
Emotions Experienced by Families Living at a Distance

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Abstract

This paper describes some of the results of a probe study where members of three-generational families, where at least one person is geographically separated from the others, talk about their emotional experiences. The method for eliciting this information is briefly described along with some of the themes identified in a grounded theory analysis. These include: sharing the moment with pride; reassurance with regard to intergenerational obligations; comfort and consolation from yearning; and little time to give comfort to one another.

Keywords

Probes, affective communication, emotion, presence technology, grounded theory analysis.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

General Terms

Design; Human factors.

Introduction

Many devices have been proposed to connect absent loved ones [1][2][5][6][7]. Yet we still know little

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Figure 1. Probes box



Figure 2. Things to do

about real value of this technology especially, from the point of view of the three-generational family. To do this we needed to find an appropriate method to understand deep feelings and real dialogue. We used an emotional probe method [4]. This paper focuses on the results of the analysis of the Probe Study.

The Probe Study

The probe method is described in more detail in [3] and [4]. Interviews were conducted with participants in their homes. A box of 'things to do' (the probes, see Fig. 1 and Fig. 2) was left with participants at the end of a first interview as a stimulus for conversation with people in a second interview. The stories they told us were transcribed anonymously and subjected to grounded theory analysis [8].

Interview 1

Participants were first asked about their day-to-day contact with their family. A family map was drawn identifying family members and how they typically communicate. Next, to sensitise them to the types of technology we are interested in they were shown pictures of four prototype communication devices: [1], [2], [6], and [7]. Finally the probes were introduced and left with them. Participants could choose to carry out one or more of the activities (see Fig. 2 and Fig. 3). They were:

- Spirit of Oracle cards with an invitation to choose a few that elicit thoughts or feelings about your family by writing on the back of the card.
- A digital camera to take photos relating to prompts such as 'something you like to share'.

- Diaries in which to write about happy or unsuccessful conversations.
- Draw 'A journey with my family' where you were happy.

Interview 2

More than one week later from the first, the second interview was conducted. This focused on how and why participants responded to their probes in the way that they had. Some of the probe activities were carried out during the second interview.

Informants

Six participants in the UK and three in South Korea were recruited by personal contacts also via Societies for South Koreans at the University of York and the University of Sheffield. One father, living with his family, two British mothers, two Korean mothers and a 10 year old boy were conducted in the UK. Two mothers and one grandmother were also interviewed in South Korea.

Analysis

With 8 hours of recorded conversation for Interview 2 and 7 hours for Interview 1 (English and Korean), 134 pages of transcript were generated.

Transcripts were first examined for text indicating: (i) emotional feelings towards the family [E]; (ii) comments about the method of communication [T]; (iii) positive or negative comments on family relationships [R]. These can be thought of as first level codes. This criterion resulted in 281 sections of text being identified as 'interesting' (E:206, R:223, T:128). Each section of text may be marked with more than one of these codes. 66 sections of text were indicated as both of 'E', 'R' and 'T'. The sections of text pointed out as 'E' and

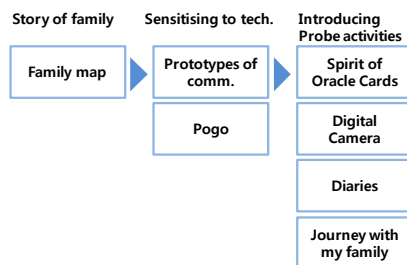


Figure 3. 1st interview procedure

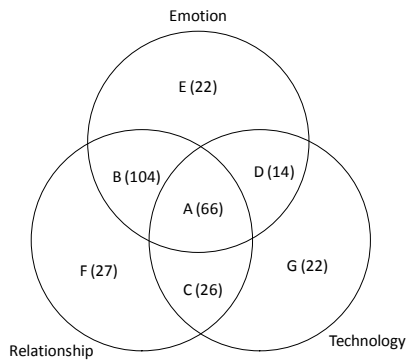


Figure 4. Distribution of sections of text in the first level codes

'R' were significantly larger (104) than other sections (see Fig. 4).

At the same time as sections were marked with first level codes, they were also coded for more subtle and workable meaning of the data. Codes were revised several times as the analysis proceeded. These second level codes were defined as 'emergent categories', including 'happy & fun', 'comfort & yearning', 'reassurance & obligation', and 'identity & hope'. The text sections associated with each of these categories also contain many codes. This third level codes contains 'obligation (20)', 'specific uses for specific media (20)', 'doing things together (19)', 'object with meaning (19)', 'seeing each other (17)', 'talking to men (15)', 'pride (14)', 'reassuring (14)', and 'no time (14)'.

Emergent categories were then clustered to identify richer themes. 37 themes emerged and each one contained one or more data quotes (118 in total). The data quotes from the previous phase were refined iteratively to form a theme. Some of the themes are presented below.

Examples of detailed themes

Participants felt happy when they shared the moment of a special event related to their children/infants. Small children are not good at talking on the phone and soon lose interest yet absent parents are keen to keep in touch, even to hear a sound such as laughter. In Q5, a wife wished to do something together for fun.

T1- Sharing the moment: a special event related to infants/children, with pride: "I was pleased to see when the baby [20months] said some new words. One day, the baby sitter told me that Benjamin understood the meaning of 'the same'. She asked him who was prettier between her two daughters. Benjamin said 'the same'. In the night, I asked

Benjamin who was prettier between me and other girl on the photo. I was expecting to hear from the word 'same', but he said, 'mummy'. I was so happy and excited that I rang my husband [in Baghdad] and told him this story. He was so surprised and happy." [Helen, Int.2, Diary probe] Q1

T2- Sharing the moment: Kid's laughter with happiness: "My husband said he wants to hear the children's laughter every day." [Lucy, Int.2, Diary probe] Q4

T3-Fun with doing things together: [With the card, 'Soul mate' cards probe], I wish I could share more hobbies with my husband. We just watch TV and that's all, but I need to do more with my husband. [Hannah, Int.2, Cards] Q5

Many quotes mention feelings of obligation to contact distant parents and some way of communicating for reassurance.

T9- Reassurance with regard to intergenerational obligations: "My mum rang me [from Korea] about her bad dream. She was worried about everything about our daily life [here in England]. She asked if anyone is not well or my husband was away on business. I told her that the kids had caught a bad cold, but they are now ok." [Hannah, Int.2, Diary probe] Q21, "I feel sorry for my parents when my kids refuse to talk with their grandparents on the phone, even though I threaten them" [Tom, Int.1] Q22

Participants used objects or media with meaning in creative ways to obtain comfort and consolation from yearning.

T14-Keeping a record to feel comfort from the media: "I keep answer machine messages. ... I saved it for a year ... when I felt lonely, I just pressed the button. I can hear people say hi, Betty, it's me ... It's truly nice. I used to keep. I've got a friend in Australia. She's left me an answering message and I just used to keep it. I just want her voice." [Betty, Int.1] Q34

T15-Comfort and consolation from yearning by seeing each other: "My husband seems quite relieved from missing us since using the webcam. He doesn't want to be alone on Saturday nights. It is too long for him to be alone. I feel to be

at the same space by seeing him on the computer while he leaves Skype on and watches TV or wanders around. I feel free from restraint." [Emma, Int.1] Q36

T16-Comfort and consolation from yearning by an object with meaning: "The watch could be the one, my wife bought me when I went on a business to the USA for the first time. I didn't wear it. I didn't need it because it's quite expensive and the mobile phone told me the time in Korea. But here I am wearing it most of the time, even at night. It is very practical to see the time. It reminds me of my wife." [Tom, Int.2, Photos] Q39

T26-Establishing and maintaining identity: the presence of daddy: "I was very worried about Benjamin [9 months old]. He couldn't have enough time to get to know his dad. So I showed him his dad's photo almost every day. The problem was Benjamin thought every man in a photo was his dad. When my husband came here with us, he was shocked at the problem. We were all in an elevator and my husband was holding Benjamin with his arms. He asked where daddy was and Benjamin pointed at the picture on the wall with his finger and said 'Daddy, daddy...'. " [Helen, Int.1] Q20

Not all the stories that were told us were happy ones. Everyone has a busy life and the international time difference is a big problem for communicating.

T31-Little room and little time to give comfort to one another: "One day, my husband looked a bit depressed with some stress. His tone with the voice was so low. I asked what happened and he said the work was not easy, under his control. I just wanted to give a gentle hug to him but it was impossible. Even though I was talking on the phone, there was a limit of time and the way of expressing my feeling. He was talking on the way home but I was in my office. It's very inconvenient to talk. I wanted to say that I was thinking of him very much but sometimes it's not easy." [Helen, Int.2, Diary probe] Q77

Conclusions and further work

The probe study was successful in triggering deep feelings and provided an understanding of practical constraints with regard to separation and

communication. The themes that emerged are rich resources for design, which will be the focus of another paper. The final step will be to use these findings, with the understanding from a literature survey, to propose and build communication devices for case studies.

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References

- [1] Chang, A., Rosner, B., Koerner, B., Wang, X., and Ishii, H. LumiTouch: An Emotional Communication Device, In *Proc. CHI 2001*, ACM Press (2001), 313-314.
- [2] Chung, H., Lee, C. J. and Selker, T. Lover's Cups: Drinking Interfaces as New Communication Channels, In *Proc. CHI 2006*, ACM Press (2006), 22-27.
- [3] Kim, H., and Monk, A. Design of technology to connect 3-generation families at a distance, In *Proc. IASDR 2009*
- [4] Kim, H., and Monk, A. Informing design with emotional probes, In *Proc. IASDR 2009*
- [5] Lindley, S., Harper, R., and Sellen, A., (2009) Designing to be in Touch in a Changing Communications Landscape: Attitudes of Older Adults, In *Proc. CHI 2009*, ACM Press (2009), 1693-1702.
- [6] Sellen, A., Eardley, R., Izadi, S. and Harper, R. The Whereabouts Clock: Early Testing of a Situated Awareness Device, In *Proc. CHI 2006*, ACM Press (2006), 22-27.
- [7] Sellen, A., Harper, R., Eardley, R., Izadi, S., Regan, T., Taylor, A. S. and Wood, K. R. Situated messaging in the home. *CSCW '06*, ACM Press (2006), 383-392.
- [8] Strauss, A., & Corbin, J. *Basics of qualitative research*, London: Sage, 1990.