Emotion Matters: What Happens Between Young Children and Parents in a Touchscreen World

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Young children today are early adopters and frequent users of touchscreen devices. This study explores how parents perceive the role of new media in their families, how and why they regulate children's media use, and how they feel about this process. The study conducts ethnographic interviews with 20 South Korean parents of two- to six-year-olds and observes 10 children in their media use and interaction with parents. We find that parents presumed that touchscreen media wielded a more negative than positive influence on their children. As a result, parents engaged in restrictive and technical mediation, though they often failed to effectively manage their children's media use due to practical challenges. The failure of parental mediation made the parents feel guilty. We suggest a greater need to attend to the contexts and emotions in which parental mediation of children's media use occurs.

Keywords: touchscreen, parental mediation, young children, emotion

In this age of digitalization, children use touchscreen devices at younger ages, and marketers target these young children aggressively (Kabali et al., 2015). The nationally representative Common Sense Media (2013) survey reports that 75% of American children from birth to age eight have access to mobile devices at home, and 38% of children under age two use a mobile device. In South Korea (hereafter, Korea), 68.4% of children ages three to five and 34.9% of infants from birth to age two use smartphones (J. Lee, Do, & Oh, 2013). The mobile industry has quickly noticed what is known as the "pass-back" phenomenon; parents pass their devices to their children for a short period with the understanding that the children will pass the devices back to the parents (Chiong & Shuler, 2010). Shuler (2012) notes that, in the iTunes App Store, the most popular age category of the education section is young children.

This rapidly growing popularity of touchscreen devices among young children needs to be examined carefully, because the use of touchscreen media is reported to have both positive (Rosin, 2013) and negative influences (Honan, 2014) on young children, and to affect parent–child interactions (Lovato & Waxman, 2016). Some researchers are optimistic about the evolution of interactivity and the

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educational benefits of the new technology (Christakis, 2014; Judge, Floyd, & Jeffs, 2015). Others are concerned about the negative effects, such as displacement and compulsive issues that may arise due to the children's young age (American Academy of Pediatrics, 2013; Souza & Cabello, 2010). Nevertheless, there remains a dearth of academic research on touchscreen use in early childhood and how it affects family relationships overall (Connell, Lauricella, & Wartella, 2015).

Moreover, gaps exist in previous studies of the topic. First, little research exists on the mediation practices of parents with infants or toddlers; most of the literature to date has examined older children (see Livingstone & Haddon, 2009). Second, because many existing studies on touchscreen technology and toddlers consist of descriptive reports on statistical figures (Common Sense Media, 2013; Cristia & Seidl, 2015; Hart Research Associates, 2014; Kabali et al., 2015), we lack an in-depth understanding of what motivates parents to engage in mediation of children's new media use and how parents cope and manage this process in their everyday lives (Shin, 2015). Third, because most of these studies explore the practices of Western countries, it is important to examine families in different cultural backgrounds. Last, many studies examine only mothers' perspectives, mainly due to methodological issues (He, Irwin, Sangster Bouck, Tucker, & Pollett, 2005; Radesky et al., 2016; Shin, 2015), which limits the understanding of parental interactions in the domestic context.

Through ethnographic interviews with 20 parents and observations of the touchscreen use of 10 children, this study examines how Korean parents of young children aged two to six living in Austin, Texas, cope with the touchscreen media environment. We ask how parents perceive touchscreen media in their families, how and why they mediate their children's media use, and how they feel about this process. The article aims to demonstrate a greater need to study the contexts and emotions in media use and family relationships. This study contributes to the existing research by providing in-depth insights into what actually happens in the family with regard to new media technology and by examining these practices in light of research with other cultures. Our participants are temporary visa holders who had lived in the United States for three to six years. Although most of their children are U.S. citizens, all the parents were born and grew up in Korea and thus were much more influenced by Korean culture and morals. We believe that Confucianism and patriarchy, which are still present in Korean society, caused our interviewees, especially the mothers, to explicitly emphasize parental responsibility for raising and educating their children (N. Kim, Lee, Kwak, & Park, 2013; Woo & Hodges, 2015). Studying these immigrant families is important because it provides additional cultural information within the same technological environments.

Literature Review

Contextualizing Parental Mediation Theory

New media technology often leads to public debates about its role in the lives of young children. These debates usually center on the dominance of screen-based media in children's lives and how this leads to serious concern about the effects of such dominance on children's development and well-being (Plowman, McPake, & Stephen, 2010). These debates contend with new technology, but the issues have been raised with each new wave of media technology throughout the past century; proponents tout

benefits, and opponents express fears (Wartella & Jennings, 2000). When a new medium is introduced to a society, we observe parental anxieties about children's media use. There were, for instance, diverse cultural anxieties surrounding television (Spigel, 1992) and the Internet (Bakardjieva, 2005) initially. Parents feel compelled to take an active role in facilitating, guiding, and regulating their children's media use. Especially with infants and toddlers, parental perceptions and attitudes critically influence young children's media use since most of the time parents choose what to watch and when to use the media (K. Lee, Jung, Park, & Chun, 2014). Thus, parents with younger children bear the heavier burden of their roles, which usually results in parental mediation.

Parental mediation includes all the "interpersonal communication strategies parents use to mediate and mitigate the negative effects of the media in their children's lives" (Clark, 2011, p. 325). Scholars have identified three forms of parental mediation strategies: *active mediation* (conversation/discussion about media use), *restrictive mediation* (setting rules to restrict time or content), and *co-using* (sharing media experiences with children; Shin, 2015; Valkenburg, Krcmar, Peeters, & Marseille, 1999). Some scholars have pointed out other styles of mediation in today's mobile media environment, such as monitoring the child's online activities afterward or using technical restrictions provided by media devices (Livingstone & Helsper, 2008). Other studies insist that parents use media as a reward or punishment tool in controlling their children (Chiong & Shuler, 2010; Horst, 2010; Wartella, Rideout, Lauricella, & Connell, 2013). Many studies have found active mediation to be the preferred strategy because it reduces possible negative outcomes such as aggressive behavior and parent–child conflict (Nathanson, 1999). Recently, more scholars are examining the usefulness of co-viewing and co-using in the new media environment, even developing a new term: *joint media engagement* (Takeuchi & Stevens, 2011).

Diverse factors—such as parental attitudes toward media use, cultural contexts, religious beliefs, the age of children, and the type of media—influence parents' decisions about which kind of mediation they should use in guiding their children's media use (Rahayu, 2012). Scholars have argued that parents with negative perceptions regarding a given medium, media content, or its effects on their children tend to apply restrictive mediation or technical restrictions, whereas parents who feel that the media offer positive opportunities are more likely to co-use the media with their child or actively talk about the content (Nikken & Schols, 2015). Meanwhile, mediation styles seem to depend on cultural differences. For example, American parents typically use active mediation (Austin, 1993); Dutch parents prefer co-viewing (Valkenburg et al., 1999); Korean parents are likely to apply restrictive mediation (B. Lee, 2012); and in Belgium, France, and Sweden, parents use technical tools (Livingstone & Haddon, 2009). Similarly, parents primarily applied restrictive and co-use mediation styles with younger children; with older children, they intervened less in children's media use or used active mediation (Hart Research Associates, 2014; Nikken & Jansz, 2014; Warren, Gerke, & Kelly, 2002). Finally, parental mediation strategies also vary according to the type of media; for instance, parents are more likely to co-use traditional media such as television than new media such as video games or tablets (Connell et al., 2015).

In this study, we define touchscreen media as portable devices—mobile phones and tablet PCs—that deliver diverse types of content, such as television programing, film, games, music, and various applications through touchscreen technology. Existing studies illuminating young children's touchscreen

technology use in both the United States and Korea have revealed a few notable findings. First, these studies have commonly found that children's new media use has increased rapidly; at age two, most children use a mobile device daily and consume a considerable amount of screen time (Common Sense Media, 2013; K. Lee et al., 2014). These studies suggest that parents allow their children to use media primarily when the parents need to do housework or when they want to enjoy some free time (Kabali et al., 2015; J. Kim, 2013; Y. Lee, 2014; Lim, 2008; Wartella et al., 2013). Second, Western parents generally have positive attitudes toward young children's mobile device use and some feel pride or confidence about it (Wartella et al., 2013), whereas Korean parents have somewhat negative perceptions (Choi, 2013). For instance, many studies that researched Korean mothers' perceptions of smartphone use in early childhood concluded that most mothers regard children at this age (birth to age six) as too young to use smartphone applications (Choi, 2013; B. Lee, 2012; J. Lee, 2011; W. Lee & Sung, 2012; Suk, 2014). Third, based on their different perceptions and cultural contexts, it appeared that Western parents are likely to co-use media with their young children or use active mediation (Austin, 1993; Livingstone & Haddon, 2009; Valkenburg et al., 1999; Wartella et al., 2013), whereas Asian parents prefer restrictive mediation (B. Lee, 2012; Rahayu, 2012).[1]

Applying Ethnographic Audience Studies

Ethnographic audience studies emphasize the relationship between everyday practices and media technologies. Scholars thus conduct ethnographic work in domestic and familial settings to capture the reality of daily lives (Bausinger, 1984; Lull, 1990; Morley, 1986; Silverstone, Hirsch, & Morley, 1991). These scholars have argued that media should be explored within the everyday familial and domestic context. Moreover, they stress the significance of media technologies in our daily lives as much as that of the media content. Lull's (1990) theorization of two social usages of television (relational and structural) and Morley's (1986) example of viewing television use as a tool for understanding family interactions have inspired many scholars in this field to delve into the familial and domestic settings of media practices. Silverstone et al. (1991) explored the ways in which television structured families' spatial and temporal routines and investigated the complex relationship between the cultural and economic functions of contemporary families. Though more recent studies focusing on communication technologies—including mobile phones, laptop computers, and portable media players—conducted ethnographies to examine how these media become a part of everyday life and how parents manage and negotiate that process (Horst, 2010; Lim, 2008), several issues should be further examined concerning the use of touchscreen media in family environments.

Some scholars have primarily investigated parental emotions, such as anxiety or guilt, in relation to parents' perceptions of new media technology and their mediation strategies (Clark, 2011; Livingstone, 2009; Seiter, 1998, 2005). Exploring feelings is critical to understanding society because feelings are not in the individual realm, but in the areas of social groups, and social practices are caused by emotional responses (Hochschild, 1979). For instance, to understand the social phenomenon of children's increasing

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[1] According to Livingstone and Haddon (2009), "rules and restriction did not fit well with the ethos of modern parenting" (p. 25) in Western countries, and parents preferred to talk and share the online experience with young children.

use of touchscreen media, we need to understand parental emotions, because these emotions are shared among parents within a society, and the type of parental mediation depends on the parents' emotions. Clark (2011) argued that how parents establish rules to mediate children's media use is understood in relation to emotional issues rather than in a rational manner; parents select media mediation strategies based on emotions rather than on rational thinking. In this regard, studies have revealed parental emotions about children's media use; parents worry about stranger danger and inappropriate content (Hart Research Associates, 2014) and new media addiction and decreasing physical activities (Wartella et al., 2013). In addition, anxieties increase because parents are less confident about controlling their children's use of interactive media than they are about controlling their children's use of traditional media (Livingstone, 2009). In addition to anxieties, more complex feelings such as guilt are related to children's use of media since decisions about it are very difficult, and parents, especially mothers, bear the burden of enforcing discipline and receiving blame when things go wrong (Seiter, 1995, 1998). Though some studies highlight maternal guilt and suggest that women experience more guilt than men (Kochanska, Gross, Lin, & Nichols, 2002; Silfver & Helkama, 2007), more studies are needed on guilt in the parenting context (Rotkirch & Janhunen, 2009) as well as on guilt resulting from media regulation.

This study explores how parents of young children manage the touchscreen environment, focusing on the contexts and emotions in media use and family relationships. In light of this aim, this study has three research questions: (1) How do parents perceive touchscreen media in their families? (2) How and why do parents mediate their children's media use? (3) How do parents feel about this process?

Method

We conducted ethnographic interviews—a type of qualitative research that combines immersive observation and directed one-on-one interviews through developing respectful, ongoing relationships (Heyl, 2007)—with 20 Korean parents of two- to six-year-old children living in Austin, Texas. We interviewed parents and observed children in their (media) behavior and interaction with their parents. Because some disparity exists between what people say they believe and do and their actual behavior, we think observation worked as a powerful check against what people reported about themselves during interviews (Tolley, Ulin, Mack, Robinson, & Succop, 2016).

To minimize potential reactive effects in the interviews, we recruited most of the participants from our social networks. Rather than conducting the interviews right away, we started them after sharing a meal. Moreover, the male author interviewed the fathers, and the female author interviewed the mothers simultaneously to reduce any awkwardness and sensitivity between different genders. For the observation, we did not provide any other guidelines except asking the participants to come with at least one of their children to the interview location. Because we interviewed the fathers and mothers at the same time, some families passed touchscreen devices right away to the child, and other families gave the child other toys or books to keep the child entertained. This interview setting allowed us to observe how parents use (or do not use) touchscreen media to occupy their children in everyday practice, how much children were immersed in the screens, and how the relationship between parents and children differed when the children were using touchscreen devices or other toys or books.

We let the interviewees choose the locations for the interviews from among their familiar spaces to maximize their comfort; except for one family who invited us to their house, all others chose coffee shops or restaurants near their houses. We argue that families in public spaces are just as interesting to observe as families in private homes, because in the public places we could observe how parents use various strategies (including touchscreen devices) to control their children's behavior (Daly, 2007; DeVault, 2000). The interviews were conducted in Austin, Texas, from 2013 to 2014. The sample for this research consisted of 10 Korean families: 10 fathers and 10 mothers for the interviews; and 10 children (five boys and five girls) for the observations. All the parents were born and raised in Korea, and they had moved to the United States as adults; they had lived in the United States for three to six years at the time of the interviews. The ages of the parents ranged from mid-30s to early 40s. The average age of the children was 2.6 years; one boy was six, and the rest were much younger (between ages two and three). We used a snowball sampling methodology to recruit the participants. While conducting the interviews, we took simple notes of noticeable observations. Based on the notes, we discussed our findings with each other immediately after each interview to ensure retention of the details. Interviews were conducted in Korean and lasted for about an hour. Interviews were audio-recorded and transcribed verbatim. They were then translated into English.

We used a semistructured interview guide. The interview questions covered three key areas: (1) parental attitudes toward their children's use of touchscreen devices, (2) parental mediation of their children's use of touchscreen devices, and (3) parental emotions regarding their children's touchscreen use and its impacts. We also established three key points for the observation: (1) the moments when parents gave touchscreen devices to their children and its effects, (2) children's actual use of touchscreen devices and the interaction between parents and children, and (3) the differences between fathers and mothers in care and control of the children.

Among the 10 families, seven had only one child, two had two children, and one had three children. Six families were media rich (possessing tablets, smartphones, and various media devices), three were average (possessing television, laptops, and smartphones), and one was media poor (possessing only a laptop, a radio, and a feature phone). All the families had some commonalities in socioeconomic backgrounds: They were all originally from Korea, and most of them came from relatively middle-income and highly educated families. Whereas the samples in previous studies conducting qualitative interviews consisted of a high proportion of mothers and a low proportion of fathers (He et al., 2005; Radesky et al., 2016 Shin, 2015), the sample for our study contains an equal number of fathers and mothers, making it valuable in giving a forum to fathers' voices. Moreover, we interviewed both the father and the mother within each family. This sampling, along with the ethnographic interview design, allows us to thoroughly investigate the practices within domestic environments from multiple angles.

The analysis was pursued over five steps. First, we reviewed two types of data sets—the transcribed interviews and the observation documents—in an iterative manner. Second, we identified recurring patterns, gender differences, and interesting exceptions in the data sets and then summarized them. Third, we classified these various points into three main categories, which were informed by parental mediation studies and ethnographic works in domestic and familial settings: *parental perception*, *mediation strategies*, and *parents' emotion*. Fourth, we discussed the results with each other to elaborate

and finalize our categorizations. Fifth, we clarified our findings and verified the significance and the limitations of our findings by comparing them with the outcomes of previous studies.

Findings

Parental Perceptions

Although positive perceptions of young children's touchscreen use were somewhat restricted and conditional among our interviewees, they were not entirely absent. Many families spoke with pride of their children's technological skills; parents seemed to consider their children's skillful manipulation of touchscreen devices as a unique talent. From the interviews, we found that the intuitive user interfaces of touchscreen media and the recommendation system that seamlessly suggests content to children allowed toddlers to easily manipulate the devices without parental involvement. While toddlers could not use a television remote control or a computer mouse proficiently, most toddlers skillfully manipulated touchscreen devices. Our observations of the children's use of touchscreen devices substantiated what the parents discussed in their interviews about their children. For instance, we realized that when parents passed the devices to their children, the children never asked for any help. Rather, they unlocked their parents' smartphones and played (and watched) their favorite content without difficulty, and they searched for other content after finishing the opening video. The children who used touchscreen media during the interviews were aged two to three years, and they watched videos rather than using other types of applications such as mobile games.

While these positive perceptions were somewhat restricted and conditional, the negative concerns were overwhelming. We recognized three types of negative perceptions. Parents were concerned about (1) psychological problems, (2) physical effects, and (3) cognitive development. First, concerns about psychological effects were mainly associated with children's compulsive use of touchscreen media. Parents worried about their children's obsession with touchscreen devices, which they thought would harm the child's personality.

> I already get worried when my baby starts to use my smartphone because I know she is going to scream and cry when it is time to stop the video. She doesn't even cry that much when she is physically hurt, but if I don't let her use my smartphone, she just boils with rage. Passing the phone is no problem, but it is so hard to get it back. (K, the mother of a two-year-old girl)

During the interviews, we observed different responses that supported these concerns. When the children were asked to stop what they were doing, the children with touchscreen devices tended to refuse the parental requests and even made a fuss, whereas children with other objects, such as toys or books, passed them back with no objection. The process of getting the touchscreen devices back was demanding. For example, the mother of a two-year-old girl had to give the girl a cookie first to distract her from the smartphone, and then quietly hide the device in her bag. Another family gave up their demand for the device and left the interview location with the two-year-old girl still clutching it.

Second, participants were concerned about the negative physical effects on children's eyesight and posture. Compared with traditional media with bigger screens, parents' anxiety increased regarding the smartphone and its smaller screen. Y, the mother of a three-year-old boy, worried about her son's smartphone use because his posture was fixed for a long time, slouching in front of the screen, whereas he occasionally changed his position when he was watching television. In one interview location, we observed that a two-year-old girl who began to watch animations did not shift her posture until the end of the interview. Curled up on a chair, she kept the smartphone a few inches from her face.

Last, participants believed that the passiveness of merely watching content on touchscreens would hinder their children's cognitive development. Even though the interactivity was regarded as one of the most determinant characteristics of touchscreen devices, the participants pointed out that the interaction happened only when their children were selecting content among recommendations, and the passiveness of just staring at the screens dominated the rest of the time. More than half the participants perceived the passiveness to lead to a lack of creativity and low intelligence in their children. During the interviews, the children using touchscreen media mostly stared at the screens, rarely manipulating the devices.

Meanwhile, parental anxieties about toddlers' touchscreen use were intensified for two significant reasons. First, parents possessed negative perceptions about their children's strong attachment to and preference for touchscreen devices. J, the father of a three-year-old girl, mentioned that his daughter prefers the iPad to television because she can control the tablet's intuitive interface, whereas she cannot control the television. K, the mother of a two-year-old girl, referred to the reasons that her daughter feels an attachment to K's smartphone:

> We would naturally think that children would prefer bigger screens, but my girl prefers the smartphone since it is smaller, manageable, and physically close to her. In contrast, she cannot touch or hold the TV and has to watch it from far away. (K, the mother of a two-year-old girl)

Due to the controllability of and intimacy with touchscreen devices, the children were more immersed in the content than they were when watching television, which was often interrupted by advertisements or parental intervention. The more their children were attached to the device, the more parents' concerns increased.

Second, the lack of empirical evidence or popular scientific theory (rumors) worsened parents' anxiety about touchscreen devices. Because the touchscreen phenomenon is relatively new, and little definitive scientific research exists, parents struggled to make decisions regarding their children's media use. N, the mother of a three-year-old girl, stressed that she wants more consistent and credible information on the effects of touchscreen media, since she was confused by conflicting opinions from different sources. Other participants also conceded that they had to depend on their intuition or anecdotal evidence about the effects of touchscreen media.

Mediation Strategies

The pervasive perceptions of the negative effects of using touchscreen devices generally resulted in parental mediation. All the research participants stated that they pursue restrictive mediation rather than active mediation or co-using. A prominent type of mediation was time-related regulation. According to the participants, their concerns about children's compulsive use of touchscreen devices gave rise to their implementing time restrictions. The interviewees rarely referred to co-using as one of their main strategies because they usually passed their devices to the children in moments when they could not take care of the children. Otherwise, if they had the time, they would rather participate in wholesome activities such as reading books or playing outside together than co-use touchscreen devices. In addition, many parents considered touchscreen devices as personal equipment unsuitable for co-use. All participants referred to time restrictions on using devices, ranging from 30 minutes to two hours at a time.

Three families that possessed tablets used technological restrictions by employing the alarm embedded in the devices. P, the mother of a six-year-old boy, mentioned that her son complied with the regulations when they set the alarm together through conversations, but he tended to disobey when she verbally regulated his use time. For them, setting the alarm together was a ritual of negotiation.

Because all the participants who possessed touchscreen devices showed videos to their children through video-sharing websites, such as YouTube, regulating the content was complex; toddlers could accidently access inappropriate content by navigating among the continuously recommended content. L, the mother of a three-year-old girl, placed her daughter near her while her daughter used an iPad so L could keep listening to the sound emanating from the device. D, the father of a six-year-old boy who could skillfully manipulate the devices, prohibited his son from using YouTube, since his son was frequently exposed to violent and lewd scenes during his explorations of the content recommended by the system. What was interesting about the parents' strategies was that they tended to choose between reducing the use time and increasing the quality of content. For instance, H stated that his family decided to show his toddler the exact same content every day, hoping that she would get bored using touchscreen media. H knew there were interactive or educational applications or videos for his daughter, but he was afraid of her spending too much time with touchscreen devices. In contrast, J, who had a relatively positive perception of children's touchscreen use, was very interested in selecting good educational content that made his three-year-old daughter sing or dance along, since he believed that they could not stop her touchscreen use.

All the participants referred to granting the use of touchscreen devices as a way of rewarding their children's good behavior and punishing bad behavior. Even the family that was most reluctant to let their children use devices declared that they let their children use devices as a reward. Meanwhile, for some families, the limitations of traditional television (dependence on schedules) and the risk of new technologies (allowing too much controllability) created a new type of technical mediation. Seven of 10 families connected their laptops or tablets to television to make their children watch on bigger screens, to decrease children's controllability, and to increase the physical distance between the children and the devices. In this way, parents could monitor and control their children and alleviate the potential negative effects of touchscreen devices, such as excessive immersion, failing eyesight, and bad posture.

Meanwhile, some parents restricted their children's touchscreen use by simply not purchasing touchscreen devices.

> My wife and I have thought about buying an iPad or upgrading to another smartphone, but we chose not to, since this decision would lead to our son using these devices a lot. (S, the father of a two-year-old boy)

> I once wanted badly to buy an iPad, but I knew it would soon become my daughter's iPad, and I'd have hard time controlling her use. So I gave up the idea. (K, the mother of a three-year-old girl)

Emotion Matters

Participants' negative perceptions of children's touchscreen use led to restrictive mediation (e.g., minimizing touchscreen time). The practical challenges in everyday lives, such as lack of time or parents' tiredness, however, often kept participants from adhering to their regulation principles. Indeed, despite their restrictive mediation principles, most participants exposed their children to touchscreen devices quite frequently or almost every day. Moreover, they admitted that touchscreen devices often served effectively as a babysitter. With the drastic diffusion of touchscreen devices, this phenomenon has become quite pervasive. K, the mother of a two-year-old girl, defined touchscreen devices as "the nanny for middle-class families." We found that the main purpose of parents' paradoxical use of touchscreen media is replacing the connection between parents and children with that of touchscreen media and children, liberating the parents temporarily. The interviewees insisted that touchscreen devices are ideal for that kind of use due to their high performance and efficiency. However, failing in keeping their basic principles was strongly related to a specific type of parental emotion—guilt.

All the participants mentioned that allowing their children to play with touchscreen devices caused a sense of guilt. The interviewees felt guilty because they exposed their children to touchscreen media voluntarily, even though they basically had negative views of children's media use. Since they highly valued interacting with children by doing more beneficial activities together, parents felt guiltier when they replaced their interactions with touchscreen devices. T, the father of three children, summarized that when there are more interactions between parents and children, the level of tiredness increases, but when there are fewer interactions, the level of guilt increases. D, the father of a six-year-old boy, explained his conflicting feelings and practices, and H emphasized the value of these moments, comparing them to the moments when the child sleeps.

> I feel sorry. I feel very sorry. Sometimes I make him play with the iPad alone when I have nothing important to do. However, I have to live. I am not an iron man. (D, the father of a six-year-old boy)

> Generally, I can do nothing when she is awake. However, when she's sleeping I can do everything. When I hand her my smartphone, I can have the same effect. Freedom! (H, the father of a two-year-old girl)

This feeling of guilt was usually aggravated since parents believed that their endeavors and devotion ought to replace the touchscreen devices. Parents also felt guilty because they thought that these practices were not entirely caused by the strong demands of their children, but by the necessity of the parents. K, the mother of a two-year-old girl, revealed that her smartphone was just one of many tools for her daughter, though it was a powerful and durable one. So when K tried to play with her daughter—asking to go out, to swim, to run—during her use of the iPhone, her daughter did not ask for the smartphone anymore. These statements were somewhat proven by our observations. With three children who were given touchscreen devices during the interviews, they did not ask for the devices; they merely whined out of boredom. Parents handed over their touchscreen devices because they felt embarrassed about the children's frequent interruptions.

Despite feeling guilty, parents had to use touchscreen devices frequently to keep their children occupied. First, 15 of the 20 participants said that when they were exhausted, they gave touchscreens to their children. When the parents were fatigued, other activities such as reading books or playing with toys were too demanding since those activities required deeper interactions between the parents and the children. Second, these paradoxical practices occurred when the parents had to get things done, such as housework or job-related work. This is quite understandable considering the norm of dual-income families. L, the mother of a three-year-old daughter, conceded that her attitude about her daughter's touchscreen use changed according to L's situations; when L had something to do, she did not hesitate to allow her daughter to use the tablet. Last, touchscreen devices were most useful in desperate situations, especially when in public places or in emergencies. We considered these types of situations when we designed the observations. Participants argued that touchscreen devices were the most immediate tools to silence their children at crucial moments. K, the mother of a two-year-old girl, defined her smartphone as "insurance for accidental moments." J, the father of a three-year-old girl, said:

> One day, my wife's supervisor called, but my daughter kept shouting, "Who is it? Give me the phone! I want to talk!" My wife told her that it was her supervisor on the phone, but my daughter obstinately kept shouting. In those cases, we have to give her the iPad. Nothing can replace it.

As interviewers, we experienced how touchscreen devices helped in the interview process. Five of the 10 families allowed their children to use touchscreens during the interviews. Two families used tablets from the beginning, and three allowed their smartphones after the children began to pester the parents. The touchscreen-media-free interviews were much more difficult to conduct due to the children's constant interruptions.

During the interviews about guilt, we found gender differences not in how participants felt, but in the way they described their feelings. The mothers commonly and frequently used expressions of generalizing their behaviors and feelings. For example, they argued that their practices of passing touchscreen devices to their children were pervasive among all parents. While mothers and fathers equally confessed their anxieties and guilt, mothers tended to justify their behaviors more strongly than fathers by talking about other mothers and general trends in society. K admitted that she worried about her social reputation when her daughter uses touchscreen devices in public spaces.

> If I talk with friends or eat something while my daughter keeps watching my smartphone, other women around me will speak ill of me. They will say, "Oh, my, nowadays, young mothers just hand that to their children and indifferently enjoy their time." It bothers me. (K, the mother of a two-year-old girl)

In summary, this research reveals a gender difference in how parents describe their feelings of guilt. While the fathers also felt guilty about touchscreen parenting, only the mothers justified their practices since they were in charge of child care.

Discussion

Although previous studies have revealed many significant findings, questions remain about an in-depth understanding of what motivates parents to mediate children's touchscreen use and how they cope with this process in their everyday lives. Based on the findings of this ethnographic interview research, we highlight five broad contributions to the existing body of literature. First, this study embraces all the closely related elements of children's use of touchscreen media, such as parental perceptions, actual practices, and emotions, which have been studied somewhat fragmentarily in previous studies, and explores how these elements are interrelated. In accordance with existing studies (K. Lee et al., 2014), we found that parental perceptions are directly associated with young children's media use; for example, if parents have negative perceptions, they are more likely to restrict children's media use. A positive perception shared by many participants was pride in their children's technological skills, which supports the findings of previous studies (Jennings & Wartella, 2013; Plowman et al., 2010). Positive perceptions were limited among our participants; they largely had concerns about the potential negative effects of excessive touchscreen use. As Wartella and colleagues (2013) pointed out parental worries about new media addiction and decreasing physical activities, participants in the current study also had concerns about the psychological and physical effects of touchscreens, such as compulsive use and vision defects.

Despite these negative perceptions, in accordance with previous studies, we also found that parents generally passed their devices to their children when (1) they were exhausted, (2) they needed to do things, and (3) they were in public spaces (Common Sense Media, 2013; J. Kim, 2013; Y. Lee, 2014). In particular, going out with children has become much easier; when parents had to pack other tools such as toys and books, the preparation took more time and the children still asked for parents' intervention. However, touchscreen media allows temporal liberation for the parents in public, which hugely influences their everyday lives. As the pass-back phenomenon implies, the participants expected their children to pass the devices back to them after the temporal liberation; however, getting the devices back was much harder than they expected. This frequent use of touchscreen media, despite parents' negative perceptions of it and the everyday struggles of coping with children, increased their sense of guilt.

The second significant finding of this research is the parents' focus on emotion and how it is related to their perceptions and mediations. Exploring feelings is critical in understanding society (Hochschild, 1979), and parental mediation depends on parental feelings rather than on rationality (Clark, 2011). This research reveals that participants feel guilty for frequently exposing their children to touchscreen media, despite their negative perceptions and certain regulative principles. It is important to

have quality time with children, and being a good parent is equated with doing more child-centered activities (Clark, 2011). Hence, parents feel guilty when they substitute touchscreen devices for interactions. This feeling of guilt is not a new phenomenon; three decades ago, Simpson (1987) pointed out that the true source of the guilt is not so much television as "the almost unconscious acceptance that a mother must, in all circumstances and at all times, be equal to the demands of a young child" (p. 7). He argued that this is why questions of guilt arise when television functions as a "childminder, comforter or distractor" (p. 7). It is critical to acknowledge, however, that while television is not mobile and thus not always available in all places, touchscreen devices are ubiquitous. Moreover, young children have strong attachments to touchscreen devices due to their portability and usability. Thus, the level of guilt associated with parental mediation of touchscreen use is much higher than with traditional media, such as television.

Third, investigating these very young children's touchscreen use is meaningful and needed. Previous studies have found parental mediation to be affected by children's age and types of media. This study reveals that parents worry about the negative effects of using touchscreen media on their children's intellectual development. Parents insisted that watching videos passively on touchscreen devices might negatively affect the cognitive development of their young children who are accustomed to this type of media use. A study of French toddlers also discovered this passiveness of using touchscreen media (Cristia & Seidl, 2015). Thus, participants in this study mostly used restrictive mediation rather than active mediation or co-using, supporting earlier studies arguing that negative attitudes about media effects result in restrictive mediation (Nikken & Schols, 2015). Studies have claimed that Korean parents perceive smartphones as an unhelpful device for children (Suk, 2014), and the negative perceptions among our participants seemed to influence their decisions concerning parental mediation. This finding is similar to the findings of earlier studies maintaining that the younger the children, the more the parents adopt restrictive types of mediation (Warren et al., 2002).

Although some studies assert that new media are suitable for co-using (Takeuchi & Stevens, 2011), this study agrees with other studies that have argued that parents do not co-use new media as much as they do traditional media (Connell et al., 2015). Korean parents rarely co-use touchscreen devices with their children. This research also supports previous studies that found parents use media as a means of delivering rewards or punishments (Chiong & Shuler, 2010; Horst, 2010; Wartella et al., 2013). One interesting finding of this research is that the participants connected new media (touchscreen devices) to old media (television) to prevent negative effects such as children's excessive immersion. This is in line with studies that have explored technical restrictions (Livingstone & Helsper, 2008).

Fourth, by examining Korean families, this study expands the area of research that has focused on Western societies. For Korean parents, passing touchscreen devices to the children instead of spending time together might be interpreted as somewhat subpar child care. While one study insisted that American parents put emphasis on content filtering rather than the amount of screen time (He et al., 2005), the concerns about children's compulsive use have led Korean parents to implement time restrictions. Some participants negotiated the time together with their children by setting alarms embedded in touchscreen devices. This technological restriction seems to be a mixed type of restrictive and active mediation. The

children tended to conform to this type of regulation. To some extent, this finding supports the notion that active mediation through conversation alleviates negative responses (Clark, 2011).

Although previous studies have recognized the pervasive phenomenon of occupying children with touchscreen media, studies in the West rarely connect this phenomenon to parental feelings of guilt. In fact, He et al. (2005) claimed that American parents never felt guilty about their children's new media use. The roots of this difference might lie in Korean parents feeling excessive responsibility in raising children, while Western parents usually underestimate the negative effects of media on their own children (Clark, 2011).

Fifth, while existing studies, including studies on Korean practices, usually represent the perspectives of mothers, this study explores the voices of both mothers and fathers in each family to understand familial dynamics and to examine gender-related differences. Among those who prohibited the use of touchscreens during the interviews, four of the women were full-time homemakers. It is possible that those mothers did not allow their children to use the devices during the interviews because they did not normally use the devices in those situations or because of the presence of the interviewers. These tendencies may be caused by the sociocultural prejudice about mothers' responsibility for child rearing. Fathers usually do not feel strongly responsible for child rearing, and mothers tend to bear much of the responsibility, which may have caused the difference in describing their less ideal practices.

During our interviews, mothers tended to speak of their touchscreen parenting practices in quite generalized terms. This finding is in line with Rotkirch and Janhunen's (2009) study, which argued that "many mothers depicted guilt that was not linked to conflict situations but related to cultural expectations" (p. 100). Compared with the West, Korea has powerful cultural expectations that demand a great sense of duty from mothers, and this seems to cause the mothers' generalizations about their touchscreen use. According to a nationwide survey, women are still mainly responsible for domestic work and child raising in Korean marriages (Seoul Statistics, 2014). Perhaps the lingering influence of Confucianism and patriarchy in Korean society causes mothers to be extra sensitive to their reputations. Confucianism presupposes a hierarchical relationship between men and women and imposes the obligations of child rearing on mothers (Won & Pascall, 2004). Considering this cultural context, it is no surprise that mothers were much more sensitive about their children's media use than were the fathers.

We acknowledge some limitations in the research design of this study. Although we tried to create interview situations that are similar to everyday environments to induce authentic practices (e.g., when parents have to meet their friends with their children), the credibility of the observations could be challenged because these situations could be artificial to some extent. We admit that both observations and interviews are contrived because "the researcher is participant in the creation of data and plays a role in the way the reality is shaped, constructed and communicated" (Daly, 2007, p. 130). In addition, it is important to echo the likelihood that the parents were conscious of our presence and that there exists some disparity between what people say they believe and do and their actual behavior. In many ways, however, comparing the comments of mothers and fathers in each family and observing the familial interactions allowed us to identify and understand the actual practices around touchscreen devices in domestic environments.

Further studies with empirical evidence of the effects of touchscreen devices on young children need to be conducted so that parents can receive more concrete and helpful guidelines. In addition, quantitative studies of the relationship among parental perceptions, mediation, and feelings about children's media use should be explored to support the findings of this research. Infants and toddlers should be extensively included in children and media studies, considering that touchscreen technologies now enable toddlers to use the devices in much more diverse ways—ways that are distinguishable from the use of traditional media.

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