Bridging the Gap between Grandparents and Teenagers: Lightweight vs. Heavyweight Contact

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Abstract

Older adults view contact with family as being worthy of time and dedication, and show a preference for 'heavyweight' forms of contact. In contrast, younger generations are increasingly adopting lightweight communication technologies. Preliminary findings from the deployment of a lightweight messaging device show that while the flexibility that it afforded facilitated direct contact between grandparents and teenage grandchildren, this was not valued by the grandparents as much as simple, but richer, interactions would be.

Keywords

Older adults, elder, senior, intergenerational communication, game-play, picture messaging, richness.

ACM Classification Keywords

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

Introduction

This paper outlines arguments presented in two previous papers [2, 3] alongside preliminary data from

a case study exploring intergenerational communication between grandparents and their teenage grandchildren.

We have previously argued [2] that while older adults seek reciprocal interactions with their peers, family relationships are more complex and are inherently asymmetrical (see also [1]). Parents seek to continue to make a meaningful contribution to the lives of their children, even when those children have become adults. Following the results of focus groups, we have also suggested [3] that older adults seek to devote time and effort to sustaining contact; favouring a richness in communication that new developments in technology seem to be moving away from. While younger generations engage in lightweight ways of keeping in touch, such as through SMS, picture messaging and status updates (e.g. using Facebook), the older adults we have interviewed retained a preference for more 'heavyweight' forms of interaction, such as the telephone and letter writing. We have argued that the ability to put something of oneself into an act of communication, and the effort and skill that this requires, is important for older generations.

However, and paradoxically, the same set of participants sought easy ways to keep in touch with important others, and reported difficulties in keeping in touch with their grandchildren. Grandchildren were said to be too busy to sustain contact with them, and used communication technologies, such as SMS, that the grandparents either could not, or did not wish, to use. It seems then, that opportunities for communication provided by newer technologies could not only meet the requirements of older adults for quick and easy contact, but could also allow gaps to be bridged when it comes to communicating with grandchildren.

Since carrying out this initial research, we have taken the opportunity to explore how a set of grandparents made use of lightweight messaging to reach the household of their son and his family. While older adults we had previously interviewed did not seem to understand the point of lightweight messaging, we wondered if this would change if they experienced it directly and could send lightweight messages easily. We also used a form of lightweight message that seemed to at least partly resonate with older adults during the focus groups. As part of these sessions we demonstrated a number of prototypes developed by the Socio-Digital Systems group at Microsoft Research in Cambridge. Our participants responded most favourably to HomeNote [4], a situated kitchen noticeboard that displays handwritten notes. The idea of sending handwritten messages, and the personal touch afforded by this, seemed to appeal.

Below are some preliminary findings from a field trial in which two households were provided with situated, lightweight, messaging devices. The first household consisted of a couple in their 70s; the second, their son, his wife and two teenage children. The ways in which the messaging devices we deployed were used by these three generations; that of the grandparents, parents, and children, will now briefly be discussed.

The Field Trial
The two households were each given a prototype messaging device to use over a period of three months. The first author visited each household to deploy and demonstrate the device, and interviewed them after 2 weeks, 1 month and 3 months of use. Messages sent to and from each device were logged.

Figure 1. Picture message of local weather.

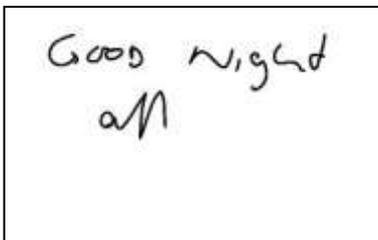Figure 2. Picture message of homegrown vegetables.

Figure 3. Scribble message "Good night all".

The Messaging Device
The device in question is somewhat similar to HomeNote [4], in that it is a situated device meant for the kitchen, which can serve as a note and message centre. However, unlike HomeNote, handwritten messages can be sent to other similar devices and therefore be displayed in the households of others. Furthermore, this device incorporates a digital camera. This combined with the note feature means that photos can be annotated and sent to others.

The Households
The grandparents live in the North-East of England. The grandfather is confident with new technology, and is responsible for the upkeep of the home wireless network. In contrast, the grandmother limits her use of technology, getting her husband to send emails for her. While the couple own a mobile phone, they do not use it to send text or picture messages. Their son and his family live in a village in England located approximately 100 miles away. Both father and mother are professionals and their schedule is a busy one. They have a 13 year old daughter and a 15 year old son.

Preliminary Findings
Communicating the 'everyday'
Prior to the introduction of our messaging device, communication between these two households was primarily by the telephone. This was described as being an increasingly infrequent event, and the ability to send small, lightweight messages was felt by all concerned to have increased the amount of contact between the two households.

It was also noted that this capacity for lightweight messaging meant that the content of communication had altered. While infrequent interactions meant that important news from the previous month would be reported, with only the most significant remembered, more frequent communication allowed for a different type of interaction. Messages would illustrate aspects of everyday life, such as the weather, or home-grown vegetables (see Figures 1 and 2). The facility to send lightweight messages also permitted the sending of social touch messages (cf. [4]); messages would be sent simply to wish the family goodnight, or to bemoan a lack of contact (see Figures 3 and 4).

Interacting without communicating (much)
Much of this communication occurred between the grandfather and his son, in reflection of existing telephone habits (the father appeared to be the link between the two households). However, an interesting (and significant proportion) of the messaging between the two households emerged as game-play; the grandfather and teenagers developed a habit of playing simple, scribble-based games (see Figures 5 and 6).

This appeared to be an easy way for the grandparents and teenagers to directly interact with one another, and is notable in that while it involves interaction, it does not really involve much in the way of communication. It is, of course, possible that the issue here is not communication between grandparents and teenagers, but communication between anyone who isn't a teenager, and teenagers. Regardless, the way in which play afforded interaction proved a useful means of overcoming an existing scarcity of direct contact.

Where contact breaks down…
The above suggests that this means of lightweight messaging was successful in drawing in teenagers of
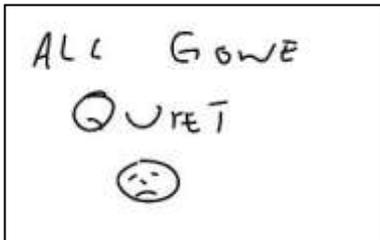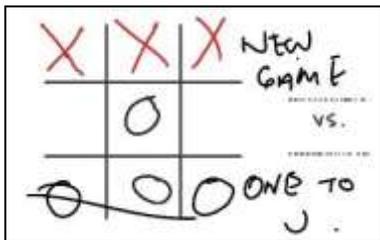
Figure 4. 'All gone quiet'.
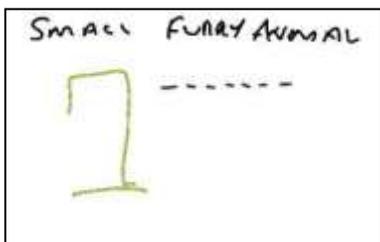

Figure 5. Game of noughts and crosses.

Figure 6. Game of hangman.

the family, who rarely made direct contact with their grandparents prior to the trial. However, it was never really adopted by their grandmother or, for that matter, by their mother. This is somewhat surprising, given the assumption that women traditionally adopt the role of maintaining inter-family communications. The grandmother in particular rarely used the device; she showed little interest in it at deployment, and the few occasions in which she did use it left her unconvinced.

Discussion and Future Directions

Like older adults that we have interviewed previously, the grandmother in this case study expressed a desire for richer, fuller, and more prolonged contact than that which can be achieved through lightweight messaging. In fact, even her husband, who seemed to enjoy using the device, did not seem truly convinced of its value. While contact with their son and his family had increased, and indeed seemed to now directly involve people with whom contact had been extremely infrequent prior to the trial, neither grandparent valued this contact as much as they would a simple phone call.

These findings resonate with our previous work, which has suggested that lightweight messages are not rich enough to meet the requirements of older adults. Lightweight communication is too superficial to provide a sense that real contact has been made, and may be most effective as a means of supplementing other forms of contact. Indeed, even the grandmother could see the use of lightweight messages as potential triggers for further, richer communication.

In terms of future directions then, a number of conclusions can be drawn. The devices reported here linked households as opposed to people, and through

doing so, offered an opportunity for communication to reach family members that might otherwise be sidelined. Furthermore, the possibilities for interaction to be lightweight, peripheral, and require little in the way of the exchange of information seemed to facilitate a link between grandparents and their grandchildren.

However, these advantages were not sufficient for the grandparents to assign true value to lightweight messaging. Devices that explicitly use lightweight cues as a more direct catalyst for richer interactions may improve upon this one. Alternatively, ways of bridging the preference for lightweight messaging on the side of teenagers, and fuller, more personal interaction on the side of grandparents, may offer a way forward. Magic Boxes, as described by [1], offer a good example of a non-electronic version of this. Here, both sides could put as much, or as little, into the interaction as they wished. The challenge may be to bridge this gap using new technologies.

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