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Visual Communication for Maintaining Social Relationships: A Case Study

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ABSTRACT

As a result of video sharing websites like YouTube, the integration of video capabilities into social networking sites, and video call software such as Skype, video communication tools are quickly becoming fixtures in the everyday lives of internet users. Researchers conducted a case study of a group of people living in a small Canadian city. The study explored their use of video, perceptions of the medium as a means for maintaining social relationships within their personal communities, and perceived barriers to video technology use. Our study indicates high levels of acceptance for communicating via video with others at a geographical distance especially if there is a cost savings, a close personal relationship between participants and a need to "show" objects or expressions. Interestingly, even in a group of video communication users, there is considerable concern about privacy issues and this acts to restrain more frequent use of video technology for everyday communication.

INTRODUCTION

Video communication has rapidly become a fixture in the everyday lives of many internet users. Video sharing websites like YouTube, the integration of video capabilities into social networking sites, and video call software such as Skype are now readily available in most regions of the developed world (Stefanone & Lackaff, 2009; O'Donnell, et. al., 2010). Both professionally-generated and usergenerated video content has been online for some time now (Milliken & O'Donnell, 2008). While video calls are more commonly use in work contexts (O'Hara, Black & Lipsson, 2006), this case study explores online video communication in a social context. We looked at how a group of people in a small Canadian city use and perceive video as a communication medium, particularly for social connection. Our study suggests high levels of acceptance for communicating via video with others at a geographical

distance, especially when there is a cost saving, a close personal relationship between participants and a need to "show" objects or demonstrate something. Interestingly, concern about privacy is a barrier to more frequent use of video technology for everyday communication.

ONLINE COMMUNICATION FOR SOCIAL CONNECTION

The internet is often discussed as either separate from or an obstacle to peoples' everyday life activities. Such debates are based on a notion that there is a real difference between virtual and real-life communities (Bakardjieva, 2003). Anderson, in *Imagined Communities* (1991), writes that all communities are mediated and imagined, but for Bakarjieva (2003), the term community is heavily value-laden. Bakarjieva discusses community as a possible form of togetherness, and describes how in all forms of "virtual togetherness," users produce valuable things such as content, relationships or culture.

Wellman and Haythornthwaite challenge that assumption by asking if internet use is a "stand-alone activity, or does it become no more separate than picking up the phone is separate from talking to family?" (2003: 31). Researchers have found that experienced internet users incorporate the technology into their everyday lives and use it for communication with close and distant friends and relatives. Those with high comfort levels using the technology engage in higher rates of "social capital building activities," so the internet is actually able to enhance social relationships (Wellman & Haythornthwaite, 2003).

Other research shows how video can also allow people to stay connected when they live far apart. As Patricia Lange states, online video can constitute a media circuit – a means of "facilitating and technically mediating social interactions among people within a network" (2008: 363). Within in media circuit members of a group can engage in meaningful ways.

Online communication is a means for people to stay in contact with their own "personal communities" - the set of relationships with others that encourage socialization, foster support and create a sense of belonging. It does not necessarily have a geographical component; there is no need for people to actually physically live next to each

other to be a part of a personal community (Hampton & Wellman, 2002).

Video can aid communication by adding social presence. Social presence, a term originally coined by Short, Williams and Christie (1976) is defined as the quality of being present when a communication medium is used. Social presence theory suggests that increased richness of the communication medium leads to increased social presence (Lowenthal, in press) and different communication media have varying degrees of social presence. For example, video with its greater ability to support visual cues, such as body language and facial expressions, generates a greater sense of social presence than audio alone (Roussel & Gueddana, 2007).

Communications researchers in the mid-1990s applied Short's theory to online communication and argued that perception matters more than the medium itself (Lowenthal, in press). Social presence theory continues to be investigated and redefined. Current definitions of social presence include notions of shared space (physical space), the experience of psychological involvement and engagement between participants (Biocca, et. al., 2001 as cited in Rettie, 2003; Emond et al., 2009).

Text-based communication, like email, is not as effective as the telephone and in-person communication for maintaining personal relations (Cummings, Butler & Kraut, 2002). Video-based communication allows for greater social presence than email because the audio and visual elements increase communication richness. Users benefit because video channels allow them to communicate in a more natural way resembling in-person communication (Bruce, 1996). Video also facilitates the process of personal identification, allows for the reading of emotional expressions, aids with speech perception, and enables viewers to read gazes - signals that express intimacy and power (Bruce, 1996; Molyneaux et. al., 2008). Video also allows people to visually share the same objects in a virtual space (Kraut, 2002; Whittaker, 2003). Video can actually go beyond the limitations of in-person communication by allowing the interaction to be saved for reviewability (Ijsselsteijn, Baren & Lanen, 2003), as well as empowering those who develop their own videos and encouraging identity-formation among producers and viewers alike. Quality of video does not necessarily have to be high in order for people to interact, as social function is more important than technological criteria (Lange, 2008).

Communication richness developed through video technologies could contribute to better (stronger and quicker) development of trust; however, there is insufficient research done in this area (Bekkering & Shim, 2006), and some research on YouTube videos suggest that the addition of the visual does not necessarily reduce antagonism (Lange, 2007). There are also practical and social barriers

to the use of video for communication, including costs and effort as well as privacy issues and concerns about personal issues (O'Hara, Black & Lipson, 2006).

Researchers have recently begun to investigate young peoples' use of video technology (Molyneaux, Fournier & Simms, 2009). Canadian researchers have found that older teens are more likely than younger teens to use cell phones and webcams, and are twice as likely to use the camera and video functions of their cell phones as adults (Media Awareness Network, 2005; Zamaria & Fletcher, 2007). University-aged Canadians are also interested in online video. In a recent study of 60 YouTube users from a university in Atlantic Canada, researchers found that 55.0% were frequent visitors; 26.7% had posted comments to videos on YouTube and 11.7% had posted videos to the site (Milliken et. al., 2008). Young people are also showing growing interest in using synchronous video. The Canada Online! report states that new internet applications like Skype video are gaining popularity among internet users, especially younger ones. Young Canadians are also expressing growing interest in posting photographs and video (Zamaria & Fletcher, 2007). However, more recent scholarship has suggested that social contact can be important factor in motivating older people to use computers (Harley & Fitzpatrick, 2009).

Few studies, however, examine the maintenance of ongoing relationships using online communication technologies (Cummings, Butler & Kraut, 2002). In a 2006 study of mobile video phone use, researchers found that the most common reason for using video on mobile phones was for "small talk": conversations where the motivation for calling was social and emotional. These calls were characterized by the close relationship between the participants. For example, couples who were temporarily geographically separated used the video to remain connected. Video was also most often used when calling family members with children, as children communicate more visually than adults. Just less than a third of the calls were to "show and talk" where participants used the video function of the mobile phone to show someone else potential purchases while shopping. The video function of the phones was also used, for a lesser extent, to accomplish functional goals; for example, to schedule meetings or lunches both for work and within social contexts (O'Hare, Black & Lipson, 2006). Other researchers have postulated that the emotional, relational content of the message is more important than the informational content when applied video communication (Ijsselsteihn, Baren & Lanen, 2003).

Recent studies have also examined the extent to which people can build social capital while watching videos, focusing on concepts of social or interactive video sharing (Oumard, et al., 2008; Guha, 2008; Weisz, 2008; Weisz & Kiesler, 2008; Agamanolis, 2008). Scholars have suggested that the majority of people share online videos with their

families and friends (Guha, 2008; Oumard et al., 2008) by forwarding the link, discussing a video they have seen or watching it with others (Weisz, 2008). In a 2008 study the researchers mention the phenomenon of participants multitasking while watching online videos, such as instant messaging, emailing, or talking on the phone or in person (Weisz, 2008). Such activities, as well as recommending videos, could aid in maintaining or building relationships (Weisz & Kiesler, 2008).

In the current study, researchers were interested in frequency of video communications, perceptions of the medium as a means for maintaining ties within their personal communities, and perceived restraints or barriers to using video for communication. These themes were explored through a case study of a group of people who use online video, video calls and videoconferencing.

STUDY METHODOLOGY

The study was administered from June to September 2009 in Fredericton, New Brunswick, a small city in Atlantic Canada. To be eligible for the study, participants had to have previously used online videos and videoconferencing or video calls. They were recruited through posters around the city and on a university campus, an article in the local newspaper, a university e-newsletter and networks of acquaintance.

Researchers achieved their goal of attracting a broad sociodemographic spectrum of Fredericton adults. The 62 participants aged 18 plus were 50% female and 50% male. The age ranges were 43% aged 18-34, 31% aged 35-54, and 26% aged 55 plus. A higher percentage of study participants had a post-secondary education than the population of Fredericton.

Participants were invited to take part in two phases of the study: a survey with multimedia content (62 participants) and a structured interview (30 of the survey participants). The research protocols were reviewed by the research ethics board of the researchers' home institution.

In the first phase - the survey - participants completed a 90item questionnaire, which assessed their current technology use using both closed (e.g., Likert scale responses) and open field response formats. Participants were provided with a \$15 honorarium. Quantitative data were analyzed using SPSS statistical software. Qualitative data from the survey were used anecdotally to explain trends and specific responses.

Participants in the second phase of the study were interviewed for an average of one hour and received a \$15 honorarium. The structured interview guide had 90 items, a mixture of both open and close-ended questions. Participants were asked about their experience and attitudes toward video calls, videoconferencing, watching online videos, and making and posting online videos. Interviews were audio recorded, transcribed, and analyzed using NVIVO qualitative software. Through team discussions, a coding frame of 15 themes ("nodes" in to NVivo terminology) was developed. The nodes were chosen based on previous research, theory, and researchers' interests. This rich data set was used to provide answers to the various research questions, and will be central to enhancing our understanding of this research area.

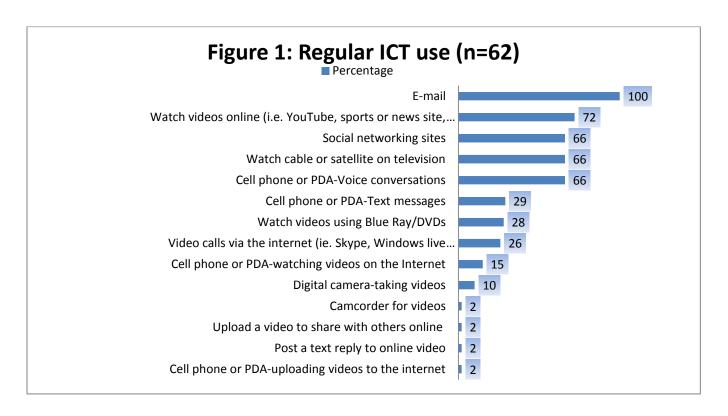
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STUDY FINDINGS

Frequency of using video communication

In the survey participants were asked how frequently they used various types of information and communication technologies, illustrated in Figure 1. Regular use is defined as using the technology every day or several times a week. Figure 1 shows that 72% of participants watched online videos regularly and 26% made video calls regularly.

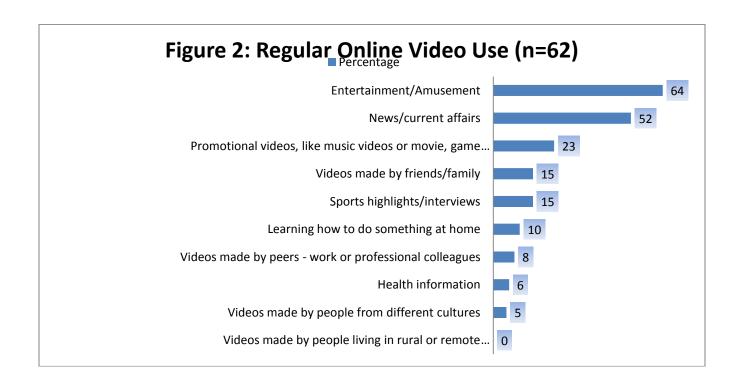
All participants reported using email on a regular basis and 66% regularly used social networking sites, viewed television, and had voice conversations on cell phones. Participants regularly used voice or text messaging on cell phones. Fewer participants reported taking videos on digital cameras or camcorders on a regular basis (10%, 2%). Uploading videos or posting text responses to online videos were also not very common activities, with only 2% of participants reporting regular use of these (Figure 1).



Using online video for maintaining social relationships

Online video is asynchronous, pre-recorded audio and video shared online. Figure 2 shows that 15% of participants in our case study regularly watched online videos made by friends and family. Again, regular use is defined as using it everyday or several times a week. Entertainment videos were the most frequently viewed, with 64% percent of

viewers watching them regularly. News or current affairs clips were also popular, with 52% of participants viewing these videos regularly, and promotional videos (music videos, movie trailers, etc) were viewed regularly by 23% of the participants (figure 2).



In the interviews, participants discussed the importance of viewing videos posted by friends and family living at a distance. They stated that online videos of private family events, like graduations and birthdays allow them to stay connected to their friends and family members' lives even if they are unable to attend in person (Female, 27; Male, 21). One participant stated:

"I've been able to like share in friends' lives and their happy moments and stuff through online videos, watch some people's graduations, seen weddings, seen birthdays online, so stuff I've missed out on, I can like relive it through the videos" (Male, 21 years old).

Another discussed how her girlfriends used online videos, uploaded through Facebook, to stay connected. In particular she said: "we really want the videos that we share with each other to show aspects of our lives that we're missing out on, and we use video a lot more to stay connected as friends and share our lives together" (Female, 27 years old).

While the emotional benefits of online video were mentioned by several participants, one participant discussed how viewing videos sent by friends and relatives could be a means of connecting with others, even if the videos were commercially-created content:

"I think emotional content would be the most powerful thing ... is I'm getting videos that people have emotionally connected with. ... And then as I watch the video, I'm thinking a little bit about who sent it to me and again, they wouldn't have sent it unless they thought it was important, right? So, it's a bit of a connection to that person because they're showing ... It's like, you know, you show your picture of your children to somebody else. You know there's a connection to the other person through what they've sent to you." (Male, 51)

Using video calls for maintaining social relationships

Video calls and videoconferencing refers to synchronous, live, audio-visual exchange. When asked in the survey how often they communicated with friends or family using video calls, video chat or videoconference, 8% of participants reported using the technology to communicate with others in the same city on a regular basis, while 31% used it to communicate with friends and family outside of their home city. In the interview, participants also discussed how they and their friends and family use video chat to converse with those living at a distance; indeed, the geographic distance between participants and their friends and family played a key role in their decisions to use, or not to use, video calling.

Participants reporting very frequent use of video calls were those whose friends and family were located the furthest distances away. One participant discussed using video for chatting on a weekly basis because his family: "...live in Europe, so I have to communicate with them [over video] because I haven't seen them in a while, since I left and came to Canada, so it's kind of good to talk with them almost every week, I'd say" (Male, 21 years old). Another participant used video calling to stay in touch with her sister in Whitehouse, a city on the other side of the country, but did not use the technology to communicate family members or friends who live locally (Female, 39 years old). Another participant mentioned she only used video calls when she was "very far apart" from her friends and family, and otherwise she used instant messaging and Facebook (Female, 39 years old).

Distance seemed to be relative for the participants in the study. One participant considers her family, living in the adjacent province of Nova Scotia, as too close a distance for regular video communication (Female, 27 years old). Another participant mentioned her friend in Bathurst, New Brunswick, which is closer than Nova Scotia, as one of the top three people she frequently communicates with by video calls, calling her about once a week over the Summer (Female, 21 years old).

A strong social relationship coupled with distance between communicating partners was a very strong motivating factor behind the use of video calls. As one participant stated; "For me personally, it comes down to when if it's somebody that I'm really close to that I can't see for a long period of time, ... I would opt for a video" (Male, 27 years old).

Close relationships as a motivator to using video calls was especially true when communicating with children. A 39 year-old female participant discussed using Skype while apart from her family and finding it a better communication medium than telephone because "they get to see me and I get to see them" (Female, 39 years old). A 71 year-old male participant explained his experience teaching for several months in China, and how the ability to "talk to the grandchildren and talk to the children and see what they looked like in real time" prompted him and his wife to use video calls (Male, 71 years old). Likewise, a 71 year-old grandmother also uses video calls to stay connected to her grandchildren, while her son uses video calls to see his infant son's developmental progress:

"Oh, you know, I'm a grandmother. Seeing my granddaughter's little piece of art that she brings home from school... For our son, who's been out in California since March, his little guy was born in November, so from March 'til now ... he's had to see his little son's growth and development on Skype. And so you're always trying to get the little one to do it when he's being Skyped. Come on, now, crawl. Get in the dog's dish. Come on" (Female, 71 years old).

Indeed, video calls seemed to take on special importance when communicating the very young or infants, as they are pre-language. As one participant stated "My partner was talking to our friend and the baby was giggling at my partner, who was making faces and waving. Well, that's an interaction you're not going to get on the telephone" (Male, 44 years old).

Interestingly, some participants use video calls as a means to stay in touch not only with family members but also with their pets. One participant reported that when he is out of town, he and his partner video call their computer at their residence, and the dog gets to see him on screen and respond to his voice (Male, 44 years old). Another participant enjoyed the visual aspect of video calls because the feeling of shared space with her partner is emphasized by the occasional onscreen appearance of her pets. She stated that video calls are important because of "the seeing, I love being able to see my dog and cat wander through the posture. I love that" (Female, 40 years old).

The clear advantage of video calls over other means of ICT like telephone calls or email is the real-time visual aspect. One participant stated, "with video you feel closer. There's closer contact with them and you don't think: Well, I haven't seen that person for three years. I mean, you say: Well, I saw them yesterday. So I guess your ongoing relationship is closer because of the video" (Male, 58 years old). While describing recent hardships in the family, another participant mentioned the beneficial visual impact of video calls, stating that "talking to someone on the phone is not the same as talking to them through video calling. It's a much more personal, better communication" (Male, 44 years old). A third participant who used video calls to connect with friends and family members also stated that video calls allowed a greater feeling of "a closer connection than if you don't see them for two or three or four years" (Male, 58 years old). Another participant stated: "When it's been my initiative, it has been simply to provide imagery of family. Otherwise it's never been my idea to have a videoconference conversation" (Male, 71 years old).

A change in physical appearance was a motivating factor for video call use. One participant said it becomes necessary to use video calls when talking with family members or friends that he has not seen in awhile, especially when he wanted to show them something, like a change in his appearance — a new haircut, for example (Male, 55 years old).

Video calls can also give people a sense of shared space, as well as an opportunity to interact in real time – something that other visual means, like digital photographs, cannot accommodate. As one of the participants described:

"I have a friend in New Mexico who's an artist, so when she's finished getting some works ready to do in an exhibition, she can take me out to her studio and show me her stuff. Whereas before, she'd take a digital picture and we'd put it up, but she's there taking about it, which many times, she wouldn't think to put in an email message or wouldn't ... Because it's not live, I can't ask her a question, so ... live time, helps." (Female, 71 years old)

During the interviews many participants discussed the importance of video calls for seeing objects and gave general examples of how they would use video calls for this purpose. One 51 year-old female mentioned using video calls "when I have a lot of time and we just want to sit and talk and look at each other or show somebody something over the thing, then we do that" (Female, 51 years old). Another noted a video call conversation with his sister where she discussed buying something, and the video call enabled her to hold the object up for her brother to view (Male, 44 years old). Similarly, another participant discussed how the difficulty of describing an object was overcome by using a webcam to show it (Male, 35 years old).

The idea of "showing" over video can refer to more than physical objects, but also to emotion. Many participants discussed how video calls and videoconferencing could potentially clear up misunderstandings that could occur over other forms of communication (Male, 24 years old; Female, 40 years old Male, 44 years old). That and the synchronous nature of video calls can help create a feeling of greater involvement:

"It's immediate. Over email, if you think about video calling as opposed to email or writing a snail mail letter, it's immediate. You don't have to sit there and compose and read and as we all know, written communication, while wonderful, there's nothing that beats getting a letter in the mail and opening it up. Love that. But it's prone to miscommunication, lack of clarity, so much of communicating is visual. Seeing the look on the person's face, seeing the delight in their eyes when they're talking about something that might not come through clearly in their voice, seeing the animation or the somberness or ... You've likely been involved in conversations, as has everybody else where you're talking to the person and they grow quieter and quieter, and you're on the other end of the phone going: I wonder what's going on. Are they just fascinated by my voice or ... And on Skype, you see that they're actually crying because what you're talking about has upset them." (Male, 44 years old)

Several participants stated that they used video calls over other means of communication because it allows them to more easily communicate because they can see other people's reactions and body language instead of guessing or relying on emoticons when communicating using non-visual means (Female, 21 years old; Male, 24 years old; Female, 51 years old; Male, 21 years old). One participant

gave examples of how the visual makes her feel more connected with others during work conference calls and in her own personal life:

"People forget that they're videoconferencing, and they just start having conversations amongst themselves and the person, if you're just dangling on a telephone conference, you don't know. Have I been cut off or am I out of the conversation, what's happened? Having that visual cue, that okay, people have naturally broken into discussion, or the coffee came in the room, and people completely get distracted or what ... Or in my husband's case, the dog has come through the picture, so I know what's going on. So it just makes you feel like you're there and part of the ... more part of the conversation than just having the audio." (Female 40 years old)

It is important to note that cost also was a factor in the decision to video chat instead of the telephone. One participant stated that he really never communicated with friends and family via video call because his parents and family live in Montreal and he prefers to communicate with them using the telephone. He did state that if he had friends and family further away, for example, in Australia, that he would value video calls instead of telephone calls because it would be less expensive (Male, age 46 years old). Several others noted that video calls are inexpensive when compared to long distance telephone calls, especially when calling many people and talking for long periods of time (Female, 21 years old; Male, 49 years old). One participant stated that he does not have a long distance phone plan so he communicates with friends and family "over MSN, and when I get bored of that, we want to talk face-to-face, we'll go on Skype" (Male, 24 years old).

Another participant whose wife was living overseas found telephone conversations far too costly "when I was talking to my wife... I used to spend like \$200 a month on telephones. So it was costly" (Male, 27 years old). Comparing video calls to telephone calls and email, this participant noted:

"I think if the other person is online, I think video call is much easier than a phone call or email because, I mean, at least I talk to my peers in India. My wife, she's in India, and we talk every day, and I think it's much cheaper. Yeah, it's much cheaper. It's much easier to talk and I think ... I mean phone calls or emails, I think are much cumbersome than video call, given they have the internet. If they don't have the internet at the same time, I think the email is the best method than phone call" (Male, 27 years old).

Restraints to using video for communication

Concern about privacy was the restraint or barrier to video call use most often reported by our participants. Some participants, although they have participated in video calls or videoconferencing in the past, were reluctant users because of privacy concerns. When asked if she communicated using video calls in her daily life, one participants stated that she was going to, in order to communicate with her daughter in Scotland, but is still reluctant to try it: "I must admit it, it's probably an age thing, but there are just some things about putting myself visually on ... I'm aware of once you're image is on the net, it's there" (Female, 54 years old).

Another participant expressed concerns that the video call software could compromise the privacy of users. For example:

"Skype lets people know when you're on Skype. If you don't want to talk to that person, they know you've rejected their call. Like the little chat thing at the bottom of Facebook, or Gmail. They know you're there. It's not like you can act like you're in the shower or you're away and let the phone ring. That has some negatives." (Male, 44 years old).

Similarly, another participant stated:

"Most of the people who are members of my family and who would be part of our friendship group would have the technology and the financial wherewithal, and would be in a community where it would be accessible and there for them. What I find the barrier is, is attitude. I think they're worried that if I call them on Skype, I'll be seeing them before they know. It's like, I'll pop up on the computer and be watching them come to the computer and they'll have to make sure they're properly clothed or not" (Male, 44 years old).

Privacy issues were of even more concern to participants when they discussed online videos. Most of the participants interviewed stated they did not create video and post them online. When further asked about video uploading and friends and family's use of online video, some mentioned uploaded personal videos and viewing videos created by friends and family, but only in the context of social networking sites, such as Facebook (Female, 27 years old; Male, 27 years old – a; Male, 27 years old – b; Male 35 years old). Participants perceived social networking sites as having a higher level of privacy control than video sites such as YouTube.

Another restraint to using video calls is the perception that it is not worth the trouble, compared to communicating by telephone. One participant who does not use video calls stated that her two sister-in-laws, who live in Canada, but are originally from Mexico, use video calls to stay in touch with their family members. She recognizes that video calls are a "great way to keep in touch with family when you're far from home"; however, she has not managed to video call others because of time constraints and her perception that "it's still easier to pick up the phone somehow" (Female, 49 years old).

Others felt that the visual aspect of video calls was not enough of a motivator for them to use the technology for everyday communication. One participant said that while he used video calls because long distance telephone calls were too expensive, the video was not as important as the audio. In fact, he mentioned that when others did not have access to webcams they would simply make online audio calls. He said that while it is nice to see the other people he's communicating with, it's not that important (Male, 46 years old).

DISCUSSION AND CONCLUSIONS

Our case study examined how a group of residents of a small city in Atlantic Canada were using video communication for maintaining social relationships, as well as their motivations for and barriers to using the technologies. This group of people had all previously viewed online videos and used video calls or videoconferencing. We found that 26 percent were using video calls regularly and 15 percent were using online video regularly to maintain ties to their own personal communities, with "regularly" defined as everyday or several times a week.

Geography was a primary motivator for using video communication technologies. Study participants using video calls did so to communicate with people living in different countries or living on the other side of the country. Although there was some video communication with others living within the same province reported during the interviews, nobody mentioned using video calls to communicate with others in the same city.

Cost was closely related to geographic location as a motivating factor for using video. In particular, participants used video calls because they are less expensive than long-distance telephone calls, especially for friends and family in other countries. Viewing online videos of family events in distant locations also allowed people to feel like they are taking part in activities they could not attend because of travel costs. Participants mentioned that online videos allowed them to view their friends and family member's birthday parties and graduations; as a result they felt more connected to the people at these events.

Another motivating factor which was also linked to geographic location was personal connection. Participants reported feeling connected to others through video calls and viewing online video. This feeling of connection through video was of particular significance due to the nature of the relationship between the participant and the person with whom they were communicating. Video was considered of great value when keeping in touch with a close circle of friends living in dispersed locations, and with significant others. In particular, participants discussed the important of video when communicating with children and pets, as

children quickly change in looks, and both children and pets communicate through actions and expression.

Communicating non-verbally with children and animals over video is closely related to another motivator to use video, that of the ability to "show." Participants reported the importance of being able to show others not only physical objects and appearance over video but also to show emotion and body language in order to achieve a greater personal connection with others and to clear up any misunderstandings that could arise from non-verbal means of communication (such as email, telephone, etc.).

Interestingly enough, even in our group of participants – all of whom were regular users of ICT - some participants were hesitant users of video. Several participants expressed concerns about privacy issues on Skype video, in particular the idea that others know when they're on the program, and might be affronted if they do not answer the video call, as well as the fear that they could be caught off-guard on a video call (i.e. dressed inappropriately, or offending others if they are seen to be multi-tasking). Participants were also hesitant to put their own videos online, for fear of them being viewed by people other than the intended audience. Social networking sites, like Facebook, were considered by participants to be a more private place to post personal videos than video sites like YouTube (even though such sites allow users to set privacy settings).

Video communication using broadband networks is still a young communication medium and research on its use to maintain social connection remains limited. Although the findings of our case study are limited to this group of participants and cannot be generalized to the wider population, we do believe that our study contributes strong evidence that the key motivators for people to use video communication for social connection are geographic distance and cost, personal connection to others, and the ability to show objects and emotions. A key restraint to using the technology is concerns about privacy. Addressing privacy concerns by offering more secure and trustworthy video communication software options would likely encourage more frequent use of this communication medium.

The wider implications of our study relate to the need for inexpensive and effective ways of maintaining social connection with friends and family living in distant locations. Video communication online clearly offers two distinct options: sharing online videos of family events and using inexpensive video calls for virtual visits. Our research demonstrates that people using these options have found that they do help to maintain their social relationships over a distance.

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