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How to cite this manuscript

If you make reference to this version of the manuscript, use the following information:

Ganong, L. H., Coleman, M., Feistman, R., Jamison, T., & Markham, M. S. (2012). Communication technology and post-divorce coparenting. Retrieved from http://krex.ksu.edu

Published Version Information

Citation: Ganong, L. H., Coleman, M., Feistman, R., Jamison, T., & Markham, M. S. (2012). Communication technology and postdivorce coparenting. Family Relations, 61(3), 397-409.

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Digital Object Identifier (DOI): doi:10.1111/j.1741-3729.2012.00706.x

Publisher's Link: http://onlinelibrary.wiley.com/doi/10.1111/j.1741-3729.2012.00706.x/pdf

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Communication Technology and Post-divorce Coparenting

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Acknowledgement: This study was funded by a University of Missouri Research Council grant to the first author. We also acknowledge funding for this research provided by the Missouri Agricultural Experiment Station, Project MO-HSSLO816

Abstract

Divorced individuals who share parenting responsibilities have to figure out ways to work together to raise their children. The purpose of this qualitative study of 49 divorced coparents was to examine how they used technology (e.g., cell phones, computers) to communicate. For parents in effective coparenting relationships, communication technologies made it easier for them to plan and make conjoint decisions about their children while living apart. Communication technology, however, did not necessarily make coparenting easier if parents were contentious. Contentious parents used communication technologies as tools to: (a) reduce conflicts, (b) withhold information, (c) limit the ability of the coparent to have input into child-rearing decisions, and (d) try to influence the behavior of the coparent. Over one million U.S. children experience the divorce of their parents annually (Kreider, 2007). In 2007, 25.8% of American children younger than 18 lived with a single parent and 6% lived with a parent and a stepparent. An estimated 16.8% of divorced men and 56.9% of divorced women live with their own minor children (Kreider, 2007). These children and their divorced parents face many challenges. One of the most important challenges in post-divorce families is maintaining positive co-parental relationships (Miller, 2009; Whiteside, 1998).

In the early 1990's 20% of divorced parents had joint legal custody; this figure increased to an estimated 50-90% when state statutes changed to permit joint legal custody (Kelly, 2007). Joint physical custody has lagged behind legal custody but by 2010, 47 states had statutes authorizing joint legal and physical custody if it was in the child's best interest (Elrod & Spector, 2011). Increasingly, parents are choosing, or courts are mandating, shared parenting after divorce (Bauserman, 2002), requiring communication between ex-partners who may have contentious relationships. Divorced individuals who share parenting responsibilities have to determine ways to work together to raise their children (Ahrons, 2007; Graham, 2003). Being able to develop or maintain a positive coparental relationship is critical because the quality of the coparental relationship is related to children's adjustment following divorce – children are harmed when parents try to undermine each other, argue frequently about the children, and put the children in the middle of parental disputes (Buchanan, Maccoby, & Dornbusch, 1996; Sandler, Miles, Cookston, & Braver, 2008).

Coparental relationships also are related to the quality of post-divorce parent-child relationships (Amato & Sobolewski, 2004) and are particularly relevant to the bonds between children and nonresidential parents, usually fathers (Sobolewski & King, 2005). Maintaining close relationships with nonresidential fathers has been found in several studies to be predictive of children's wellbeing and adjustment to divorce (Amato & Gilbreth, 1999; Carlson, 2006; King & Sobolewski, 2006). In fact, the evidence has been so compelling that some researchers have turned their attention to factors that facilitate or hinder divorced parents' connections with their children and each other. One factor that has been identified is communication (Afifi & McManus, 2006; Graham, 2003). Although communication allows family members to maintain relationships, it can either ameliorate or increase conflict (Graham, 1997; Miller, 2009). That is, if the communication between parents is mostly negative, accusatory, or hostile, then children suffer. Markham and Coleman (in review) noted that divorced co-parenting mothers who identified their co-parenting relationships as contentious, limited direct communication (i.e., in person, phone) and used only email and texting in order to avoid strife. Those who had better relationships used a variety of means of communicating, including technology. Much more needs to be known about the processes by which coparents communicate post-divorce.

Although considerable research has been focused on divorced coparents, little is known about their use of technology (e.g., cell phones, computers) to communicate. Therefore, the purpose of this study is to examine how divorced coparents use communication technology.

Families and Technology

Various technologies have allowed for improved contact for geographically-dispersed families (Yarosh, Davis, Modlitba, Skov, & Vetere, 2009). Christian (2009) reported that in Denmark the adoption of the cell phone has changed how people organize their everyday activities; parents use cells for both control (keeping track and monitoring) and care of their children. Researchers in the United States have found that cell phones, email, text messaging, and video chatting are ways that families often share information (Chen & Katz, 2009), seek support (Weisskirch, 2009), and create feelings of closeness and connection (Christensen, 2009). Christensen (2009) labeled families' creation and maintenance of feelings of closeness when physically apart as "connected presence." For example, she found that parents frequently used cell phone calls for coordinating (e.g., making plans for the family's evening tasks), for sharing experiences, and sometimes to simply create presence or closeness between family members. She concluded that this "connected presence," including the shortest and most instrumental calls, reaffirms bonds between family members.

Most research on the use of technology within families has ignored family structure. Although the challenges inherent in maintaining coparenting relationships have been documented extensively in the divorce literature (Amato, 2010), few researchers have explored how post-divorce coparents maintain contact while physically separated, especially if their relationships are strained or hostile.

Communication Technology Use in Post-Divorce Families

Interpersonal communication may be classified as either synchronous (i.e., both parties are available at the same time such as in phone conversations or face-to-face meetings) or asynchronous (i.e., messages are sent and received intermittently over periods of time; messages must be saved to be received at a later time, as in emails or phone texts). When family members are separated either temporarily or by permanent structural changes, their use of synchronous and asynchronous communication media may change. Communication strategies may change as well (Stern & Messer, 2009). For example, whereas parents who live together typically make plans about their children during shared times at home (i.e., synchronous), divorced coparents who live in separate households may need to communicate asynchronously (e.g., leaving text messages or exchanging emails).

Phone conversations remain a common synchronous method of communication in postdivorce families, but phone calls may have drawbacks. Divorced coparents have reported that phone calls were most effective when they were brief and fact-based (Author, in review). Otherwise, phone calls had the potential to disintegrate into arguments about on-going disagreements and rehashing of past issues. Phone calls, unless recorded, leave no record of what was said, so coparents can deny having been told things about the children such as their schedules. It is also impossible to retract statements and threats made in heated telephone arguments. Email, on the other hand, has been found to be a useful tool for divorced coparents (Miller, 2009). Emails can be sent without fear of engaging the other parent in unwanted conversation, they leave a record of information shared, and they allow a parent a chance, if they so choose, to edit their comments to be less hostile or more accommodating.

The purpose of this study was to explore the use of communication technology by divorced coparents. We investigated the type of communication technology divorced coparents used and their motives for using them

Methods

Secondary Data Analysis

Qualitative data collection often yields large, rich datasets that cannot be fully interpreted or explained in a single study (Hinds, Vogel, & Clarke-Steffen, 1997). Since 2007, we have been conducting a series of grounded theory studies of relationships in post-divorce families (e.g., Author citations). The focus in some of these investigations has been on the dynamics of coparental relationships among divorced parents. We conducted a secondary analysis of some of these data to better understand one specific concept of interest – divorced parents' use of communication technology in coparental relationships. Based on extensive analyses of the original data, we knew there was an adequate fit between these data and this new research purpose, which is one of the primary criteria to conducting secondary analyses of qualitative data (Hinds et al., 1997), and is consistent with a grounded theory approach to research. Strauss and Corbin (1998) advocated theoretically sampling data to identify variations of relevant situations to analyze further. They admitted that although categories in secondary analyses may have less densely described properties and dimensions than in original analyses, typically there were "ample variation within cases to enable the researcher to compare concepts for similarities and differences" (Strauss & Corbin, 1998, p. 288). In the original project the research question was broad – "What facilitates or hinders the maintenance of post-divorce coparental relationships?" In the analysis presented here, the question was more specific – "How do divorced parents use technology to communicate with coparents?"

Participants

The data analyzed for this paper were from interviews with divorced parents conducted between 2007 and 2011 with 42 mothers and 7 fathers (see Table 1). Parents had to have at least one child under the age of 18 at the time of their divorce to be in the study. The ages of children ranged from 13 months to 30 years. Most parents had either 1 or 2 children, with a range of 1 to 4 (Mean number of children = 1.8). There were a variety of custody arrangements, but in general parents shared physical (N = 20) and legal custody (N = 27). Most of those with sole physical custody were mothers (14 of 18), and even when there was shared physical custody, children usually spent more time in their mothers' households than in their fathers.' Most of the parents were White, employed, and middle-class. They ranged in age from 26 to 49. About half were remarried or in a committed relationship and the rest were single and not involved in a serious

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romantic relationship. In 28% of the families, both parents had repartnered. A detailed description of the sample is included in Table 1.

Procedure

Data collection procedures were consistent with a grounded theory approach. Coparents were interviewed individually for 60-90 minutes by a member of the research team and interviews were digitally recorded and transcribed verbatim. Interviews began with a genogram of the family that included all marriages, divorces, and children's sibling constellations (full, step-, and half-). We then asked participants how they maintained their coparental relationships as they experienced various family transitions (e.g., separation, divorce, and new relationship formation). We focused specifically on the processes individuals used in sustaining their coparenting relationships. Interviews began with a basic set of questions but were flexible enough to adapt to the comments and concerns of each participant; this type of interview is common in grounded theory and makes it possible to obtain rich and detailed explanations of participant experiences (Corbin & Strauss, 2008). In addition, during the interviews we asked coparents to rate the quality of their coparental relationship on a four-point scale, with 1 = poor, 2 = fair, 3 = good, and 4 = excellent. We did not define "quality" for participants, instead we allowed them to use whatever personal definitions they wanted.

Coparents were recruited via a court ordered parent education program for divorcing parents, advertisements, and word of mouth. Participants received a \$10 gift card for being interviewed. All interviews were conducted in university offices, in the homes of participants, or in a few cases, by phone.

Analytic Strategy

We began the analysis for this study by examining the coded data from all adults from the original interviews. This time we examined ways in which communication technology helped or hindered post-divorce coparents. Interviews were read again line by line. Using constant comparison, we reanalyzed all interview transcriptions, adding a number of new codes to those previously identified. By using constant comparative analytic techniques and returning to the data to validate emergent findings, the proposed category definitions about the use of communication technology were grounded in parents' descriptions. We identified when and under what conditions communication technology was used by coparents and what the resulting outcomes were as a way to understand coparental processes (Corbin & Strauss, 2008). We applied secondary analytic parameters as described by Hinds, Vogel, and Clarke-Steffen (1997) and Thorne (1994) to focus on the new research question. In this study, the way individuals discussed different technologies seemed to be rooted in the quality of their coparental relationships.

All interviews were read independently by at least 4 of the 5 research team members. New codes, new memos, and developing ideas about coparental relationship quality and the strategic use of technology to communicate between coparents, were discussed. The final analyses reflect consensus of the research team.

Although this study was inductive, several general ideas from the research literature about post-divorce coparenting informed the data analysis. These sensitizing concepts (Daly, 2007) were used as a lens through which the data were viewed. Concepts derived from the research literature, such as coparental cooperation and conflict, and children's well-being, were of central interest when analyzing how technology was used to communicate. We also were attuned to issues related to boundary maintenance, since co-parents remain involved with each other as parents while concurrently separating themselves from the pre-divorce couple relationship.

Results

Coparents Use of Communication Technology

The participants' ratings of their coparental relationships revealed a wide range of relationship quality (from poor to excellent), although the ratings skewed toward more positive. The self-evaluations were helpful because the use of communication technologies differed between individuals who perceived their coparenting relationship as excellent and those in relationships perceived as poor or less well-functioning. Relationship quality, it should be noted, was not determined solely by the single self-rating item. Participants who rated their relationships as "poor" also reported more hostile interactions and more emotional distance from coparents than did those who rated their relationships as "excellent" or "good"; interview comments about their coparents and about their coparenting relationships also were utilized as the basis for evaluating coparental relationships quality.

For coparenting individuals with good relationships who seemed to focus primarily on their children's needs, the utilization of devices such as cell phones and the use of email or Google Calendar were done in the interest of conveying information across households and keeping each other apprised of children's activities. These individuals also frequently spoke to their coparent partners by phone or face to face. One mother stated, "It depends on how time sensitive it is; probably a combination of emails and phone calls. We have a fairly amicable relationship. I think this kind of situation would be a nightmare if you didn't have an amicable relationship" (# 47).

In short, for parents in effective coparenting relationships (by their standards) communication technology was used as a set of tools to make it easier for them to plan for their children and for their households. They even made conjoint decisions on email or over the course of several conversations on cell phones, email, etc. For adults in these post-divorce families, the internet and cell phones made it easier for them to raise children while living apart.

If there's something I'm concerned about, I'll send an email to her dad and inquire about it. Not like grill him or say this is wrong, but I'll just kind of ask about it and if we need to discuss it, we will. (#42)

I mean we talk about our relationship, [my ex-husband] and I's relationship, goals that we have for our relationship. We talk about finances, we talk about school, my goals in school, and we talk about work all the time. We talk about, just normal daily things that a couple would talk about. [We use] texting, email, the phone, we see each other a lot. (#34)

For poor-quality coparental relationships, however, communication technology did not necessarily make coparenting easier. For them, communication technologies were employed as tools for controlling interactions with the other parent, in attempts to: (a) reduce conflicts, (b) withhold information, (c) convey information in a way that limited the ability of the coparent to have input into child-rearing decisions, and (d) influence the behavior of the coparent. Communication technology was used strategically by these coparents - they purposefully employed the technology to achieve one or more goals that were not solely focused on sharing information with the other parent. In addition, nearly all parents used communication technology to maintain personal and household boundaries and to establish a record of decisions and agreements. Motivations to set firm boundaries varied across relationship qualities, however. Parents in emotionally distant or hostile relationships tried to set firmer boundaries between households and between themselves and the coparent, while parents in more positive coparental bonds maintained flexible personal and household boundaries. Similarly, the need for a written record differed substantively between poor and positive coparenting relationships.

Maintaining boundaries. Communication technologies make coparental communication convenient. This is a boon when coparental relationships are positive and parents are working together to make their children's lives as fulfilling as they can. Changed plans can be quickly communicated, schedules can be shared with everyone in the family rapidly, and decisions about children can be made more quickly and efficiently. For instance, one mother related that the day before the interview she had called her former husband to pick up medicine for their sick child and bring it to her home after he got off work: "Several times a day we'll talk on the phone or we'll text. We don't usually email too terribly much unless we're emailing stuff like documents or pictures. We email each other pictures all the time of the kids." (# 15) This latter statement illustrates how cooperative coparents use technology to help maintain bonds among nonresidential parents and children, as well as to conduct the "business" of coparenting by attaching or scanning school records or other documents (e.g., sport schedules).

When coparental relationships are negative (e.g., conflicted, emotionally distant), however, the ease by which communication technology allows contact is a problem to be resolved rather than a benefit. For instance, some coparents communicated with each other by cell phones five or more times per day, and these calls were usually initiated by one parent only. This frequent contact was seen by the parent receiving the calls as either harassment or unwanted dependency, and they felt compelled to find ways to reduce the contact. One mother (#23) complained:

He calls way too frequently. He calls for one thought and then he'll hang up, and have another thought and he'll call back, and one other thought, and so it just sort of chips away at your nerves a little bit. By the time you get to where you really need to make a decision, there's tension there because it's . . . constant interruptions. So then a rude conversation will occur. 'Please stop calling. What do you need, black and white, so we can get through this because I am here with the children alone.' . . . But, you know, we talk. I'll take the calls.

This woman continued to take his phone calls but indicated that she was becoming increasingly rude and angry with her former husband, whom she saw as dependent and irresponsible. She had not yet reached the point of another mother, however, who simply refused to answer calls, forcing the father to text and use email to communicate:

I quit calling her in the last 6 months because she quit returning my phone calls. It normally takes . . . two to three texts to get her to respond back if I'm gonna text message her, and she chooses to respond to emails when she feels like it.(#20)

Personal and household boundary maintenance was more challenging for parents in difficult coparental relationships because of the ease and ubiquitous nature of communication technology. These technologies, however, also provided ways in which parents wishing to solidify boundaries could strategically do so. For instance, asynchronous conversations are feasible on email and via texting, and it is easier to control the pace of interactions in asynchronous communication than it is in face to face or synchronous phone conversations. By screening calls and refusing to take calls from coparents, communication interactions may be either reduced or channeled into texts or emails, which allows the recipient to exert more control over the communication process.

We both have the agreement that I can have her call him and he can have her call me, but we don't just call the other person. Like I'll text him a message saying, "I'd like to tell [child] goodnight. Is she still awake?" And he'll either text back, "She's already asleep" or "I'll have her call." And then he'll dial the phone and then hand it to her and then I answer the phone and then when I'm done talking with her, I'll just hang up so he doesn't talk to me afterwards. (#33)

Another mother (#40) shared this strategy, "And he is very volatile, very mean. So I try to avoid conversations with him because anything can set him off. [When I text him] I can choose not to reply." However, some contentious coparents found that negotiating various technologies added to their frustration.

[We communicate] by email. I try to sometimes get through to him by phone, but when I call him, he immediately gets the girls there and puts me on speakerphone so there's no way that I can have a conversation with him unless it's overheard by the girls, and he does that deliberately. So I'll say, "Can you turn it off speaker phone? I need to talk to you about something." And he'll say, "No, you need to email me." And then when I do email him, he doesn't respond. I've reminded him, for instance about parent-teacher conferences, and I've notified him by email, and he just doesn't show up. (#49)

Sometimes interactions via technology provided a means for angry parents to reject the coparenting attempts of their ex-partners. For example, one mother (#40) said, "I sent him a

picture of our youngest son via text messaging, and he replied to leave him alone so I didn't bother him again."

Cooperative coparents may have settled boundary issues and were comfortable with the frequency and content of communication or their more sanguine relationships may have made boundary maintenance simply less of an issue for them. Whatever the reason, parents who rated their coparenting relationships as excellent both initiated and received messages from their coparental partners at paces and patterns (i.e., who contacted who) that seemed to be at acceptable levels for them. Consequently, although all coparents used communication technology to maintain boundaries, for some parents this was a contentious and challenging issue and for others in cooperative relationships, this was not a problem.

Reducing coparental conflicts. At times, communication technology was utilized strategically by nearly all parents to reduce conflicts by reducing or eliminating opportunities to have face to face or synchronous phone discussions. When there were unresolved feelings of anger or mistrust, or when a parent preferred to have no further involvement with a former spouse but felt obligated to communicate with him because of shared children, asynchronous communication was favored as a way of reducing stressful in-person interactions. One mother (#1) who coparented with a former spouse who had several affairs when they were married, characterized their coparental relationship as a "Necessity . . . You know, it really is. I really don't like to talk to him or anything. I talk to him, [but] it just, it makes me ill." She dealt with her anger and their conflict-filled interactions by relying primarily on communication technology. "He'll have to call and leave a message on my voicemail telling me what he's wanting, and then I'll call him back if I think it's important." She also knew his work schedule

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and called his cell phone when she knew he would not be able to answer, leaving a voice message. She recounted a disagreement about child support and how it was handled:

He called me and said that he didn't think he ought to be paying child support anymore, period. I just hung up on him, you know. And then he threatened me another time that he was just gonna not pay child support, and so I called him back and left a message on his voice mail and said 'You know, I'll settle for half the child support, but that's it. And if you don't like that, then you can send two of your last pay stubs to my attorney.'

Email was often a preferred form of communication when relationships were conflicted because emails can be edited to reduce anger-promoting and inflammatory language. One participant was ordered by the judge to only communicate with her ex-spouse via email or text because of their conflicts during phone calls or face-to-face communications. Coparents indicated that they thought more carefully about their communications when using email. E-mail allowed them to wait until anger and other negative thoughts and feelings about the former spouse had subsided somewhat before they constructed or sent their message. As one coparent (#33) pointed out, "It works out a lot better because I can say hateful things to my phone while I'm typing a polite message back." In contrast to those with hostile feelings about the coparent, parents in positive coparenting relationships rarely tried to reduce synchronous contacts. One mother (#14) jokingly related an incident that illustrated how rare this was for them:

We had an opportunity over the weekend to chat about an issue so I called his cell phone. I could tell that he was attempting to answer and then the phone just cut off, so I figured, you know, he's in a low range area or whatever. Pretty soon my phone rings and he says, 'Hey, Mary, this is Sam. I saw where you called.' And I said, 'Yeah, yeah.' And he goes 'I'm sorry, I just tried to flip open the phone and it cut off.' I said, 'I thought maybe you just had that ex-wife application installed.' And he goes, 'You know, I've been pricing that, maybe.' At which point my daughter, the teenager, said that she wanted it as well, and then my [current] husband said, 'Let me know what that costs.' I said, 'You guys are taking this from an ex-wife app to a Mary app, and that's not funny anymore.' That's my coparenting story.

Another way that communication technology was used strategically to reduce conflict was when emails were retained as a record of decisions made by coparents. For instance, when one mother (#3) needed to compromise on childrearing decisions, "I typically email him first because he has a really bad habit of taking what I say and twisting it all around, and so I do as much of it as I can in writing because I don't trust him." Even when coparents were able to have civil discussions about child-related decisions to be made, email was used to verify what had been decided: "Sometimes he'll say to me 'So this is what we've decided?' And I'll say, 'Yeah,' and I send him an email and say 'This was our conversation and unless you state otherwise, this was your recollection of the conversation.""(#3) This use of email as a record to reduce future disagreements was generally reserved for serious issues, although when coparenting relationships were characterized by generally hostile interactions, even issues such as pick-up schedules for children were emailed rather than conveyed orally. For most coparents, however, daily schedules and updates on children's activities were discussed in real time (synchronously), but meaningful issues were reserved for email if there needed to be a record. One pair of coparents used Google Calendar as a way to resolve conflicts about minor issues, such as weekly appointments for children:

We have found using Google Calendar is a wonderful tool for divorced people because you can share a calendar, and all the kids' stuff goes on there. We had a lot of conflict over me feeling like, I would say 'The kids need to be picked up at 3:15,' and then he would say he didn't remember me saying that and so we found Google Calendar to be a very neat source, third party (#19).

Withholding information. By using communication technology to avoid real-time conversations, individuals could easily limit the amount of information shared with their coparents. Leaving messages on cell phones, texting, or emailing, allowed parents to appear to be cooperatively sharing information about the children with the coparent yet allowed them to limit what was conveyed. When communication was via messages left on email accounts or cell phones, the coparent had less opportunity to ask questions or to seek additional information. Attempts to garner more information could simply be ignored by the message-sending coparent: "I can email him, but he doesn't respond by email."(#2) While this strategy may have been effective from the standpoint of communication-sending parents, the recipients of these asynchronous messages were less than satisfied. Leaving messages make it harder for recipients to get questions answered and to obtain the complete story:

As far as scheduling and working together on a schedule and for him to consider others when he's making a schedule, that's been difficult because most of the time I get a teeny ounce of information and it's that 'Oh, this sport is starting. We're gonna practice on Tuesdays nights. Can she play? Can he play? Can Anna come?' I get about, not even a fourth of the information, and then two weeks into it . . . [he leaves a message] 'Here's the schedule. We're actually gonna practice two nights a week and the games will be the other two nights a week.' So there's plenty of information that is not given when these commitments are asked for . . . and in some cases I must admit I do think it's manipulative. I do think that there is more knowledge than what is given to me, so we do have a definite communication issue. (#23)

Conveying information while excluding the coparent from decision-making.

Although many of the participants in this study shared legal (decision-making) and physical custody, most children resided more than half of the time with mothers. The parents who lived with the children most of the time (i.e., mothers) appeared to be the primary decision makers, regardless of legal custody agreements. When children split time evenly between parents' households, mothers also tended to be the ones responsible for much of the daily and weekly decisions regarding the children. One mother said, "As far as like doctors' appointments, dentist appointments I'm the one who makes them. I schedule them and then I text him and let him know when they are." (#35) Another mother shared:

Before they go to his house, like during the week in the summer, I make an itinerary of when they're supposed to be where. Usually the phone call I get is, 'Oh I forgot to look at the list. What time is their game?'(#44)

When coparental relationships were positive, communication technology helped residential parents with childrearing tasks by making it easy and convenient to contact the other parent, but when relationships were negative, residential parents used communication technology to control the other parents' opportunities to be involved in decision-making. With rare exceptions (i.e., a father with sole custody), mothers perceived that they made most of the daily decisions, and when there were major issues, they shared only a minimal amount of information via text messages, voice mail, and emails. One mother (#23), who considered her children's father to be irresponsible in general and uninterested in being an equal coparent with her, justified her withholding of information because it was easier, less time-consuming, and less stressful:

I just don't want to go through the 20 hours of conversation that, because I really, it's so hard to explain. I really think he sees an emotional side of things that he will spend time on and dwell on, and it's a negative side of things, rather than how can we make this work . . . let's work together. I think maybe I don't give [him] enough [information] to where he should be involved.

The control of information and the subsequent control of decisions about children's activities, lead to many power struggles between coparents in hostile relationships. One nonresidential parent had been to court several times because he was unable to find out information about his child's health care from her mother, and another father became so frustrated at not being able to discuss issues with his coparent that he also went to court. These negative interactions were not caused by communication technology, but the primary parents' strategic use of technologies to asynchronously share some but not all relevant information contributed to nonresidential parents' feelings of being excluded from decisions about their children. In this regard, communication technology exacerbated rather than reduced interparental conflicts.

Influencing the coparent's behavior. Some parents, usually the mother, used communication technology to try to encourage greater involvement of the other parent with the children. Email again was a popular mode of communication in these attempts because the written record could serve as a helpful reminder of children's schedules. For instance, one mother (#6) e-mailed weekly schedules of her daughter's activities to the child's father to

encourage him to attend the child's musical performances and other school activities. When this did not work as well as she had hoped she began including her former husband's new wife in these emails; she perceived the stepmother as more responsible and likely to help make sure the father attended certain events. In general, however, efforts to use communication technology to facilitate greater involvement of the coparent were not successful. According to our participants, coparents often ignored the emails as well as cell phone calls or texts, and even claimed not to have received such messages. Here are some example comments:

I can email him, but he doesn't respond by email. I email him [because our daughter] has a doctor's appointment on a day when he has them, 'you need to bring them to the clinic at this time.' You know, I call him and he doesn't know anything about it. Doesn't show up, you know.(#2)

[He tells the kids], 'I promise I'll be there. I'll come to one of your games.' And then I get him a schedule, he loses the schedule. 'When's their next game? . . . I'm like, 'I gave you a schedule.' He has an email address and I've sent him a couple of things but he never replies back. (#12)

Again, the efficacy of the use of communication technology to facilitate coparental goals seems dependent on the quality of the coparenting relationship. Although modern communication technology theoretically makes it possible to efficiently and easily remain in contact, in practice this promise holds true only if the parents are focusing on the children and not dealing with interpersonal issues and other negative dynamics.

Control and communication technology use. A central and unifying concept in this study of how divorced coparents use communication technology is control. The coparents often

mentioned wanting more control over: (a) how their children were raised, (b) how often they saw their children, (c) how decisions were made, and (d) the content of those decisions.

Communication technologies were tools used in their efforts to gain control over themselves or over their relationships or in their attempts to share control. The coparents who rated themselves as having excellent coparenting relationships talked little about control issues, and they used cell phones and computers to share coparenting duties and to convey information about the children. It is not possible to determine from our data how they arrived at this relational situation, so we are unsure if communication technology helped or hindered in their journey toward cooperative coparenting.

Parents with more challenging relationships used communication technology to either limit involvement of the coparent or to attempt to enhance the coparent's involvement in ways they specified. For these couples, anger over how their marriages ended, and ill feelings regarding how the coparent fulfilled parental responsibilities were issues that did not appear to be resolved. Communication technologies were used to try to resolve problems, but often these efforts (e.g., email reminders about children's schedules, calling coparents and texting frequently with child-related questions) were countered by the coparents, and problems remained, for the most part. In short, interpersonal control dynamics between coparents were not resolved by utilization of state-of-the-art communication technologies.

Some parents also used computers in their efforts to control coparental dynamics in ways other than in communicating. For instance, one mother, in the midst of a dispute over increasing child support payments, looked her former husband up on the internet to find out if he had changed jobs and increased his education and income (he had). She used this information in her child support negotiations.

Post-divorce Contexts and Technology

We examined the data for possible intrapersonal and interpersonal influences on technology use, such as the presence of new partners, the ages and genders of children and parents, the physical distance between parents' residences, the number of children, and custody arrangements. None of these contextual factors appeared to be related to technology use. That does not mean, of course, that there were no other contextual influences that may have affected or been related to technology use. Future researchers of this topic should investigate thoroughly the potential effects of demographic, individual, and familial influences on technology use by coparents.

Discussion

Limitations. Before we discuss the implications of these findings, it should be noted that this qualitative study had limitations. As with most qualitative work, the sample was small and consisted of parents, mostly mothers, who were willing to talk about their coparenting experiences. Moreover, the sample was predominately middle class and White, and both of these characteristics may be related to technology use. Finally, the data that served as the basis for this secondary analysis were from a project that was not originally designed to examine the use of communication technology. Therefore, this study should be considered an exploratory examination of communication technology use.

Implications for Coparents

Although both synchronous and asynchronous communication technologies potentially have utility for post-divorce coparents, both also may be used to control the other parent's access to the child and information about the child. How communication technologies are used depends to a great extent on how well coparents get along with each other and how well they work together in childrearing. Email and texting, as potentially asynchronous methods of communicating, may be particularly effective for coparents with hostile or otherwise difficult relationships, because information can be exchanged, and even decisions made about children, without the acrimony associated with face to face or synchronous phone conversations. Through the use of asynchronous communication tools, even some parents who had negative feelings about their former spouses nonetheless rated their coparenting as "good."

Some of the parents in this study used email to maintain records in case they returned to court to seek changes in the divorce decree (e.g., contact with children, child support), but a written record also is useful for parents with bad memories, for busy parents, for babysitters, and for others who need to know about children's activities. In addition, email provides parents a chance to edit messages they send and perhaps reduce hostile comments or ambiguities in what is conveyed. Of course, sending a clear message is no guarantee that it will be received in the manner intended or that the coparent will pay attention to it, but the possibility for reduced conflict and miscommunication is there for parents if they want to take advantage of it, as many parents in our study did.

Communication technologies that are widely used by divorced coparents make boundary maintenance both easier and more challenging. They are unequivocally neither boon nor bane to divorced coparents.

Implications for Practice

Many courts in the United States mandate parent education for divorcing couples with minor children. These programs usually provide an overview of how parents can help children during and after divorce, and how to maintain a functional coparenting relationship after divorce. Although the findings from this study need further validation, they suggest that divorce educators may want to include some discussion of the positive and negative uses of communication technology in their work with separated and divorced parents. For example, educators could discuss with parents the practical implications of using email and texting in working with a coparent. Having a record of children's appointments or schedules is useful for all coparents, whether they work together effectively or not. Technological aids such as Google Calendar or sending emails to coparents with schedules attached could be beneficial for all parents. These technologies also have the advantage of expanding to include interested third parties, such as stepparents, grandparents, teachers and coaches, and even the children themselves. At least among cooperative coparents, this study suggests that technology use may reduce confusion and miscommunication. Introducing the uses of technology could be a meaningful addition to current curricula in post-divorce parenting classes.

Findings from this study also have the potential to help those in family law and family therapy in working with coparents. Consideration of synchronous and asynchronous communication is important when working with busy and potentially distraught parents, particularly those with contentious relationships. The findings of this study suggest that even in positive relationships, synchronous communication sometimes is difficult because of time constraints. This is an important factor when family practitioners think of their contact with the family or considering giving suggestions for how the family should interact and solve problems. Email exchanges and other digital forms of communication (i.e., drop box technologies) have the potential to get information out quickly, efficiently, and with emotion-laden language reduced or eliminated through editing. Attorneys and mediators may want to discuss with divorcing parents how they will use technology to communicate with each other, and it is even possible that it

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might be advisable with some couples to build into parenting plans the use of specific tools such as Google Calendar.

Implications for Research

The use of social media by divorced coparents has not been explored. Social networking sites, such as Facebook, although not mentioned by parents in this study, could provide them with opportunities for coparental interactions across distances and time. Sheldon and colleagues (2011) found that Facebook use was related to both more and less satisfaction with relationship bonds, but the findings on social network use and their effects on families in general are poorly understood. Future research focusing on technology use by divorced parents should include examining the use of social networking sites.

Obviously, further research on coparents' use of communication technologies is needed to validate the findings of this study. Additional qualitative studies should be conducted to focus specifically on how divorced parents use technology to manage their coparenting relationships and to effectively raise children. Longitudinal studies also are needed that follow coparents over time to see if the use of communication technologies changes. Other data collection methods, such as asking parents to keep diaries of coparental communication and electronically tracking cell phone and email usage, may yield additional information about the utility of communication technologies. It also would be interesting to examine differences and variations in technology use between mother and fathers. Finally, quantitative studies with larger and more heterogeneous samples of coparents would allow researchers to compare positive and negative coparental relationships on several dimensions with data on children's wellbeing and would provide a more complete picture of the outcomes of technology use. Communication technologies have the potential to greatly affect all families and family relationships. This exploratory study has revealed that divorced parents strategically use technology to manage relationships and boundaries. It is less clear from our data however, how technology usage affects the wellbeing of individuals and relationships. Clearly, much more research is needed – technological innovations continue to be advanced, and family scholars need to be motivated to examine how technologies affect families of all kinds.

References

- Afifi, T., & McManus, T. (2006). Investigating privacy boundaries: Communication in postdivorce families. In K. Floyd & M. T. Morman (Eds.), *Widening the family circle: New research on family communication* (pp. 171-187). Thousand Oaks, CA: Sage.
- Ahrons, C.R. (2007). Family ties after divorce: Long-term implications for children. *Family Process*, 46, 53-65.
- Amato, P. R. (2010). Research on divorce: Continuing trends and new developments. *Journal of Marriage and Family*, 72, 650-666.
- Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A metaanalysis. *Journal of Marriage and Family*, 61, 557-573.
- Amato, P. R. & Sobolewski, J. M. (2004). The effects of divorce on fathers and children:
 Nonresidential fathers and stepfathers. In M. E. Lamb (Ed.), *The role of the father in child development* (4th ed.) (pp. 341-367). Hoboken, NJ: John Wiley & Sons.
- Bauserman, R. (2002). Child adjustment in joint-custody versus sole-custody arrangements: A meta-analytic review. *Journal of Family Psychology*, 16, 91-102.
- Carlson, M. (2006). Family structure, father involvement, and adolescent behavioral outcomes. *Journal of Marriage and Family*, 68, 137-154.
- Chen, Y. F., & Katz, J. E. (2009). Extending family to school life: College students' use of the mobile phone. International *Journal of Human-Computer Studies*, 67, 179-191.
- Christensen, T. H. (2009). 'Connected presence' in distributed family life. *New Media & Society*, *11*, 433-451.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.

- Daly, K, (2007). *Qualitative methods for family studies & human development*. Los Angeles, CA: Sage
- Elrod, L.D., & Spector, R. G. (2011). A review of the year in family law. Working toward more uniformity in laws relating to families. *Family Law Quarterly*, *44*, 469-518.
- Emery, R.E. (1994). *Renegotiating family relationships, divorce, child custody, and mediation*. New York: The Guilford Press.
- Ganong, L., Coleman, M., & Jamison, T. (2011). Patterns of stepchild-stepparent relationship development. *Journal of Marriage and Family*, 73, 396-413.
- Graham, E.E. (2003). Dialectic contradictions in postmarital relationships. *The Journal of Family Communication, 3*, 193-214.
- Graham, E.E. (1997). Turning points and commitment in post-divorce relationships. *Communication Monographs*, 64, 350-268.
- Hinds, P., Vogel, R., & Clarke-Steffen, L. (1997). The possibilities and pitfalls of doing secondary analysis of a qualitative data set, *Qualitative Health Research*, *7*, 408-424
- Kelly, J. B. (2007). Children's living arrangements following separation and divorce: Insights from empirical and clinical research. *Family Process*, *46*, 35-52.
- Kelly, K.P., & Ganong, L. (2010). Moving to place: Childhood cancer treatment decision making in single-parent and repartnered family structures. *Qualitative Health Research*, 17, 283-290.
- Kelly, K., & Ganong, L. (2011). 'Shifting Family Boundaries' after the Diagnosis of Childhood Cancer in Stepfamilies. *Journal of Family Nursing*, 17, 105-132.
- King, V., & Sobolewski, J. M. (2006). Nonresident fathers' contributions to adolescent wellbeing. *Journal of Marriage and Family*, 68, 537-557.

- Kreider, R. M. (2007). *Living arrangements of children, 2004*. Washington DC: US Dept. of Commerce, Economics and Statistics Administration, US Census Bureau.
- Markham, M., & Coleman, M. (in review). The good, the bad, and the ugly: Divorced mothers' experiences with coparenting.
- Miller, A. (2009) Face concerns and facework strategies in maintaining post-divorce coparenting and dating relationships. *Southern Communication Journal*, *74*, 157-173.
- Sandler, I., Miles, J., Cookston, J. T., & Braver, S. L. (2008). Effects of father and mother parenting on children's mental health in high- and low-conflict divorces. *Family Court Review*, 46, 282-296.
- Sheldon, K., Abad, N., & Hinsch, C. (2011). A two-process view of Facebook use and relatedness need-satisfaction: Disconnection drives use and connection rewards it. *Journal of Personality and Social Psychology*, 100, 766-775
- Stern, M., & Messer, C. (2009). How family members stay in touch. *Marriage and Family Review*, 45, 654-676.
- Troilo, J., & Coleman, M. (in review). Nonresidential fathers' identities after divorce.
- Weisskirch, R. (2009). Parenting by cell phone: Parental monitoring of adolescents and family relations. *Journal of Youth and Adolescence*, *38*, 1123-1139.
- Whiteside, M. (1998). The parenting alliance following divorce: An overview, *Journal of Marital and Family Therapy*, 24, 3-24
- Yarosh, S., Davis, H., Modlitba, P., Skov, M., & Vetere, F. (2009). Mobile technologies for parent/child relationships. In A. Druin (Ed.), Mobile Technologies for Parent/Child Relationships. Boston: Morgan Kaufmann.

Table 1

Sample Description (N=49)

ID	Parent	Relationship Quality	Repartner Status	Children	Custody
1	Father	Good	Father only	16M, 11F	Sole P, Joint L
2	Father	Poor	Neither	6F, 5F	Joint P & L
3	Father	Unknown	Neither	14M, 11M	Sole P, Joint L
4	Mother	Unknown			Other parent Sole
			Both parents	6F	P & L
5	Father	Excellent	Both parents	8M	Joint P & L
6	Father	Poor	Father only	28F, 18F	Sole P, Joint L
7	Mother	Good			Other parent Sole
			Mother only	12M, 9M	P, Joint L
8	Mother	Fair	Neither	30M, 24F, 15F	Sole P, Joint L
9	Mother	Poor	Neither	16F, 11F	Joint P, Sole L
10	Mother	Excellent	Both parents	19F, 17F, 16M	Sole P, Joint L
11	Mother	Good	Mother only	22M, 20M	Sole P & L
12	Mother	Good		17M, 14M,	
			Father only	12M, 10M	Unknown

Mother	Excellent	Both parents	12M	Joint P & L
Mother	Excellent	Both parents	18F	Joint P & L
Mother	Excellent		7M, 6M, 5M,	
		Father only	13moF	Joint P & L
Mother	Excellent	Both parents	14M	Sole P & L
Father	Fair			Other parent Sole
		Father only	10M, 5F	P & L
Mother	Fair	Both parents	13M, 11M	Joint P & L
Mother	Good	Both parents	12F, 11F	Joint P & L
Father	Poor			Other parent
		Father only	3М	Sole P, Joint L
Mother	Good	Both parents	15F, 9F	Sole P & Joint L
Mother	Excellent	Neither	5F	Joint P, Sole L
Mother	Fair	Neither	12M, 8F	Sole P & L
Father	Good	Neither	19M, 16M	Sole P, Joint L
Mother	Poor	Both parents	8F, 5M	Unclear
Mother	Good	Mother only	6M	Sole P, Joint L
	Mother Mother Mother Father Mother Father Mother Mother Sather Father Mother Father	Mother Excellent Mother Excellent Mother Excellent Mother Fair Mother Fair Mother Good Father Poor Mother Good Mother Excellent Mother Fair Mother Fair Mother Good Mother Fair	MotherExcellentBoth parentsMotherExcellentFather onlyMotherExcellentBoth parentsFatherFairFather onlyMotherFairFather onlyMotherFairBoth parentsMotherGoodBoth parentsFatherPoorFather onlyMotherGoodBoth parentsMotherGoodBoth parentsMotherGoodNeither onlyMotherGoodNeitherMotherGoodNeitherMotherFairNeitherMotherFairNeitherMotherFairNeitherMotherFairNeitherMotherFairNeitherMotherFairNeitherMotherPoorSoth parentsMotherFairNeitherMotherFairNeitherFatherGoodNeitherFatherPoorSoth parentsMotherFairNeitherFatherGoodNeitherFatherPoorSoth parentsMotherPoorSoth parents	MotherExcellentBoth parents18FMotherExcellentFather only13moFMotherExcellentBoth parents14MFatherFairFather only10M, SFMotherFairFather only10M, SFMotherFairBoth parents13M, 11MMotherGoodBoth parents12F, 11FFatherPoorFather only3MMotherGoodBoth parents15F, 9FMotherGoodBoth parents15F, 9FMotherExcellentNeitherSFMotherFairNeither12M, 8FMotherFairNeither12M, 8FMotherGoodNeither19M, 16MMotherPoorSF, 5MMother

27	Mother	Good	Both parents	21M, 17M	Sole P & L
28	Mother	Good	Neither	13M, 10F	Sole P, Unclear
29	Father	Fair	Unknown	19F, 16M	Joint P & L
30	Father	Good	Both parents	26M, 21F	Joint P & L
31	Mother	Good	Mother only	18F, 16M, 12M	Joint P & L
32	Mother	Unknown			Other parent
			Both parents	12M	Sole P & L
33	Mother	Fair	Neither	4F	Joint P, Joint L
34	Mother	Excellent	Neither	21moM	Joint P, Joint L
35	Mother	Poor	Mother only	3F	Joint P, Joint L
36	Mother	Good	Neither	8M, 6F	Joint P, Joint L
37	Mother	Good	Neither	6F, 5M	Joint P, Joint L
38	Mother	Poor	Neither	9F, 6M	Joint P, Joint L
39	Mother	Excellent	Both parents	12F	Joint P, Joint L
40	Mother	Poor	Neither	6M, 3M	Joint P, Joint L
41	Mother	Good	Neither	6M, 3M	Joint P, Joint L
42	Mother	Good	Father only	5F	Joint P, Joint L

43	Mother	Excellent	Father only	7F	Joint P, Joint L
44	Mother	Poor	Neither	9F, 7M, 4F	Joint P, Joint L
45	Mother	Good	Father only	9M, 6F	Joint P, Joint L
46	Mother	Poor	Neither	6F	Joint P, Joint L
47	Mother	Good	Mother only	9M	Joint P, Joint L
48	Mother	Poor	Father only	10F	Joint P, Joint L
49	Mother	Poor	Neither	6F, 4F	Joint P, Joint L