The Social Challenges with Grandparent and Grandchild Communication Over Distance

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ABSTRACT

Grandparents and young grandchildren naturally like to communicate using technology when they are separated by distance. Yet there are few studies of the social challenges that might arise during communication as a result of technology usage. To address this gap, we conducted an interview and diary study that explores the communication practices and desires of distance-separated grandparents and young grandchildren (aged 3-10) from the perspective of the grandparents and parents of the children. Our results show that grandparent-grandchild communication is not without its challenges: grandparents sometimes feel self-conscious in remote telecommunication, perceive that parents or children will be annoyed if they ask too many questions, and do not want to interfere too much in their grandchildren's lives. The implication is that designs should attempt to mitigate the social challenges faced by grandparents (and parents) when designing technologies for grandparent-child communication.

Keywords

Grandparent and grandchild telecommunication; distance-separated family communication; design;

1. INTRODUCTION

The grandparent-grandchild bond is an important emotional relationship in a human's life. Yet, in reality, many grandparents and grandchildren face challenges in building and maintaining their relationship because of distance separation. Technology such as the phone or video chat can help mitigate issues of distance-separation, yet they bring with them their own challenges, such as parental scaffolding and child engagement [2,21]. Time zones and busy schedules also add to the challenges [16] as does cultural differences and language barriers.

There are several systems designed to support this demographic already where the focus is doing and sharing fun activities (e.g., [3,13,21]). While beneficial, we see a gap in understanding how parents react to communication between grandparents and grandchildren and how they see such communication ideally working. Past research on grandparent-grandchild communication also does not focus on understanding social or cultural issues beyond scaffolding challenges for parents. Without this understanding, one may easily think that grandparent/child communication occurs with little social conflict.

Given this background, the goal of our research was to understand the communication over distance from the perspective of the grandparents and parents of the children. In particular, we were interested in families with children aged 3 to 10 years old and not yet at the pre-teen stage of life (where they want to talk less with grandparents [16]). For these reasons, we conducted a diary and interview study with grandparents or parents of children between the ages of 3 and 10. Both provided an understanding of different social situation and challenges that usually occur in this area. Our results show that grandparent-child communication is not always an ideal situation. Grandparents face social challenges such as feeling self-conscious and overly inquisitive and often work hard to socially manage communication exchanges. Many parents desired additional social support from grandparents over distance. Overall, these results point to the need to address complex social challenges when designing for grandparent-child communication.

2. Related Work

There have been several studies focused on communication between distance-separated grandparents and grandchildren, as well as children and other familial adults [4,5,6,10,15,18,22]. Ballagas et al. [2] studied phone conversations between children and their remote family members. They found that children are easily distracted, not motivated to talk, and, depending on the age, have difficulties using the phone. They also show that phone conversations are not enough to build a close relationship with children. Ames et al. [1] explored the benefits of video chat for distance-separated grandparents and grandchildren and found a great deal of parent scaffolding and technical support was needed.

Several systems have been proposed in order to motivate children to stay in touch with their remote grandparents. First, some focus on supporting story telling. Family Story Play [19] is a tangible collaborative storytelling interface that uses a physical book coupled with video conferencing. A web-based version called Story Visit was also created [21] where grandparents and grandchildren can read an e-book together. People in Books [7] is a shared visual space for story reading, which immerses remote readers into online storybook illustrations, giving children the illusion that they are part of a magical world. Vutborg et al. [24, 25] proposed an asynchronous system that combines different components including collage and storytelling features where these components mediate play and oral storytelling.

Second, some systems focus on games and tangible objects to stimulate communication. Take Me With You [16] is a shared adventure game that promotes social interactions between remote grandparents and grandchildren along with physical movements in the real world reflecting an illusion of exploring a virtual world and doing shared activities together. Magic Box [23] is a physical box, which carries gifts, toys, photos, and any other special things between grandparents and grandchildren. Raffles et al. [20] developed a messaging system for preschoolers using a jack-in-the box toy with an embedded mobile phone.

Third, there also exist systems focused on grandparents who may face challenges in communicating because of their age, technical literacy, or illness. For example, Multimedia Biography [16] allows grandparents and grandchildren to create multimedia biographies from various media and watch the resulting videos together. Families in Touch [16] lets grandparents and grandchildren share photos and videos in a digital frame.

Forth, Experience2Go [9] was designed for family members to share activities (e.g., school events, sports events, birthday parties) with remote loved ones such as grandparents regardless of where the activity happened.

Taken together, we see a variety of research on family communication and support for connecting grandparents and grandchildren. Yet we see little focus on the social challenges that may occur as a result of grandparent-child communication.

3. Our Study

We conducted a diary and semi-structured interview study to explore grandparent-grandchild conversations over distance from the perspective of the grandparents and parents. Our goal was to reveal social challenges they faced from the adult perspective. For this purpose, we recruited 20 participants. Half of the participants were grandparents of children between 3 and 10 years old, while the other half were the parents of children in this age range. We recruited participants with diverse demographics and cultural backgrounds. Our participants were mainly located in Canada but some migrated from various countries, (e.g., Italy, Albany, Iran, India, Ukraine, Brazil), and had their distance family (either grandchildren or parents) there. We included participants with different family situations, such as single parents and step-grandparents. We also purposely recruited people with cultural differences in the family due to reasons such as marriage out of faith, or immigration to a new country. We wanted to investigate if this impacted the exchange of cultural knowledge between the grandparents and grandchildren.

First, we asked our participants to keep an online diary of grandparent-grandchild communication over a period of three weeks before the interviews. Then we conducted semi-structured interviews in-person or over Skype where we asked questions regarding their background, communication patterns, communication needs and barriers and conflicts. We also read all submitted diaries prior to the interview session and focused portions of the interview on getting more detailed information about communication episodes reported in the diaries. We analyzed interview transcripts and diary entries using open, axial, and selective coding.

The following sections describe the social situations and challenges that were described to us by our participants, grouped by the main themes. Additional results can be found in Forghani and Neustaedter [8].

4. Becoming Separated by Distance

First, we found that communication between grandparents and grandchildren was often especially challenging right after separation. For example, several participants described how their grandchildren refused to talk on the phone or use video chat with the grandparents for the first few months after one of the parties moved away. This happened for all four families in our study where grandparents and grandchildren lived close by and then one party immigrated to a country far away. The grandchildren wondered why they had to move apart and felt resentment towards the situation. Once communication resumed, the grandchildren would remind the grandparents about emotional moments that they had with them to make sure that the remote grandparents still loved them despite the distance separation. After this stage, children began to slowly communicate via phone and video chat with their grandparents. They also thought about upcoming physical visits with their grandparents and would create drawings of them (e.g., grandparents visiting, family gathering, grandparents in the airplane). Children also asked the parents or grandparents about when the grandparents would be coming to visit.

4.1 Self-Consciousness and Perceived Annoyances

All grandparents in our study felt that being separated by distance from their grandchildren weakened their emotional bond with their grandchildren. This made some grandparents apprehensive or self-conscious when communicating with their grandchildren because they did not want to provide unneeded advice or annoy them by asking them about their unpleasant experiences.

For example, P2 described how she wanted to talk about her grandchildren's passions but this could easily change and she did not want to be embarrassed by asking about the wrong thing. She also did not know if her grandchildren were having bad experiences with their activities and did not want their short amount of conversational time to focus on negative thoughts.

While grandparents were interested to know about almost every detail of their grandchildren's lives, they did not want to bother them by asking 'too many' questions. Grandparents expressed a similar sentiment about asking parents too much information about their grandchildren. Thus, they perceived that the other parties might be annoyed with their questions. Because of this, nearly all of the grandparents we talked to did not push their grandchildren to talk about things. Instead, they preferred that their remote grandchildren directed the conversation and talked about what they wanted. This is surprising given the age and (lack of) conversational abilities of young children.

In cases where grandparents were part of divorced families or were step-grandparents, grandparents were additionally concerned about the focus of conversations with their grandchildren and 'saying the wrong thing'. This was despite having 'good' relationships with the parents and grandchildren. As one might imagine, situations like these were even worse when there *were* relationship issues between grandparents and either or both parents.

4.2 Cultural Differences

Some grandparents really liked to share cultural knowledge with their grandchildren (e.g., traditional cultural holidays). This was especially the case for grandchildren who had moved away from one's native country (e.g., grandchildren living in Canada after moving from India). However, this also raised challenges. First, language was often an obvious barrier. Some grandchildren simply did not speak the same language as their grandparents, or their grandparents did not know how to say words associated with cultural events in the language that grandchildren understood. Second, in some cases, grandparents told us they would prefer not to overwhelm children with knowledge about their original roots because they felt that remote grandchildren had a lot of other things to deal with already. Instead, grandparents wanted to talk about the new culture of the grandchildren, despite a longing to share their native roots and traditions.

Exchanging cultural knowledge was also challenging when cultures clashed, such as when people were married 'out of faith' or with a person of another nationality or religion. Because of situations like these, many grandparents in our study simply tried to avoid such conflicting topics.

4.3 Parental Support

Our results also showed that some challenging social situations could turn into beneficial situations with additional grandparent support. For instance, some parents liked to have remote

grandparents support them and become more involved in their children's activities from a parenting perspective. This most often occurred in households with single parents or parents with busy schedules, or when the grandparent's profession related to the support needed (e.g., a school teacher). Grandparents also offered parental support for situations where they may know more about a topic than one of the parents. For example, one parent talked about how 'grandpa,' a dentist, was especially valuable to have talk to her son because of his occupational experience:

"Few months ago my son had some tooth problem and went to dentist. As my father is a dentist too, my son told the story for him and I asked my dad to remind hygienic routine to my son. My son enjoyed this practice and showed his teeth and the way he was brushing in a video chat to my dad. My father keeps looking at his teeth and pretends that he is checking up his teeth. My son encouraged taking care of his hygienic routine more." – P5, Parent, Child Aged 5

In addition, we also found that remote grandparents can become more involved in activities or topics where there is a lack of support or interest from the parents.

While parental support by grandparents was certainly valuable, some grandparents described how they did not want to overstep their bounds and infringe on the parenting styles of their children. Similarly, some parents talked about how they did not want the grandparents to influence certain child behaviors of their children.

5. Discussion and Design Implications

Our results described the social situations and challenges that can emerge for grandparent-grandchild communication over distance. These are not reported in the prior literature and present interesting design challenges. Most importantly, they show that grandchild-grandparent communication is not always the ideal situation that much of the related work paints a picture of; conflict and difficult situations can easily emerge.

We found that it can be especially challenging for grandparents and grandchildren to communicate when distance separation first arises. Thus, even the best-created design solutions (e.g., systems proposed in the related work [3,11,12,16,21]) may not be used by grandparents and grandchildren in real situations where separation has only recently occurred. Technology designs for cases of recent separation may best be focused on reminiscing about the mutual memories that grandparents and grandchildren hold. There may also be great value in using technology to show that grandparents still love their grandchildren (e.g., a huggable teddy or doll that 'transmits' such emotion). Then, when grandchildren are 'ready,' designs that allow them to share aspects of their new life with their grandparents may be beneficial.

We also found that some parents valued grandparents providing parental support during communication with their children, especially in divorced families, new immigrants, or situations where parents did not have the necessary knowledge. As a result, communication systems that allow grandparents to remotely help grandchildren with certain activities would be valuable for some people. Activities may include homework, extra-curricular planning, teaching a native language, or learning hygiene practices (e.g., brushing one's teeth). In such situations, careful and creative design is needed in order to provide a shared space for both parties to interact in where objects can be seen and gestured at. One must also consider real world privacy issues that might arise from the natural locations for such activities (e.g., a bathroom for teaching hygiene practices), as well as the social issues that could emerge where some parents may not want

grandparents to 'interfere' past a certain threshold or introduce particular behaviors.

The related work has shown the need for parental scaffolding for grandparent-grandchild conversations over video chat because of technical challenges [14]. Because of this, one may naively try to design video chat systems that remove the need for such scaffolding. However, this could easily create additional social tensions as some parents may, again, be concerned about grandparent interference in daily life, especially if they are not present during grandparent-child interactions. In turn, grandparents may be concerned about over-stepping their bounds if parents are not around. While cumbersome, parental scaffolding allows parents to observe grandparent and grandchild interactions to ensure they are desirable. Removing such scaffolding completely may introduce new problems. This suggests designs should attempt to mitigate parental scaffolding challenges, while still encouraging parental supervision during communication sessions.

We also found that grandparents were sometimes self-conscious during conversations with their grandchildren. They did not always know what to talk about, did not want to make grandchildren upset, and did not want to feel like they knew little about their grandchild and exacerbate the feelings of a lack of connection. Moreover, even though they wanted to know lots of low level details about their grandchildren, they did not always want to ask because they perceived that the grandchildren or their parents may become easily annoyed. This is a social challenge that technology cannot solve alone. Yet one could think about focusing new designs on trying to foster confidence in grandparents by providing them with more information about their grandchildren without forcing them to ask or be told.

For example, one might imagine awareness systems, such as a shared family calendar, as providing an awareness of a grandchild's life to the grandparent. These systems can update grandparents in the background about topics that children are not interested in talking about. Designing applications that encourage children to provide information offline about their daily life, friends, and school activities in the form of paintings or other media could be also useful. This information could be used to increase the grandparent's true knowledge of the child and act as seeds for conversation. Grandparents may then feel more confident that they know information about their grandchildren, which could in turn reduce feelings of perceived annoyance since they may have to ask less in order to learn all of the details they are interested in knowing about their grandchildren.

Lastly, we learned that exchanging cultural information between grandparents and grandchildren was valued, yet it was sometimes difficult because of language barriers and other clashes of culture. This suggests design opportunities for cultural exchange between grandparents and grandchildren. Here it would be important that designers consider the effects of different languages on shared information and, possibly, even provide support for language learning for grandparents, grandchildren, or both. Designs could leverage existing storytelling systems (e.g., [3,19]) and couple them with stories focused on cultural knowledge exchange or the use of visual content as opposed to language-specific text. Of course, we also saw tensions about when and how to share cultural knowledge with children and this would need to be carefully thought through such that designs were targeted at appropriate ages.

6. Conclusion

Our paper contributes a study of the routines and needs of grandparents and parents for grandparent-grandchild conversations over distance. Through a diary and interview study we found that while grandparent-grandchild communication is highly valued, it is not without its challenges. Both parents and grandparents must deal with social issues that arise from potential interference, a lack of truly knowing one's grandchild (leading to self-consciousness and feelings of perceived annoyance), and cultural differences. This suggests a new perspective for the design of grandparent-grandchild communication systems that attempt to balance the need for information exchange and support with solutions to the social issues being faced.

7. Acknowledgments

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