IT IS A HARD TRADEOFF: EXAMINING SHARENTING BEHAVIORS FROM A
PRIVACY CALCULUS MODEL PERSPECTIVE

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ABSTRACT

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Parents disclosing information about their children's and parenting in mediated spaces is referred to as sharenting. This practice leads to 92 percent of children having their personal information published online before they reach the age of two-years-old. This is problematic because parents are argued to be violating children's privacy and putting their identity at risk of being stolen. Qualitative sharenting scholars suggested several influential factors such as self-presentation, social connection, and privacy concerns may explain why parents sharent, indicating a need for quantitative research. Building on previous studies, this mixed-method dissertation examines the empirical makeup of sharenting and tests predictors of it through three separate studies. Study 1 investigated the validity of the assumed dimensions of the construct and explored the breadth of the construct through semi-structured interviews. Study 1 results demonstrated that sharenting construct is a two-dimensional construct and parents shared both children's information and emotional experiences. Study 2 aimed to develop a scale of sharenting and validated its two-dimensional structure with the quantitative survey method. Results of exploratory factor analysis validated its two-dimensional structure and displayed a 15-item scale of sharenting, but found the second dimension as parenting information disclosure instead of emotional disclosure. Study 3 confirmed the structure of the scales and tested factors that predicted sharenting behaviors by using the privacy calculus model. Results showed that social capital was a positive predictor of both children's information disclosure and parenting information disclosure, whereas self-presentation was positively related to parenting information

sharenting but negatively related to children's information sharenting. Perceived enjoyment, privacy concerns and privacy self-efficacy were only significantly related to children's information. Discussions, implications and limitations were included at the end of each study.

This dissertation is dedicated to my advisor Dr. Serena Miller, my husband Tao Jiang, and my Mom and Dad. Thank you all so much for supporting, helping, and believing me in the past five years.

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Writing a dissertation is like climbing the Everest Mountain. It is already quite difficult to climb to the top, however, it is even more difficult to go back to the ground. Climbing up here refers to writing up the proposal and going down to the ground refers to finishing the whole dissertation up. No matter how hard it is, either climbing up or going down, there has always been a group of people who supported and helped me throughout this process. I would like to extend my sincere thanks to the following people for helping me with this research project.

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CHAPTER ONE: INTRODUCTION

Sharenting reflects the behaviors in which parents disclose their children's information and parenting processes to the public on mediated platforms (Brosch, 2018; Holiday, Norman & Densely, 2020; Siibak & Traks, 2019). Parents receive benefits through online sharing such as staying connected with their family and friends (Wagner & Gasche, 2018), getting confirmation of their parenting skills (Brosch, 2016), receiving social and emotional support from other parents (Siibak & Traks, 2019), and sharing parenting advice (Archer & Tao, 2018). Mothers in the United States spend on average 200 minutes on the Internet, and 59 percent of mothers access social networking sites several times a day with the most popular social networking site among mothers being Facebook (Statista, 2018). This practice contributes to 92 percent of children having their digital footprints, personal information shared on online, on social media platforms before reaching the age of two, and almost 34 percent of children having their information posted before they are born (Duggan, Lenhart, Lampe & Ellison, 2015). Parents, unknowingly, may deprive their children of the choice of opting out of a social media presence, rob them of the chance to create their identity on their own terms, or imperil their future financial security (Coughlan, 2018; Hsu, 2019; Tomchak, 2021).

The volume of children's information being sharented online leads to other internet users using these images and information for inappropriate uses. United Kingdom Internet users made at least 8.8 million attempts to access videos and images of children suffering from sexual abuse (Tomchak, 2020). Reports of child abuse images online increased by 50 percent during the coronavirus pandemic lockdown according to the Internet Watch Foundation (Jeffreys, 2020). News media professionals warn parents of the risks to their children associated with oversharenting such as a lack of privacy, cyberbullying, identity theft, financial fraud, digital

kidnapping, or even grooming. Parents share identifying information such as their name, date of birth, and home address, which makes it possible for fraudsters to steal their identity (Tomchak, 2021). An online security study conducted by Barclays, a multinational investment bank, predicted that by 2030 that there will be seven million incidents of identity theft per year attributed to sharenting, which would cost their children up to 914 million dollars in the future (Coughlan, 2018). This research suggests that it is vital for parents to evaluate the risks before posting information about their children.

Parents enjoy posting pictures of their children's daily life, outings, special events, and happy moments despite the risks (Brosch, 2016; Kumar & Schoenebeck, 2015). Motivations include staying connected with families, collecting memories, receiving social support, and affirming parenting performances (Blum-Ross & Livingstone, 2017; Ouvrein & Verswijvel, 2019; Wagner & Gasche, 2018). Paradoxically, parents likely choose to sharent due to the social benefits they receive from it even though it was found parents expressed concerns about the practice (Kumar & Schoenebeck, 2015), which will be tested using the privacy calculus model.

This dissertation aims to conceptually define the sharenting construct; develop and validate a scale for it; and test predicting factors based on the privacy calculus model. Most studies on sharenting are qualitative in nature in which they found the perceived social benefits, motivations, and privacy concerns are important factors associated with sharenting behaviors (Chalklen & Anderson, 2017; Fox & Hoy, 2019; Lupton, 2017; Ouvrein & Verswijvel, 2019; Latipah, Kistoro & Hasanah, 2020). The goals of this proposed project are to build on these studies by taking a quantitative approach to create a valid and reliable measure and using that measure in a model predicting sharenting. Therefore, the first goal of this study is to conceptually explicate sharenting and develop a scale to measure this construct. Most previous research adopted an inductive approach to explain why people sharent, but the degree of each

factor's impact on the sharenting behaviors remains untested and unknown. The privacy calculus model is useful because it includes competing factors of both risks and benefits that concurrently affect the degree to which people engage in disclosure behaviors (Trepte, Scharkow & Dienlin, 2020). Hence, the second goal of this study was to use the privacy calculus model to test factors that may be useful in predicting and interpreting sharenting as a disclosure behavior.

This study made three contributions to the sharenting scholarship. First, to the best of my knowledge, this study is the first one to develop a scale for sharenting and empirically validate it. The development of a scale can be useful in identifying factors that explain sharenting practices (Carpenter, 2018). Practically, a scale of sharenting can help future parents and online parenting platform companies precisely gauge the intensity of a parent's sharenting behavior and identify what content practices dominant their posting behaviors. Secondly, this study improves scholars' identification of sharenting predictors by applying the privacy calculus model to learn more about how to steward children's privacy. The model posits that self-disclosure behaviors are an outcome of individuals assessing the associated benefits and costs of self-disclosure (Bol et al., 2018). The privacy calculus model should help people understand why parents choose to sharent while knowing that there are potential risks. Thirdly, as previous studies investigated sharenting on a single platform, this study examined sharenting across broader mediated spaces, which ensures generalizability and applicability of the sharenting scale across platforms.

Literature Review

Sharenting Theoretical Definition

Theoretical definitions of sharenting have been criticized for not precisely capturing the essence of the sharenting construct's meaning (Brosch, 2018). As a result, the conceptualization of sharenting is the first logical step in the scale development process. Three issues arose based

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on the reading of the existing research. First, scholars interpreted the sharenting construct from two different perspectives giving rise to two different interpretations of the construct: one line of research interpreted sharenting as disclosing information about one's children (Brosch, 2018; Fox & Hoy, 2019; Kumar & Schoenebeck, 2015; Ouvrein & Verswijvel, 2019; Verswijvel et al., 2019), whereas the other line emphasized that sharenting behaviors serve for the purpose of parenting (Archer & Kao, 2018; Blum-Ross & Livingstone, 2020; Lupton, 2017; Steinberg, 2016). Secondly, the conceptualization of sharenting varies across different mediated contexts. Although sharenting behaviors mostly occur on social media platforms, other mediated spaces such as parenting apps, group chats, parenting websites, blogs, and online forums are also platforms where parents share information about parenting and their children (Archer & Kao, 2018; Lupton, 2017). Thirdly, the inconsistent definitions of sharenting also lead to the varying items being used to measure the behaviors, which impairs the validity of the measure (Marquart, 2017). A precise definition is an essential first step in determining what items best represent a social scientific construct (Carpenter, 2018). This study, therefore, dedicates space to addressing the above disagreements associated with previous conceptualizations and proposes a definition of the sharenting construct with the intent of it guiding in the development of the proposed measure.

Existing sharenting definitions fall into two different categories. One group of scholars theorizes sharenting as *information disclosure* behaviors by defining sharenting as a practice in which parents engage in disclosing their children's photos, videos, and other posts on social media platforms (Ammari et al., 2015; Brosch, 2018; Fox & Hoy, 2019; Kumar & Schoenebeck, 2015; Ouvrein & Verswijvel, 2019; Verswijvel et al., 2019). Scholars from this group posited that sharenting content revolves around children's daily lives and activities, which include children's school accomplishments, sporting activities, trying of new types of food, wearing of

cute outfits, moments of meeting family and friends, and other significant milestones (Ammari et al., 2015; Brosch, 2018; Fox & Hoy, 2019; Kumar & Schoenebeck, 2015; Ouvrein & Verswijvel, 2019; Verswijvel et al., 2019; Wagner & Gasche, 2018). Sharenting in this context is a communicative practice similar to other sharing activities on major social media platforms (e.g., updating statuses, posting photos, uploading videos) that involve making personal information accessible to a wider public (John, 2017; Kennedy, 2018). From this perspective, sharenting is an *information disclosure behavior* through which parents make their children's information accessible to a wider audience.

Emotional disclosure is also an aspect of sharenting even though it has been omitted in previous conceptualizations of sharenting (Ammari et al., 2015; Ouvrein & Verswijvel, 2019; Siibak & Traks, 2019; Wagner & Gasche, 2018). Regardless of the sharenting context, emotional disclosure has been argued to be an integral part of online disclosure behaviors (Bazarova & Choi, 2014; Hidalgo et al., 2015). Furthermore, Blum-Ross and Gasche (2018) discovered that parents viewed blogging as a version of self-care through which they share their own difficult moments by writing about their problems and expressing their feelings toward the parenting process. This study, therefore, explores emotional disclosure as a part of the sharenting construct. Emotional disclosure helps regulate and manage emotions through social interactions (Bazarova et al., 2015; Zaki & Williams, 2013). People who experience an emotional event often have an urge to express it to others (Nils & Rimé, 2012). Parents also post emotional experiences about their children, their interactions with children, and their parenting experiences (Blum-Ross & Livingstone, 2020; DeHoff et al., 2016; Lupton, 2017). For example, pride is one dominant emotion expressed in parents' sharenting messages because parents experience pleasure from expressing feelings of pride in their children (Wagner & Gasche, 2018). Emotional disclosure is beneficial particularly when the parent receives positive feedback (Rimé, 2009). One study on

parents with young children with special health care needs found that sharing painful experiences with other parents experiencing a similar situation helped them feel less lonely and more positive (DeHoff et al., 2016). Thus, informed by the first line of sharenting research and online self-disclosure literature, this study proposes that sharenting is an online disclosure behavior in which parents disclose both information and emotional content to a wider audience.

Scholars of the second group emphasize that the act of a disclosure is motivated due to a need for both informational resources and emotional support (Archer & Kao, 2018; Blum-Ross & Livingstone, 2020; Lupton, 2017; Steinberg, 2016). This group of scholars suggest that sharenting should be viewed as mediated communication that plays a key role in providing social support, alleviating anxiety and pressure, and validating parenthood, especially for first-time parents or parents who are not in regular contact with family members (Archer & Kao, 2018; Lupton, 2017). In their opinions, sharenting are behaviors that are framed to seek both informational and emotional social support with expectation of receiving positive feedback. These two forms of support provide participating parents with the informational knowledge to solve child-related problems and the emotional capacity to cope with anxiety and stress associated with parenting (Heaney & Israel, 2008). To receive informational or emotional social support, parents may ask other parents' questions about children's health; growth and eating tips; how to cope with their struggles; and venting about parenting experiences (Archer & Kao, 2018; Blum-Ross & Livingstone, 2020; Lupton, 2017; Steinberg, 2016). Parents may tell their parenting success stories, talk about past parenting failures or mistakes, share information about events, and places that benefit parent-child bonding, and provide compassion to parents during their struggles (DeHoff et al., 2016; Lupton, 2017; Steinberg, 2016). From this perspective, sharenting is an online communicative behavior in which parents provide and receive social support.

The second group's interpretation then expands the sharenting communicative space to other types of social media platforms besides Facebook, Instagram, and SnapChat to parenting websites and apps, blogging platforms, discussion forums, and social media support groups (Archer & Kao, 2018; Lupton, 2017). Thus, conceptualization of sharenting should reflect communication practices that take place on such platforms. After reviewing relevant sharenting literature, parenting online discussion forums and parenting apps play a critical role in helping parents improve their parenting skills, overcome transitions, and identify parenting norms (Davis et al., 2015; Fox & Hoy, 2019; Lupton, 2017; Verswijvel et al., 2019). Therefore, this study extends the scope of the sharenting context to general content-sharing platforms. To ensure that the measure is useful over time and across platforms, I argue that sharenting involves sharing communication behaviors that take place on general content-sharing platforms including online parenting forums and social network spaces such as Facebook. Taken together, informed by studies on sharenting, online disclosure, and social support, this study defined *sharenting* as *communicative behaviors* in which parents disclose *children's personal information and emotional experiences* about *their children and parenting* in mediated spaces.

Sharenting Dimensions

The majority of sharenting literature suggests that informational disclosure and emotional disclosure are the two primary communication behaviors that represent the sharenting construct.

Informational disclosure. Parents disclose information both about their child's life and their own stories about being a parent to the public. The informational disclosure in sharenting manifests when parents publish content about their children's growth, life stories, and important moments; write about their personal experiences about pregnancy and parenthood; and offer parenting advice, which comprise of the major types of content valued by parents (Doty & Dworkin, 2014). Information about parenting is one of several major resources that parents need

over time to understand how to raise their children (Haslam et al., 2017; Lee & Sullivan-Bolyai, 2011). Issues such as breastfeeding; post-childbirth recovery; parenting role adjustment; infant health and well-being; parents' mental health; daycare; school choices; and homeschooling are commonly discussed topics on online parenting group forums (Archer & Kao, 2018). Parents use parenting websites, online parenting programs, interactive forums, or social media networks to discuss topics of interest with other parents, share their own experiences, and give parenting advice. Parents may feel supported or informed by reading other parents' similar experiences (Haslam et al., 2017) because shared personal parenting experiences are considered more valuable to new parents than experts' advice, because they perceive other parents' personal experiences of parenthood are more reliable than expert guidance (Sarkadi & Bremberg, 2005). Also, parents also perceive other parents' shared information is more aligned with their needs than their spouses or family members who have no experience with parenting (Haslam et al., 2006). Parents also publicly disclose personal information of their children when sharenting (Brosch, 2018; Fox & Hoy, 2019; Ouvrein & Verswijvel, 2019; Verswijvel et al., 2019). The sharenting content encompasses children's developmental milestones and firsts; cute and funny expressions and moments; activities and outings with family and friends; and special days including holiday gatherings comprise a large proportion of the sharenting content. Parents like to use social media platforms as a digital album to chronicle their children's lives for future reminiscing (Kumar & Schoenebeck, 2015). For example, parents like to post moments that highlight children's growth, including the gestation and birth of a child, children's school accomplishments, overcoming obstacles in sports (Ammari et al., 2015), first day at school (Ouvrein & Verswijvel, 2019), getting teeth, learning new skills, experiencing new activities, and participating in events (Kumar & Schoenebeck, 2015). Parents also capture cute and funny

moments to share with others in mediated spaces (Ammari et al., 2015; Kumar & Schoenebeck, 2015; Ouvrein & Verswijvel, 2019; Verswijvel, 2019).

Emotional disclosure. In mediated spaces, parents may disclose both positive and negative emotional experiences of parenthood. Previous studies also found that reading other parents' similar experiences relieves depression and stress associated parenting challenges (Doty & Dworkin, 2014; Haslam et al., 2017; Lee & Sullivan-Bolyai, 2011). Disclosing emotions is also a form of self-care that helps parents reduce and reevaluate feelings of stress, fear, and depression (Rime, 2009), while positive emotional communication invites positive feedback for the sharer to re-experience and prolong hedonic feelings (Gable & Reis, 2010; Lin et al., 2014; Rime, 2009). For example, Wagner and Gasche (2018) found that parents liked to express feelings of pride in their children, which, in turn, made them feel successful. Positive reinforcement from receiving validation, reassurance, and encouragement from others improves parents' efficacy and confidence in their parenting strategies (Doty & Dworkin, 2014; Haslam et al., 2017).

Research Question

RQ1: Is sharenting represented by (a) informational disclosure and (b) emotional disclosure?

CHAPTER TWO: STUDY ONE

Focus groups and in-depth interviews are the two most frequently used methods in sharenting studies, as such qualitative methods assisted researchers in discovering patterns (Chalken & Anderson, 2017; Fox & Hoy, 2019; Hesse-Biber & Leavy, 2006; Latipah et al., 2020; Lipu & Siibak, 2019; Lupton, 2017; Ouvrein & Verswijvel, 2019). Previous sharenting studies sought to understand how parents conceptualized sharenting (Lipu & Siibak,2019); how digital devices helped parents with their parenting (Lupton, 2017); why parents posted information about their children on social media platforms (Fox & Hoy, 2019); what rules parents used to guided their sharenting practices (Fox & Hoy, 2019); what factors parents considered when they engaged in sharenting (Wagner & Gasche, 2018); and what motives encouraged parents to post information about their children online (Latipah et al., 2020). However, previous scholars have not investigated the theoretical conceptualization of sharenting or the breadth of practices that encompass the construct, including the empirical indicators to measure sharenting. The major goal of Study 1 was to build on existing qualitative scholarship by providing structure to the construct.

I sought to investigate the validity of the assumed dimensions of the construct and explore the breadth of the construct through semi-structured interviews. Informed by previous literature and conceptual definitions, I investigated the meaning of the sharenting construct and the validity of the two dimensions in the sharenting construct: informational disclosure and emotional disclosure. The proposed theoretical definition and dimensions guided my interview protocol. The interview questions focused on the specific behaviors that parents practiced when engaging in sharenting, parents' interpretation of the sharenting construct, and the type of

information and experiences parents sharented. Results of in-depth interviews confirmed the existence of two proposed dimensions.

Method

Sample & Sampling Procedure

A total of 16 participants were recruited and interviewed for this study. Of the 16 participants, four were fathers and 12 were mothers. The average age of interviewed parents was 36 years old. Fourteen participants were from the United States, one from the United Kingdom, and one from Nepal. Each participant had two children on average. Ten parents were white, three were Asian, one was Hispanic, and one was Lebanese. Fifteen participants were married and one was divorced. Thirteen participants had attained master's or higher degrees and three participants had bachelor's degrees or equivalent.

All 16 participants were recruited from SONA paid pool, Medium, Reddit, or Facebook parenting groups to participate in semi-structured interviews. Six participants were recruited from snowball sampling, three from a Medium parenting forums, two from Reddit parenting forums, three from SONA paid pool, and the remaining three from Facebook parenting groups.

Participants were people who had just had a new baby and/or had at least one child from the ages of 1 to 13. Parents of a new baby are first-time parents and their sharenting content and motivations may be different from parents who have been raising a child for a few years. I also limited the child's maximum age to 13, because a child who is more than 13 years old begins to develop a certain level of consciousness about the online world; thus, the conversations on sharenting between those parents and children are different (Ouvrein & Verswijvel, 2019). Additionally, parents recruited for the interviews needed to have posted information about their

children or parenting on at least one mediated platform, such as a social media platform,

parenting app, or parenting forum.

Table 1
Descriptive statistics of interviewed respondents

No.	Age	Occupation	Education	Sharenting Platforms	Race/Ethnicity	Marital Status	Number of Children	Average age of each child
Male1	39	Multiple jobs	Graduate	Facebook	White/Caucasian	Divorced	2	5 years old
Male 2	34	Nonprofit administrator	Graduate	Facebook, Instagram, Reddit	White/Caucasian	Married	2	4 years old
Male 3	30	Yoga Coach	Graduate	Medium, Facebook	White/Caucasian	Married	1	3 years old
Male 4	32	Post-doc	Graduate	Instagram	Hispanic	Married	2	2.5 years old
Female 1	31	Part-time	Graduate	Facebook	White/Caucasian	Married	2	3 years old
Female 2	29	Student	Graduate	Facebook, Instagram	White/Caucasian	Married	2	4 months
Female 3	31	Gymnastics coach	Associate's	Reddit, Facebook, Instagram	Japanese/Hispanic	Married	2	7 years old
Female 4	33	Homemaker	Graduate	Whatsapp, Instagram	White/Caucasian	Married	1	13 months
Female 5	37	Consultant	Graduate	Medium, Instagram, Facebook	Lebanese/Middle Eastern	Married	2	4 years old
Female 6	41	Instructor	Graduate	Facebook	White/Caucasian	Married	2	8.5 years old
Female 7	40	Manager	Bachelor	Facebook, Instagram, Snapchat	White/Caucasian	Married	2	14 years old
Female 8	38	Self-employed	Graduate	Facebook, Instagram	White/Caucasian	Married	2	3 years old
Female 9	43	Project-coordinator	Graduate	Telegram, Facebook	Asian	Married	1	6 years old
Female 10	32	Homemaker	Bachelor	Instagram, Facebook	White/Caucasian	Married	3	2 years old
Female 11	38	Homemaker	Graduate	Facebook, WeChat, Line	Asian	Married	1	10 years old
Female 12	45	Professor	Graduate	Facebook, WeChat	Asian	Married	2	6 years old

Interview Protocol

The IRB-approved interview protocol was created based on prior literature on sharenting, information disclosure, emotional disclosure, and parenting social support. The interview questions were reviewed by a methodological professor and a committee member for revision. The in-depth interviews were conducted after I revised the protocol according to experts' feedback.

The interview began with a broad question, such as "What is it like being a parent?" The purpose of this question was to let participants relax and feel comfortable about sharing their parenting experiences. Next, the interview questions transitioned to questions about the construct and the dimensions of the construct. The goal of conducting in-depth interviews was to identify sharenting dimensions and scale items. After finishing the questions about sharenting, each participant was asked about their demographics, including their age, gender, education, racial/ethnic background, employment status, marital status, parenting-related platform usage, their number of children, and their children's age(s) and gender(s). In-depth interviews were conducted online via Zoom due to the Covid-19 pandemic. In all, 16 interviews were conducted. After the data collection, all audio recordings were sent to the professional transcription company TranscribeMe! for transcribing. The average length of audio recordings was 37 minutes.

Interview Data Analysis

I used NVivo software to help me analyze the interview data. The procedure of interview data analysis involved seven steps. First, I read through the transcribed data, familiarized myself with it, and took notes. Second, I used open coding to generate initial coding categories and to organize quotes that belonged to the corresponding categories (Hesse-Biber, 2006). Third, I

examined the initial categories and quotes and reorganized them into a higher level of themes. Fourth, I re-examined the higher level of themes identified from the last step and organized them into broader and more abstract concepts or constructs. Fifth, I thoroughly went over the transcripts one more time to check for any unidentified theme(s). Sixth, I asked two of the interview participants and one scale development expert to assess and verify the validity and consistency of the theme interpretations. All of them agreed with my theme interpretations.

Study 1 Results

Results of the in-depth interviews supported the two dimensions (i.e., informational disclosure and emotional disclosure) drawn from the literature. All 16 participants mentioned that they disclosed information about their children's daily lives to document their growth and that they shared their parenting experiences for the benefit of other parents. Thirteen participants stated that they posted about their emotional experiences associated with parenting for the purposes of seeking emotional support and social belonging.

For informational disclosure, parents reported they shared children's social activities; milestones; accomplishments; good qualities; parenting problems and advice; and self-reflections about parenting. For emotional disclosure, parents liked to share their self-care strategies and emotional experiences.

Informational Disclosure

RQ1 asked about whether sharenting included information disclosure. Results showed that parents not only disclose children's information but also share their parenting experiences. The information parents disclosed about their children included information about their children's daily activities, growth and development, firsts and milestones, successes and accomplishments, special events and occasions, interesting conversations and stories, acquisition of new skills, and impressive behaviors, among other things.

Social Activities

According to the results of my study, children's activities with family and friends comprised the bulk of sharenting content. Frequently shared social activities included, but were not limited to, meeting with family, friends, or classmates; gathering on holidays; playing with pets; and going on family vacations or outings. Below are a few examples:

> "My sharenting content is about sort of event-type things or the meeting of family members...So most of what I share is meeting grandparents and great grandparents. We shared some photos for Easter Sunday yesterday." (# 2)

> "I share about happy events, like field trips, holidays, family vacations. Maybe a sport activity I would take a picture of, or if they were going to a new camp. I know I posted a picture about a new summer camp. When they started golf lessons I took a picture, posted about it. When they started gymnastics I posted a picture about it." (# 3)

> "But I posted a vacation. We went on spring break. And so, I posted a lot about our recent spring break vacation. And activities that we did around, adventures we took. We went in a cave and in an underground waterfall and we traveled up a mountain and just did different activities that we did as a family and with my kids." (# 7)

Parents also liked to share interesting conversations they or other family members had with their children. They posted their conversations because their children either asked interesting and funny questions or expressed opinions that do not speak to their age. Here are two examples:

> "I posted about just some funny, cute conversation." (#11)

> "I posted when I woke up in the morning - my son's name is Henry - I said, 'Hey, Henry, how are you doing?' He said, 'Great,' in his tiny little three-year-old voice. And then, I said, 'Oh, that's fantastic.' And he said, 'Yes. Dad, I'm so glad to see you.' And I don't even think he knows what that means. It's just what he hears my daughter say every morning. And so, yeah, I shared that on social media. I love that stuff. Little kind of grown-up conversations that you have with little kids." (#4)

Parents' responses demonstrated that their informational disclosure content encompasses children's social activities or conversations with themselves, other family members, or friends. Social activities are about interesting family or school activities, such as camping, visiting a cave

or waterfall, attending a summer camp, or attending happy family gatherings or events such as celebrating Easter or Christmas. Conversations with children that occurred during these interactions should also be included in the informational disclosure content. Therefore, I drafted items that included children's interesting interactions or conversations with family and friends. For example, "I share photos or videos of my child(ren)'s activities with family and friends," "I post photos or videos of my child(ren) participating in family outings or activities," and "I post about my child(ren)'s interesting interactions or conversations with family members or friends."

Children's Milestones

All of the interviewed parents documented their children's growth and milestones. Parents wanted to record every moment of their children's growth from birth until the present. Developmental milestones can be big occasions, such as coming into the world or celebrating the first birthday; the first day of school; or the first Christmas with the family. Such milestones can also be specific, small firsts, such as the first time eating pasta, playing a sport, losing a tooth, crawling, or walking.

> "I shared when they were born. I'm not sure if we shared my son. We shared my daughter when she was born." (#13)

> "I posted about when they lost their first tooth." (#3)

> "Or if it is the first time he is eating pasta, then I share it. His first words, let's say. I shared those things." (#4)

> "Let's say, for instance, my child took her first steps or started crawling or something like that, I want to share [that] that happened." (#14)

It appears that any events or experiences that happened in children's lives for the first time will be considered milestones by parents making them worthy of posting online. According to parents' responses, sharenting content includes children's growth, developmental milestones, and "firsts." Example items are "I post about my child(ren) experiencing a key date (e.g.,

birthday, first day of school, etc.)", "I record my child(ren)'s firsts", and "I share my child(ren)'s milestones (e.g., first words, graduation, celebrating a birthday, etc.)."

Children's Accomplishments

Parents are proud to share their children's accomplishments with the world, and these are not limited to children's academic successes. According to parents' responses, such accomplishments include a dish their children made, a birdhouse their children built, and a basketball game their children played and won.

> "I share their success. For example, something about them had a really great sports game or like their first basketball game of the season or last game of the season...It can be academic, sometimes I'll share." (# 7)

> "And so, we documented us making birdhouses. And then we've posted the progress on the birdhouses and then the final product." (# 7)

> "When they got good grades, I posted a picture with them holding their report card." (# 3)

Based on parents' responses, I drafted two items emphasizing sharenting content that includes children's accomplishments. An example item is "I announce my child(ren)'s accomplishments to family and friends."

Children's Qualities

There are moments when parents started to realize that their kids have grown up and started to possess qualities beyond parents' expectations. Those qualities include being smart, outgoing, welcoming, supportive, helpful, understanding, and courageous. When those moments occurred, parents shared them online, praising their children's qualities.

> "I did post [that] he used to be so shy, and [inaudible] he built up his self-esteem and then he wasn't afraid to dance anymore." (# 3)

> "I remember when my daughter was young, she wanted to help me cook, and she tried to stir the spaghetti sauce...And so I took a picture, and I just posted about it." (# 10)

"My daughter wrote a note about how to apologize. And I posted it-- she was teaching her little brother how to apologize. And I posted a note on Facebook saying that maybe we all need to learn how to apologize." (# 12)

"Here's a for instance, she has never lived in a world where Zoom wasn't everything, and so she is just very used to it. She loves to say hi to people on Zoom. And so that's a unique thing about a child that I just never-- my first child, that was not the case. So, yeah, just the way that they're smart and the way they pick up on things I like to share about, I think." (# 14)

Therefore, the information parents disclose when engaging in sharenting should also include posts about the characteristics or qualities that children have demonstrated. Example items are "I post to praise my child(ren)'s to recognize their good qualities or characteristics (e.g., being smart, being honest, being brave, being compassionate, etc.)" and "I share information when my child(ren)'s are being supportive and mature (e.g., helping friends or family members, comforting others, solving a problem independently, etc.)."

Parenting Problems and Advice

In addition to disclosing children's information, sharing their experiences and suggestions of how to parent may also represent sharenting content. Young parents often feel the need for advice and suggestions from experienced ones. Particularly for parents who do not have nearby family members, sharing their parenting problems online has become a way to seek advice on childcare issues, such as breastfeeding, bedwetting, health, and sleeping problems.

"I also posted about asking for advice on, I believe a couple of months ago I know I posted about asking advice around bedwetting." (# 3)

"I did talk about pregnancy there a little bit, or I asked questions there when I was uncertain about what I was experiencing but didn't really want to call the doctor." (# 2)

"It was something I had just never dealt with, and I wanted other people's perspective, but I've also asked for advice on things about food, I think I've even asked for things about medicine, and the things that stick out in my mind are like daycare, just child care in general." (# 14)

Parents who were concerned about asking stigmatized questions in real life would also utilize online platforms for help. Online parenting forums such as Reddit, which allows posters to anonymously share information, made parents feel safe to discuss sensitive topics they are afraid to talk about in real life, such as the following topic:

> "And I'm usually vague about certain specifics, because normally when I do post on Reddit, I'm trying to find advice for something that often is maybe stigmatized as I can't reach out to other people, or I don't have anyone that I know of going through it. So, I like to post on the home school Reddit, I like to post on the parenting Reddit, co-parenting Reddit, and then stepparenting Reddit, and also the adoption Reddit. Because those are things that I'm going through" (#3).

Sharenting has become a way for experienced parents to provide informational support for new parents. Some parents stated that they like to share parenting experiences and knowledge because they wanted to help other new parents and contribute to the parent community. For example, participants 2, 3, 8, and 10 referred to sharenting using phrases such as "giving advice," "help in the community," and "help young mothers." In their opinions, sharenting was to provide information to and help other parents. According to parents' responses, information they provided included, but was not limited to, pregnancy experiences, how to adjust to new parenthood, how to teach children a new language, solutions to children's sleeping problems, and toilet training.

> "One person asked about sleeping on their back or sleeping on like, 'Oh, I'm only supposed to sleep on my left side, but I'm more comfortable on my right side.' And I had actually talked to my doctor about that, who was like, 'You can, essentially, sleep in whatever position you're comfortable. Your body will tell you that it's not okay.' It'll be hard to breathe and that sort of thing. So I shared that information that I had heard from my doctor about it because it was something that I was worried about, too, earlier on in my pregnancy." (# 2)

> "I'm giving advice from my experience as a parent." (# 3)

> "But it reassures them and they'd go back to sleep instead of getting up and coming into our room and waking us up. And so that was something we shared with them that worked for us." (# 7)

"So I guess, discussing one of my most popular blog posts was about my experience of toilet training." (# 15)

Based on parents' answers, parents disclose information about their parenting experiences and parenting problems online. Parenting experiences included topics such as experiences during pregnancy, how to take care of a child, how to feed a child, how to help children develop good habits, how to educate a child, and how to correct children's bad habits. The parenting experience topics include problems parents ask for advice about online. Informed by the results, I drafted items that reflect parents' disclosure of their experiences with childcare and strategies for education. Example items are "I give suggestions to other expecting moms on how to navigate pregnancy," "I provide advice online to other parents on childcare," "I share parenting strategies for other parents on how to help their child(ren) receive the best education," "I talk about the problems associated with parenting," and "I offer my suggestions on child(ren)'s mental health and development to help other parents."

Self-reflection

For some parents, sharenting is a process of self-reflection through which they can explore themselves as parents; reflect on their parenting styles and approaches; consider how they got to where they are; provide different perspectives in online discussions; and listen to other parents' interpretations.

> "I guess it's nice to kind of share that online and start a conversation with other people. I particularly like it when people leave comments. It gives me a sense of what other parents are going through, how they experienced the same things, different perspectives, interpretations, that kind of thing… I guess, in some way as well, in terms of my audience, I kind of want to, not challenge that, but to kind of offer a perspective that there are some fathers out there who are not so bad" (# 15).

The process of writing out one's parenting or emotional experience is regarded as a chance to learn from previous successes or mistakes. The ultimate goals of this form of sharenting are to help parents make sense of the parenting process and become better parents.

"It's almost like I'm making sense of who I am as a parent. For example, some topics come up or some experiences come up, and I use writing to make sense of it... So yeah, I think we're all on, in some respect, our own little journey, and we're trying to make sense of it. And there's more than one right way of going about it" (# 15).

In summary, participant responses showed that parents disclosed their inner thoughts and reflections on how they have been parenting their children and how to improve their parenting strategies. Example items are "I share what I learned from my parenting journey," "I talk about my reflections on how to raise a child," and "I post about my parenting philosophy to start conversations with other parents."

Balancing Parenting and Work

Fourteen interviewed parents were fully or partially employed, and they had to manage their time to both take good care of their children and finish their work. Balancing parenting and work were difficult for every parent interviewed in this study. Parents posted about their struggles to handle working and parenting at the same time, including how much mental fortitude they needed to support their children every day, how to write a working email while handling a crying two-year-old, or how to efficiently work while attending to children.

> "It was always stressful to have young kids because they're really relying on your well-being on their well-being. You're keeping them alive. Without you, they literally can't survive. So that you kind of carry that around all the time. As a parent of young kids, you just kind of have that. We call it the mental load. It's just always there worrying about a million things that could go wrong. And on top of that, you're worrying about what could go wrong, and you're actually delivering on things in the moment. So while you're making them lunch, you're worrying about something that could happen later on. And it." (# 5)

> "I'll share the struggle of balancing schedules. And so I have shared posts around that. I've shared posts around the struggle of trying to work, in addition, being a working mother and balancing all the kids' activities." (# 7)

Parents in the study also shared about dilemmas they faced, such as choosing between work and parenting and deciding whether mothers should give up work for children. Parents who

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had already overcome the most difficult period of balancing schedules or making difficult

decisions also shared their experiences and suggestions for other parents.

> "That was one of my best-performing articles, it was just my experiences of making that decision and creating an empowering context for mothers who are choosing to stay at home and how they could feel a little bit like a failure." (# 5)

> "A lot of my articles and videos are supporting young mothers that are navigating motherhood and work. So I often use many examples of my children of how women are working and also being in the motherhood space. So I have pictures on my website, and I use examples of my daily parenting and things that come up in my articles." (# 8)

Therefore, the information parents disclose online also includes their struggles to balance

work and parenting as well as dilemmas they face. Such content could include the situations they

are currently experiencing or suggestions they already summarized for other parents online.

Example items are "I disclose the moments when I struggled with balancing both parenting and

working," "I share my situations of juggling parenting, work, and housework," "I offer

suggestions on how to balance both parenthood and my job."

Emotional Disclosure

Emotional Expression

RQ1 also queried about whether sharenting includes emotional disclosure. Some parents

need a venue to express their stress and feelings about the parenting process and a platform to

talk about problems they encounter during that process. Most interviewed mothers mentioned

that they experienced stress, anxiety, exhaustion, and negative feelings during the parenting

process. As all of the moms interviewed were employed, and they had to handle the stress from

both work and family. Furthermore, the COVID-19 pandemic exacerbated their stress and

anxiety.

> "I'm not hiding anymore. The bad days, I'm like not hiding those because there's always a lesson to learn from the bad days. When you lose your temper and you feel bad, there's something for you to learn and there's something that you can teach your kid from that...I

mean I very recently kind of decided that if me sharing kind of all the dark truths about what it's really like having young kids in a pandemic." (# 5)

"Moms that are stressed and overwhelmed and taking on so many things with working full-time and raising young children, it affects your young children in a big way." (# 8)

Not all emotional expressions were negative. Participant #16 also shared positive or mixed feelings online. According to him, mixed feelings referred to him being both happy and sad about his daughter's growth:

"I shared a post about my daughter taking her first dance class, right, and how it was both awesome and kind of sucky because she was just getting older, right? And I shared feelings about it's awesome that she's getting older and trying new things and doing kind of things that adults do, but also sucky that I'm losing my little girl who relied on me even to walk or even to-- and then I shared those emotions that are kind of mixed, right, good and bad." (# 16)

Based on parents' answers, their emotional disclosure could include both the stress/anxiety they experience during parenting and mixed/positive feelings that they felt toward their children. Example items are "I vent about my negative feelings about parenting," "I share my positive feelings about parenting," "I share my mixed feelings about parenting," "I post about moments that I feel tired and overwhelmed" and "I disclose the emotional challenges I experienced during parenting."

Self-care Strategies

Under pressure from both family and work, parents need to vent their negative emotions, have an emotional outlet, and heal so they can take care of themselves. If other parents expressed sympathy and understanding to the disclosed emotional experiences, it gives the parent comfort and a feeling of belonging. Emotional expression and conversations with other parents are a form of therapy through which parents nurture themselves.

"I definitely think that it helps so much. It makes me feel not so alone, and it's also almost like a form of counseling, especially on Reddit." (# 3)

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"Things like that, that parents seem to need that social connection, outlet, validation of their parenting, sympathy for the difficult parts of parenting, etc." (# 13)

"The other thing I will often share is frustration, because I think I want to often be affirmed in feeling frustrated." (# 14)

"This is one of those ways in which I can reach out to similar people going through similar experiences, making sense of it. And yeah, I mean, I guess in some respect, conversation is a bit of therapy. But in a positive way though, I mean." (# 15)

"If someone shared an experience they had had or a frustration they had had, a lot of times I'll agree with it or say, "I totally understand where they're coming from. And it's kind of reassuring someone that they're not alone, I think is a lot of what I see on social platforms for parents, because I think sometimes in parenting situations, you can feel alone in the moment when things aren't going well. And then when you share something on social media and other people comment on it, it really shows you're doing just fine and you're not alone. And even on your worst days, it's not as bad as you think it is. So just keep going forward and you're doing a great job, I think it is kind of the feeling or the emotions I get a lot of times with posts." (# 7)

"I usually end up writing about when things are the struggles because my sole purpose for writing in this particular self-help parenting genre is to help others." (# 5)

Parents' responses revealed that their emotional disclosure could also exist in the form of stories about and suggestions for how they emotionally adjusted to their parenting role, how they walked through the darkest times, and how they practiced self-care to become stronger parents. Example items included "I talk openly about the ups and downs of my parenting process with other parents" and "I tell my parenting stories with other parents."

Study 1 Discussion

This study investigated several sharenting behaviors and explicated the sharenting construct by conducting in-depth interviews with 16 parents. Results showed that sharenting is an online disclosure behavior by which parents reveal their children's information; disclose their parenting problems; struggles and experiences; discuss their reflections on parenting; and exchange parenting strategies and advice. Sharenting content encompasses posting about both parenting and one's children. Parents posted about self-reflection and parenting strategies, which

contained both children's information and parents' experiences. Previous research focused on how frequently parents posted videos or photos about their children (Brosch, 2018; Steinberg, 2016; Lupton, 2017; Lazard et al., 2019). However, parents also indirectly post about their children by writing about how they trained their children to use a toilet or how they solved their children's sleeping problems, which both involve details about their children's lives and their mixed feelings about their children's growth and accomplishments. Parents' emotions and experiences are often intertwined with the revealing of their children's information. Therefore, this study suggests that future sharenting encompasses parents' emotions related to, struggles with, and experiences of raising children.

Informational Disclosure

Building on previous sharenting studies, this study found that parents disclosed their children's qualities; parenting problems and advice; and experiences of balancing work and parenting. Kumar and Schoenebeck (2015) found that parents disclosed children's cute and funny moments, milestones, and gatherings with friends and family. Later sharenting studies essentially adopted Kumar and Schonebeck's typology of sharenting content and did not include children's characteristics and qualities (e.g. being mature, brave, considerate, thoughtful) were also important information that comprised sharenting content (Lazard et al., 2019; Ouvrein & Verswijvel, 2019). The present study found that parents posted moments when children overcame an obstacle related to their growth. Therefore, when talking about disclosing children's information, one should also include disclosing information about children's moments of growth in sharenting behavior.

Parenting experiences, problems, and advice reflect informational disclosure as well. Results showed that parents who do not have accessible help offline will turn to online parenting

forums and other platforms for advice and assistance. For new parents, other parents' advice plays an important role in solving parenting problems, coping with the transition into parenthood, and overcoming difficulties (Archer & Kao, 2018; Madge & O'Connor, 2006). Some parents get access to childcare information offline from their partners, doctors, family, or friends. However, when offline information is not available or is untrustworthy, they turn to online sources (Archer & Kao, 2018). Parents value experienced parents' perspectives from online platforms to a greater degree than they do experts (Doty & Dworkin, 2014). Parents post suggestions concerning childcare; education and homeschooling; children's mental and physical health care; and interacting with one's children (Doty & Dworkin, 2014; Haslam et al., 2017; Lee & Sullivan-Bolyai, 2011). Therefore, this study suggests that one should consider parenting experiences, problems, and advice when observing sharenting behaviors.

Results also demonstrated that parents write about parenting and exchange their experiences about balancing parenting and work in online spaces. The context of this study was expanded beyond a single platform to include parenting websites, forums, blogs, video sites, and podcast platforms to create a measure that is useful across mediated contexts. The existence of multiple sharing platforms gives parents others spaces to express their feelings and opinions including talking about their parenting experiences and struggles. In this study, some parents created blog posts to share how they educated their children and solved parenting dilemmas. For example, one parent created a website focusing on sharing how mothers can care for themselves after giving birth and how to cope with the work and parenting stresses based on her life experiences. Another parent launched a podcast to discuss her daily interactions with her children and what she learned about raising her children. Thus, future sharenting studies should

examine whether parents include their reflections on parenting experiences or strategies in their sharenting content.

Emotional Disclosure

In addition to informational disclosure, this study found that sharenting involved emotional disclosure, which included parents' expression of positive, negative, or mixed feelings and strategies of self-care. Results showed that parents who are under a lot of stress and anxiety need a place to reveal their true -- sometimes even dark -- feelings. The process of expressing one's emotions reduces parents' stress and helps them reflect on the emotional experiences (Lin, Tov & Qiu, 2014; Rimé, 2009). New parents are often unsure whether the emotions they are feeling, such as frustration about themselves not being competent in both work and parenting, are valid. They want to share those frustrations online to see if they are the only ones who have such emotions. Usually, the shared emotional experience resonates with other parents who had similar experiences, and these posts invite experienced parents to provide feedback, suggestions, and sympathy. The interactions between parents who are experiencing the emotional obstacles in parenting and those who are already experienced are considered forms of counseling for the former. From other parents' feedback, parents who are currently enduring a particular experience can receive validation, affirmation, support, and encouragement.

There were also some parents who transformed their emotional struggles and experiences into a parent's self-help handbook based on their postings. For instance, participant #5 shared, "I usually end up writing about when things are the struggles because my sole purpose for writing in this particular self-help parenting genre is to help others." Such parents disclosed their emotional experiences with the hope that other parents could benefit. In summary, sharenting

content also included parents' emotional disclosure, which could be either parents' venting their emotions or providing suggestions to others.

Conclusion

Study 1 contributed to the sharenting scholarship by explicating the sharenting construct and expanding the breadth of sharenting practices to include more than one platform. Sharenting is an online disclosure practice in which parents disclose both children's information and the parenting of their children. Most sharenting studies focused on the disclosure of children's information (e.g., age, name, hobbies, clothing, activities), and neglected the disclosure of feelings, experiences, and thoughts that contain children's information (Blum-Ross & Livingstone, 2017; Kumar & Schoenebeck, 2015; Marasli et al., 2016; Moser et al., 2017). Taddicken (2014) proposed there were two forms of self-disclosure: disclosure of factual information and disclosure of sensitive information, the former referred to disclosing one's personal facts such as gender, age, or hobbies, and the latter referred to disclosing one's feelings and thoughts. Specifically, Taddicken (2014) highlighted that although sensitive information disclosure is subjective, it still cannot be treated the same as factual information disclosure. As a kind of online disclosure behavior, sharenting also has two forms of disclosure: factual information disclosure where parents share children's personal information and sensitive information disclosure where parents disclose their emotional experiences about parenting. For self-disclosure scholarship, this study investigated Taddicken's (2014) conceptual questioning by identifying and proposing the emotional disclosure of sharenting. Therefore, it is recommended that both sharenting and self-disclosure scholars should consider both forms of disclosure behaviors based on the results of this study.

This study also has several limitations. Like every other sharenting research study, this one was conducted in western countries. The generalizability of this study's conclusions might not hold in eastern countries. Therefore, I encourage scholars from eastern countries to investigate sharenting behaviors. Secondly, most of the interview participants received a master's degree or higher. Parents from other educational levels may interpret the sharenting behaviors differently; and thus, future research would benefit from recruiting a more diverse group of participants to investigate their sharenting behaviors.

CHAPTER THREE: STUDY TWO

Sharenting Scales in Previous Studies

We lack a valid scale to measure sharenting behaviors. Most sharenting studies are of a qualitative nature, and only two sharenting studies have measured parents' sharenting behaviors: Ranzini et al.'s (2020) paper and Hinojo-Lucena et al.'s (2020). Unfortunately, these two studies failed to provide a valid scale to measure the sharenting construct. Ranzini and her colleagues did not define the sharenting construct, and they used only one item to measure sharenting behaviors on Instagram. Hinojo-Lucena (2020) included sharenting motives and privacy problems in the sharenting scale, which did not precisely capture the theoretical meaning of the sharenting construct. Given the validity issues, it is necessary to develop a valid sharenting scale that reflects a theoretical meaning of sharenting.

Instead of defining and explicating the sharenting construct, Ranzini et al. (2020) claimed that sharenting is a self-promotion practice enacted by parents, saying that parents use children's information as part of their online self-presentation. However, in their narrative, Ranzini and her colleagues argued that self-presentation is a motive for sharenting and that sharenting is a behavior by which parents share pictures and videos of their children. However, self-promotion limits interpretation of content to only posts about children's accomplishments and milestones, and sharenting is more complex than self-presentation. They measured sharenting by asking participants one frequency question: "On average, how often do you post pictures or videos featuring your children on Instagram." This single-item measurement has two weaknesses. First, single-item measure should not be used to measure an abstract construct, which can result in large measurement error (Bergkvist & Rossiter, 2007; Churchill, 1979; Nunnally & Bernstein, 1994). In other words, single-item measurement has low validity.

Hinojo-Lucena and his colleagues (2020) defined sharenting as a behavior by which parents or relatives share images of their children. Informed by prior sharenting studies, they developed a scale to "analyze the topics related to sharenting" (Hinojo-Lucena et al., 2020). According to their work, the scale had eight items that measured posting frequency, platforms used, sharenting motivations, and privacy. Specific items were not provided, so there is no way to evaluate the quality of each item. However, Hinojo-Lucena et al.'s scale may suggest that items may or may not reflect a theoretical definition of sharenting or they may reflect items that should be used in independent concept measures. Their interpretation implies that sharenting is an information-sharing behavior; however, sharenting motivations and privacy are concepts related to sharing behaviors, but not sharing behavior itself. Therefore, their scale may not capture the theoretical meaning of the sharenting construct and includes other concepts that do not represent sharenting behaviors.

Sharenting Items Generation

Before generating a pool of items, one needs to be clear about what to include in a measure (DeVellis, 2012). One should understand the theoretical meaning of the concept, identify whether it is multi- or uni-dimensional, and distinguish the contexts the concept covers (Chaffee, 1991; Carpenter, 2018; DeVellis, 2012). Informed by prior sharenting literature, I defined sharenting as communicative behaviors in which parents disclose children's personal information and emotional experiences about their children and parenting in mediated spaces. Important elements in this definition such as "disclose," "children's personal information," "emotional experiences," "parenting," and "mediated spaces" are example elements of my items. As the sharenting construct may have two dimensions -- informational disclosure and emotional disclosure -- I generated one group of items that focused on informational disclosure and another

that focused on emotional disclosure. For the informational disclosure dimension, items were created to reflect "disclose," "children's personal information," and "mediated spaces." Example items include "I post about my child(ren) experiencing a key date online," "I document my child(ren)'s growth and development online," and "I record my child(ren)'s firsts online." For the emotional disclosure dimension, items were created to reflect "disclose," "emotional experiences," "parenting," and "mediated spaces." Example items are like "I share parenting strategies for other parents on how to help their children receive the best education" and "I disclose the emotional challenges I experienced during parenting."

For the informational disclosure, results from study 1 indicated that sharenting content consisted of children's social activities; milestones; accomplishments; qualities; parenting problems and advice; parents' self-reflection; and balancing parenting and work. Thirty-two items were created based on the Study 1 results. I first wrote a statement that contained the element I want to include in the measure, then I paraphrased the statement to convey the same meaning. For example, to reflect the element of children's social activities, I first wrote the item "I share photos or videos of my children's activities with family and friends," then paraphrased the "activities with family and friends," and wrote "I post about my children's interesting interactions or conversations with family members or friends."

Regarding the emotional disclosure, results from study 1 suggested that sharenting content consisted of parents' emotional expression and self-care strategies. As previous studies did not include emotional disclosure in the sharenting construct, I created 20 items for emotional disclosure, 12 of which reflected emotional expression and eight of which reflected self-care strategies. The same as with informational disclosure items, I first wrote out statements that directly described emotional expression, and then I paraphrased the statement to convey the same

meaning. For example, I first wrote, "I vent about my negative feelings about parenting," and then paraphrased "vent about my negative feelings" as "I disclose the emotional challenges I experienced during parenting," expressing the same idea. Example items for self-care strategies were like these: "I write about the process of how I rebuilt my state of mind to be a better parent" and "I share stories of my emotional growth as a parent."

Items should be as exhaustive as possible to ensure they cover all the aspects of a concept during the item development phases (DeVellis, 2012). Generally, the size of an original item pool should be two to three times the final item scale. I expected my final sharenting scale to have 15-20 items to be both usefulness and meet the criteria of parsimony. Therefore, I developed a sharenting scale of 62 items. I developed 10 items based on previous sharenting literature. Items such as "I document my children's growth and development" and "I post small daily cute moments of my children's life" were informed by Minkus et al. (2015), Wagner and Gasche (2018), Verswijvel et al. (2019), and Fox and Hoy (2019).

Expert Feedback

Asking for experts' feedback on a scale is a necessary step to improve the item quality (Carpenter, 2018). To improve the sharenting item quality and ensure each item reflects the overarching construct, I asked one scale development expert, one sharenting blogger, and one interview participant to help me scrutinize the scale and assess the validity of each item. Guided by DeVellis (2015) scale development instructions, I emailed them my original scale with 62 items and asked them to help me check if my scale meets the following criteria: a) items were measuring the sharenting construct based on my definition; b) the meaning of items were clear; and c) items were concise. Based on their feedback concerning grammar issues, face validity, and redundancy, four items were deleted for redundancy and 58 were kept for the next step.

Study 2 Method

Sample and Sampling Procedure

A quantitative survey with 58 sharenting questions was administered to 531 parents in the United States. I used Qualtrics to recruit participants and distribute the survey. Of 531 U.S. participants in total, 24.0 percent (n=127) of parents received a high school diploma or vocational training, 46.9 percent (n=249) of parents received a bachelor's or equivalent degree, 22.2 percent (n=118) of parents received a master's or a specialist's degree, 7.2 percent (n=38) of parents earned a doctorate or professional doctorate degree, and two parents received other educational degrees. The descriptive data also showed that most participants responded that they identified as white (72.3%, n = 384), followed by Black or African American (12.0 %, n = 64), Hispanic (8.3%, n = 44), Asian (3.7%, n= 20), American Indian (1.1%, n = 6), Middle Eastern (0.1%, n =1), Native Hawaiian (0.1%, n =1), and other race or ethnicity (1.5%, n=8). The survey also asked parents about their marital status, finding that 52.5 percent (n=385) of parents were married, 2.0 percent (n=11) were widowed, 5.0 percent (n=27) were divorced, six were separated, 18.6 percent (n=99) were single, and the three parents did not disclose their marital status. Eighty-seven point four percent (n=464) of parents responded that their children were biological, 3.2 percent (n=17) of parents stated that they were step-parents, eight parents reported their children were adopted, 4.7 percent (n=25) of parents reported they had both biological and step-parent/children, 2.5 percent (n=13) of the parents had both biological and adopted children, and four parents had both step-children and adopted children. The average age of participants was 35 years old. Each participant had, on average, one to two children, averaging an age of 7.8.

Table 2
Descriptive statistics of EFA participants (N=531)

Demographics	Count	Percent

Table 2 (cont'd)

Gender

Male	217	40.8%
Female	312	58.7%
Other	2	0.4%

Relationship with child(ren)

Biological	464	87.4%
Stepchild	17	3.2%
Adopted	8	1.5%
Biological & Stepchild	25	4.7%
Biological & Adopted	13	2.5%
Adopted & Stepchild	4	0.7%

Marital Status

Married	385	52.5%
Widowed	11	2.0%
Divorced	27	5.0%
Separated	6	1.1%
Single	99	18.6%
Other	3	0.5%

Education

Highschool	127	24.0%
Bachelor's	249	46.9%
Master's	118	22.2%
Doctorate	38	7.2%
Other	2	3.8%

Race/Ethnicity

White	384	72.3%
Native Hawaiian	1	0.1%
Middle Eastern	1	0.1%
Hispanic	44	8.3%
Black/African American	64	12.0%
Asian	20	3.7%
American Indian	6	1.1%
Other race, ethnicity	8	1.5%

Parents who participated in this survey had to meet the following two criteria: had at least one child aged between 0 and 13 years old and had experiences of sharing children's information or parenting experiences online. To ensure that parents who participated in this study met both criteria, two screening questions (i.e., "Do you have at least one child under 13 years old?" and

"Do you have experiences of posting your children's information or your parenting experiences online?") were added at the beginning of the survey. After parents said *yes* to both questions, they were required to answer 52 questions about their behaviors of disclosing their children's information or parenting experiences online. They were also asked to answer the degree to which each item was true for their disclosure behaviors on a seven-point scale ranging from (1) *very untrue of me* to (7) *very true of me*. I specifically provided a definition of "online" for participants to answer the second screening question: Online here refers to social media platforms (e.g., Facebook, Instagram, Reddit, Twitter, WeChat), blogs, parenting apps, parenting websites, or online parenting forums.

Exploratory Factor Analysis

I first examined Barlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) to ensure the collected data was appropriate for exploratory factor analysis (EFA). I proceeded to the EFA when the KMO value was higher than 0.6 and the Barlett's chi-square test was significant (McCrosky & Young, 1979; Pett et al., 2003; Tabachnick & Fidell, 2007). Next, I submitted 531 responses for EFA. When identifying the latent factors, I chose principal axis factoring over principal components analysis (PCA). This is because PCA includes error variance and inflates the size of factors (Haig, 2005; Worthington & Whittaker, 2006). When determining the number of factors, I used a combination of the following criteria: scree plot, parallel analysis, MAP, and theoretical convergence (Carpenter, 2018). Scree plot is recommended to estimate the number of factors. To determine the number of sharenting factors, I found the elbow point on the plot (McCrosky & Young, 1979; Pett et al., 2003; Preacher & MacCallum, 2003; Reise et al., 2000). The parallel analysis and MAP were also recommended to determine the number of factors

(Carpenter, 2018; Humphreys & Montanelli, 1975; Kline, 2013). I used R studio to help me compute the output of parallel analysis and MAP.

Item Deletion and Retaining

Item deletion is also an important process in scale refinement. Multiple criteria can be used in this process, such as theoretical convergence, cross-loadings, communalities, item loadings, factor reliability levels, and parsimony (Carpenter, 2018). For this study, I checked cross loadings, item loadings, communalities, and factor reliability levels. The recommended cut-off level for item loadings is 0.32. Any item with loading lower than 0.32 was deleted. Items that loaded under more than one factor were cross-loadings, and they were deleted as well. The acceptable Cronbach's alpha was 0.7. The common range of a communality for an item is between 0.4-0.7 (Costello & Osborne, 2005). Items with community value lower than 0.4 were deleted. When items' meanings were similar, I deleted items with lower communalities.

Study 2 Results

EFA

Before conducting the EFA, I examined the dataset for missing data, outliers, and normality. There were no incomplete responses or missing cases. The mean ranged on the seven-point scale from 4.46 to 5.78 with standard deviations ranging from 1.54 to 1.86. Skewness ranged from -0.41 to -1.17, and kurtosis ranged from -1.11 to 0.87.

An exploratory factor analysis was conducted to test whether the construct model of sharenting was appropriate. Bartlett's test ($\chi^2 = 26909.75$, $df = 1653$, $p < .001$) and KMO statistic of 0.99 suggested it was appropriate to proceed with principal axis factoring and a promax rotation. The in-depth interviews suggested two factors, the literature review suggested two factors, parallel analysis suggested two factors, MAP result suggested three factors, and the scree

plot suggested two factors. Therefore, both three-factor and two-factor models were examined. However, the three-factor solution was rejected because all six items in the third factor were cross-loadings. As a result, the two-factor solution was retained for the EFA.

I reduced the number of items by employing both objective and subjective criteria. First, I checked the item loadings that were below 0.32. There was no item loading below 0.32. Then, I checked for cross-loadings and found fourteen items loading under two factors at the same time. After deleting fourteen items, the total number of items was 44, which was not practical or usable. Next, I calculated the reliability for each factor, and found one factor's reliability was 0.94 and the other one was 0.98, which indicated a high redundancy among these items. I checked both objective communalities and the subjective meaning of items. When items had similar meaning, I deleted ones with low communalities or lower loadings. For example, between "I offer suggestions on how to balance both parenthood and my job" and "I share my situations about juggling parenting, work, and housework," I chose the former because it had both higher communality and loading than the latter one. In the process, I deleted 19 items. I also deleted items that were too specific to the sharenting content because these items might have only captured one side of the central ideas. For example, I deleted "I give suggestions to other expecting moms on how to navigate pregnancy," as it only focused on sharenting during the pregnancy period. In this process, I deleted 10 items.

Of the 52 items included in the exploratory factor analysis, 15 items were retained for two dimensions in the end. I conducted another EFA on the 15 items. Results showed that all item loadings were above 0.32 and no cross-loadings appeared. The total variance explained by the model was 63 percent (see Table 3).

Table 3

Exploratory factor pattern coefficients for principal axis extraction and promax rotation of the Sharenting two-factor structure.

Scale items	Mean	Factor 1	Factor 2	h^2
1. I offer suggestions on how to balance both parenthood and my job.	5.75	**0.88**	-0.09	0.69
2. I explain my interpretation of different parenting approaches with other parents.	5.80	**0.88**	-0.04	0.72
3. I share parenting strategies for other parents on how to help their child(ren) receive the best education.	5.76	**0.83**	-0.02	0.67
4. I share advice on how one can become a better parent.	5.74	**0.79**	0.00	0.63
5. I offer suggestions on child(ren)'s mental health and development to help other parents.	5.77	**0.78**	0.00	0.61
6. I write about how to make life decisions that involve child(ren) (e.g., quit a job for homeschooling, move to another place for better education).	5.59	**0.77**	0.02	0.61
7. I share stories of my emotional growth as a parent.	5.97	**0.75**	0.06	0.64
8. I share my perspectives on how parents can support their child(ren)'s physical health and development.	5.89	**0.74**	0.09	0.65
9. I talk about the problems associated with parenting.	5.93	**0.67**	0.14	0.59
10. I announce my child(ren)'s accomplishments to family and friends.	6.44	-0.08	**0.88**	0.68
11. I share my child(ren)'s milestones (e.g., first words, graduation, celebrating a birthday).	6.49	-0.03	**0.81**	0.63
12. I post about my child(ren) experiencing a key date (e.g. birthday, first day of school).	6.39	-0.06	**0.79**	0.57
13. I share entertaining stories about my child(ren) with family and friends.	6.47	0.03	**0.78**	0.63
14. I share photos or videos of my child(ren)'s activities with family and friends.	6.53	0.06	**0.74**	0.61
15. I document my child(ren)'s growth and development.	6.39	0.16	**0.61**	0.53

Note: Principal Axis factoring and Promax rotation were used. Factor loading cutoff was 0.32. Item 1-9 = parenting information disclosure (variance= 38%, eigenvalue= 8.29, mean=5.80, SD=1.46, α = 0.93); Item 10-15 = Children's information disclosure (variance = 25%, eigenvalue = 1.89, mean=6.45, SD=1.29, α = 0.90).

Study 2 Discussion

In Study 2, I developed the sharenting scale and determined a possible factor structure. The sharenting scale was based on a literature review (Ammari et al., 2015; Minkus et al., 2015; Verswijvel et al., 2019; Wagner & Gasche, 2018) and was informed by the qualitative interview results from Study 1. The results of exploratory factor analysis identified two factors representing the sharenting construct. One of them is labeled as children's information disclosure, as all items reflect that it is a behavior that parents make children's activities, accomplishments, milestones, etc. The other dimension, however, did not reflect the meaning of emotional disclosure based on a review of the items. The items that loaded under the second dimension reflected a form of information disclosure revolving around parents' experiences, suggestions, and interpretations about raising children. Based on this review of items, I relabeled the second dimension as parenting information disclosure.

Children's Information Disclosure

Children's information disclosure is a critical component of sharenting, and the results are consistent with previous sharenting studies (Ammari et al., 2015; Fox & Hoy, 2019; Minkus et al., 2015; Verswijvel et al., 2019; Wagner & Gasche, 2018). The present study provided quantitative evidence to confirm qualitative research that sharenting content includes children's activities with family and friends; accomplishments; growth and development; milestones; and interesting stories. All items represent the posting of children's information that is positive in nature. Kumar and Schoenebeck (2015) found that mothers posted positive information about their children to communicate to others that they are good mothers. Results of this study not only confirmed Kumar and Schoenebeck's findings, but this study also found that this behavior applied to both mothers and fathers.

Parenting information disclosure

Items loaded under this dimension reflected that parents discloses suggestions, interpretations, strategies, advice, stories, and perspectives about parenting. Parenting topics, such as how to become a better parent, how to support children, how to educate children, and how to solve parenting problems, appear across all items of this dimension. As all items of this dimension unanimously reflected the parenting concept, I decided to relabel this dimension to parenting information disclosure.

The finding that the other dimension of sharenting is composed of parents sharing their parenting problems, advice, and self-reflections strategies differs from what I proposed before -- that the other dimension is emotional disclosure. Parenting information disclosure, nevertheless, implies the exchange of information with the intent of supporting each other in their role as parents. The expressions of support may serve as self-care. In Study 1, I defined emotional disclosure as parents disclose both positive or negative emotional experiences about parenting online. Parents' emotional experiences of parenting could include the stresses of parenting (Bartholomew et al., 2012), isolation resulting from children's health problems (Huws et al., 2001), or postpartum depression (Niela-Vilén et al., 2014). Parents may share how they recovered from postpartum depression or how they cope with the stress of being a parent. Therefore, parenting information disclosure may encompass emotional disclosure.

The finding that parenting information disclosure is a component of sharenting suggests that parents indirectly disclose children's information while sharing parenting experiences. Steinberg (2016) found that children's information is publicly released when a mom used blogs to seek help on how to cope with her son's misbehavior. Based on the review of items, parenting information disclosure is when one posts their experiences or tells a story from the parent's

perspective, representing motherhood or fatherhood. Nevertheless, children's personal

information may be inadvertently disclosed through posts about daily activities, conversations,

health problems, or education issues (Steinberg, 2020).

People disclosing information that involves others is called interdependent information

disclosure (Alsarkal, Zhang & Xu, 2018; Chutikulrungsee & Burmeister, 2017). Parents'

disclosure about themselves that involves their children's information suggests that sharenting

has an interdependent relationship to disclosure (Alsarkal et al, 2018; Chutikulrungsee &

Burmeister, 2017). Prior scholars attributed such interdependent information disclosure to the

context collapsed digital platform (Alsarkal et al, 2018). However, parenting information

disclosure serves as an exception, as the interdependent nature of sharenting results from the

interdependent relationship between parents and children, not the context collapsed platforms.

Such a mutually reliant relationship gives rise to parents and children sharing the same

experiences. When parents share their parenting experiences or reveal their parenting struggles,

they inevitably give away information about their children. The interdependent nature of

sharenting implies that children's information may be disclosed unintentionally by parents.

Conclusion

This study made theoretical contributions to sharenting literature by developing and

validating a sharenting scale. The results demonstrate that the sharenting construct is composed

of two factors: children's information disclosure and parenting information disclosure. The

identification and validation of two dimensions sheds light on understanding sharenting

behaviors. Previous sharenting studies suggested that parents intentionally disclose children's

information online, and violate children's privacy by not asking their permission or letting them

make a choice of what is posted about them (Blum-Ross & Livingstone, 2017; Fox & Hoy, 2019;

Siibak & Traks, 2019; Verswijvel et al., 2019). This study found the interdependent nature of sharenting and proposes that parents may unknowingly and unintentionally disclose their children's information when they tell their parenting stories. Scholars in the future may want to try to come up with a solution or design an intervention that can help parents become more aware of how children's information being disclosed could be harmful.

This scale has a variety of practical applications. First, parents can use this scale to self-assess the degree of their sharenting behaviors and evaluate their practices. Second, educational organizations or institutions can use this scale to assess the sharenting degree of students' parents and decide how to design corresponding workshops that educate parents about the potential risks of sharenting. Third, with this scale, sharenting scholars can quantitatively test the relationship among sharenting and other potential predictors, such as social benefits, privacy concerns, privacy literacy, etc. Results of the tested relationship could be used to develop interventions or educational programs that help parents become better stewards of their children's data.

This study, nevertheless, has several limitations. First, this study only provides the types of information revealed by sharenting content. As sharenting closely relates to children's privacy, the depth of the content or the intimacy of the information cannot be measured by this scale. Second, the item-generation process is a subjective one. Even though I asked experts for their feedback and followed standard procedures, it is still possible that some aspects of sharenting were not manifested in the items. Third, this study's sample was not a diverse and most participants were white. It is necessary to replicate this study with a larger and more diverse sample to confirm and validate this scale.

CHAPTER FOUR: STUDY THREE

Parents have the responsibility to protect their children's information online (Kumar & Schoenebeck, 2015). Previous studies showed that even though parents have concerns about children's privacy, they continue to post children's information online (Chalklen & Anderson, 2017; Kumar & Schoenebeck, 2015; Lupton, 2017; Ouvrein & Verswijvel, 2019; Wagner & Gasche, 2018). The widely accepted reason for this phenomenon is that parents receive benefits of sharing children's information, therefore, continue engaging in sharenting behaviors (Chalklen & Anderson, 2017; Kumar & Schoenebeck, 2015; Wagner & Gasche, 2018). For example, Wagner and Gasche (2018) found that through sharenting that parents receive validation and confirmation of good parenting; get support from friends and family; keep others informed; and praise their children to the world. Although some parents have concerns that their children's privacy might be violated, their expected benefits outweigh the concerns (Kumar & Schoenebeck, 2015). Therefore, whether parents engage in sharenting or not is an outcome of a benefits and risks calculation.

Findings about the influence of privacy concerns and expected benefits on sharenting are present in qualitative studies, but their relationship to sharenting has not been fully supported by quantitative evidence. To date, there is only one study that investigated the relationship between parents' privacy concerns and sharenting behaviors (Ranizi et al., 2020). Ranizi and her colleagues conducted a quantitative survey to investigate the influence of privacy concerns, privacy self-efficacy, and peer influence on sharenting behaviors. However, Ranizi and her colleagues only considered the factor of privacy concerns influence on sharenting, while not examining the expected benefits.

To provide quantitative evidence on the impact of privacy concerns on sharenting and to also investigate the impact of expected benefits, I decided to use the privacy calculus model to predict the sharenting behavior. The notion of privacy calculus model is that people disclose information based on a calculation of costs and benefits. Given sharenting is defined as a disclosure behavior and there are expected benefits and privacy concerns involved, the privacy calculus model can be applied in predicting sharenting behaviors.

Drawing from previous research that applied the privacy calculus model, I proposed that privacy concerns and privacy self-efficacy are the costs, while self-presentation, social capital, and enjoyment are the benefits (Chen, 2018; Dienlin & Metzger, 2016; Ranizi et al., 2020; Trepte et al., 2017). The social norms predictor is added because parents' sharenting behaviors might be largely influenced by close friends and other family members.

Predictors of Sharenting

Privacy Calculus Model

The privacy calculus model has explained the factors that influence information disclosure in the context of social media platforms (Jozani et al., 2020), location-based apps (Chen, Su & Quyet, 2017), online health communities (Kordzadeh, Warren & Seifi, 2016), and e-commerce websites (Bol et al., 2018). The model originally comes from the economic field and assumes that people's decisions are an outcome of a rational cost-benefit calculation (Culnan & Armstrong, 1999; Dinev & Hart, 2006). The assumption of the privacy calculus model is that people rationally weigh the potential benefits and risks that might be brought by information disclosure and then determine whether to disclose that personal information (Chen, 2018; Dienlin & Metzger, 2016; Trepte et al., 2017). The potential benefits include social capital (Chen, 2018), enjoyment (Jozani et al., 2020), social benefits (Krasnova et al., 2010; Trepte et al., 2020), efficiency benefits (Jozani et al., 2020), personalization (Gutierrez et al., 2019), and

monetary rewards (Gutierrez et al., 2019). In the context of social media platforms and mobile apps, the main perceived benefits of information disclosure are obtaining needed information and fulfilling social needs (Pentina et al., 2016). The cost in the privacy calculation model is measured by privacy concerns. Prior studies only considered the institutional privacy concerns and defined them as the extent to which an individual is concerned about the websites' collection and use of their personal information (Hong & Thong, 2013). However, scholars recently pointed out that this definition omitted the social privacy concern that disclosed personal information can also be accessed and used by people who use the same platform (Jozani et al., 2020). Jozani et al. (2020) proposed that privacy concerns should include both institutional and social privacy concerns finding that both privacy concerns were negatively related with information disclosure. Therefore, the privacy concerns in the privacy calculus model should encompass both institutional and social privacy concerns.

According to the privacy calculus model, people decide to engage in information disclosure because they think the returns of the disclosure will offset the privacy risks; in other words, the privacy violation is the price to attain the expected rewards (Krasnova et al, 2010). Prior studies found that the impact of perceived benefits is stronger than the impact of perceived risks when making decisions as to whether to disclose (Acquisti et al., 2015; Bol et al., 2018; Dienlin & Metzger, 2016; Krasnova et al., 2010). This is because people value the immediate fulfillment of perceived rewards more than the potential future privacy risks.

The privacy calculus model has successfully explained information disclosure in the context of internet use (Culnan & Armstrong, 1999) and online shopping (Dinev & Hart, 2006) in terms of personal data use. The privacy calculus model has been applied to examining why people disclose personal information on social media spaces (Chen, 2018; Dienlin & Metzger,

2016; Krasnova et al, 2010; Min & Kim, 2015; Shibchurn & Yan, 2015; Sun, Wang, Shen & Zhang, 2015; Trepte et al., 2017). Most of previous studies found a significant relationship between social media users' perceived benefits and privacy concerns with the disclosure behavior, which further corroborates the usefulness of privacy calculus theory in explaining online disclosure behaviors (Chen, 2018; Dienlin & Metzger, 2016; Krasnova et al, 2010; Min & Kim, 2014; Sun, Wang, Shen & Zhang, 2015; Trepte et al., 2017).

Privacy Calculus Model and Sharenting

Privacy in social media contexts is primarily about processes that an individual determines when, how, and to what extent others can have access to the information of self (boyd, 2012; Humbert, Trubert & Huguenin, 2019; Trepte, 2020). Sharing information with others can bring not only social gratifications but also privacy risks as well (Altman, 1975). Every person has an ideal level of privacy in their mind. To maintain that ideal level of privacy, individuals constantly regulate access to their information by either disseminating or withholding personal information (Dienlin & Metzger, 2016; Petronio, 2015).

Privacy in sharenting contexts refers to the processes that parents determine to control others' access to their children's information. Research has shown that parents have privacy concerns about sharing their children's information online, but also weigh sharing with expectations of social benefits at the same time (Kumar & Schoenebeck, 2015). Given that privacy concerns and expected simultaneous benefits both play a critical role in the sharenting behaviors, this study decided to use the privacy calculus model to explain how parents make decisions to share their children's information on social media platforms.

Based on the privacy calculus model, it is expected that the immediate benefits outweigh future risks in the context of parents and their sharing behaviors. When parents think they can receive social benefits and they expect few privacy costs; the privacy risks are unknown or

unclear; or they are confident that they can minimize the negative consequences, the sharenting

behavior is likely to occur. In fact, research has shown that parents are motivated to share

children's information because they want to connect with friends and family; receive support and

validation; and find belonging (Brosch, 2018; Steinberg, 2016). Although parents have concerns

about their children's privacy loss, the expected benefits outweigh their privacy concerns in most

cases (Brosch, 2018; Kumar & Schoenebeck, 2015). Another case is that parents are not fully

informed of the social media privacy problems and therefore are not aware of the negative

consequences of sharenting (Steinberg, 2016). It has been found in Ouvrein and Verswijvel's

(2019) study that adolescents' parents did not possess a strong understanding of privacy as their

children, and often adolescents needed to teach the parents about privacy settings on social

media. Additionally, parents can overestimate their privacy understanding (Kumar &

Schoenebeck, 2015). In any case, parents may perceive the privacy risk is controllable, or not

important, and are offset by expected benefits. Informed by the privacy calculus model, this

study proposed that privacy concerns, privacy self-efficacy, and perceived risks are negatively

related to sharenting, whereas social benefits and self-presentation are positively related to

sharenting.

Sharenting Costs: Privacy Concerns and Privacy Self-efficacy

According to the privacy calculus model, the *cost* of social media self-disclosure

includes privacy concerns (Chen, 2018; Dienlin & Metzger, 2016; Min & Kim, 2015). In an

extended privacy calculus model, Dienlin and Metzger (2016) found that privacy self-efficacy

was also a significant explanatory variable explaining social media self-disclosure. This finding

was corroborated by Chen's (2018) cross-sectional data from both Hong Kong and the United

States. There is a scarce number of sharenting studies using quantitative methods or a formal

theoretical model to test the relationship between factors and sharenting behaviors. Ranzini et al.

(2020) included privacy concerns and privacy self-efficacy in predicting sharenting. These two variables, however, were not selected from a theoretical model. Therefore, this study is the first one to use a formal theoretical model to explain and predict the sharenting behavior.

Privacy concerns. Both institutional and social privacy concerns have been repeatedly identified as key factors in discouraging users from disclosing personal data in the realm of either e-commerce or social media networks (Kransnova et al., 2010; Malhotra et al., 2004; Min & Kim, 2015). Institutional privacy concerns arise in the context of e-commerce that people are worried about how their information is collected and used by online stores or companies. When their customers realize their personal information is under threat, online stores can suffer distrust leading to losses in revenue. Social media networks also need users' personal information to make transactions with third parties. In social media contexts, users who have concerns about their privacy tend to disclose less personal information or engage in more privacy-protective behaviors (Dienlin & Trepte, 2015). Besides institutional privacy concerns, social privacy concerns that the disclosed information can be misused by other users, emerged as another important factor that discourages people from disclosing information (Jozani et al., 2020). In sharenting contexts, parents are concerned that their children's personal information may be accessed, collected, and misused by both institutions and other persons who use the same platform. The concern about privacy suggests that the parents are fearful of potential losses or dangers to their children due to sharing their children's information.

This study, therefore, hypothesized that privacy concerns are negatively related to sharenting behaviors. The more privacy concerns parents have about sharing children's information online, the lower levels of sharenting. Parents who are more concerned about children's privacy tend to share less frequently, disclose less personal information, and limit

sharing within a smaller social circle. In contrast, parents who are less worried about children's privacy will share more frequently, disclose more personal information, and share within a larger social circle. Some parents, in fact, do have concerns about their children's privacy being violated due to oversharing, creating children's digital footprints online and losing control of children's information (Brosch, 2018; Kumar & Schoenebeck, 2015). As their children's privacy protectors, parents are becoming increasingly skilled at employing privacy settings to protect children from potential harm (Chalklen & Anderson, 2017). Nevertheless, the desire for the benefits of sharenting prevails in the parent's mind most of the time (Chalklen & Anderson, 2017; Kumar & Schoenebeck, 2015; Steinberg, 2016).

  Privacy self-efficacy. Extant studies provided conflicting evidence about the relationship between privacy self-efficacy and online self-disclosure (Chen, 2018; Dienlin & Metzger, 2016). One line of research posits enacting privacy protection behaviors require an individual to have a certain amount of knowledge and understanding of a social media's infrastructure (Marwick & boyd, 2010). Users who are confident in their knowledge and ability will protect their online privacy by deleting embarrassing posts, changing privacy settings, limiting profile visibility, or asking friends to remove name tags (Chen, 2018). Following this rationale, the higher perceived privacy self-efficacy should result in more strict privacy protections and less disclosure. However, another line of studies argues that perceived self-efficacy leads to users being more confident about their disclosure behaviors (Chen & Chen, 2015). As users learn more skills in implementing privacy settings, they may not be that concerned about their information being misused because they believe that the social media privacy settings are well established, which results in more disclosure.

Given the conflicting findings and theoretical possibilities about the relationship between privacy self-efficacy and self-disclosure, this study proposed a research question that perceived self-efficacy may have a positive or negative relationship with sharenting behaviors because parents may engage in more protecting behaviors or it also may have a positive relationship with sharenting behavior because parents may feel more confident in their sharenting skills.

The relationship between privacy concerns and privacy self-efficacy has rarely been investigated. Dienlin and Metzger (2016) and Chen and Chen (2015) found there was a negative relationship between privacy concerns and privacy self-efficacy in their extended privacy calculus model. As there is not sufficient literature to support the negative relationship between privacy self-efficacy and privacy concerns, this study proposed a research question regarding the relationship between privacy concerns and privacy self-efficacy.

Sharenting Benefits: Social Capital, Self-presentation, Enjoyment and Injunctive Norms

In spite of perceived privacy concerns, parents still tend to share children's information on social media platforms. The reason why parents disregard privacy concerns and still engage in sharenting behaviors are the social benefits parents expect to attain through sharenting. According to the privacy calculus model, disclosure behaviors are primarily motivated by the expected social benefits rather than future risks (Kransnova et al., 2010). Prior studies applying the privacy calculus model have identified three major factors including increasing social capital (Chen, 2018; Ellison et al., 2007), enacting self-presentation (boyd, 2007), and seeking entertainment (Choi & Bazarova, 2015) as expected benefits. Informed by the privacy calculus model, this study proposed that parents' expected benefits such as social capital, self-presentation, and entertainment are three main drivers of their sharenting behaviors.

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Social capital. There are two categories of social capital: bonding social capital and bridging social capital (Putnam, 2000). Bonding capital is the strongest form of social capital which refers to the strong ties an individual has with their family or friends, from which one may receive substantive benefits such as emotional support and financial support (Ellison, Vitak, Gray & Lampe, 2014; Putnam, 2000). Bridging capital is derived from weaker ties or distant relationships, from which one can receive benefits such as the access to novel information and diverse perspectives (Ellison et al, 2014; Putnam, 2000). Social capital has received a great deal of attention in social media scholarship because social media affordances reduce the cost of cultivating weaker ties and facilitating the maintenance of these connections (Ellison et al., 2014; Tong & Walther, 2011). Social media self-disclosure and social capital research has provided strong evidence that social capital benefits are one of the major motivations that lead users to be highly involved in disclosing behavior (Bazarova, 2014; Chen, 2018; Ellison et al., 2007; Ellison, Steinfield, & Lampe, 2011; Min & Kim, 2015; Choi & Bazarova, 2015). Therefore, this study hypothesized that accumulating social capital is one of the primary social benefits that parents desire when they sharent.

Sharenting behaviors can help parents accumulate social capital, such as satisfying the need of belongingness, gaining emotional support, accessing new information, establishing new relationships, and maintaining old connections (Brosch, 2018; Fox & Hoy, 2019; Ouvrein & Verswijvel, 2019). First-time parents can get advice from experienced parents online to help them physically and psychologically adjust to the stresses of this big life change. The emotional support from close friends and family can alleviate new parents' pressure from uncertainties and inexperience of taking care of a new-born baby (Fox & Hoy, 2019; Lupton, 2017). For experienced parents, they like to build an online community based on the similar parenting

problems they are facing in their roles as a parent, where they can share parenting challenges and experiences; discuss children's growth and education; and exchange information and support each other (Blum-Ross & Livingstone, 2017; Siibak & Traks, 2019). Engaging in sharenting behaviors can also help parents keep remote family members and friends updated or rebuild the connection with friends who have not been in touch for a while (Ouvrein & Verswijvel, 2019; Siibak & Traks, 2019). To summarize, sharenting behaviors can bring parents both bonding and bridging social capital.

Self-presentation. Besides social capital, self-presentation was also regarded as a central factor contributing to people's disclosure behaviors on social media platforms (boyd, 2007; Kransnova et al., 2010). Self-presentation is a behavior that performs to present a favorable and appropriate impression to others (Goffman, 1959). Without the pressure of constantly adjusting nonverbal behaviors to give a good impression, people have more time and sufficient resources to design and curate their image on social media platforms (Hogan, 2010). Driven by the desire to present a desirable version of oneself, social media users tend to share more positive information including moments of pride (Ellison et al., 2006).

Social media platforms also give parents the opportunity to indirectly self-present themselves (Ouvrein & Verswijevel, 2019). Individuals that post about the achievements of closely related ones to manage their online presentation of self is called indirect self-presentation (Tedeschi, 2013). When an individual indirectly self-presents with a significant one's qualities, the audience usually attributes those qualities to the self-presenting person. In sharenting, parents use children's academic achievements to self-present themselves as a successful parent. In order to be viewed as competent mothers or fathers, parents share their children's information to confirm their successes in parenthood (Kumar & Schoenebeck, 2015). Collett (2005) found that

mothers posted about their children to create a favorable and successful image of parenthood and people would also consider the representation of children as a reflection on mothers. Wagner and Gasche (2018) found that self-presentation was one of the dominant factors behind sharenting behaviors, because it brings parents feelings of pride, accomplishment, and successfulness. Therefore, this study hypothesized that parents' desire to present the parenting competencies drive them to sharent on social media platforms.

Perceived enjoyment. People can receive inherent enjoyment by engaging in an activity (Chen, 2013b; Krasnova et al., 2010; Sun, Wang, Shen & Zhang, 2015). Enjoyment indicates that people are doing something because it is just entertaining. Prior scholars had identified enjoyment as a powerful predictor in affecting people's online self-disclosure behavior (Sun et al., 2015). In fact, the social media network is unanimously regarded as a hedonic technology, which releases new, interesting, and interactive features every year to attract new users to adopt it and encourage old users to continuously experience the platform (Krasnova et al., 2010; Sun et al., 2015). For example, the avatar pictures and names, styling options, picture filter options and a variety of interesting content are the typical examples which users consider enjoyable to play with (Casaló et al., 2017; Seol et al., 2016). In this study, perceived enjoyment is defined as the degree of fun a parent can have by sharing children's information on social media. I posited that sharenting itself can bring parents enjoyment, which has a strong and positive impact on parents' sharenting behavior.

Injunctive norms. Parents may consider sharing children's information as a socially approved behavior or may even perceive pressure to engage in sharenting behaviors. The perception of whether a behavior is socially approved or not is called injunctive norms. It was found that injunctive norms played an important role in determining and regulating one's self-

disclosure behaviors on social media platforms (Lambert, 2016; Zillich & Muller, 2019; Zillich & Riesmey, 2021). For example, when studying how injunctive norms affect adolescents' online self-presentation behaviors, Zillich and Riesmey (2021) found adolescents felt a strong peer pressure from their friends in presenting themselves on Instagram accounts, and adolescents who did not conform to the self-presentation norms would not get likes or positive comments. For parents, there might be a pressure or expectations from friends and family that drives them to share children's information online. If parents do not conform to such sharenting norms, they might face social sanctions. Therefore, this study hypothesized that the more parents perceive there is a pressure to conform to the injunctive norms of sharenting, the more likely they will engage in sharenting behaviors.

Injunctive norms of disclosure may have an influence on one's privacy attitudes. It was found that people would have an intention to protect their privacy if others thought protecting one's privacy is the appropriate practice to do while engaging in self-disclosure (Ho et al., 2017; Lewis, 2011). If the injunctive norm is that it is appropriate to disclose personal information and not protect it, people probably will disclose more and not have privacy concerns. In sharenting context, if parents perceive it is appropriate to disclose children's information, they probably will not be concerned about privacy. Therefore, this study proposed a research question that there might be a relationship between privacy concerns and injunctive norms.

Figure 1

Conceptual model of sharenting and predictors
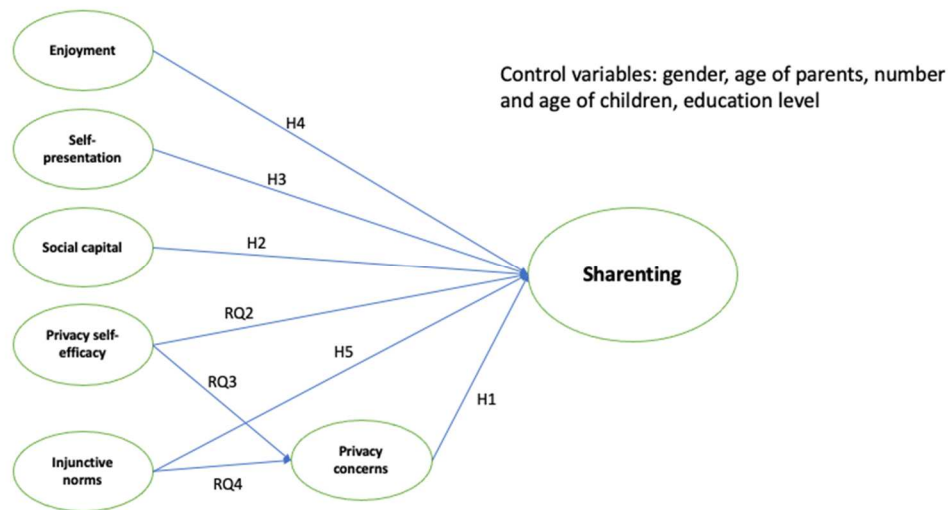
Research Questions and Hypotheses

RQ2: What is the relationship between parents' privacy self-efficacy and their sharenting behaviors?

RQ3: What is the relationship between privacy concerns and privacy self-efficacy?

RQ4: What is the relationship between injunctive norms and privacy concerns?

H1: Privacy concerns are negatively related to sharenting.

H2: Social capital is positively related to sharenting.

H3: Self-presentation is positively related to sharenting.

H4: Enjoyment is positively related to sharenting.

H5: Injunctive norms are positively related to sharenting.

Study 3 Method

Sample and Sampling Procedure

A quantitative survey was administered to parents in the United States who have at least one child ages between 0-13 years old and had experiences of sharing children's information

online. To ensure parents who participated in this study meet both criteria, two screening questions (e.g., "Do you have at least one child under 13 years old?", "Do you have experiences of posting your children's information or your parenting experiences online?") were added at the beginning of the survey. We specifically provided a definition of online for participants to answer the second screening question: Online here refers to such as social media platforms (e.g., Facebook, Instagram, Reddit, Twitter, WeChat, etc.), blogs, parenting apps, parenting websites, or online parenting forums.

To assess the dimensional validity and reliability of the new sharenting scale, a confirmatory factor analysis (CFA) via R studio (Version 1.1.463) was conducted on a sample of 536 participants. After deleting outliers, unfinished, and lower quality responses (e.g., participants clicking on 7 throughout the survey), a total of 500 responses were included in the CFA. Of total 500 participants, 27.8 percent (n=139) parents received high school diplomas or vocational training, 54.2 percent (n=271) parents received bachelor or equivalent degrees, 35.0 percent (n=175) parents received master or specialist degrees, 2.4 percent (n=12) parents obtained doctorate or professional doctorate degrees, and the other three parents received other educational degrees. The descriptive data also showed that most participants were white people (74.6%, n = 373), which is followed by Black or African American (10%, n = 50), Hispanic (7.6%, n = 38), Asian (4%, n= 20), Native Hawaiian (1%, n =5), Middle Eastern (0.8%, n=4), American Indian (0.6%, n = 3), and other race or ethnicity (1.4%, n=7). The survey also asked parents about their marital status. Seventy two percent (n=362) parents were married, 1.2 percent (n=6) were widowed, 5.2 percent (n=26) were divorced, 2.8 percent (n=14) were separated, 18.4 percent (n=92) were single, and only one parent was not willing to disclose such information. The relationship between participants and their children was also diverse. Ninety one percent

(n=459) parents have biological relationships with their children, 2 percent (n=10) parents have step-parents/child relationships, 2.2 percent (n=11) parents reported their children were adopted, 2.6 percent (n=13) parents have both biological and step-parent/child relationships, and seven parents have both biological and adopted children. The average age of participants was 39 years old. Each participant had, on average, 1-2 children of 8.7 years old.

This survey with the 15-item sharenting scale was conducted to confirm the factor structure of sharenting construct. A quantitative survey with both sharenting scale and predictors' scales were administered to parents in the United States who have at least one child ages between 0-13 years old and had experiences of sharing children's information online. To ensure parents who participated in this study meet both criteria, two screening questions (e.g., "Do you have at least one child under 13 years old?", "Do you have experiences of posting your children's information or your parenting experiences online?") were added at the beginning of the survey. I still provided a definition of online for participants to answer the second screening question.

Of total 500 participants, 27.8 percent (n=139) parents received high school diplomas or vocational training, 54.2 percent (n=271) parents received bachelor or equivalent degrees, 35.0 percent (n=175) parents received master or specialist degrees, 2.4 percent (n=12) parents obtained doctorate or professional doctorate degrees, and the other three parents received other educational degrees. The descriptive data also showed that most participants were white people (74.6%, n = 373), which is followed by Black or African American (10%, n = 50), Hispanic (7.6%, n = 38), Asian (4%, n= 20), Native Hawaiian (1%, n =5), Middle Eastern (0.8%, n=4), American Indian (0.6%, n = 3), and other race or ethnicity (1.4%, n=7). The survey also asked parents about their marital status. Seventy two percent (n=362) parents were married, 1.2 percent

(n=6) were widowed, 5.2 percent (n=26) were divorced, 2.8 percent (n=14) were separated, 18.4 percent (n=92) were single, and only one parent was not willing to disclose such information. The relationship between participants and their children was also diverse. Ninety one percent (n=459) parents have biological relationships with their children, 2 percent (n=10) parents have step-parents/child relationships, 2.2 percent (n=11) parents reported their children were adopted, 2.6 percent (n=13) parents have both biological and step-parent/child relationships, and seven parents have both biological and adopted children. The average age of participants was 39 years old. Each participant had, on average, 1-2 children of 8.7 years old.

Measures

 Sharenting. The 15-item sharenting scale was developed from and informed by survey data from in-depth interviews. Participants were asked to indicate the frequency with which they share their child's information or parenting experiences on social media platforms, parenting apps, blogs, or parenting websites in the past six months on a scale ranging from 1 (Very untrue of me) to 7 (Very true of me): (a) "I post about my child(ren) experiencing a key date (e.g., birthday, first day of school, etc.)," (b) "I announce my child(ren)'s accomplishments to family and friends," (c) "I document my child(ren)'s growth and development," (d) "I share entertaining stories about my child(ren) with family and friends," (g) "I share photos or videos of my child(ren)'s activities with family and friends," The rest scale items that represent existing sharenting scales have been listed at the end of this proposal (see Appendix C). **(α=0.91, Mean=4.97, SD=1.06)**

 Privacy concerns. Privacy concerns were measured with two dimensions: institutional privacy concerns and social privacy concerns, which were modified from Chen (2018) and Jozani et al. (2020). Nine out of ten items were selected and adjusted to be in accordance with

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the sharenting context of this study. For example, the original item "A person can find private information about me on social media" was adjusted to "A person can find personal information about my children on social media/websites/apps." One item was dropped because it deals with the privacy concern associated with online transaction apps, which was not relevant to this study. For social privacy concerns, participants were required to indicate the extent to which they are concerned about the following statements ranging from 1 (strongly disagree) to 7 (strongly agree): (a) "The information I post about my children on social media/websites/apps could be misused," (b) "A person can find personal information about my children on social media/websites/apps," (c) "I am concerned that the detailed information about parenting I share on social media/websites/ apps could be misused by other users," (d) "I am not concerned that leaving my child's personal information public online could threaten his/her privacy," (e) "I am concerned about submitting my children's information online, because it could be used in a way I did not foresee," (f) "I am concerned about submitting my children's information online, because of what others might do with it." For institutional privacy concerns, participants were required to indicate the extent to which they are agree with the following statements from 1 (strongly disagree) to 7 (strongly agree): (a) "Social media/websites/apps companies should disclose the way the data collected, processed, and used," (b) "A good social media/website/app company privacy policy should have a clear and conspicuous disclosure," (c) "It is very important to me that I am aware and knowledgeable about how my child's personal information will be used." **(α=0.81, Mean=4.99, SD=1.00)**

      Privacy self-efficacy. All five items of privacy self-efficacy were selected from Dielin and Metzger (2016) and adjusted to be in accordance with the sharenting context of this study. For example, the original item "I feel confident in my ability to protect myself using Facebooks'

privacy settings" was changed to "I feel confident in my ability to protect my children's information using websites/apps/social media privacy settings". Participants were asked to indicate to what degree they agree with the following statements on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree): (a) "I feel confident in my ability to protect my children's information using websites/apps/social media platforms privacy settings," (b) "I feel in control of who can view my children's information on websites/apps/social media platforms," (c) "Privacy settings on websites/apps/social media platforms allow me to have full control over the information about me and my children I provide online," (d) "I feel confident that the information about my children and my parenting experiences I post on websites/apps/social media platforms can only be seen by those who I have chosen to share it with," and (e) "I am confident that I know what information about my children on websites/apps/social media platforms can be seen by people outside of the platforms I have been using." **(α=0.89, Mean=5.26, SD=1.23)**

Social capital. Eight out of ten bonding social capital items and all ten bridging social capital items were adapted from Williams (2006). Two bonding social capital items were dropped because they asked about financial support one can obtain from a network, which is irrelevant to this study. Modifications were made to items to fit within the sharenting context. For example, the original item "There are several people online/offline I trust to help solve my problems" is changed to "There are several parents online I trust to help solve my parenting problems." Participants will be asked to indicate to what degree they agree with the following statements on a 7-point scale from (strongly disagree) to 7 (strongly agree). Sample bridging social capital scale items are like: (a) "Interacting with people online makes me want to try new parenting approaches," (b) "Interacting with parents online makes me interested in parenting

stories that happen outside of my town," and (c) "Interacting with people online makes me interested in what parents unlike me educate their children," Sample bonding social capital scale items are: (a) "There are several parents online I trust to help solve my parenting problems," (b) "There is someone online I can turn to for advice about making very important parenting decisions," and (c) "The people I interact with online would help me overcome parenting challenges." **(α=0.93, Mean=4.74, SD=1.09)**

Self-presentation. All 17 items of self-presentation were selected from Michikyan et al. (2015) and five out of 17 are modified to be in accordance with the sharenting context of this study. For example, the original item "Who I want to be is often reflected in the things I do on my Facebook profile" is changed to "I post things online to show aspects of what kind of a parent I want to be." Participants will be asked in indicate to what degree they agree with the following statements on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree): (a) "I sometimes try to be someone other than my true self online," (b) "Sometimes I feel like I try to be a good parent online," (c) "I have a good sense of who I am as a parent and the information I shared online is a way of showing that," (d) "I have a good sense of my parenting approaches and sharing my parenting experiences is a way to express my views and beliefs." The rest scale items have been listed at the end of this proposal. Please see Appendix C for the rest of self-presentation scale items. (α=0.89, Mean=4.39, SD=1.05)

Perceived enjoyment. Three items of perceived enjoyment were selected from Jozani et al. (2020) and modified to be in accordance with the sharenting context of this study. Participants were asked in indicate to what degree they agreed with the following statements on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree): (a) "I find sharing my child(ren)'s lives or my parenting stories to be enjoyable," (b) "The actual process of sharing my child(ren)'s lives or

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my parenting stories is pleasant," (c) "I have fun when sharing my child(ren)'s lives or my parenting stories." (α=0.87, Mean=5.27, SD=1.19)

Injunctive norms.14 items of injunctive norms were selected from Bizer, Magin and Levine (2014), and modified to fit the sharenting context of this study. For example, "I go out of my way to follow social norms" was modified to "I go out of my way to follow other parents who post children's information online." Participants were asked to indicate to what degree they think following statements are characteristic of what they believe on a 7-point scale from 1(extremely uncharacteristic) to 7 (extremely characteristic): (a) "I go out of my way to follow other parents who post children's information online," (b) "Parents should not always have to follow a set of social rules when sharing children's information," (c) "Parents should always be able to post information as they wish rather than trying to fit the expectations of family members or close friends." The rest scale items have been listed at the end of this proposal. Please see Appendix C for the rest of social norms scale items (α=0.84, Mean=4.55, SD=0.94).

Control Variables

Gender. Previous research suggests that mothers post information about their children more frequently than fathers (Lazard et al., 2019). Thus, I control gender in our data analysis. Participants will be asked directly to indicate their gender identity with which they most identify by selecting following options: (a) female, (b) male, (c) genderqueet, (d) Transgender, (e) cisgender, (f) agender, (g) other.

Age of parents. Prior study shows that the older group of parents (larger than 40 years old) are less frequently to post information about their children than the younger group of parents (between 27 to 39 years old) (Moser et al., 2017). Age of parents will be measured by directly asking participants to type in their age in a blank box.

Number and age of children. As new parents are more likely to seek information and help online, the author assumes that new parents sharent more often than experienced parents. Parents will be directly asked how many children they have and what the average ages of their children are.

Educational level. Educational level will be measured by asking participants to select one of the following options that apply: (a) some high school, (b) high school diploma or equivalent, (c) vocational training, (d) some college, (e) associate's degree, (f) bachelors' degree, (g) some post undergraduate work, (h) master's degree, (i) specialist degree, (j) applied or professional doctorate degree, (k) doctorate degree, (l) other.

Data analysis

I conducted confirmatory factor analysis by using R studio to determine whether the proposed factor structure of sharenting fit the data. I used the following goodness of fit indices helping me assess the fitness of the model for the data: comparative fit index (>0.9), RMSEA (<0.08), SRMR (<0.08), and TLI (>0.9).

I conducted two regressions analyses and two Structural equation modeling analyses conducted with R Studio (Version 1.1.463). Two separate regressions were conducted to pre-test the relationships between predictors and sharenting dimensions. Results of two regression models are reported in Table 5 and 6. Based on the results of two regressions, I ran two SEMs for children's information disclosure and parenting information disclosure respectively. All hypotheses and research questions were addressed by two structural equation modeling (SEM). Results of the SEM analyses are reported in Table 7 and 8. The whole model contains seven independent variables (i.e., perceived enjoyment, privacy self-efficacy, social capital, self-

presentation, injunctive norms, and privacy concerns). Variables including parents' gender, age,

marital status, and education level; number and age of children were controlled in each analysis.

Table 4

Descriptive statistics of CFA and SEM participants (N=500)

Demographics	Count	Percent
Gender		
Male	120	24.0%
Female	376	75.2%
Other	4	0.8%
Relationship with child(ren)	459	91.8%
Biological	10	2.0%
Stepchild	11	2.2%
Adopted	13	2.6%
Biological & Stepchild	7	1.4%
Biological & Adopted	0	0%
Adopted & Stepchild		
Marital Status		
Married	362	72.4%
Widowed	6	1.2%
Divorced	26	5.2%
Separated	14	2.8%
Single	92	18.4%
Other	1	0.2%
Education		
High school	139	27.8%
Bachelor's	271	54.2%
Master's	175	35.0%
Doctorate	12	2.4%
Other	3	0.6%
Race/Ethnicity		
White	373	74.6%
Native Hawaiian	5	1.0%
Middle Eastern	4	0.8%
Hispanic	38	7.6%
Black/African American	50	10.0%
Asian	20	4.0%
American Indian	3	0.6%
Other race, ethnicity	7	1.4%

Results

Confirmatory Factor Analysis (CFA)

The CFA goodness-of-fit test indicated a sufficient model fit for the two-dimensional solution ($\chi^2 = 230.922$, $df = 89$, $p < .001$, CFI $= 0.965$, TLI $= 0.959$, RMSEA $= 0.056$, SRMR $= 0.059$). The internal consistency reliability of each factor were as follows: information disclosure, $\alpha = .84$; social support, $\alpha = .92$. The results of CFA confirmed the two-factor structure (children's information disclosure and parenting information disclosure) of sharenting construct on another dataset.

Figure 2
The CFA plot of sharenting scale
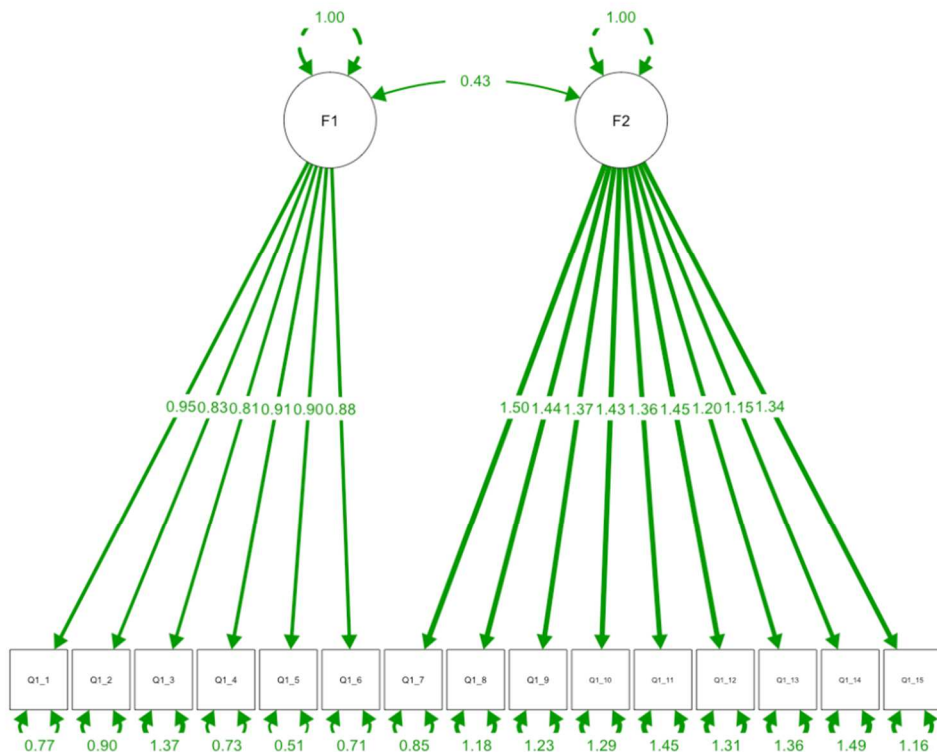
Regression Tests & Multicollinearity Diagnostics

Before conducting SEM, I ran regression analyses on children's information disclosure and parenting information disclosure respectively to assess their relationships. Results (see Table 5 & 6) showed that perceived enjoyment, privacy self-efficacy, social capital, self-presentation and privacy concerns were significant factors in predicting children's information disclosure, whereas only self-presentation and social capital were significantly related to parenting information disclosure.

Table 5
Regression results for children's information disclosure

Predictors	Beta	SE	t-value	p-value
Perceived enjoyment	0.369***	0.039	9.454	<.001
Privacy self-efficacy	0.091**	0.033	2.763	0.005
Social capital	0.134*	0.049	2.733	0.006
Self presentation	-0.108*	0.048	-2.247	0.025
Injunctive norms	0.047	0.044	1.061	0.289
Privacy concerns	0.092*	0.038	2.389	0.017

Total Adjusted R^2 = .382

Table 6
Regression results for parenting information disclosure

Predictors	Beta	SE	t-value	p-value
Perceived enjoyment	0.065	0.050	1.288	0.198
Privacy self-efficacy	0.032	0.043	0.795	0.448

Table 6 (cont'd)

Social capital	0.580***	0.063	9.105	<0.001
Self presentation	0.378***	0.062	6.044	<0.001
Injunctive norms	0.019	0.058	0.330	0.742
Privacy concerns	-0.058	0.049	-1.172	0.242

Total Adjusted R^2 = .520

I also ran multicollinearity diagnostics among predictors as social capital had strong correlation with perceived enjoyment and self-presentation. Problems like multicollinearity among predictors can destabilize the model. I used both variance inflation factor (VIF) and tolerance values to determine whether there were multicollinearity problems. Recommended VIF values are below 10 (Tabachnik & Fidell, 2007), and tolerance values are larger than 0.4 (Allison, 1999). Diagnostic results showed that VIF values ranged from 1.14 to 2.54, and tolerance values were larger than 0.39, indicating no concerns of multicollinearity.

Hypothesis Tests

To address the hypothesis and research questions, two SEM path analyses were conducted with RStudio. For children's information disclosure, the goodness of fit indices of SEM results suggested a good fit for the proposed model: χ^2 = 15.082, df = 8, p =0.058, CFI = .976, TLI = .937, RMSEA = .042, and SRMR = .021. The proposed model explained 39.2 percent variance in children's information disclosure (see Table 7). For parenting information disclosure, the goodness of fit indices of SEM results also indicates a good fit for the proposed model: χ^2 = 15.082, df = 8, p =0.058, CFI = .983, TLI = .956, RMSEA = .042, and SRMR = .022. The proposed model explained 53.3 variance in parenting information disclosure (see Table 8).

Hypothesis 1 stated that privacy concerns would have a negative relationship with sharenting. According to the SEM results, privacy concerns had a positive relationship with children's information disclosure ($\beta = .092$, SE= .037, $p = .014$), but did not have a significant relationship with parenting information disclosure ($\beta =- .059$, SE= .049, $p = .229$). Hence, hypothesis 1 was not supported.

Hypothesis 2 predicted that social capital would have a positive relationship with sharenting. Results indicated that social capital had a significant relationship with both children's information disclosure ($\beta = .134$, SE= .048, $p = .006$) and parenting information disclosure ($\beta = .582$, SE= .063, $p < .001$). Therefore, hypothesis 2 was supported.

Hypothesis 3 stated that self-presentation would positively relate to sharenting. Results demonstrated that self-presentation was significantly associated with both children's information disclosure ($\beta = -.108$, SE= .047, $p = .023$) and parenting information disclosure ($\beta = .379$, SE= .062, $p < .001$). Hence, H3 was supported.

Hypothesis 4 stated that perceived enjoyment would positively relate to sharenting. According to SEM results, perceived enjoyment was positively related to children's information disclosure ($\beta = .369$, SE= .039, $p < .001$), but did not significantly associated with parenting information disclosure (($\beta = .066$, SE= .050, $p = .191$)). Hence, H4 was not supported.

Hypothesis 5 predicted injunctive norms would have a positive relationship with sharenting behaviors. Results indicated that subjective norms did not have significant relationship with either children's information disclosure ($\beta = .048$, SE= .045, $p = .287$) or parenting information disclosure ($\beta = .019$, SE= .058, $p < .740$). Therefore, H5 was not supported.

RQ 2 queried about the relationship between privacy self-efficacy and sharenting behaviors. Results showed that privacy self-efficacy had a positive relationship with children's information (β = .091, SE= .033, p =.005), but did not have a significant relationship with parenting information disclosure ((β = .033, SE= .043, p < .445)).

RQ 3 asked whether privacy self-efficacy would positively relate to privacy concerns. The SEM results indicated that privacy self-efficacy was a positive predictor of privacy concerns (β = .133, SE= .035, p < .001).

RQ4 asked about the relationship between injunctive norms and privacy concerns. The results showed that subjective norms positively predicted privacy concerns (β = .202, SE= .035, p < .001).

Table 7
Overview of path analysis coefficients of SEM model (Children's information disclosure)

Response Variable	Predictors	Beta	SE	z-value	p-value
Sharenting	Perceived enjoyment	0.369***	0.039	9.589	<.001
	Privacy self-efficacy	0.091**	0.033	2.781	0.005
	Social capital	0.134*	0.048	2.768	0.006
	Self presentation	-0.108*	0.047	-2.276	0.023
	Injunctive norms	0.048	0.045	1.066	0.287
	Privacy concern	0.092*	0.037	2.455	0.014
Privacy concerns	Injunctive norms	0.202***	0.035	3.846	<.001
	Privacy self-efficacy	0.133***	0.035	3.846	<.001

Table 7 (cont'd)

Total Adjusted R^2 = .392
Privacy self-efficacy
Adjusted R^2 = .097

Control variables: Parents' gender, age, marital status, and education level; number and age of children.

Table 8
Overview of path analysis coefficients of proposed SEM model (Parenting information disclosure)

Response Variable	Predictors	Beta	SE	z-value	p-value
Sharenting	Perceived enjoyment	0.066	0.050	1.307	0.191
	Privacy self-efficacy	0.033	0.043	0.763	0.445
	Social capital	0.582***	0.063	9.219	<.001
	Self presentation	0.379***	0.062	6.122	<.001
	Injunctive norms	0.019	0.058	0.331	0.740
	Privacy concern	-0.059	0.049	-1.204	0.229
Privacy concerns	Injunctive norms	0.202***	0.046	4.428	<.001
	Privacy self-efficacy	0.133***	0.035	3.846	<.001

Total Adjusted R^2 = .533
Privacy self-efficacy
Adjusted R^2 = .097

Control variables: Parents' gender, age, marital status, and education level; number and age of children.

Table 9

Results of correlation test among dependent and independent variables (N=500)

Variables	1	2	3	4	5	6	7
1. Children's information disclosure	1.00						
2. Parenting information disclosure	0.42	1.00					
3. Perceived enjoyment	0.59	0.47	1.00				
4. Privacy self-efficacy	0.42	0.31	0.53	1.00			
5. Social capital	0.42	0.69	0.60	0.38	1.00		
6. Self-presentation	0.25	0.64	0.47	0.31	0.71	1.00	
7. Injunctive norms	0.31	0.42	0.43	0.36	0.53	0.50	1.00

Table 10

Multicollinearity diagnostics

Variables	Tolerance	VIF
Perceived enjoyment	0.52	1.93
Privacy self-efficacy	0.68	1.47
Social capital	0.39	2.54
Self-presentation	0.44	2.26
Injunctive norms	0.64	1.57
Privacy concerns	0.88	1.14

Figure 3

Proposed conceptual model of children's information disclosure and predictors
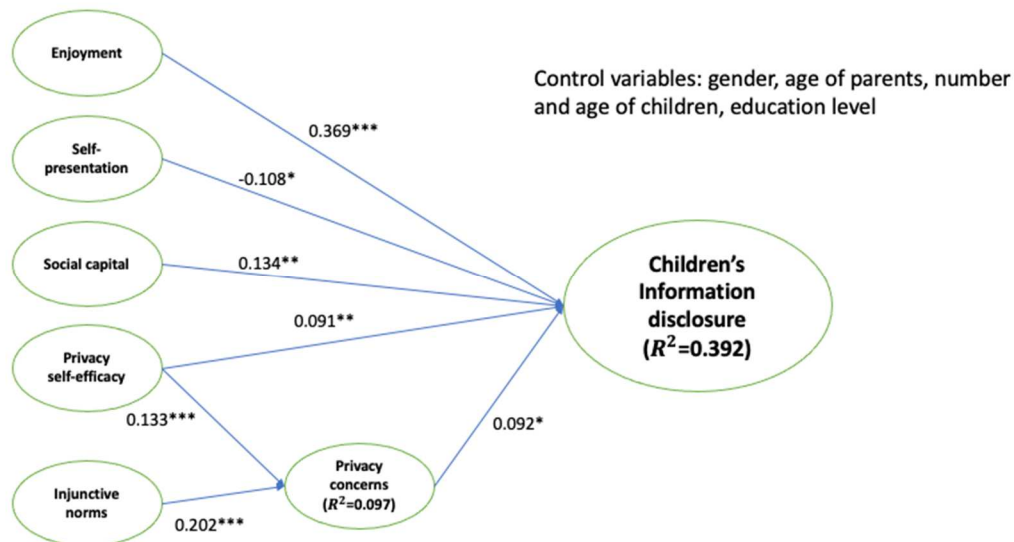
Figure 4

Proposed conceptual model of parenting information disclosure and predictors
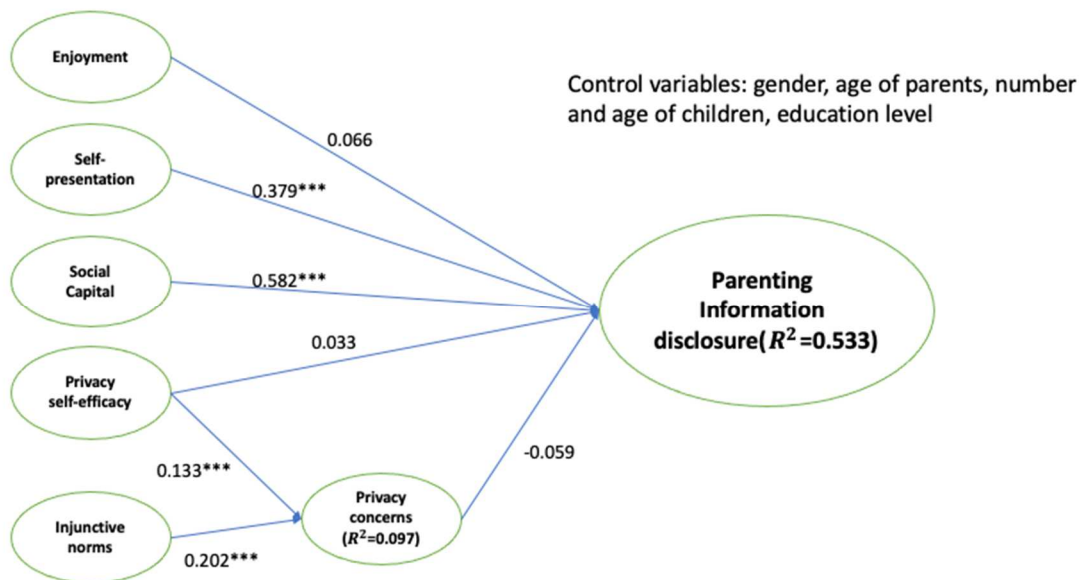
Discussion

Study 3 aimed to confirm the two-dimensional structure of the sharenting construct, and explore the influence of privacy concerns, privacy self-efficacy, self-presentation, perceived

enjoyment, social capital and injunctive norms on sharenting behaviors. The confirmatory factor analysis demonstrated that children's information disclosure and parenting information disclosure were in theoretically and operationally alignment with each other. The SEM results showed that privacy concerns, privacy self-efficacy, self-presentation, social capital, and perceived enjoyment were significant predictors of children's information disclosure; whereas, only social capital and self-presentation were significantly related to parenting information disclosure. Results from two SEM analyses indicated that this privacy calculus model worked better for children's information disclosure than parenting information disclosure. Therefore, I suggested that scholars need to test the privacy calculus model on different forms of disclosure behaviors.

Costs of Sharenting

Results from hypothesis 1 showed that privacy concerns had a positive relationship with children's information disclosure but not significantly relate to parenting information disclosure. In other words, parents who had privacy concerns about their children's information and their own parenting information were more likely to engage in sharing their children's information; whereas their concerns did not affect sharing their parenting information. To better understand how literature explains these results, I discuss parenting information disclosure and children's information disclosure.

The insignificant relationship between privacy concerns and parenting information disclosure corresponds to the privacy paradox phenomenon, where people have privacy concerns toward information disclosure but still share their information online (Barth & Jong, 2017). According to the privacy calculus model, if parents rationally weighed the sharenting benefits and costs, their decision to disclose parenting information was because they thought the expected

benefits were larger than potential risks. It could be possible that an inexperienced mother shares her breastfeeding problems in order to receive suggestions about how to better feed her baby. Compared to potential privacy violations, receiving advice on breastfeeding is more imminent and urgent. Therefore, privacy concerns might not have an impact on parents' sharenting behaviors.

Another explanation is that parents' sharenting behaviors were unconsciously influenced by other factors, such as sharing habits, underestimation of risks, cognitive abilities, and time constraints (Barth & Jong, 2017). It could be possible that a mother engaging in sharenting regardless of her privacy concerns is because she has a habit of blogging daily lives. Parents' underestimation of risks could be a potential factor that influences the effect of privacy concerns on sharenting behaviors. It was found in prior studies that parents did not have enough knowledge about how disclosed information could be used by companies, therefore, underestimated the risks of sharenting (Desimpleaere, Hudders, & Van de Sompel, 2020). These factors may have the potential in influencing the relationship between privacy concerns and sharenting, future research should consider them to predict sharenting behaviors.

The positive relationship between privacy concerns and children's information disclosure contradicts previous studies' conclusions that privacy concerns negatively have an impact on disclosure behaviors (Chen, 2018; Dielin & Metzger, 2016; Jozani et al., 2020). This result needs to be discussed along with other two positive relationships: privacy self-efficacy with children's information disclosure, and privacy self-efficacy with privacy concerns. Privacy self-efficacy refers to the belief in one's ability and knowledge to protect one's privacy (Chen, 2018). The positive relationship between privacy self-efficacy and children's information disclosure means that the more a parent is confident in his or her ability to protect children's privacy, the more

likely he or she will engage in sharenting. Prior studies found that when people believe they can handle privacy violations problems well, they do not think their privacy will be at risk and will disclose more (Chen & Chen, 2015; Chen, 2018). Therefore, it is possible that parents were confident that they set up all privacy protections and did not consider their sharenting would put children's privacy at risk.

Parents who believe in their ability to protect their children's privacy were more concerned about privacy (RQ3). This finding aligns with Adhikari and Panda's (2018) conclusion. Adhikari and Panda (2018) posited that people who have confidence in protecting their privacy are more aware of potential privacy risks, which, in turn, will execute more privacy protection management. Following this logic, it is quite possible that parents' confidence in their privacy protection abilities made them more aware or sensitive about potential threats to their children's privacy, which drove them to execute protection managements. Because they believe in the effectiveness of their privacy protection settings, they consider it is safe to disclose more children's information. This rationale also helps explain the positive relationship between privacy concerns and children's information disclosure. It is not that parents do not care about their children's privacy and continued making information public; instead, it is because parents believed they already acquired enough knowledge and skills in protecting their children's privacy. Their high privacy self-efficacy warrants their continuous sharenting behaviors. However, this study did not measure whether parents execute privacy protection managements, what type of privacy protections parents exercised during sharenting, or how much parents know about potential privacy risks and privacy protection. Future studies need to integrate these factors into the privacy calculus model to predict sharenting behaviors.

Expected Benefits & Sharenting

Social capital plays an important role in predicting sharenting, which confirms the result of prior studies (Chen, 2018). Parents encounter hundreds of problems during the process of raising children. Engaging in sharenting can bring parents intangible benefits that include but are not limited to: receiving emotional support, accessing child-care information and solutions, looking for a parent group sharing the same problems, maintaining old connections, meeting other parents, and satisfying the need of belongingness (Brosch, 2018; Fox & Hoy, 2019; Ouvrein & Verswijvel, 2019). Therefore, parents who expect to receive above benefits would be more likely to engage in sharenting. Social capital is a popular variable in social media scholarship, but does not receive enough attention in the studies that apply the privacy calculus model (Chen, 2018). The present study provided one more piece of evidence to support that social capital is one of expected benefits when people share their information.

Self-presentation was theorized to be an expected benefit in the privacy calculus model. Results demonstrated that self-presentation was negatively related to children's information disclosure but positively related to parenting information disclosure. Parents who wanted to present themselves were more likely to disclose parenting suggestions, advice, or experiences, and less likely to disclose children's growth, accomplishments, and activities. This means when parents disclose children's information, they may not intend to present themselves as good parents; whereas, when they disclosed parenting information, they intend to present themselves. This result contradicted previous sharenting conclusion that parents engage in sharenting because they want to present themselves as competent parents (Davidson-Wall, 2018; Kumar & Schonebeck, 2015; Ouvrein & Verswijvel, 2019). The difference between parents using parenting information to self-present and using children's information to self-present is that the

former is direct self-presentation and the latter is indirect self-presentation. Indirect self-presentation is a self-promotion tactic in which people improve their image by mentioning accomplishments or success of related ones (Cialdini & Richardson, 1980). However, it was found that the effect of indirect self-presentation was positive when it was done by a third-party not by the self-presenter (Gilovich, 1981; Kernis & Wheeler, 1981). In fact, a person who initiated the indirect self-presentation was perceived as less likable or manipulative (Tal-Or, 2008). Therefore, it could be inferred that parents already knew or experienced that using children's information for indirect self-presentation would have a countereffect on their images as competent parents. When they posted children's information online, they just wanted to inform friends or record children's growth. If they intended to present their successful parenthood, they preferred to directly disclose their parenting experiences, suggestions or stories to present themselves as good parents.

It is interesting to note that perceived enjoyment only related to children's information disclosure but was not related to parenting information disclosure, as perceived enjoyment is a major benefit in previous privacy calculus studies (Brosch, 2018; Jozani et al., 2020). General online self-disclosure can bring people enjoyment, which motivates them to continue engaging in self-disclosure behavior (Jozani et al., 2020; Kransnova et al., 2012; Lankton et al., 2017). The insignificant relationship between parenting information disclosure and perceived enjoyment implies that parents did not think sharing parenting information was a behavior in which they received joy. This might be caused by the vulnerable and sensitive content of parenting disclosure. When examining the relationship between perceived enjoyment and self-disclosure, scholars only asked participants how frequently they disclosed personal information or feelings online (Chen, 2018; Lankton et al., 2017; Kransnova et al., 2012). Details about personal

information or feelings were not explained or elaborated in previous studies. However, parenting information sometimes involves parents' sensitive and vulnerable information disclosure. When sharing the parenting information, parents may expose their vulnerabilities to others and put themselves at risk. Instead of feeling enjoyable, parents might perceive this disclosing process as risky and challenging and need to muster enough courage to tell their parenting stories. This result also indicated that vulnerability disclosure differs from general self-disclosure and factors that predicting general self-disclosure might not predict vulnerability disclosure.

Injunctive Norms

Results showed that injunctive norms did not have a significant relationship with both children's information disclosure and parenting information disclosure, which is consistent with Min and Kim's (2015) results. In this study, injunctive norms referred to the extent to which parents perceive sharenting as socially approved behavior (Cialdini & Trost, 1998). Results suggested that even though parents perceive sharenting as appropriate behavior, they may or may not engage in children's or parenting information disclosure. The reason is that there are other factors that affect the effectiveness of injunctive norms on disclosure behaviors. It has been argued that the effectiveness of injunctive norms depends on how clearly and strongly people perceive the general rules exist (Min & Kim, 2014). In other words, the influence of injunctive norms would be more effective in mandatory contexts than voluntary ones. Following this rationale, it is possible that the sharenting context is a voluntary context, parents may perceive there are unwritten social norms to share children's information online but it is not clear or coercive. Therefore, although parents perceived engaging in sharenting is socially approved, the perception was not strong enough to induce the behavior.

It is interesting to see that parents who perceive the social pressure to engage in sharenting have a higher degree of privacy concerns. This may be due to the contrast between parents' attitudes towards sharenting and perceived expectations from peers. Although attitudes and norms have been conventionally considered having joint influence on behavior, recent studies found attitudes can moderate perceived injunctive norms and actual behavior (Rice & Klein, 2019). If a behavior entails negative consequences, people will view this behavior negatively and presume the social norm is to constrain such behavior (Horne et al., 2015). It could be possible that parents might have a negative attitude towards sharenting behaviors and presumed others also hold the same attitude toward sharenting. However, perceived sharenting pressure challenged parents' attitudes about sharenting: friends and family expected parents to disclose more information about sharenting. Parents were kind of forced to meet others' expectations and disclose children's information. The more parents perceived such pressure, the more they were concerned about disclosing children's information and privacy. As this study only measured parents' sharenting behaviors and did not measure sharenting attitudes, future studies can look into this relationship in depth by adding sharenting attitudes.

Conclusion

The theoretical contributions of this study are three-folds. First, this study is one of the first to apply the privacy calculus model to explore predictors of sharenting behaviors and shed light on how perceived benefits and costs influence the sharenting behavior. This study provided empirical evidence to supported that factors such as social capital, self-presentation, perceived enjoyment, privacy concerns, and privacy self-efficacy do have influence on parents' sharenting behaviors. However, except social capital and privacy self-efficacy, privacy concerns, privacy self-efficacy, perceived enjoyment and self-presentation did not predict sharenting behaviors as

prior sharenting studies proposed. Future researchers are encouraged to replicate this study to test whether this result holds in other samples and other contexts.

The second contribution of this study is to extend the privacy calculus model by adding important contingencies. Prior privacy calculus studies considered Facebook benefits (Dielin & Metzger, 2016), social capital (Chen, 2018), self-presentation (Krasnova et al., 2010), and perceived enjoyment (Krasnova et al., 2010) as typical expected benefits of self-disclosure behavior. This study adds evidence to Chen (2018) and extended privacy calculus model that social capital is a major perceived benefit in online disclosure behavior such as sharenting. However, this study challenges previous studies' conclusions on self-presentation and perceived enjoyment and proposes that there are contingencies to include self-presentation and perceived enjoyment as benefits in the privacy calculus model. Findings revealed that not every kind self-presentation could contribute to positive impression management. Indirect self-presentation enacted by the presenter not by a third-party will lead to giving negative impressions on others. Thus, future scholars need to distinguish whether disclosers use others' information or their own information to present themselves.

The insignificant relationship between perceived enjoyment and sharenting indicates that not every form of self-disclosure is inherently entertaining, which highlights a more detailed typology of self-disclosure behaviors. Taddicken (2014) argued that self-disclosure with personal facts (e.g. gender, age, profession or hobbies) should not be treated the same as self-disclosure with intimate and sensitive information (e.g. experiences, thoughts, feelings). However, most privacy calculus scholars treated self-disclosure as self-disclosure with personal facts, not self-disclosure with sensitive information (Chen, 2018; Dienlin & Metzger, 2016; Krasnova et al., 2010; Trepte et al., 2017). Therefore, future scholars need to distinguish the disclosure content

and test whether the privacy calculus model could predict the self-disclosure with intimate and sensitive information.

Third, this study provides a new perspective to analyze the privacy paradox phenomenon by emphasizing the role of privacy self-efficacy. There is scarce literature discussing the important role of privacy self-efficacy in the mechanism of self-disclosure decision making (Chen & Chen, 2015). This study found that privacy self-efficacy can both positively influence and outweigh the privacy concerns. People's confidence in their knowledge and ability to protect privacy will result in the increase in self-disclosure. Although privacy self-efficacy does not belong to one of the expected benefits, it can outweigh privacy concerns. Chen and Chen (2015) found that privacy self-efficacy overrides privacy concerns especially for people who have low privacy concerns. It is quite possible that privacy self-efficacy moderates the relationship between privacy concerns and disclosure behavior. Future scholars need to go in that direction and investigate the moderation role of privacy self-efficacy in the privacy calculus model.

Fourth, this study sheds light on the relationship among privacy concerns and disclosure behavior. It has been conventionally argued that privacy concerns had negative or no relationship with self-disclosure behaviors. To my best knowledge, this study is the first one finding privacy concerns positively predicting disclosure behaviors such as sharenting. Given the positive relationship between privacy self-efficacy and privacy concerns, I posited that the knowledge about how to control and protect privacy enabled parents to know what needs to be concerned about in sharenting behaviors. In other words, parents who do not have such knowledge about privacy are not aware of the online risks. Antecedents of privacy concerns, such as privacy self-efficacy and privacy literacy, seem to play an important role in the self-disclosure mechanism

and require more research to dig into. Future research can investigate what factors contribute to privacy concerns that lead to more self-disclosure or more self-withdrawal.

This study cannot be interpreted without limitations. One big limitation of this study is that a group of important factors were not included in the conceptual model. Factors such as privacy management, privacy literacy, previous privacy violation experience, and sharenting attitudes could be significant predictors of sharenting behaviors. In the future study, it is important to include these variables and examine their relationships with sharenting behaviors. The second limitation of this study is the sample of this study is not diverse. Most respondents of this survey were white and married parents. A more diverse and large sample is required for future studies to ensure the generalizability of the result of this study. Although one of this study's contributions is the newly developed and confirmed scale, it is better to measure sharenting with a combination of self-reported data (e.g. survey) and observational data (e.g. digital traces).

APPENDICES

Hello. I'm Zhao Peng and I am a Ph.D. candidate in the School of Journalism at MSU. Thank you so much for your willingness to speak with me today. I truly appreciate your insights into your experience. Do you have any further questions for me either about this study or items within the consent form? After this interview, if you find you do have any questions, please do not hesitate to email me.

Before we start, I would like to go over a few items you may have read in the consent form. As I mentioned, this research is for my thesis I am working on as part of my doctoral program. The purpose of this study is to understand what and why parents share children's information and parenting process online. This study was reviewed and approved by the Office of Regulatory Affairs and assigned IRB #...

I estimate the interview will last roughly 30 minutes to one hour. If at any time you need to take a break or stop, please do not hesitate to let me know. Additionally, this study is completely voluntary; there will be no compensation for participation other than my gratitude. As I discussed before, would you mind if I recorded this conversation so I can make sure to get your experience down correctly? I also plan on taking notes to help with this too. If you are alright, I will be recording this conversation with this handheld recorder and a microphone. After this interview, I will ask you if you have a preferred pseudonym you would like me to use so your identity will be protected.

After the recording, I will transcribe this interview and remove any additional identifying personal information to ensure your identity will not be compromised in this study. I want you to feel confident in knowing your answers are completely confidential and will be shared with no one but me. Again, thank you so much for taking the time to speak with me today. If you feel uncomfortable at any point in the conversation, you are free to withdraw without consequences, so please do not hesitate to do so. Do you have any questions before we begin?

Sharenting Questions:
1. What do you like to share about your child online?
2. What type of posts do you post about your child?
    1. Can you describe a typical post?
        1. Moments? Firsts, milestones, interesting activities, group activities, achievements or accomplishments?
        2. Who is your intended audience?
    b.   What did you post when your child was younger?
        i.   Has your posting changed as your child aged?
            i.   Could you give an example? At what age or moment you changed?
3.   Where do you post this information?
    a.   Social media platform? Blogs? Parenting websites? Parenting apps?
    b.   What is the name of the platform?

      c.   Why do you like to post on that platform?
4. Do you share your experiences about parenting?
      a.   What parenting topics do you usually share? Child care? Children's mental and physical health? Children's education?
5. Do you share your emotions or feelings about the parenting process?
      a.   What do you share? Why? How does it help you?
      b.   What negative emotional experiences did you share?
      c.   What positive emotional experiences did you share?
6. Did you share stories between you and your child?
      a.   What are your stories about? Why do you share this story?
      b.   What other stories did you share?
7. Did you share your growth stories as a parent?
      a.   What are your personal growth stories about? Why do you share this story?
      b.   How did this sharing help you?
8. Who interacts with these posts?
      a.   What do they say?
      b.   Do you adjust your sharing because of others' comments?
9. Did you delete any post about your child or parenting experience?
      a.   Why did you delete that post?
      b.   What is the deleted post about?

Demographics:
1. May I know your name?
2. Could you please share your age, occupation, education level, household income and race/ethnicity?
3. Could you please share your marital status?
4. How many children do you have? What is the average age of your children?
5. What is your relationship between you and your child? Stepchild?

APPENDIX B. Survey consent form

Consent Form

What the study is about: You are invited to participate in a research study about how you as a parent interact with other people in online spaces. The purpose of this study is to investigate what parents post about their children and parenting online. We are asking you to take part because you meet the qualifications of being (a) 18 years or older, (b) a parent who has at least one child under the age of 13 years old or is expecting a baby, and (c) having experience of sharing children's information or parenting experiences online. The survey will include questions about your experiences as a parent and will take approximately 15 minutes to complete.

Potential Risks: There are extremely little, if any, psychological or social risks associated with this research study. Your participation is requested in the interest of science and will be of educational value. If any question creates psychological discomfort, you may skip the question or withdraw from the interview. Although the research study team does not anticipate any responses will fall into a third party view, we cannot guarantee the security of Internet technologies.

Your answers will be confidential: The records of this study will be kept private. I will not include any information that will make it possible to identify you. Research records will be kept in a safe file on a password-protected computer; only the researcher will have access to the records. You will be assigned a research code number, which will ensure that you cannot be identified by your responses.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with myself or Michigan State University. If you decide to take part, you are free to withdraw at any time.

Contact: If you have questions, you may contact the principal investigator-Zhao Peng (pengzhao@msu.edu) at Michigan State University. The researcher has expressed no potential conflict of interest with this research project. If you have any questions about your rights as a volunteer in this research, contact the staff in the MSU HRPP (irb@msu.edu).

Statement of Consent: I have read the above information and have received answers to any questions asked. I consent to take part in the study.

By clicking Next, you agree to participate in the study:

APPENDIX C. Sharenting scale (58 items)

Sharenting

The following are statements about your online information sharing activities related to your children or parenting experiences. **Online** can refer to such as social media platforms (e.g., Facebook, Instagram, Reddit, Twitter, WeChat, etc.), blogs, parenting apps, parenting websites, or online parenting forums. Read each statement and indicate how much it reflects your behaviors regarding what information you share **online** with your family, friends, parents, or other people interested in parenting or your children's lives. Please answer to whether these activities reflect your posting behaviors **only on online platforms**.	Very untrue of me	Untrue of me	Somewhat untrue of me	Neutral	Somewhat true of me	True of me	Very true of me
I post about my child(ren) experiencing a key date (e.g., birthday, first day of school, etc.).	1	2	3	4	5	6	7
I post small daily cute moments of my child(ren)'s life.	1	2	3	4	5	6	7
I announce my child(ren)'s accomplishments to family and friends.	1	2	3	4	5	6	7
I document my child(ren)'s growth and development.	1	2	3	4	5	6	7
I record my child(ren)'s firsts.	1	2	3	4	5	6	7
I post my child(ren)'s funny moments (e.g., lipstick all over their face, wearing parents' shoes or clothes, dumping cereal on the floor, etc.) .	1	2	3	4	5	6	7
I share entertaining stories about my child(ren) with family and friends.	1	2	3	4	5	6	7
I post about my child(ren)'s interesting interactions or conversations with family members or friends.	1	2	3	4	5	6	7
I post to praise my child(ren)'s to recognize their good qualities or characteristics (e.g., being smart, being honest, being brave, being compassionate, etc.).	1	2	3	4	5	6	7
I share photos or videos of my child(ren)'s activities with family and friends.	1	2	3	4	5	6	7
I share my child(ren)'s milestones (e.g., first words, graduation, celebrating a birthday, etc.).	1	2	3	4	5	6	7
I post photos or videos of my child(ren) participating in family outings or activities.	1	2	3	4	5	6	7
I post photos or videos of my child(ren) participating in school activities.	1	2	3	4	5	6	7
I share information when my child(ren)'s are being supportive and mature (e.g., helping friends or family members, comforting others, solving a problem independently, etc.).	1	2	3	4	5	6	7
I provide advice online to other parents on childcare.	1	2	3	4	5	6	7
I share parenting strategies for other parents on how to help their child(ren) receive the best education.	1	2	3	4	5	6	7
I offer my suggestions on child(ren)'s mental health and development to help other parents.	1	2	3	4	5	6	7
I share my perspectives on how parents can support their child(ren)'s physical health and development.	1	2	3	4	5	6	7
I share stories of how I support my child(ren)'s well-being.	1	2	3	4	5	6	7

I offer suggestions on how to balance both parenthood and my job.	1	2	3	4	5	6	7
I write about how to make life decisions that involve child(ren) (e.g., quit job for homeschooling, move to another place for better education, etc.).	1	2	3	4	5	6	7
I disclose the moments when I struggled with balancing both parenting and working.	1	2	3	4	5	6	7
I share my situations with juggling parenting, work, and housework.	1	2	3	4	5	6	7
I provide advice to other parents on parents' self-care.	1	2	3	4	5	6	7
I share my parenting experiences to help other parents.	1	2	3	4	5	6	7
I share advice on how one can become a better parent.	1	2	3	4	5	6	7
I use my experiences as an example to empower other parents.	1	2	3	4	5	6	7
I share my opinions on how parents can better communicate with their child(ren).	1	2	3	4	5	6	7
I talk openly about the ups and downs of my parenting process with other parents.	1	2	3	4	5	6	7
I give suggestions to other expecting moms on how to navigate pregnancy.	1	2	3	4	5	6	7
I tell my parenting stories with other parents.	1	2	3	4	5	6	7
I talk about the problems associated with parenting.	1	2	3	4	5	6	7
I vent about my negative feelings about parenting.	1	2	3	4	5	6	7
I share my positive feelings about parenting.	1	2	3	4	5	6	7
I share little moments about my child(ren) that uplift my day.	1	2	3	4	5	6	7
I share my mixed feelings about parenting.	1	2	3	4	5	6	7
I talk about the times when I went through a difficult period during parenting.	1	2	3	4	5	6	7
I disclose the emotional challenges I experienced during parenting.	1	2	3	4	5	6	7
I talk to other parents about my parenting struggles.	1	2	3	4	5	6	7
I tell people how my feelings changed after giving birth.	1	2	3	4	5	6	7
I tell people how I have emotionally evolved after having a child.	1	2	3	4	5	6	7
I tell other expecting moms how I managed my moods during pregnancy.	1	2	3	4	5	6	7
I express how I can be overwhelmed about the amount of attention I need to provided to my child(ren).	1	2	3	4	5	6	7
I share my experiences of how parents manage their anger in front of child(ren).	1	2	3	4	5	6	7
I post about times that I failed to manage my negative feelings.	1	2	3	4	5	6	7
I post about the moments that I felt tired and overwhelmed.	1	2	3	4	5	6	7
I post encouragement for other parents to practice more self-care.	1	2	3	4	5	6	7

I share with other parents about my negative feelings that I experience as a parent.	1	2	3	4	5	6	7
I share my frustrations about the stress I need endure as a parent.	1	2	3	4	5	6	7
I write about the process of how I rebuilt my state of mind to be a better parent.	1	2	3	4	5	6	7
I open up about how I healed my emotional self after becoming a parent.	1	2	3	4	5	6	7
I share stories of my emotional growth as a parent.	1	2	3	4	5	6	7
I post about my parenting philosophy to start conversations with other parents.	1	2	3	4	5	6	7
I give my parenting perspectives when discussing with other parents.	1	2	3	4	5	6	7
I explain my interpretations of different parenting approaches with other parents.	1	2	3	4	5	6	7
I provide information for other parents on what parenting looks like in my country's culture.	1	2	3	4	5	6	7
I talk about my reflections on how to raise a child.	1	2	3	4	5	6	7
I share what I learned from my parenting journey.	1	2	3	4	5	6	7

APPENDIX D. Study 3 survey questionnaire

Privacy Self-efficacy

The following are statements about your self-evaluation in protecting your children's privacy online. Please indicate the degree to which you agree with each statement.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I feel confident in my ability to protect my children's information because I know how to use the online platform's privacy settings.	1	2	3	4	5	6	7
I feel in control of who can view my children's information online.	1	2	3	4	5	6	7
Privacy settings on online platforms allow me to have control over the information about me and my children that I provide online.	1	2	3	4	5	6	7
I feel confident that the information I post online about my children and my parenting experiences can only be seen by those who I have chosen to share it with.	1	2	3	4	5	6	7
I am confident that I know what online information about my children can be seen by people outside of the online platforms.	1	2	3	4	5	6	7

Social Capital

The following are statements about your relationship with other parents **online**. Please indicate the degree to which each statement applies to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Interacting with parents online makes me want to try new parenting approaches.	1	2	3	4	5	6	7
Interacting with parents online makes me interested in parenting stories that happen outside of my town.	1	2	3	4	5	6	7
Interacting with parents online makes me interested in how parents not like me educate their children.	1	2	3	4	5	6	7
Talking with parents online makes me curious about other parenting approaches in the world.	1	2	3	4	5	6	7
Interacting with parents online makes me feel like I am part of a larger parents community.	1	2	3	4	5	6	7
Interacting with parents online makes me feel connected to the bigger picture.	1	2	3	4	5	6	7
Interacting with parents online reminds me that every parent in the world is connected.	1	2	3	4	5	6	7

I am willing to spend time to support parents from online communities.	1	2	3	4	5	6	7
Interacting with parents online gives me new parents to talk to.	1	2	3	4	5	6	7
Online, I come in contact with new parents all the time	1	2	3	4	5	6	7
There are several parents online I trust to help solve my parenting problems	1	2	3	4	5	6	7
There is someone online I can turn to for advice about making important parenting decisions	1	2	3	4	5	6	7
The people I interact with online help me overcome parenting challenges	1	2	3	4	5	6	7
There is no one online that I feel comfortable talking to about intimate parenting problems. (Reverse)	1	2	3	4	5	6	7
When I feel lonely, there are several parents online I can talk to.	1	2	3	4	5	6	7
The parents I interact online would put their reputation on the line for me.	1	2	3	4	5	6	7
The parents I interact online would be good information sources for me.	1	2	3	4	5	6	7
I do not know parents online well enough to get them to do anything important (Reverse).	1	2	3	4	5	6	7

Self-presentation

The following are statements about what you share online in both a parenting and non-parenting sense. Please indicate the degree to which each statement.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I sometimes try to be someone other than my true self online.	1	2	3	4	5	6	7
I am a completely different person online than I am offline.	1	2	3	4	5	6	7
I post information about myself online that is not true.	1	2	3	4	5	6	7
Sometimes I feel like I try to be a good parent online (*).	1	2	3	4	5	6	7
I have a good sense of who I am as a parent and many of the things I share online is a way of showing that (*).	1	2	3	4	5	6	7
Who I am online is similar to who I am offline.	1	2	3	4	5	6	7
I have a good sense of my parenting approaches and sharing my parenting experiences is a way to express my views and beliefs. (*)	1	2	3	4	5	6	7
The way I present myself online is how I am in real life.	1	2	3	4	5	6	7
I like my parenting style and am proud of it and share it online (*).	1	2	3	4	5	6	7
I try out many aspects of who I am as a parent much more than I can in real life (*).	1	2	3	4	5	6	7

I change my photos online to show people the different aspects of who I am.	1	2	3	4	5	6	7
I feel like I have many sides to myself and I show it online.	1	2	3	4	5	6	7
I compare myself to others online.	1	2	3	4	5	6	7
I try to impress others with the photos I post of myself online.	1	2	3	4	5	6	7
I only show the aspects of myself online that I know people would like.	1	2	3	4	5	6	7
I post information online to show aspects of what kind of a parent I want to be (*).	1	2	3	4	5	6	7
What type of a parent I want to be is often reflected in the things I shared online (*).	1	2	3	4	5	6	7

Perceived Enjoyment

The following are statements about your enjoyment that you experience when sharing children's information and parenting experiences online. Please indicate the degree to which each statement.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agre
I find sharing my child(ren)'s information or my parenting stories to be enjoyable	1	2	3	4	5	6	7
The actual process of sharing my child(ren)'s information or my parenting stories is pleasant	1	2	3	4	5	6	7
I have fun when sharing my child(ren)'s information or my parenting stories	1	2	3	4	5	6	7

Long-term Orientation

The following are statements about your attitudes toward planning for the future. Please indicate the degree to which each statement applies to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agre
I resist posting about my children to protect my children's lives in the future (He & Sun, 2020).	1	2	3	4	5	6	7
I work hard on monitoring how others post online about my children to ensure their privacy in the future (He & Sun, 2020).	1	2	3	4	5	6	7
I do not mind giving up sharing information of my children with my family and friends to protect my children's future (He & Sun, 2020).	1	2	3	4	5	6	7
I avoid posting about children because I think about the long-term implications of how it may affect my children's future (He & Sun, 2020).	1	2	3	4	5	6	7

Injunctive Norms

Please rate the extent to which these items are characteristic of you or what you believe. Please indicate the degree to which each statement applies to you.	Extremely uncharacteristic	Uncharacteristic	Somewhat uncharacteristic	Uncertain	Somewhat characteristic	Characteristic	Strongly characteristic
I go out of my way to follow other parents who post children's information online (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
Parents should not always have to follow a set of social rules when sharing children's information (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
Parents should always be able to post information as they wish rather than trying to fit the expectations of family members or close friends (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
There is a correct way to post children's information in every situation (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
If more parents followed the rules of sharing children's information, the world would be a better place (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
People need to follow life's unwritten rules every bit as strictly as they follow the written rules (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
There are lots of vital customs that parents should follow when sharing children's information online (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
The standards that society expects parents to meet are far too restrictive (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
Parents who do what society expects of them lead happier lives (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
Our society is built on unwritten rules that members need to follow (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
I feel at ease when every parent around me is sharing their children's information online (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
We would be happier if we did not try to follow society's norms (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
My idea of a perfect world would be one with few social expectations (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7
As a parent, I always do my best to follow society's rules (Bizer, Magin & Levine, 2014).	1	2	3	4	5	6	7

Privacy Concerns (Institutional + Social)

The following are statements about whether you have concerns regarding sharing your children's information and parenting experiences <u>online</u>. Online here refers to such as social media platforms (e.g., Facebook, Instagram, Reddit, Twitter, WeChat, etc.), blogs, parenting apps, parenting websites, or online parenting forums. Please indicate the degree to which each statement.	*Strongly Disagree*	*Disagree*	*Somewhat Disagree*	*Neither Agree nor Disagree*	*Somewhat Agree*	*Agree*	*Strongly Agree*
I am concerned that the information I post about my children could be misused. (Chen, 2018)	1	2	3	4	5	6	7
I am concerned that a person can find personal information about my children online. (Chen, 2018)	1	2	3	4	5	6	7
I am concerned that the detailed information about parenting I share online could be misused by other users. (Jozani et al., 2020)	1	2	3	4	5	6	7
I am not concerned that leaving my child(ren)'s personal information public online could threaten their privacy. (Reverse) (Chen, 2018)	1	2	3	4	5	6	7
I am concerned about submitting my child(ren)'s information online because it could be used in a way I did not forsee. (Chen, 2018)	1	2	3	4	5	6	7
I am concerned about submitting my child(ren)'s information online because of what others might do with it. (Chen, 2018)	1	2	3	4	5	6	7
An online platform should disclose the way the data collected, processed, and used.	1	2	3	4	5	6	7
A good online platform privacy policy should have a clear and conspicuous disclosure. (Jozani et al., 2020)	1	2	3	4	5	6	7
I am aware and knowledgeable about how my and my child(ren)'s personal information will be used. (Jozani et al., 2020)	1	2	3	4	5	6	7

Demographics

1. Which year you were born?

2. What is your gender?
   a. Female
   b. Male
   c. Genderqueer
   d. Agender
   e. Transgender
   f. Cisgender
   g. Prefer not to answer

3. Which of the following categories best describes the industry you primarily work in?

Agriculture, Forestry, Fishing and Hunting	Mining
Utilities	Construction
Computer and Electronics Manufacturing	Other Manufacturing
Wholesale	Retail
Transportation and Warehousing	Publishing

Software	Telecommunications
Broadcasting	Information Services and Data Processing
Other Information Industry	Finance and Insurance
Real Estate, Rental and Leasing	College, University, and Adult Education
Primary/Secondary (K-12) Education	Other Education Industry
Health Care and Social Assistance	Arts, Entertainment, and Recreation
Hotel and Food Services	Government and Public Administration
Legal Services	Scientific or Technical Services
Homemaker	Military
Religious	Other Industry

4. What is your education level?
   a. Some high school
   b. High school diploma or equivalent
   c. Vocational training
   d. Some college
   e. Associate's degree (e.g., AA, AE, AFA, AS, ASN)
   f. Bachelor's degree (e.g., BA, BBA, BFA, BS)
   g. Some post undergraduate work
   h. Master's degree (e.g., MA, MBA, MFA, MS, MSW)
   i. Specialist degree (e.g. EdS)
   j. Applied or professional doctorate degree (e.g., MD, DDC, DDS, JD, PharmD)
   k. Doctorate degree (e.g., EdD, PhD)
   l. Other, please specify:

5. What is the range of your household income?
   a. Less than $ 20,000
   b. $20,000 - $ 44,999
   c. $ 45,000 - $ 139,999
   d. $ 140,000 - $ 149,999
   e. $ 150,000 - $ 199,999
   f. More than $ 200,000
   g. Prefer not to say

6. What is your race and ethnicity?
   a. American Indian or Alaska Native
   b. Asian
   c. Black or African American
   d. Hispanic, Latino or Spanish Origin
   e. Middle Eastern or North African
   f. Native Hawaiian or Other Pacific Islander
   g. White
   h. Some other race, ethnicity, or origin, please specify:

7. What is your marital status?
   a. Married or domestic partnership
   b. Widowed
   c. Divorced
   d. Separated
   e. Single, never married
   f. Rather not say

8. How many children under age 13 do you have?

9. What is the average age of your children under age 13?

10. What is your relationship between you and your child(ren)?
    a. Biological
    b. Stepchild(ren)
    c. Adopted

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