She had 1,500 on an old account that she deleted) | |
| Isabel | 143 | |
| Zainab | 50 or 60 (on the account dedicated to her daughter) | |
| Jessica | 65 | |
| Marina | About 1,400 | |
| Lindsey | About 60 | |
| Rita | 28 | |
| Ella | | About 50 people receive a link to a Google+ album |
| Rebecca | | About 30 people receive a link to a Snapfish album |

Managing Audience Expectations, Identity, and Self-Presentation

Some participants acknowledged that Facebook and other SNSs only portrayed a certain perspective of their lives. Jimena actively used SNSs but stopped while she and her husband were separated and while she was adjusting to school in the United States. She used Facebook to share “happy stuff,” and she said she had nothing to share during the time she was adjusting. After she and her husband reunited and he and their son came to live with her, she began posting pictures again. Her sister said it looked like Jimena was “doing great,” but Jimena said, “She just sees the beautiful pictures. She doesn’t really know how harsh and how hard it is.”

Concerns About Oversharing

About half of participants said they did not want to overshare, or post too many pictures of their children online. They used vivid imagery to describe this activity, saying they did not want to overwhelm, inundate, barrage, saturate, bombard, or blow up Facebook with pictures. For Karen, pictures had to have a purpose to be shared.

Karen: “I feel like there has to be some sort of a reason or some sort of special thing that it’s marking... I don’t need to put something on every day of just her sitting there.”

Clara said that in a few instances she removed pictures after posting them to Facebook because she felt she had already shared enough and, “it wasn’t a good enough photo to justify me posting it.” Carrie said that if she shared pictures of her twins on Facebook for a few days in a row, she might post a picture in a private Facebook group that contained her three best friends or text a picture to a friend rather than post it on her Timeline. Shelby’s gauge to avoid oversharing was to consider what would annoy people. For example, she posted a group of pictures the week before the interview, so she said she probably would not post any pictures that week unless she took one that showed a milestone or “was just too cute.”

Shelby: “People are not going to want to be your friend if you post every picture you take of your child.”

For Zainab, cultural norms influenced why she limited the visibility of her Facebook and Instagram accounts, as well as her daughter’s Instagram account. She lived in the Middle East, in “an Islamic country” and a “very conservative society.” Her daughter’s Instagram account contained pictures of her in “beach gear and stuff,... for example, that I would not share on Facebook because they just don’t need to see that.”

Jessica posted pregnancy pictures and updates on a blog instead of Facebook in part because she did not think that all of her Facebook Friends would want to see that information. Wendy hesitated to post her ultrasound image on her Facebook Timeline because she wanted to be “respectful” of people who might be struggling to conceive. A few participants did not share their ultrasound images on Facebook because they found it “weird” or “creepy” to show an image of the inside of their body. Others said the image did not look like much. Two participants felt superstitious and did not share the image online.

With regards to baby pictures in general, Karen said she was aware that some people did not have children or did not care about children, while others might want children and could not have them. For this reason, she tried not to post too many baby pictures and to ensure the ones she did post were pictures that people would find funny or cute even if the people were not interested in children. Christine knew that while she thought her son was, “the most beautiful, amazing, interesting child in the entire world,...other people do not,” and Isabel said that people did not need to see five pictures of her son a day. When deciding what pictures to post of their children, participants looked for pictures that were cute, fun, or presented their children in a particular way. They also considered how their children would feel about the picture being shared as well as what

others, such as their children's grandparents, would want to see.

Motherhood and Participants' Identities

While participants did consider what pictures their audience would want to see, photo sharing was also a way to express themselves. Having a child added another facet to the identities of participants. For Jimena, Isabel, and Marina, posting pictures of their children online highlighted a central component of their lives. Isabel said her use of SNSs revolved around her role in the world, and at that moment, her role was as Emiliano's mother. While she knew having a child would change her life, she did not expect to be so happy to identify as a mother. She took pride in sharing herself online through Emiliano. Before giving birth, Lee Ann's "Facebook life" reflected her roles as a wife, aunt, and worker. When she became pregnant, she thought she would not share pictures of her child online. As she went through the pregnancy and began raising her son, she realized it would be hard to leave out her role as a parent in her use of Facebook.

Some participants said they could not help but post pictures of their children, especially in their child's first few weeks of life. Clara said she "went nuts" posting baby pictures during her son's first few weeks. Melissa, who had directed social media teams as part of her career, said she planned to give herself six months "to just go full-bore. And then I was going to try and get it under control." In reality, she "didn't even bother with trying to impose any restrictions on myself until about a year into it," after which she posted less often.

A few participants described that they couldn't resist posting a particular picture. Jimena's sister asked for a picture of her son at four months of age. Jimena found a picture she posted on her old Facebook account and reposted it to her current account, saying she, "just had to put it back again on this one." During the time of the interview, Carrie had pictures of her twins as her

Facebook profile and cover picture. She said that while she wanted the profile picture to include her, when a picture was “really super cute like that, you can’t resist [posting] it.”

Other participants said they did not want their identities as mothers to overtake their online profiles. Brianna said that Facebook was a space to document her life, not her daughter’s.

Brianna: “It’s not her Facebook. It’s my Facebook. Yes, she’s a big part of my life, obviously. But, I think that my Facebook should be about me and the things that I’m doing.”

Rebecca, who also felt her Facebook profile should reflect information about her, said posting something such as, “Louise had her first drink of toilet water today,” on Facebook was a story about her daughter, not her. (Rebecca also asserted that, to her knowledge, her daughter Louise had never drunk toilet water.) Emily felt frustrated when she saw Facebook Friends post only about their children, saying it felt like “you’re hiding behind your kid and their accomplishments.” For example, a Facebook Friend of Emily’s who had just entered the second trimester of a pregnancy with twins posted comments about having pregnancy brain, getting two hours of sleep, and the increase in her family’s grocery bill. To Emily, this said, “Now that I’m pregnant or I’m a mom, I cease to have another existence...this is my whole identity, not just an additional identity that I take on.”

Seeing an abundance of Facebook posts and pictures about pregnancies and babies was, “really painful” for Emily because she and her husband had been trying to have children for several years and endured a few interrupted adoptions. She stopped using Facebook for 10 months, saying that was better than “getting bitter about something I can’t control.”

Some participants considered how pictures they posted would reflect on them and their parenting skills or styles. For example, Zainab said that while she primarily breastfed her daughter, she occasionally used a bottle and would always make sure the bottle never appeared in pictures. She was not sure why, but she attributed it to her pro-breastfeeding beliefs. Conversely, Marina recently

shared a picture of her son sitting on the ground eating dirt. In addition to sharing because she found it funny, she said might have subconsciously wanted to show people that she was the type of mother who liked that her son was playing in dirt.

Christine once took a picture of her son Oliver sitting at a dining table in front of a wall lined with scribbles. Before the picture was taken, she told Oliver to draw a picture to send his cousins and went to the kitchen to bake for a Christmas party. She returned and saw he drew on the wall. Christine found this hilarious, especially since the washable marker came off the wall. She knew she had to reprimand him, but she also wanted to take a picture. She did both and debated whether to post the picture on Facebook, since it showed her son doing something wrong and suggested that Christine had not been watching him. Ultimately, she posted it, saying it might show her as a bad parent, or it might show that she has a young child who does not know the difference between paper and the wall. It became one of the most liked and commented pictures she posted, and people referenced it in-person at several Christmas parties she attended.

Presentation of the Child

In addition to considering how pictures would reflect on their own identities, participants recognized that the pictures they shared could shape how others viewed their children. Some participants posted pictures they believed captured their child's personality. Marina's cover picture showed her son gripping a wooden table and gnawing it, his "mischievous" eyes looking directly into the camera. She said it showed him growing up, wanting to hold on and stand against the table. Shelby posted a few pictures when her son turned eight months old. The pictures showed him in an armchair, then getting down and crawling around. She said they showed him developing a mind of his own, a "stubborn personality." In his first few months, he would simply lie in the chair when she placed him in it for a picture whereas now he wanted to get up and move around. Christine posted a

picture of her son standing in his crib holding a sign that announced his second birthday. A few weeks before his birthday, she said he began asserting opinions and throwing mini-tantrums. She felt the picture captured her son saying, “I’m two. Like, you want me to cooperate? I am not going to stand here and take a picture. I am going to make a snarly face and take your sign and rumple it all up.”

Clara pointed out two pictures she had posted on Facebook when her son was a newborn. One showed him with red, splotchy, skin, half-shut eyes, a scrunched face, and pursed lips. In the second picture, his eyes were wide open and his lips formed a partial smile. Clara said she believed she had posted the first one accidentally, intending to post the second one. She said the first picture, in which he looked “like an angry, grumpy old man,” was not flattering, and while the second picture still showed him looking “weird and newborn-y,” it was more “charming” than the previous one. She said wished she had deleted the first one and did not know why she left it on Facebook.

More than half of participants said they did not share pictures they believed their children would find embarrassing or humiliating. This typically included pictures that showed the child naked or upset. Many said they did not think their children would want naked pictures of themselves online. Rita said that a crying child was having a “private moment,” where “what you need is somebody to make you feel better, not for somebody to document it for posterity.” A desire to protect their children’s dignity also influenced how some participants shared pictures of their children’s birth. As described in Chapter 4, Clara’s son had to be ventilated immediately after birth, and Melissa’s son was born three months premature. Neither shared the first picture they took of their sons online, but instead shared ones that showed their children as healthy.

Sabrina typically took pictures of funny moments with her son. She kept pictures for herself, but if she thought someone such as her son’s grandfather or her friends would find the picture funny, she shared it. Recently she was sitting in her living room and her son was playing on the

floor. She looked down and noticed he had crawled under the rug. He made a funny face and she took a few pictures of him. She shared one as a way to say, “Hey, look what he’s doing right now, ‘cause he’s being hilarious.” Marina, who shared pictures of her son on Facebook, Instagram, and Twitter, called the latter two “an amusement” and a place to share, “hilarious pictures of my son that I feel like everyone needs to see because they’re just a joke.”

Some participants shared pictures to portray their children or themselves in a certain light. Marina wanted her son, “to be seen as a happy-go-lucky kid.” This was how she said she portrayed him when she talked with her friends and family, and she wanted pictures of him online to convey the same image. She would not post a picture of him crying because that was not something she would call and tell her friends. Christine called posting pictures on Facebook a “display,” saying people, “intentionally pick and choose” what they show of themselves. She recently posted a picture of her husband and son at a museum. She posted the picture because she said there were not many pictures of her husband and son, but also because she wanted to show her Facebook Friends that they did cultural activities as a family. Isabel said part of why she posted pictures of her son online was to “show off how cute he is.”

Isabel: “I think Facebook in general has a lot to do with showing off and showcasing, like, who you are and the life you lead and however...self-absorbed that is, I think it’s just kind of the culture and the generation we live in right now.”

Zainab, who shared pictures of her daughter Nailah on Facebook, Instagram, and WhatsApp, said her daughter’s daily Instagram picture was “somewhat scripted.” Sometimes she created a scenario so she would have an interesting picture to share on Instagram. She said she was “a lot less selective” with what she sent to various WhatsApp groups. Conversely, Cara wanted to capture her son’s everyday behaviors. She created a Facebook profile for her son Ye-jun after he was born. She typically posted pictures and videos of him on her Timeline and and tagged him so they

appeared on his Timeline. She did not post naked pictures, but she posted pictures and videos that showed different facets of his personality.

Cara: “He’s going to have good days; he’s going to have bad days. H’s going to be sweet, and he’s going to be a little turd sometimes. And so I post that. And then when he gets it, he’ll see, oh, this is how I was when I’m being cute. This is how I was when I’m just, you know, throwing a tantrum.”

Cara described a recent incident where Ye-jun tried to climb up to the TV and touch the screen. She told him no, and he lay down in a cardboard box and cried. She recorded a video of him and shared it on their Facebook profiles. She explained that she documented Ye-jun acting in a variety of ways so that he would be able to accept himself wholly. Through that, she hoped he would be able to accept and respect that other people are not perfect.

It was also important to Cara that Ye-jun grew up learning how to navigate a life that includes a digital footprint.

Cara: “I see a lot of kids, you know, teenagers posting on Facebook kind of ridiculous stuff. And I don’t comment because they’re at a stage in their life where they need to post certain things. And, and Ye-jun, at a young age, I want him to know that everything he does, regardless if he posts it on Facebook or not, people will know about.”

Ye-jun, who was two years old at the time of the interview, had more than 320 Facebook Friends. His Friends included family members, neighbors, and his father’s business associates. By documenting his life on Facebook and allowing people to comment on the information, Cara could help her son develop expectations about who could see information about him and also teach him the importance of being accountable for his online behavior.

Addressing Privacy Concerns

Most participants said they set their Facebook profile so that only Facebook Friends could see what they posted. Carrie and Cara said Friends-of-Friends could see what they posted, while

Sabrina and Judy said their profiles were public. Some participants checked to confirm their privacy settings during the interview; others did not. In one case, a participant who believed her profile was set to Friends-only checked during the interview and saw it was set to public. She changed it during the interview.

Many participants used the term “locked down” to describe their privacy settings, which they explained to mean visible to only their Friends. In general they did not want people outside their network to see the information they posted on Facebook. Shelby said she read articles about how people could take pictures of children off Facebook and post them on other sites. She changed her Facebook visibility settings to Friends-only after her son was born. Cara, whose profile had been public and Friends-only in the past, kept it as Friends-of-Friends because she also used the site for business networking. She set her son’s Facebook profile to Friends-only visibility. Carrie and Sabrina broadened the visibility of their Facebook information because they heard from people who weren’t able to see what they posted.

Sabrina: “Facebook's privacy settings seem to work on an all or nothing basis, so it's just easier to leave it public. And I'm comfortable doing so because I don't put a lot of private stuff on there, so I'm alright with whoever stumbles across my page seeing what's there.”

More than one-third of participants mentioned that Facebook changed the privacy settings available to users, and some found these settings hard to keep up with and frustrating. Lee Ann did not realize that people who were not her Friend could see which Facebook groups she had joined, “which ended up basically being identifying information because, you know, I’m part of the [town name] Kids group, the [town name] Moms group.” Judy felt it was too complicated to determine how to make information on Facebook private. Zainab said she checked her settings whenever Facebook announced a policy change, and while she thought she knew who could see her information, she was not “100 percent sure.” Brianna expressed frustration at not being able to keep

up with privacy changes. She appreciated receiving emails from Facebook about policy updates, even if she disagreed with the changes. But she sometimes saw information from, “a reputable source,” or status updates from other users about changes to privacy settings and was unsure what was true or not.

Some participants knew Facebook enabled users to create lists of Friends but chose not to create them. Emily, who took a 10-month break from Facebook, said she unfriended about half her Friends when she re-joined. Rebecca said creating lists would waste her time because she felt the fact that Facebook was “constantly shifting what [and] how the information is shared” would require her to keep changing her settings. For this reason, Rebecca simply did not post often. Zainab also said setting up groups was “just too complicated.”

Zainab: “They [Facebook] keep changing their rules and their settings and everything and I was just like, forget it. It’s not worth it.

At one point Christine created lists for different Friends (e.g., family, college friends, husband’s friends, professional colleagues) and allowed only one group to see pictures. She did this because she did not want, for example, professional colleagues to see her travel pictures. But she said Facebook redid the lists and after that she allowed all Friends to see her pictures.

Other participants described using Facebook’s group and list features to limit who saw their information. Wendy joined a mothers group on another website where comments in the group were publicly visible. They created a private Facebook group where Wendy said she felt more comfortable discussing such personal topics as medical issues, family issues, or complaints about husbands. She also felt more comfortable sharing pictures in the Facebook group. Judy said she sometimes changed the visibility of Facebook posts from public to Friends if they asked a question or included a picture. Isabel adjusted her Facebook settings so that her posts were visible to Friends except a subset of work colleagues or loose acquaintances. About one-fifth of her Friends were in this

“limited view” group. Jimena created lists of Friends, such as those from her hometown or her college, and sometimes she shared with a particular group.

Brianna, who realized while she was pregnant that she did not want acquaintances and people who were not an important part of her life to see pictures of her daughter, pruned her Facebook Friends from about 1,000 to 529. As mentioned earlier in this chapter, the action of her sister-in-law posting a picture of Abigail on Facebook prompted Brianna to address the topic and ultimately to create a smaller list of Facebook Friends who could see baby-related information.

Brianna: “It highlighted for me the inevitability of the fact that she [Abigail] was going to be on Facebook. And so that’s when I really started thinking about, well how can I control this as much as possible.”

The desire to control information, especially related to their children, influenced some participants’ approach to sharing baby pictures. It was how some defined privacy.

Brianna: “Privacy is having control over who has information relevant to me and my life.”

Brianna and Shelby described that they as parents had a responsibility to “protect” their children, which included monitoring their children’s digital footprints. Karen felt that she shared more often when her first child was born, partially due to the novelty of having a baby and also because she had moved and wanted to share baby pictures with friends. As her daughter grew up, she felt more aware of privacy concerns and said she wanted more control over who saw her daughter’s image. A desire to control the audience for baby pictures is partially what drove Zainab to share baby pictures on Instagram. She had a wide network of Friends on Facebook, which included people she forgot even existed. She did not want those people to see pictures of her daughter’s daily life, so she created a private Instagram account and only allowed family and close friends to follow it.

Marina shared pictures of her son Cooper on Facebook, Instagram, and Twitter. Her Facebook profile was limited to Friends-only visibility, and her Instagram and Twitter accounts were public. She explained that her best friend was a YouTube performer who had hundreds of thousands of followers. Marina opened the Instagram and Twitter accounts because of her friend, and most of her followers on those sites were her friend's fans. The fans loved to see pictures of Cooper, and Marina said she did not think it harmed anyone when she posted pictures of her son.

Marina: "And if it gets her [Marina's friend] more likes by these kids, then I'm going to do it. Because it's her career. And you know, she's my best friend, so obviously I'm going to help her in any way I can."

She acknowledged that she was not an expert at SNSs and said she felt she had more control over the content that appeared on Instagram and Twitter compared to Facebook. Although she knew people could take screenshots of Instagram, Marina felt that because other people tagged pictures of herself and her family on Facebook, the audience was wider and that "on Facebook somebody could just share my picture and it could go anywhere."

Ella preferred to share pictures of her son through Google+ albums rather than Facebook because sending the album link to a specific group of people made her feel like she had more control over who saw the pictures. Rebecca, who emailed links to a Snapfish album to family and friends, echoed this sentiment. Rebecca was also wary of posting on Facebook because her husband's aunt tended to share pictures of her daughter Louise on her own Timeline. People that neither Rebecca nor her husband knew saw pictures of Louise on the aunt's profile and commented on the pictures. This made Rebecca think, "whoa, yikes, who else does this go to?" Shelby once searched for her name on Google and saw pictures of her son, "which really bothered me," she said. Those pictures had been her Facebook profile pictures, and she assumed that was how they became linked to her name. Her irritation stemmed not from a question of whether people were using pictures of her son for good or bad, but rather from a sense of not knowing that the pictures were

out there in the first place. Carrie wished she knew whether her Facebook pictures were being used for any other purpose.

Carrie: “The only thing that really upsets me is, like, they’re my babies. So anything that is related to them requires my permission...The thing is, if I were asked, I’d probably give my permission. But the fact that my permission was not even asked, is the problem.”

Other participants also voiced concerns over not knowing what would happen to the data they posted online. Ella said posting on Facebook felt too “vulnerable” for her since she did not know who would be able to see the pictures in the future. As much as Judy wanted to feel that her profile was her personal space, she knew that a company owned it and could access her information. Lee Ann used to hesitate using Facebook because she worked with mentally ill individuals and did not want them to see the information she posted on Facebook. A few participants treated Facebook as a public forum and considered that when deciding what to post.

Zainab: “I put on Facebook something that I wouldn’t mind anybody in the world seeing.”

Some participants voiced concerns over their data being used for location-tracking, advertising, or facial recognition, or other purposes. Jimena, Lindsey, and Marina turned off location tracking on their phones. Jimena said she was concerned that someone might kidnap her child, and Lindsey read an article that said people could extract location information from pictures posted online. Cara only posted pictures of an activity after the fact so as not to reveal her current location. With regards to online advertisements, Cara once found an advertisement that used a picture of her son. She said she would not have minded if the company had asked her permission, but it had not. She told the company to remove the ad or she would pursue legal action, and the company complied.

Judy refrained from using her son's name on Facebook because she was concerned about technology that would enable someone to take a picture of her son, for example, while he played at a park, and use an online search to pull up other information about him. By not connecting his name to his picture, she felt she was limiting the amount of information strangers could find about him. Ella did not want pictures of her son Neil's face on Facebook because she felt the face was a visual fingerprint that distinguished people. She posted very few pictures of Neil on Facebook, though others had tagged her in group pictures that included her son. She felt the group pictures were acceptable but said that if someone were to post a picture of just Neil, she might ask that person to remove it. She wanted her son to decide whether he wanted his face online, and she also expressed concern at the development of facial recognition technology. Clara echoed this concern and thought she might post pictures less often as her son's face evolved from looking like a baby's to a child's. Though Brianna posted pictures of her daughter's face on Facebook, she considered limiting any future posts to pictures that did not show Abigail's face.

Brianna: "I like the idea of the only people who know what her face looks like every day are the people who actually see her face every day."

A few participants cited privacy concerns with regards to posting ultrasound images. Judy expressed surprise at seeing other people post the image with their name and patient ID number, mentioning that people could use that number to obtain personal information. Wendy, who shared her ultrasound image with her moms group on another website and also within their Facebook group, cropped her patient and hospital information out of the version on the other website. She did not care about cropping the version she posted in the Facebook group since the moms "were all pretty involved in each other's lives anyway."

Privacy concerns precluded several participants from posting naked pictures of their child online. Sabrina referenced that her Facebook profile was public, and, "there are a lot of creepers on

the Internet, so I don't need people creepin' naked pictures of my baby." Jimena strongly opposed posting naked pictures of children online. She called them "personal" and "family pictures." Once, her husband's aunt took a picture of her son naked in the shower with his buttocks showing. The aunt said she was going to post it on Facebook, which sparked an argument between Jimena and her husband. Ultimately, Jimena said the aunt did not post the picture. Jimena also talked to her sister and sister's husband after her sister posted a naked picture of her own son. Jimena said uploading those pictures online was risky, since security could not be guaranteed, "sick people" might access them, and that "it's just not right for me to expose your baby's parts."

Cara said she did not post pictures of her son sucking on objects; she once removed a picture she had posted on Facebook of her son sucking on a breadstick. She felt it looked "sexual" and worried about "pedophiles trolling Facebook and other social media taking pictures of children." Isabel and Lindsey also held similar concerns about people seeing their baby pictures in general.

Conversely, Christine said she did not care about privacy. The volume of data on the Internet was so great that what were the chances anyone with bad intentions would see pictures or videos she posted of her son, she said. She did not post her address online, so even if someone did see pictures of her son, she said she was not worried that a stranger would come and kidnap her son. She understood that people feared this idea but said that such events were rare, and that realistically, people do not pay much attention to what they see online.

Christine: "They're going to see it [what she posts] and they're going to forget...We're all like goldfish, like, oh that's cute, that's pretty, move on."

Christine explained that her husband, whom she described as "paranoid" shared her view. She said they both felt comfortable sharing pictures and videos of their son online but were wary about linking location information, such as an address, to a child. For example, Christine's sister-in-

law sent them a piece of mail that included a personalized stamp with the face of Christine's niece. Her husband found that far more risky than posting a picture on Facebook, since the stamp attached the baby's face with an address and was visible to an untold number of people who processed mail.

Some participants considered how their children would feel about their information being online. Brianna explained, "It's not my right to make the decision about what of hers goes online," Ella echoed this sentiment, saying her son had the right to decide what information about himself he wanted to be online. If he decided he wanted to post aspects of his life online, she would have the records to give him. Some participants also referenced the privacy of their children as individuals.

Emily: "I feel like I'm kind of stewarding his privacy, and he doesn't have a chance yet to say, 'Hey Mom, could you not put that on Facebook,'"

A few participants did not appear to view their children as having privacy concerns at this stage in their life. Like many participants, Wendy avoided posting pictures that might humiliate her daughter, and she framed her decision based on thoughts her daughter could have in the future.

Wendy: "She's a baby. I don't think there's anything that she could do or there's any way that she could look [right now] that she would regret, you know, later in her life...I don't post pictures of like, poop explosions...I might comment about it, if there was one. But I won't post pictures of that. I mean, I'm not going to embarrass her on Facebook. Not that, I don't think a four-month-old can be embarrassed."

Marina, who shared pictures of her son on Facebook, Instagram, and Twitter, differentiated between sharing pictures of him and pictures of others.

Marina: "I don't post pictures of my family. I wouldn't post a picture of my dad on Instagram and, you know, put his name out there for everyone to know because I don't want his, his, you know, privacy. I don't know. You know what I'm talking about, though, right?"

Clara recognized that by posting pictures on Facebook, she was making a decision for her son Ryan, one that could not be easily reversed. She said she did not take that responsibility lightly

but wondered if she was making the right decisions for him. Carrie worried about what happened to her data but did not want to think about it because she derived such benefit from sharing pictures on Facebook. Cara acknowledged that Facebook filters were not perfect, and that even if information about her son became public, she would know she did what she could to limit the visibility of information about her son.

Some participants mentioned that, all things considered, they felt it was worth it to share pictures of their children online. For Karen, the benefit of using SNSs to keep in touch with others outweighed any potential downsides. She did not see any downsides now but could imagine that concerns such as privacy could become a problem in the future. Ella acknowledged that, while she did not typically post pictures on Facebook, she did send pictures of her son through the Internet. She said she was sharing in the most secure way she could think of, and she was willing to accept the risk of information about her son potentially being released to others because sharing pictures of him with family and friends was important. Before Clara's son Ryan was born, Clara thought she would not post pictures of her son online. She ultimately did share pictures online, and she realized how important it was to her when she created a montage of pictures for his first birthday party.

Clara: "It was so emotional to me, doing that you know... You think it's silly to weigh that against what you're conceding with your privacy, but if I lost that stuff, I don't know what I would do."

Overall, photo sharing helped participants stay connected with their family and friends. Baby pictures on SNSs tended to receive more feedback from the audience than other information participants posted. Many participants also found a need to negotiate photo-sharing expectations with their husbands, and, to a lesser degree, with other family members and friends. People often requested baby pictures, and for a few participants this translated into feeling pressured to post pictures. For most, SNSs and other online technology offered a convenient way to share pictures with many people and also a way to store and archive their photograph collections. Some

participants turned to Instagram or Google+, in some cases because they wanted to share pictures with a smaller audience. Participants also tried to avoid oversharing and sometimes hesitated to share pictures if they had already shared recently.

Some participants saw sharing baby pictures as a way to assert their identities as mothers while others hesitated to share because they wanted to preserve the non-mother facets of their identity. In addition to considering how sharing such pictures would reflect on them, participants also thought about how sharing pictures would shape the ways others perceived their child. Many posted pictures that showed their children's personalities or portrayed them in a certain way, generally doing something cute or funny. Participants also factored in whether certain pictures would cause their child embarrassment or harm. They addressed privacy concerns largely through considering the content of pictures, adjusting their privacy settings on SNSs, or limiting their audience. Though some participants hesitated to share pictures online, most felt the benefits they derived from connecting with others outweighed any concerns.

Chapter 6

Discussion, Future Work, and Conclusion

This study examined the types of baby pictures new mothers share online and how they decide what pictures to share. Participants typically took many more pictures than they shared online, and many made similar decisions regarding what they would share. Participants tended to share pictures that were cute or funny, depicted a milestone, showed the child with family or friends, or served a function. They typically did not share pictures that exposed the children (e.g., showed nudity or, to a lesser degree, bath time), portrayed the child negatively, or were of low quality.

The desire to connect with family and friends motivated participants to share pictures online, though some negotiated expectations or guidelines regarding online photo sharing with their husbands, and, to a lesser extent, other family or friends. Several shared pictures on multiple SNSs or various communication technologies (e.g., email, texting). Participants' conception of their audience, both who was in it and what its members would want to see, as well as privacy concerns influenced their decision of what SNS to use.

While existing work has explored the significance of family pictures in daily life and society, surprisingly little work has examined the contents of family photo collections, particularly not in the digital age (Chalfen, 1987; Halle, 1993; Rose, 2010). Several studies have examined photo sharing online, particularly on SNSs, and research on digital technology and motherhood is emerging. Little work has focused on the online photo sharing practices of new mothers. This is understandable given that widespread use of tools such as SNSs only rose to ubiquity within the last decade. The present study focuses on a particular subset of family pictures and extends work on online photo sharing as well as digital motherhood. It sheds light on how photo sharing and photowork have evolved now that digital photography and use of social network sites are common in many

households. It also suggests how photo sharing may offer a unique lens through which to consider the mother-child relationship as well as parental conceptions of privacy online.

A Growing Audience for Baby Pictures

As recently as 2007 those who engaged in what Chalfen (1987) called the “Kodak culture,” meaning those who primarily photographed family moments, were reluctant to share such pictures with people beyond their family and friends (Miller & Edwards, 2007). Participants in the present study still see family and friends as the primary audience for baby pictures. Indeed, they described online photo sharing as a way to foster connection with people whom they do not regularly see. Rose’s (2004) found that physical family pictures foster “togetherness,” and this study suggests the same is true for their digital counterparts.

A few participants in this study were comfortable posting baby pictures with public visibility settings, though the majority did seek to limit their audience to family and friends. The fact that most participants appeared to feel comfortable sharing pictures on SNSs where they typically had hundreds of Friends suggests that the audience for family pictures is widening. Oeldorf-Hirsch & Sundar (2010) identified this as one factor that differentiates digital photo sharing from its face-to-face counterpart.

New mothers do not appear to actively seek a wider audience for their digital baby pictures compared to the traditional audience for physical family pictures. However, SNSs enable users to articulate connections that persist until a user actively decides to unfriend a connection. This affordance may be broadening the definition of family and friends to include people who, in the past, may have faded out of an individual’s circle of communication. It also hints at a possible redefinition of Chalfen’s home mode of communication, which he defined as “a pattern of interpersonal and small group communication centered around the home” (Chalfen, 1987, p. 8). The

act of broadcasting a baby picture on SNSs for an audience of hundreds or more moves that communication beyond the realm of small groups. Several participants said they received more feedback, typically in the form of likes or comments, on baby pictures compared to other types of content they posted on SNSs, aligning with previous work (Morris, 2014). The act of sharing baby pictures with a wider audience of family may help bring extended families closer (Tee et al, 2009). However, having an expanded audience may also require mothers to manage the expectations of more people and keep track of who in the intended audience uses which SNS.

This research also extends our understanding of photoware and photowork. In their study of conventional and digital photography practices among families, Frohlich et al (2002) described how photoware supported four types of photo sharing: co-present sharing, archiving, remote sharing, and sending, which afford sharing along various dimensions of space and time. The introduction of SNSs blurs the lines between these activity types. Participants in the present study prioritized archiving and sending activities. Frohlich et al's (2002) description of archiving photoware included CD-ROMs and photo websites, which afford viewing in the same place but a different time. However, posting pictures on SNSs creates an archive that anyone in the audience can peruse from anywhere, precluding the need to be in the same place. Frohlich et al's (2002) description of sending photoware included email attachments and Internet photo frames, which afford viewing in different places and times. While participants in the present study did use email and text messaging to send pictures, SNSs appeared to fulfill the bulk of sending behavior. Additionally, participants did not mention the need for remote sharing (e.g., instant messaging, video conferencing) to share pictures at same time with people in a different place. At least in the realm of photo sharing, asynchronous communication appears to be far more popular.

The present study suggests that new mothers continue to value having pictures and videos that document their children's early life (Rose, 2004). Taking pictures of their children felt like a

natural activity for participants. This was especially true given that historical constraints on photography (e.g., number of exposures on a roll of film, cost of developing pictures, inconvenience of carrying a camera everywhere, space taken up by physical prints) have largely disappeared. When asked, participants said they would share the pictures they posted online with their children in the future, but they largely described photo sharing as an activity that benefitted the participants themselves. They appreciated being able to document the details of when their children hit milestones as well as what their children were like on a typical day. One participant described how much she would cherish her collection of baby pictures and videos should anything ever happen to her son.

While the value people place on family pictures appears to remain consistent, the medium in which people prefer to store and view their pictures may be evolving. Even while digital photography gained traction throughout the last decade, individuals generally preferred physical copies of pictures (Frohlich et al, 2002; Kirk et al, 2006; Van House, 2009), but found albums frustrating and time-consuming to make (Frohlich et al, 2002). As mentioned in Chapter 4, about half of participants created physical albums or planned to, typically as a way to document their children's lives and show the record to their children when they were older. Thus, physical photos still appear to hold value for individuals, though to a lesser degree than in the past.

Results from these interviews suggest that the need for photowork also appears to be diminishing. Kirk et al (2006) examined how users managed the process to download, organize, and edit digital photographs. Nearly all participants in the present study used mobile devices to take pictures, and many valued the convenience of being able to take and post pictures online directly from these devices. Some posted immediately, while others waited a little while before posting. A few participants periodically created digital albums. However, they did not describe engaging in much photowork beyond simply selecting the pictures to share. This suggests that the convenience

of mobile phones have indeed made them a valuable photo-sharing tool (Van House et al, 2004; Gibson & Hanson, 2013).

In the days of film cameras, family pictures tended to capture special occasions (Chalfen, 1987). As camera phones grew in popularity, people began using photography to document everyday moments (Okabe & Ito, 2006; Kindberg et al, 2005; Ames et al, 2010). New mothers appear to fit this trend; they still photograph special occasions and milestones but they also capture many everyday moments, typically using a mobile device. Participants shared these types of pictures online, as well as pictures that were cute or funny or that depicted children with friends or family. This largely aligns with the types of baby pictures families historically took and included in albums (Chalfen, 1987; Rose, 2004). Existing literature and results from this study suggest that the size of the family photo collection has increased dramatically since the advent of digital camera technology and inexpensive data storage, but that its purpose remains primarily to connect the life of the child with family and friends.

These pictures also appear to continue constructing an image of the family that conveys progress in accordance with sociocultural norms. Some participants acknowledged that they posted baby pictures in part to show off their child, attributing and accepting it as a norm in a world of SNSs. Others said they enjoyed the positive feedback they received from posting pictures, though participants did not mention this as the sole motivation to share. Many avoided posting images that their children might one day find embarrassing or humiliating. Thus, participants typically considered their own self-presentation when posting pictures online and their children's perceptions of their own self-presentation when deciding not to post pictures online.

Although the types of photos shared and not shared online align with the historical content of family photo collections, the study suggests that people are willing to share some pictures that run counter to cultural norms. For example, one participant did not appear to be concerned about

sharing pictures where her child was naked. Another shared pictures of her daughter on Instagram that depicted certain situations (e.g., scenes at the beach) that may be viewed as inappropriate within the Middle Eastern culture and country where she lived. And another participant used Facebook to document and display all facets of her son's behavior, ranging from moments where he behaved sweetly to when he threw a tantrum. This suggests that at least some mothers are using pictures as a way to document a truer self rather than a particular presentation of the self that fits within typical sociocultural boundaries. The following section examines this idea in greater detail, focusing on the mother-child relationship.

Baby Pictures and the Presentation of Identity

Chapter 2 described how mothers scaffold their young infants' psychological development so they can eventually develop their own sense of self. In the first few weeks of a child's life, primary maternal preoccupation enables a mother to enter a state of deep alignment with the needs of her infant (Winnicott, 1956). As a child grows, he develops the capacity to think and act for himself. A parent's ability to consider the child's own internal experience and evaluate its effect on behavior is known as parental reflective functioning (Slade, 2005).

These core concepts of child development and the infant-child relationship may help us understand mothers' online photo sharing behavior. For example, some participants described posting many pictures in the first few weeks and months of their child's life, with photo sharing tapering off as the child grew. Some participants also described their desire to include their children in their Facebook profile or cover pictures. This suggests that online photo sharing may align in part with feelings of primary maternal preoccupation. In the early stages of a child's life, preoccupation with the child is normal and expected, and it seems natural that a new mother would want to share her transformative experience with family and friends.

Sharing baby pictures on Facebook also helped participants accomplish the self-disclosure goal of identify clarification, though in different ways (Vitak & Kim, 2014). Some participants enjoyed highlighting their roles as mothers while others actively sought to balance that role with the non-mother aspects of their identities. Posting baby pictures to SNSs such as Facebook enabled participants to present and broadcast their new roles as mothers. This may help new mothers feel as though they are sharing a part of themselves and their experiences with the people they care about. This aligns with findings from Rose (2004) that new mothers feel compelled to photograph their young children and treat baby pictures as if they are a part of the people they depict rather than a representation of those people.

However, other participants in the present study felt their Facebook profiles were places for information about themselves, not their children. These participants described a desire to post information that reflected the non-mother sides of their identity, though this view was not as prevalent in the present study as it was in Gibson & Hogan (2013). Existing work has explored how motherhood affects identity, (Barclay et al, 1997; Nelson, 2003) and this study suggests that mothers consider their personal identities and their motherhood identities when deciding what pictures to post online.

As described in Chapter 5, participants shared baby pictures primarily to connect with friends and family. Disclosing this type of information also appeared to help participants accomplish several additional self-disclosure goals that Vitak & Kim (2014) examined among Facebook users. In particular, participants from the present study shared baby pictures as a way to gain social approval (i.e., share information they thought Friends would find interesting), intimacy (i.e., maintain a connection with important people) and create a personal record. Participants also largely viewed Facebook as a place to share positive or happy information (Vitak & Kim, 2014).

Findings from the present study suggest that sharing baby pictures primarily served to benefit participants, not the children depicted in the pictures. This is not to say that children did not benefit from their mothers sharing pictures of them online, but rather to express that participants did not seem to consider whether photo sharing would benefit their children as they decided whether to share a picture online. They did consider whether a picture could harm their children, but participants appeared primarily to share photos online as a way to benefit themselves. Given the tremendous effort that goes into raising a child, especially for the first time, and the lack of emotional and social support available to new mothers (Nelson, 2003), the ability to derive social capital benefits from online photo-sharing may be a very good outcome for new mothers. Nelson (2003) identified active engagement in caring for a child as a key factor in helping mothers adjust to parenthood. Online photo sharing may offer one way for new mothers to demonstrate their engagement with their child.

Additional exploration into new mothers' photo sharing could examine the degree to which photo sharing fits into the interplay between Kohut's (1966) description of the narcissistic self and the ego ideal. The presence of captions and feedback (e.g., likes and comments from others) as well as the ability to detect patterns in photo sharing could provide insight into how a mother chooses to represent her child. For example, many participants' aversion to sharing pictures that expose their children or portray them negatively reflects their desire to protect their children from physical harm or exploitation (e.g., child molesters or pedophiles) as well as emotional trouble (e.g., the child feeling embarrassed or humiliated). But is there a point at which sharing pictures online reflects an exhibitionistic urge emanating from the narcissistic self? Or, conceptualized from the perspective of parental reflective functioning, at what point does online photo sharing disregard consideration of the child's internal mental state? For example, few participants described thinking about how their children, when they grew older, might feel about participants' photo sharing as a whole. Further

work in this area could elucidate possible connections.

Privacy Concerns and Boundary Turbulence

Participants who were concerned about privacy typically addressed their concerns by avoiding sharing photos they perceived as private or in some way limiting their audience for baby pictures. As Litt (2013) explains, while communication privacy management (CPM) theory suggests that people with privacy concerns may use more privacy rules and boundaries to govern their information disclosure behavior, existing research has provided ambiguous results. Some research supports this connection while other work does not find evidence for a connection (Litt, 2013). For most participants in the present study, privacy controls in the form of limiting their Facebook profile visibility or creating smaller groups for baby picture viewing (either on Facebook or another SNS) appeared to satisfy their privacy concerns enough that they felt comfortable sharing pictures.

The degree to which privacy influenced participants varied. One participant expressed ambivalence that she had posted pictures of her daughter on Facebook, desiring to keep her daughter's image off the Web but also seeking to satisfy the demands of family and friends. At least four preferred sharing baby pictures on networks other than Facebook, primarily because they (or in one case, their husband) viewed Facebook as too public a setting for such pictures. Another participant shared pictures of her son on Facebook but avoided mentioning him by name, hoping to prevent anyone looking for data on her son from being able to identify him by name. Others who mentioned privacy during the interview primarily used the methods identified earlier (e.g., not sharing private pictures or limiting the audience for baby pictures) to address their concerns; some mentioned frustration at trying to keep up with or figure out Facebook's privacy settings.

The privacy concerns that participants described ranged from a general sense of unease about what happened to their data online to worries that a child predator could take their

photographs or track their child. Their privacy concerns also intersected with self-presentation, as several participants said they would not share pictures that their children might find embarrassing or humiliating. This echoes Ahern et al (2007)'s findings that parents are especially cognizant of the security and identity concerns that sharing pictures online poses to others, with the others presumably being their children. Participants' concerns over who could see their pictures stem from context collapse (Marwick & boyd, 2011) and frustration with the imagined audience (Litt, 2012). Some participants felt that only a subset of their Facebook Friends should see baby pictures, and they either manipulated Facebook's settings or used a different platform to share pictures with that subset of people. In this way, participants sought to place these objects of Chalfen's (1987) home mode of communication back in context. Creating a list of people with whom to share baby pictures enabled participants to articulate an audience rather than simply sharing with an imagined one (Litt, 2012).

The process that participants used to decide whether and what pictures to share reflected the five principles of the communication privacy management theory (Petronio, 2002; Petronio, 2010), outlined below.

1. Ownership: Considering baby pictures as information, participants exhibited ownership by virtue of the fact that they were the ones deciding whether or not to disclose. Their thoughts and beliefs, whether feeling that their child's image was private or wanting to show others what the child was doing, arose out of the logical assumption that the decision to share pictures was theirs to make.

2. Control: Several participants described a desire to control who saw information related to their child, and they developed routines or selected SNSs they felt gave them the most

control over their information. Some acknowledged that their decisions were based on perception; that is, they did not know whether their behavior actually gave them more control, but they felt it did. For example, some preferred to share baby pictures on Instagram compared to Facebook, despite the fact that Facebook owns Instagram.

3. Privacy Rules: Participants described a variety of guidelines that influenced whether they posted a given picture. These included the content and quality of the picture; demand from their audience; recency of the last time they shared a picture; and the ease with which they could share it in that moment.

4. Shared Boundaries: This includes determining who can share baby pictures, what types of baby pictures they can share, how they can share pictures, and what, if anything, people who see pictures can do with them. Participants managed these various layers to varying degrees. About half talked with their husbands about photo sharing. At least two discussed boundaries in conversations with their mothers; discussions mentioned the types of baby pictures they did not want posted online or Facebook privacy settings. Two participants said they communicated their sharing preferences (e.g., hesitance to post on Facebook or to use their child's name on Facebook) in birth announcement emails. The least amount of boundary setting occurred with regards to what, if anything, other people could do with baby pictures once they were posted; participants appeared largely to rely on implicit or unstated guidelines in his realm. A few participants mentioned that others who wanted to share pictures they posted would ask participants' for permission, but this was rare.

5. Boundary Turbulence: Similar to Ames et al's (2010) findings in a study of online photo sharing, participants in the present study did not say they experienced direct harm from posting baby pictures online. However, several described situations that qualify as boundary turbulence caused by other individuals, companies, or technology features. This included others sharing a baby picture that the participant did not want shared or distributed to a wider audience, finding baby pictures on a Google search, or discovering a baby picture in an online advertisement. Participants' responses to these turbulences ranged from mild displeasure or discomfort to frustration to hurt.

SNSs introduce complexity into the information disclosure process (Litt, 2013). In addition to considering whether a given piece of information is worth sharing in the first place, an individual may also need to think about who might see the information (Litt, 2012), what if any technical or privacy settings to adjust, and whether the information could require future deletion or modification. Thus, boundary setting and co-ownership of information in the form of digital baby pictures can involve many more people than their analog counterparts. When family photos lived in physical albums in people's homes, people had control over when they showed the pictures and to whom. Now that so many of these pictures exist as replicable, transmittable bits on servers, boundary turbulences that were once impossible may arise.

Participants in the present study may not have considered the boundary turbulences they experienced to be severe enough to prevent them from sharing pictures online. While many participants expressed privacy concerns about sharing baby pictures online, they also developed strategies to share pictures in a way that made them feel comfortable. For nearly all participants, the benefits of sharing pictures online outweighed any potential risks. Further research on boundary

setting and navigation of shared ownership over baby pictures could inform questions around how parents overcome privacy concerns when sharing baby pictures online.

Future Directions

The generation of children being born now will be the first to inherit a digital presence on SNSs. The implications of sharing a child's baby pictures online are impossible to know. However, future research can extend our knowledge of this behavior and help researchers predict what, if any, effect this phenomenon will have on children and parents. For example, similar research on fathers and online photo sharing could explore how parents negotiate expectations and boundaries around sharing pictures of their child. Deeper examination of the pictures mothers post online could uncover facets of their parenting style or representation of their child. Longitudinal work could examine patterns of photo sharing over time and discover, for example, whether or to what degree photo sharing diminishes as children get older. Interviews with children as they mature could yield valuable information on their opinions of their parents' photo sharing, as well as ascertain whether such sharing affected a child's identity formation or sense of connection with his parents' family and friends. Finally, research that includes mothers (and fathers) who do not share pictures online could further elucidate the decision-making process to share information about a child online.

Some participants in this study cited concerns about someone using a baby picture to discover where they lived or exploiting a picture of their child. Marwick (2008) examined the emergence of "technopanics," or moral panics over how contemporary technology poses threats to children. She found that while mainstream media portrayed the SNS MySpace as rife with online predators, such claims were not true. As photo sharing continues to be a popular activity on SNSs, it may be worth exploring the risk of such pictures falling into the wrong hands. A finding that such risk is low could assuage some parents' photo sharing concerns.

The SNS landscape continues to evolve, and several participants wondered whether Facebook and other sites would still exist when their children are teenagers. This raises several additional questions around parental boundary setting (e.g., at what age will their children join SNSs; how will parents' photo-sharing behavior change when their children begin using SNSs) as well as documentation and use of data. For example, will Facebook resemble a modern-day shoebox, where users take solace in the fact their pictures exist even if they hardly scroll through and look at those pictures? What would happen to people's photograph collections if a site like Facebook were to disappear? What additional computational techniques could SNSs build to mine photographic data? Examining these topics as they emerge would help parents better understand how to navigate SNS use within the family context.

Limitations

This study's sample primarily included educated, married, heterosexual White women in the United States whose ages ranged from mid-twenties to late-thirties. The study did include a few participants who lived abroad or moved to the U.S. from abroad. Though I did not ask participants their income or education level, based on their descriptions of their jobs, locations, and online behaviors, it is likely that most participants were middle class or middle-upper class. Although I viewed participants' Facebook profiles during the interview, the findings largely contain self-reports and participants' perceptions of their own behavior. Future work should examine photo sharing among a broader spectrum of family systems and socioeconomic levels to more deeply understand this phenomenon.

Conclusion

This study discovered what baby pictures a group of new mothers felt comfortable sharing online and described the various factors that influence their decisions. It contributes to the research areas of family photography, online photo sharing, motherhood and identity, and parenting and technology. While existing work has explored the content of family pictures as well as the role of SNSs in the transition to motherhood, this study is the first, to my knowledge, that has examined the intersection of these areas through investigating what baby pictures new mothers have shared online and how they decided to do so.

Within the realm of photo sharing, the findings suggest that mobile phones and SNSs offer a convenient way to share pictures, suggesting that digital photography tools may be supplanting such analog tools as film and paper. New mothers take baby pictures to document their children's lives and share the pictures online to connect with family and friends. This desire has always motivated family photography, but participants' relative willingness to share on SNSs suggests that the audience for such images may be widening beyond the individual or small group audience that traditionally viewed physical pictures. The ease with which pictures can be duplicated and redistributed online can lead to situations of boundary turbulence, where pictures end up in unexpected places. Some participants negotiated these boundaries with husbands and to a lesser degree, other family members or friends.

Family pictures are vehicles through which people shape how others will perceive them. Pictures tend to capture special occasions and happy moments. Though the use of mobile phones has resulted in more "everyday" pictures entering the family photograph collection, participants largely followed the norms that shaped family photography throughout the twentieth century. Participants tended to share pictures that were cute or funny, marked a milestone, showed their child with another family member or friend, or served a function (mainly communicating a particular

message to someone). They typically did not share pictures that exposed their children or portrayed them in a negative light, though a few did share these types of pictures.

Participants considered a variety of factors when deciding whether to share pictures; these included the content of the picture, whether the audience would want to see the picture, when they had last shared a baby picture, or how convenient it would be to share the picture. And a few participants hesitated sharing at all; their reasons included feeling the pictures were too private to be shared, being unsure of what would happen to the data, perceiving that the audience online was too large or unknown, and wanting their children to create their own digital footprint.

The last point suggests another possible application of this work: the use of online photo sharing as one way to examine the relationship a mother has with her child. For example, do parents view decisions related to photo sharing as aligning with their value systems (i.e., does a mother who avoids sharing pictures online also seek to raise a child who avoids sharing information online?) or do parents view photo-sharing decisions as separate from parenting decisions? How do these beliefs influence the way parents disclose information related to their children online? These questions are highly personal and nuanced, and future work can illuminate the degree to which their answers may shape the behaviors and beliefs of this newest generation, one that will have no memory of a time without digital technology.

Bibliography

- Ahern, S., Eckles, D., Good, N. S., King, S., Naaman, M., & Nair, R. (2007). Over-exposed?: Privacy Patterns and Considerations in Online and Mobile Photo Sharing. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 357–366). New York, NY, USA: ACM. doi:10.1145/1240624.1240683
- Altman, I. (1975). *The Environment and Social Behavior: Privacy, Personal Space, Territory, Crowding*. Monterey: Brooks/Cole.
- Ames, M., Eckles, D., Naaman, M., Spasojevic, M., & House, N. V. (2010). Requirements for mobile photoware. *Personal and Ubiquitous Computing*, 14(2), 95–109. doi:10.1007/s00779-009-0237-4
- Ask Heidi: Baby Photos on Facebook. (n.d.). *Whattoexpect*. Retrieved March 16, 2014, from <http://www.whattoexpect.com/first-year/ask-heidi/baby-photos-on-facebook.aspx>
- Balaam, M., Robertson, J., Fitzpatrick, G., Say, R., Hayes, G., Mazmanian, M., & Parmar, B. (2013). Motherhood and HCI. In *CHI '13 Extended Abstracts on Human Factors in Computing Systems* (pp. 3215–3218). New York, NY, USA: ACM. doi:10.1145/2468356.2479650
- Ballve, M. (2013, December 17). Our List Of The World's Largest Social Networks Shows How Video, Messages, And China Are Taking Over The Social Web. *Business Insider*. Retrieved from <http://www.businessinsider.com/the-worlds-largest-social-networks-2013-12>
- Barclay, L., Everitt, L., Rogan, F., Schmied, V., & Wyllie, A. (1997). Becoming a mother — an analysis of women's experience of early motherhood. *Journal of Advanced Nursing*, 25(4), 719–728. doi:10.1046/j.1365-2648.1997.t01-1-1997025719.x
- Bartholomew, M. K., Schoppe-Sullivan, S. J., Glassman, M., Kamp Dush, C. M., & Sullivan, J. M. (2012). New Parents' Facebook Use at the Transition to Parenthood. *Family Relations*, 61(3), 455–469. doi:10.1111/j.1741-3729.2012.00708.x

- Batchen, G. (2008). Snapshots: Art history and the ethnographic turn. *Photographies*, 1(2), 121–142.
doi:10.1080/17540760802284398
- Belsky, J., & Rovine, M. (1984). Social-Network Contact, Family Support, and the Transition to Parenthood. *Journal of Marriage and Family*, 46(2), 455–462. doi:10.2307/352477
- Bernstein, M. S., Bakshy, E., Burke, M., & Karrer, B. (2013). Quantifying the Invisible Audience in Social Networks. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 21–30). New York, NY, USA: ACM. doi:10.1145/2470654.2470658
- Besmer, A., & Lipford, H. R. (2010). Moving Beyond Untagging: Photo Privacy in a Tagged World. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1563–1572). New York, NY, USA: ACM. doi:10.1145/1753326.1753560
- betsy12180. (2013, October 15). sharing photos on fb-vent. *BabyCenter*. Retrieved March 16, 2014, from /post/a45205258/sharing_photos_on_fb-vent
- boyd, d. (2011). Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications. In Z. Papacharissi (Ed.), *A Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39–58). New York, NY, USA: Routledge.
- boyd, d., & Hargittai, E. (2010). Facebook privacy settings: Who cares? *First Monday*, 15(8). Retrieved from <http://firstmonday.org/ojs/index.php/fm/article/view/3086>
- boyd, d., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. doi:10.1111/j.1083-6101.2007.00393.x
- Buchanan, T., Paine, C., Joinson, A. N., & Reips, U.-D. (2007). Development of measures of online privacy concern and protection for use on the Internet. *Journal of the American Society for Information Science and Technology*, 58(2), 157–165. doi:10.1002/asi.20459

- Burke, M., Kraut, R., & Marlow, C. (2011). Social Capital on Facebook: Differentiating Uses and Users. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 571–580). New York, NY, USA: ACM. doi:10.1145/1978942.1979023
- Burke, M., Marlow, C., & Lento, T. (2010). Social Network Activity and Social Well-being. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 1909–1912). New York, NY, USA: ACM. doi:10.1145/1753326.1753613
- Chalfen, R. (1987). *Snapshot Versions of Life*. Bowling Green, Ohio: Bowling Green State University Popular Press.
- Child, J., Haridakis, P., & Petronio, S. (2012). Blogging privacy rule orientations, privacy management, and content deletion practices: The variability of online privacy management activity at different stages of social media use. *Computers in Human Behavior*, 26(5), 1859–1872. doi:10.1016/j.chb.2012.05.004
- Cohen, C. P. (2005). *Jurisprudence on the Rights of the Child*. Martinus Nijhoff.
- Cohler, B. J. (1984). Parenthood, Psychopathology, and Child Care. In R. S. Cohen, B. J. Cohler, & S. H. Weissman (Eds.), *Parenthood: A Psychodynamic Perspective*. New York: The Guilford Press.
- Considine, A. (2012, August 8). Unbaby.me Keeps Baby Pictures Off Facebook. *The New York Times*. Retrieved from <http://www.nytimes.com/2012/08/09/fashion/unbabyme-keeps-baby-pictures-off-facebook.html>
- Cunningham, S. J., Masoodian, M., & Adams, A. (2010). Privacy Issues for Online Personal Photograph Collections. *Journal of Theoretical and Applied Electronic Commerce Research*, 5(2), 26–40.
- Daneback, K., & Plantin, L. (2008). Research on Parenthood and the Internet: Themes and Trends. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 2(2). Retrieved from <http://cyberpsychology.eu/view.php?cisloclanku=2008110701&article=2>

- Davies, D. (2011). *Child Development: A Practitioner's Guide* (3rd ed.). New York, NY, USA: The Guilford Press
- De Choudhury, M., Counts, S., Horvitz, E. J., & Hoff, A. (2014). Characterizing and Predicting Postpartum Depression from Shared Facebook Data. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work; Social Computing* (pp. 626–638). New York, NY, USA: ACM. doi:10.1145/2531602.2531675
- Dominick, J. R. (1999). Who do you think you are? Personal home pages and self-representation on the World Wide Web. *Journalism and Mass Communication Quarterly*, 76(4), 646–658.
- Duggan, M. (2013). *Photo and Video Sharing Grow Online*. Retrieved from <http://www.pewinternet.org/2013/10/28/photo-and-video-sharing-grow-online/>
- Duggan, M., & Smith, A. (2013). *Social Media Update 2013*. Pew Research Center. Retrieved from <http://www.pewinternet.org/2013/12/30/social-media-update-2013/>
- Ellison, N. B., Steinfield, C., & Lampe, C. (2011). Connection strategies: Social capital implications of Facebook-enabled communication practices. *New Media & Society*, 13(6), 873–892. doi:10.1177/1461444810385389
- Ellison, N. B., Vitak, J., Steinfield, C., Gray, R., & Lampe, C. (2011). Negotiating Privacy Concerns and Social Capital Needs in a Social Media Environment. In S. Trepte & L. Reinecke (Eds.), *Privacy Online* (pp. 19–32). Springer Berlin Heidelberg. Retrieved from http://link.springer.com.proxy.lib.umich.edu/chapter/10.1007/978-3-642-21521-6_3
- Ellison, N.B., & boyd, d. (2013). Sociality Through Social Network Sites. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies* (pp. 151–172). Oxford: Oxford University Press. Retrieved from <http://www.danah.org/papers/2013/SocialityThruSNS-preprint.pdf>
- Elson, M. (1984). Parenthood and the Transformations of Narcissism. In R. S. Cohen, B. J. Cohler, & S. H. Weissman (Eds.), *Parenthood: A Psychodynamic Perspective*. New York: The Guilford Press.

- Elwell, J. S. (2014). The transmediated self Life between the digital and the analog. *Convergence: The International Journal of Research into New Media Technologies*, 20(2), 233–249.
doi:10.1177/1354856513501423
- Facebook, Ericsson, & Qualcomm. (2013). *A Focus on Efficiency* (Whitepaper). internet.org. Retrieved from https://fbcdn-dragon-a.akamaihd.net/hphotos-ak-ash3/851560_196423357203561_929747697_n.pdf
- Freeman, M. (Ed.). (2011). *Childrens Rights: Progress and Perspectives*. Martinus Nijhoff.
- Frohlich, D., Kuchinsky, A., Pering, C., Don, A., & Ariss, S. (2002). Requirements for Photoware. In *Proceedings of the 2002 ACM Conference on Computer Supported Cooperative Work* (pp. 166–175). New York, NY, USA: ACM. doi:10.1145/587078.587102
- Gibson, L., & Hanson, V. L. (2013). Digital Motherhood: How Does Technology Help New Mothers? In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 313–322). New York, NY, USA: ACM. doi:10.1145/2470654.2470700
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Garden City, New York: Doubleday Anchor Books.
- Halle, D. (1993). *Inside Culture: Art and Class in the American Home*. Chicago: The University of Chicago Press.
- Hax, C. (2013, June 14). Carolyn Hax: Asking family members to keep their baby's photos off Facebook. *The Washington Post*. Retrieved from http://www.washingtonpost.com/lifestyle/style/carolyn-hax-asking-family-members-to-keep-their-babys-photos-off-facebook/2013/06/13/06e2f48e-c8a5-11e2-9f1a-1a7cdee20287_story.html
- Hirsch, J. (1981). *Family Photographs: Content, Meaning, and Effect*. New York: Oxford University Press.

- Hogan, B. (2010). The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. *Bulletin of Science, Technology & Society*, 30(6), 377–386.
doi:10.1177/0270467610385893
- Holland, P. (1991). Introduction: History, Memory and the Family Album. In J. Spence & P. Holland (Eds.), *Family Snaps* (pp. 1–14). London: Virago Press.
- Jacobs, D. (1981). Domestic Snapshots: Toward a Grammar of Motives. *The Journal of American Culture*, 4(1), 93–105. doi:10.1111/j.1542-734X.1981.0401_93.x
- Jang, J., & Dworkin, J. (in press). Does social network site use matter for mothers? Implications for bonding and bridging capital. *Computers in Human Behavior*. doi:10.1016/j.chb.2014.02.049
- Kindberg, T., Spasojevic, M., Fleck, R., & Sellen, A. (2005). The ubiquitous camera: an in-depth study of camera phone use. *IEEE Pervasive Computing*, 4(2), 42–50. doi:10.1109/MPRV.2005.42
- Kirk, D. S., Izadi, S., Sellen, A., Taylor, S., Banks, R., & Hilliges, O. (2010). Opening Up the Family Archive. In *Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work* (pp. 261–270). New York, NY, USA: ACM. doi:10.1145/1718918.1718968
- Kirk, D., Sellen, A., Rother, C., & Wood, K. (2006). Understanding Photowork. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 761–770). New York, NY, USA: ACM. doi:10.1145/1124772.1124885
- Klosterman, C. (2013, August 2). T.M.B. (Too Much Baby). *The New York Times*. Retrieved from <http://www.nytimes.com/2013/08/04/magazine/tmb-too-much-baby.html>
- Kohut, H. (1966). Forms and Transformations of Narcissism. *Journal of the American Psychoanalytic Association*, 14(2), 243–272. doi:10.1177/000306516601400201
- Lee, C. (1997). Social context, depression and the transition to motherhood. *British Journal of Health Psychology*, 2(2), 93–108. doi:10.1111/j.2044-8287.1997.tb00527.x

- LeMasters, E. E. (1957). Parenthood as Crisis. *Marriage and Family Living*, 19(4), 352–355.
doi:10.2307/347802
- Lessig, L. (2006). *Code version 2.0*. New York: Basic Books.
- Litt, E. (2012). Knock, Knock. Who’s There? The Imagined Audience. *Journal of Broadcasting & Electronic Media*, 56(3), 330–345. doi:10.1080/08838151.2012.705195
- Litt, E. (2013). Understanding social network site users’ privacy tool use. *Computers in Human Behavior*, 29(4), 1649–1656.
- Litt, E., & Hargittai, E. (2014). Smile, snap, and share? A nuanced approach to privacy and online photo-sharing. *Poetics*, 42, 1–21. doi:10.1016/j.poetic.2013.10.002
- Liu, Y., Gummadi, K. P., Krishnamurthy, B., & Mislove, A. (2011). Analyzing Facebook Privacy Settings: User Expectations vs. Reality. In *Proceedings of the 2011 ACM SIGCOMM Conference on Internet Measurement Conference* (pp. 61–70). New York, NY, USA: ACM.
doi:10.1145/2068816.2068823
- Lopez, L. K. (2009). The radical act of “mommy blogging”: redefining motherhood through the blogosphere. *New Media & Society*, 11(5), 729–747. doi:10.1177/1461444809105349
- Madrigal, A. (2013, November 1). Twitter Is Weird—and Other Things Fatherhood Taught Me. *The Atlantic*. Retrieved from <http://www.theatlantic.com/technology/archive/2013/11/twitter-is-weird-and-other-things-fatherhood-taught-me/281082/>
- Madrigal, A. (2013, December 4). What To Expect When You’re Expecting ... To Share Your Baby Photos. *NPR.org*. Retrieved from <http://www.npr.org/2013/12/04/248757594/what-to-expect-when-youre-expecting-to-share-your-baby-photos>
- Margulis, S. T. (2011). Three Theories of Privacy: An Overview. In S. Trepte & L. Reinecke (Eds.), *Privacy Online* (pp. 9–17). Springer Berlin Heidelberg. Retrieved from http://link.springer.com.proxy.lib.umich.edu/chapter/10.1007/978-3-642-21521-6_2

- Marwick, A. E. (2008). To catch a predator? The MySpace moral panic. *First Monday*, 13(6).
Retrieved from <http://firstmonday.org/ojs/index.php/fm/article/view/2152>
- Marwick, A. E., & boyd, d. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133.
doi:10.1177/1461444810365313
- Mayer-Schönberger, V. (2009). *Delete: The Virtue of Forgetting in the Digital Age*. Princeton, N.J.: Princeton University Press.
- McDaniel, B. T., Coyne, S. M., & Holmes, E. K. (2012). New Mothers and Media Use: Associations Between Blogging, Social Networking, and Maternal Well-Being. *Maternal and Child Health Journal*, 16(7), 1509–1517. doi:10.1007/s10995-011-0918-2
- Mendelson, A., & Papacharissi, Z. (2011). Look at Us: Collective Narcissism in College Student Facebook Photo Galleries. In Z. Papacharissi (Ed.), *A Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 251–273). New York, NY, USA: Routledge.
- Miller, A. D., & Edwards, W. K. (2007). Give and Take: A Study of Consumer Photo-sharing Culture and Practice. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 347–356). New York, NY, USA: ACM. doi:10.1145/1240624.1240682
- Morris, M. R. (2014). Social Networking Site Use by Mothers of Young Children. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1272–1282). New York, NY, USA: ACM. doi:10.1145/2531602.2531603
- Morrison, A. (2011). “Suffused by Feeling and Affect”: The Intimate Public of Personal Mommy Blogging. *Biography*, 34(1), 37–55. doi:10.1353/bio.2011.0002
- Murray, S. (2008). Digital Images, Photo-Sharing, and Our Shifting Notions of Everyday Aesthetics. *Journal of Visual Culture*, 7(2), 147–163. doi:10.1177/1470412908091935

- Nelson, A. M. (2003). Transition to Motherhood. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 32(4), 465–477. doi:10.1177/0884217503255199
- Netter, M., Riesner, M., Weber, M., & Pernul, G. (2013). Privacy Settings in Online Social Networks – Preferences, Perception, and Reality. In *2013 46th Hawaii International Conference on System Sciences (HICSS)* (pp. 3219–3228). doi:10.1109/HICSS.2013.455
- Nielsen. (2009, May 7). Power Moms Represent Nearly 20 Percent of the Online Population, According to Nielsen. *Where the Moms Are: Shopping, Blogging, Networking and Strategizing Online*. Retrieved from http://www.nielsen.com/us/en/press-room/2009/power_moms_may.html
- Nissenbaum, H. (2010). *Privacy in Context: Technology, Policy, and the Integrity of Social Life*. Stanford, California: Stanford University Press.
- Oeldorf-Hirsch, A., & Sundar, S. S. (2010). Online Photo Sharing As Mediated Communication (pp. 1–13). Presented at the 60th Annual Conference of the International Communication Association, Singapore.
- Okabe, D., & Ito, M. (2006). Everyday Contexts of Camera Phone Use: Steps Toward Techno-Social Ethnographic Frameworks. In J. R. Höflich & M. Hartmann (Eds.), *Mobile Communication in Everyday Life - Ethnographic Views, Observations and Reflections*. Berlin: Frank & Timme. Retrieved from <http://www.itofisher.com/mito/archives/camphones.okabeito.pdf>
- Olson, J. S., Grudin, J., & Horvitz, E. (2005). A Study of Preferences for Sharing and Privacy. In *CHI '05 Extended Abstracts on Human Factors in Computing Systems* (pp. 1985–1988). New York, NY, USA: ACM. doi:10.1145/1056808.1057073
- Palen, L., & Dourish, P. (2003). Unpacking “Privacy” for a Networked World. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 129–136). New York, NY, USA: ACM. doi:10.1145/642611.642635

- Papacharissi, Z., & Gibson, P. L. (2011). Fifteen Minutes of Privacy: Privacy, Sociality, and Publicity on Social Network Sites. In S. Trepte & L. Reinecke (Eds.), *Privacy Online* (pp. 75–89). Springer Berlin Heidelberg. Retrieved from http://link.springer.com.proxy.lib.umich.edu/chapter/10.1007/978-3-642-21521-6_7
- Parens, H. (1975). Parenthood as a Developmental Phase. *Journal of the American Psychoanalytic Association*, 23(1), 154–165. doi:10.1177/000306517502300108
- Pauwels, L. (2008). A private visual practice going public? Social functions and sociological research opportunities of Web-based family photography. *Visual Studies*, 23(1), 34–49. doi:10.1080/14725860801908528
- Petronio, S. (2002). *Boundaries of Privacy: Dialectics of Disclosure*. Albany: State University of New York Press.
- Petronio, S. (2010). Communication Privacy Management Theory: What Do We Know About Family Privacy Regulation? *Journal of Family Theory & Review*, 2(3), 175–196. doi:10.1111/j.1756-2589.2010.00052.x
- Photograph. (2006, March). *Oxford English Dictionary*. Oxford: Oxford University Press.
- Rodden, K., & Wood, K. R. (2003). How Do People Manage Their Digital Photographs? In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 409–416). New York, NY, USA: ACM. doi:10.1145/642611.642682
- Rose, G. (2003). Family Photographs and Domestic Spacings: A Case Study. *Transactions of the Institute of British Geographers*, 28(1), 5–18.
- Rose, G. (2004). ‘Everyone’s cuddled up and it just looks really nice’: an emotional geography of some mums and their family photos. *Social & Cultural Geography*, 5(4), 549–564. doi:10.1080/1464936042000317695

- Rose, G. (2010). *Doing Family Photography: The Domestic, The Public and The Politics of Sentiment*. Farnham, England: Ashgate.
- Schoenebeck, S. Y. (2013). The Secret Life of Online Moms: Anonymity and Disinhibition on YouBeMom.com. In *Seventh International AAAI Conference on Weblogs and Social Media*. Retrieved from <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM13/paper/view/5973>
- Seidman, I. (2013). *Interviewing as Qualitative Research: A Guide for Researchers in Education & the Social Sciences* (Fourth.). New York: Teachers College Press.
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269–281.
- Solove, D. (2008). *Understanding Privacy*. Cambridge, Massachusetts: Harvard University Press.
- Stutzman, F., Capra, R., & Thompson, J. (2011). Factors mediating disclosure in social network sites. *Computers in Human Behavior*, 27(1), 590–598. doi:10.1016/j.chb.2010.10.017
- Tee, K., Brush, A. J. B., & Inkpen, K. M. (2009). Exploring communication and sharing between extended families. *International Journal of Human-Computer Studies*, 67(2), 128–138. doi:10.1016/j.ijhcs.2008.09.007
- Titus, S. L. (1976). Family Photographs and Transition to Parenthood. *Journal of Marriage and Family*, 38(3), 525–530. doi:10.2307/350421
- Tufekci, Z. (2008). Can You See Me Now? Audience and Disclosure Regulation in Online Social Network Sites. *Bulletin of Science, Technology & Society*, 28(1), 20–36. doi:10.1177/0270467607311484
- United Nations, O. of the H. C. for H. R. Convention on the Rights of the Child (1989). Retrieved from <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Van House, N. A. (2009). Collocated Photo Sharing, Story-telling, and the Performance of Self. *Int. J. Hum.-Comput. Stud.*, 67(12), 1073–1086. doi:10.1016/j.ijhcs.2009.09.003

- Van House, N., Davis, M., Takhteyev, Y., Good, N., Wilhelm, A., & Finn, M. (2004). From “What?” to “Why?”: The Social Uses of Personal Photos. In *Proceedings of the 2004 ACM conference on Computer supported cooperative work*. New York, NY, USA: ACM. Retrieved from http://people.ischool.berkeley.edu/~vanhouse/van%20house_et_al_2004a.pdf
- Vitak, J., & Kim, J. (2014). “You Can’t Block People Offline”: Examining How Facebook’s Affordances Shape the Disclosure Process. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work; Social Computing* (pp. 461–474). New York, NY, USA: ACM. doi:10.1145/2531602.2531672
- Walther, J. B. (2011). Introduction to Privacy Online. In S. Trepte & L. Reinecke (Eds.), *Privacy Online* (pp. 3–8). Springer Berlin Heidelberg. Retrieved from http://link.springer.com.proxy.lib.umich.edu/chapter/10.1007/978-3-642-21521-6_1
- Warren, S. D., & Brandeis, L. D. (1890). The Right to Privacy. *Harvard Law Review*, 4(5), 193–220. doi:10.2307/1321160
- Webb, A. (2013, September 4). We Post Nothing About Our Daughter Online. *Slate*. Retrieved from http://www.slate.com/articles/technology/data_mine_1/2013/09/facebook_privacy_and_kids_don_t_post_photos_of_your_kids_online.html
- Whittaker, S., Bergman, O., & Clough, P. (2010). Easy on that trigger dad: a study of long term family photo retrieval. *Personal and Ubiquitous Computing*, 14(1), 31–43. doi:10.1007/s00779-009-0218-7
- Winnicott, D. W. (1956). Primary Maternal Preoccupation. In *Collected Papers: Through Paediatrics to Psycho-Analysis* (pp. 300–305). New York: Basic Books.

Yoffe, E. (2014, March 12). Dear Prudence: In-Law Facebook Fanatics. *Slate*. Retrieved from http://www.slate.com/articles/video/dear_prudence/2014/03/dear_prudence_video_in_law_facebook_fanatics.html

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior*, 24(5), 1816–1836.
doi:10.1016/j.chb.2008.02.012

Appendix 1: Interview Protocol

Warm-Up Questions

1. Tell me about who lives in your home with you.
2. Describe your typical weekday.
 - a. Describe your typical weekend.

Use of Facebook

1. About when did you join Facebook?
 - a. Do you recall what made you decide to join Facebook?
2. About how many Facebook friends do you have?
 - a. Tell me about your Facebook friends.
3. Tell me about your Facebook use.
 - a. How often do you check Facebook?
 - b. How do you usually access Facebook (e.g., computer, tablet, mobile device)?
 - c. Tell me about the last time you checked Facebook. Walk me through what you did when you checked it.
4. Have you explored any of Facebook's settings that let you change who can see information you post?
 - a. (If yes) Tell me about what you have changed.
 - b. (If they ask me for more information or say they are unsure): Facebook has sections where people can change their account settings and privacy settings. Have you changed any of those?

Perception of Norms around Photo-Sharing on Facebook

1. Do you have Facebook friends who are mothers of babies or young children?
 - a. What kinds of things do your friends who are mothers of babies and young children share on Facebook?
2. Do you see baby pictures on Facebook?
 - a. What kinds of pictures do your friends who are mothers of babies post on Facebook?
3. Think of five Facebook friends who are mothers of young babies.
 - a. Tell me the first names of your five friends.
 - b. Tell me about the kinds of things each friend likes to post on Facebook?

Decision-Making Process to Post Photos on Facebook

1. Tell me about your child.
 - a. What is his/her first name?
 - b. How old is he/she?
2. Did you get an ultrasound when you were pregnant?
 - a. Tell me about how you felt when you saw that image.
 - b. Did you share the ultrasound/sonogram picture with others?
 - i. Who did you share it with?
 - ii. How did you share it (e.g. mail, email, post on Facebook?)
3. Have you shared pictures of [child's name] with others?
 - a. On Facebook?
 - b. What pictures do you share?
 - c. Are there pictures you do not share?

- i. Are there times when you've wanted to post a picture of [child's name] but didn't?
 - d. About how often do you share pictures?
4. Can you show me the most recent picture you posted of [child's name] on Facebook?
 - a. Tell me about this picture.
 - b. What made you decide to post this picture?
 - c. What response did you get from people after sharing this picture?
5. Are there times when you've posted a picture of [child's name] and then taken it down?
6. Have other people posted pictures of [child's name] on Facebook?
 - a. Tell me about a time someone posted a picture of [child's name] on Facebook.
 - b. How did you feel about that picture being shared?
7. Can you think about how you used Facebook before [child's name] was born, and how you use it now. Are there any differences?
 - a. Similarities?
8. Before [child's name] was born, did you think you would keep using Facebook once you became a mom?
 - a. Were there any times when you thought about how you would use Facebook after [child's name] was born?
 - b. (If yes) Tell me about how you thought you would use Facebook after [child's name] was born.
9. At this point, do you think you will show the pictures you post on Facebook to your child when s/he is older?
10. At this point, do you think you will let your child use Facebook?
 - a. (If yes) Tell me about how you see yourself introducing Facebook to [child's name].

- b. (If no) Tell me more about that.

Opinions of Facebook

1. Tell me about any thoughts you have about how Facebook manages its users' information.
 - a. On how it manages information about children.
2. To what extent do you trust Facebook with your personal information?

Is there anything else you'd like to tell me?

Do you have any questions for me?

Appendix 2: Recruitment Text

Are you a first-time mom?

Are you age 18 or older?

Is your child between 0 and 24 months old?

Do you post photos of your child on Facebook?

Participate in a research study at the University of Michigan! We want to learn about how you use Facebook to share photos of your young child. We hope to better understand the role of social media in parenthood.

If you decide to participate, we will ask you to take part in an interview with our research team. The interview will take about one hour of your time. Participating in our study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time.

This study is being conducted at the University of Michigan. For more information, please contact Priya Kumar at priyaku@umich.edu or Dr. Sarita Yardi Schoenebeck at yardi@umich.edu.

Details: <http://yardi.people.si.umich.edu/MothersFacebook.html>