

“A Little Silly and Empty-Headed” – Older Adults’ Understandings of Social Networking Sites

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ABSTRACT

This study suggests reasons for the absence of a growing proportion of the population, the so-called baby boomers, from the otherwise highly popular social networking sites. We explore how people of this age group understand social networking sites and how these understandings fit certain aspects of their life. Designing social networking sites that match older adults’ life would increase their possibilities of coping with the changes related to their age and of contributing to the information society. In a qualitative study involving use of an existing social networking site, and group and personal interviews, we found that understanding the internet as a dangerous place, and social networking sites as places of socially unacceptable behavior, hinders the use of these technologies. To include older adults, we propose arrangement of social events for getting familiarized with these services and offering of clear and simple privacy management on the sites. These actions have implications for users of all ages.

Author Keywords

Social networking sites, social media, aging society, older adults.

ACM Classification Keywords

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

INTRODUCTION

In contemporary societies, social interaction is increasingly mediated by information and communications technology (ICT), and mediated social interaction is becoming a part of public activities. For example, social media services such as Facebook and Twitter are considered to have had an impact in the 2008 Presidential election in the United States. If services of these kinds are designed with only the younger generations in mind, we run the risk of excluding a significant part of the population from the so-called information society. Although we do not draw a causal

relationship here between not using social media services and being excluded from the information society, we argue that the absence of older adults from these services should be considered in the planning of actions for including those of all ages in the information society. Such actions, which promote accessible ICT and the integration of older people, have been initiated at both international and national level [10,24,29].

In this paper, we look at a particular interaction technology, social networking sites (SNS), from the perspective of older adults. By older adults we refer to the generation born in 1945–1955 (i.e., the “baby boomers”). This age group is of significant interest for two reasons: First, in industrialized countries, people aged 55–65 constitute a significant proportion of the population. Within the next decade, this generation will retire from the workforce, which is a major societal issue for these countries [13,21,30]. Second, social media and SNSs are often used by people under the age of 40 [16]; therefore, the understanding of the use of ICT in social interaction has potential bias towards the younger population.

To study why such a large proportion of the population is absent from the otherwise very popular SNSs, we address the following research questions: 1) *How do older adults understand SNSs?* 2) *How do these understandings fit certain aspects of their life?* 3) *How should these conceptions be taken into account in the design of SNSs?* Our contribution is a qualitative understanding of the relationship between SNSs and the various aspects of the older adult generation’s life. In addition, we shed light on current social interaction technologies from a fresh perspective and therefore provide a better understanding of the technologies’ implications.

To answer the research questions, we conducted an intervention study wherein our participants used an existing SNS. Also, we arranged group and personal interviews covering their social networks, use of communication media, and perceptions of SNSs, including experiences with the SNS used in the study.

Our findings suggest that older adults perceive the internet generally as an unwelcoming place for sociality, and SNSs as places for people who seek publicity and superficial relationships – qualities we found inconsistent with values expressed in older adult life. Moreover, the common frames for interaction that friends maintain, built in decades-long relationships, are difficult to manage in a new environment. In the Discussion section, we go over

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the findings and their implications for designing SNSs for older adults. We focus in particular on suggesting ways to overcome the negative conceptions highlighted concerning SNSs.

BACKGROUND AND RELATED WORK

In this section, we present the latest statistics on older adults' SNS use, factors that may isolate older generations from ICT and online environments, and the potential benefits that older adults may gain from using SNSs. Since we are talking about a technology used for social interaction and managing social relationships, we discuss the special characteristics of older adults' relationships.

Older Adults' Use of Social Networking Sites

The percentage of adults of over 55 years online has increased steadily [8,11,12], showing that the retiring baby boomer generation will be a prominent age group online. However, looking more closely at users of various services online, we find a new kind of digital divide: Baby boomers are still a clear minority on leading SNSs when compared to younger generations, although the proportion of visitors of age 55+ is increasing [18,16]. In industrialized countries, about 10% of internet users aged 50 and over have used SNSs in the last year [26]. Reasons for use or non-use of SNSs by older adults have not been examined before this study.

Sites targeted at older adults, such as eons, BOOMj, and Saga Zone, are successful, but academic research has focused mainly on young adults and teenagers. Older adults as SNS users have been neglected almost completely, an exception being Arjan et al. [3], who studied the friendship networks and self-presentation styles of users aged 60 and older. They found that older users tend to have fewer friends than younger users, but greater variety in the age of their friends. In their self-presentations older users were more formal, and used less words that the authors interpreted as indicative of emotions associated with adolescence, such as negative feelings.

Considering ICT use in general, Selwyn [27] maintains that the problem of generations isolated from the information society will not vanish as those who have used ICT in school and their work grow older. In addition to physical and cognitive constraints, Selwyn argues that there also are structural constraints to older adults' ICT use, as seen in his interview study with people aged 60+. The first constraint presented by Selwyn is the ambivalence between praising the benefits of the information society and inability to see its benefits in one's personal life. The second constraint, related to the first, is that of the relevance of ICT in older adults' life. Selwyn argues that integrating older adults into the information society would be easier if those of this age were involved in developing services that fit their life.

Being left outside the information society is not only a matter of non-use but also one of a lack of a reference group in it. Ito et al. [15] studied an online community of an organization supporting seniors in learning about ICT.

The authors found out how the members together constructed the online environment as a place for themselves, at the same time negotiating their social identity as "seniors". The members valued the polite but still vivid discussion in the online community. Having a feeling that one belongs to a social network of peers using the same service supported involvement in the online community.

Benefits of ICT and SNS Use in Older Adult Life

In the case of teenagers and young adults, it has been found that the gratifications of using SNSs lie in managing social capital, constructing identities, and participating in public activities outside adult society [4,5,9]. Older adults may not have similar needs for constructing their identity or their own public sphere. However, the benefits related to social capital may apply to this generation too. Ellison et al. [9] hypothesized that students amid the transition from high school to college take advantage of SNSs in order to preserve their dispersed social relationships and to build new ones when entering new social circles. We propose that, in the same way, older adults who are in transition from work life to retirement and have children living elsewhere could use SNSs to preserve their dispersed relationships. Before us, Lowenthal & Robinson [20] compared retirement to adolescence by proposing that when social networks are loosened in a certain phase of life, people of the same age are appreciated as friends more than those who are not experiencing the same kinds of changes in life.

Selwyn [27] summarizes previous research addressing the benefits that older adults could gain from using ICT. In addition to supporting task-oriented goals, lower perceived life stress, and access to societal and health-related information, ICT use provides interaction benefits, such as avoidance of social isolation. Concerning these interaction benefits, Lindley et al. [17] argue that the technologies should support the maintenance of emotionally meaningful ties, since older adults value their existing relationships more than new ties. SNSs are used prominently with existing ties [5], but the question still remains of why older adults, who may benefit from a medium through which they could maintain their existing relationships over a distance, do not take advantage of this particular medium.

Rook [25] has studied the importance of companionship in later phases of life. She argued that, because of the difficulties that physical constraints impose for ability to reciprocate, having relationships based on companionship as opposed to exchange of support is better for the well-being of older adults. Companionship is about mutual sharing of experiences, not solely about needing to rely on another person when in need. Wright [31] found out that in a web community, older adults actually had more companionship relations than supportive ones. This suggests that computer-mediated communication serves as a source of social interaction and for creating meaningful relationships for older adults. Lindley et al. [17] claim that ICT should support feelings of dignity and self-worth through reciprocity of communication. On the other hand, older adults often participate more actively in

the lives of their children and grandchildren than vice versa. We see SNSs as an interesting technology in this context because they allow both reciprocal and asymmetrical communication.

Special Characteristics of Older Adults’ Social Relationships

Because SNSs are sites for maintaining and creating social contacts, we take a look at the special characteristics of older adults’ social relationships. Allan & Adams [2] consider examining the effects of age on friendship perceptions crucial: since older people are likely to be in retirement and their children, if any, to have moved away, their daily routines and activities have changed quite dramatically. This affects their friendship patterns, and probably their conceptualizations of them as well.

Empirical support for these arguments has been presented, for example, by Patterson et al. [22], who argue that the greater tendency of older adults to emphasize reciprocity reflects the greater accumulation of life experience older adults have to rely upon – especially in considering how one can tell a friend from someone who is not. However, these authors argue that the greater significance of reciprocal elements for older people might be a matter of generation and cohort rather than a function of age.

From open-ended interviews, Patterson et al. [22] inductively constructed nine clusters defining friendship from the perspective of older adults: devotion, commonality, reciprocity, relational stratification, frequent contact, positive attributions, positive impact, understanding, and familial comparison. A similar study by Adams et al. [1] shows that behavioral elements of friendship, such as self-disclosure and shared activities, were the most important aspects defining friendship for older adults.

Unfortunately, research on older adult friendships has not paid attention to the meaning of material and technological substance that contributes to the forming and maintaining of social relations. Two exceptions are the work of Phillipson et al. [23] and of Litwak [19], who briefly discuss the effects of communication media such as telephones on enhancing contact with long-term contacts living further away. We fill this gap by looking at how a communication technology fits older adult life, including social relationships. In order to do this, we need to find out why the majority of older adults are not such eager users of SNSs while these are highly popular among younger generations.

We find it plausible, from the findings of Ito et al. [15], that perceiving SNSs as an environment for different social groups than one’s own and without the possibility of constructing a space in which to feel comfortable might be a reason for not using these services. However, also the structural constraints presented by Selwyn [27] (how the services fit the life of older adults) need to be examined if one is to take advantage of the benefits of these technologies.

Older adults’ use of ICT has been studied from the usability standpoint [7]. The focus has been on alleviating physical and cognitive constraints by enhancing the user interface. Our research questions, however, need to be answered with other methods than traditional usability studies, since our concerns involve infrastructural decisions on a larger scale than just the user interface.

METHODOLOGY

To be able to study how the aspects of older adult life fit the generation’s understanding of SNSs, we chose to conduct a qualitative interview study, which included an intervention period. Our objective was to gain a deeper understanding of the participants’ life situation and its relationship to SNSs than a quantitative study could have provided. While a quantitative approach aims at statistical generalization and at measurements, we aim to understand older adults from their own perspectives on their unwillingness to use SNSs and to provide interpretations for these phenomena.

Our participants were eight older adults, aged 58 to 66, in two groups of four people each: a group of women and a group of men. We selected our participants such that they knew each other beforehand, since we wanted to study how social networking technology is adopted in an existing social network rather than how new relationships and networks are created. The participants were found through mutual acquaintances.

The group of women consisted of four ex-colleagues who had recently retired. They had worked together for many years and knew each other well. The second group consisted of four men who also knew each other prior to our study. In the group of men, one was retired, one was semi-retired, and two were still working full-time. The male participants lived in the same town in southern Finland, while the female participants lived in the capital area. For their effort, the participants each received a one-year subscription to a magazine of their choice.

Our participants represent the majority of older adults in industrialized countries, who do not use SNSs but nonetheless are part of the increasing proportion of older adults online who use the internet regularly. Rather than to provide a statistically representative sample, our purpose was to uncover understandings and experiences of SNSs in older adult life. This includes elements related to features shared by many people of the same age: retirement associated with increased leisure time, dispersion of work contacts, children who have moved away from home, grandchildren, and not needing to use the computer for work tasks.

Intervention Study

To study how our participant groups understood and used social networking technology, we conducted an intervention study using an existing commercial service called Netlog (www.netlog.com). We interviewed the participants before and after the period in which they used Netlog, and we held group discussions before introducing the service. None of the participants had used any SNS prior to the study. The objective of the

intervention was to provide a common experience and a concrete technology to be discussed in the interviews. We chose Netlog mainly because the interface was in the participants' native language, Finnish. This research has neither financial nor social connections to the service.

Netlog is a service in which users can create profiles listing their personal details, add their own photos and videos, make a list of their friends, and maintain a blog. The system was introduced to each group in the group discussions. The introduction covered the service's various key functions and provided written information on how to make use of the functionality. We avoided giving direct indications of how and why to use the system. The participants were encouraged to try out the system, but we emphasized that using the system was not obligatory for them.

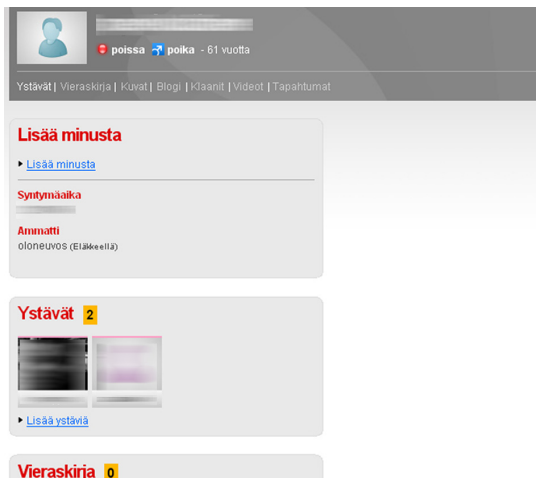


Figure 1. Part of a participant's profile.

The use period in our study was four weeks. The participants had the option of continuing to use Netlog after the test period. Four weeks was long enough for the users to try out the system and to conceptualize it. However, this was not long enough for any "novelty effect" to wear off – that is, for the researchers to observe the manner and extent of adoption of the system as part of routines and practices.

Data Collection and Analysis

In the intervention study, we systematically gathered the media content created by the participants during this period. We captured screenshots of participants' profiles (see Figure 1) every other day but only if they had been modified. In addition to this observation of use, the data collection included conducting and recording of personal interviews with each participant before and after the intervention period, and a post-trial group discussion with both groups. Each interview took roughly one to two hours. The questions in the interviews were mainly open-ended, such as "Please describe the last time you communicated with a certain person" and "How would you describe your relationship?" The interview quotations presented in the Findings section are translations from Finnish.

The first interview concerned the use of communication

technology and the strength and content of participants' social relationships. The transcribed interviews consisted of 6,000–7,000 words. The second interview focused on how, when, and why the interviewees used or did not use the Netlog service. The second set of interviews transcribed had approximately 4,000 words. In addition, we conducted a group discussion for each group after the trial. The groups discussed how they understand concepts related to online interaction, such as communities, blogs, friends, and guest books. During the group discussion, we introduced Netlog and created accounts for the participants. The group discussions were videotaped and transcribed on a thematic level.

The analysis of the material followed the constructivist ideas of a data-driven approach, meaning that, instead of following a set theoretical framework, we let the data guide our analysis (for detailed discussion of this approach, see e.g. [6,28]). Arising from this, we identified how the participants understand SNSs and what kinds of dimensions they regard as important in the use of these services. Two of the authors started by working separately on the material: they read through the transcribed interviews and identified themes from the data. At this stage, the themes were based on direct quotations from the participants.

After the independent work, we discussed the similarities and differences between our themes together in order to minimize the impact of subjective assessments. Together we constructed the following themes illustrating the experiences of older adults: attitudes, skills and habits concerning the use of personal computers, common frame for interaction, reciprocity, similarities, privacy, and self-expression. After this, we raised the level of abstraction and grouped the similar themes under umbrella categories: use of personal computers and elements valued in friendships and social interaction. The Findings section considers our themes in view of prior findings on older adults' use of personal computers and on special characteristics of social relationships.

FINDINGS

In this section we present how certain aspects of older adult life are related to SNS use. The first aspect is the use of a personal computer: attitudes, skills, and habits concerning it. Secondly, since SNSs are sites of sharing private information in order to create or keep up social contacts, the other aspects of older adult life we focus on are social relationships and the privacy and norms related to self-expression. We regard these aspects as revealing the values of older adults in a broader sense and consider these values entwined with the usage of SNSs. Below, we discuss each of these aspects in detail. We compare the preconceptions of SNSs to actual experiences from the use period, and we discuss their compatibility with the various aspects of older adult life. As background for this section, we start with the observations made during the intervention period.

Observations from the Intervention Study

We did not have access to user logs to analyze frequency of use. Instead we concentrated on the frequency and

content of the material published in the profile. Also, we observed friend lists. Two participants from the male group modified their personal information: hobbies, profession, and location. Otherwise, this group did not publish any content. From the female group, one participant published seven writings and one photo in her profile, and two writings for her friends’ profiles. Another participant published five writings for her friends’ profiles. Two participants in the male group added each other as friends. One of the two accepted a friend request from a person he had not known elsewhere. The female participants each added at least two friends from the group, in addition to the person who had invited the group to join the study.

From these observations it can be concluded that the majority of the participants did not use the service regularly and expressed doubts about the viewers of the profile in both the material they published and in the interviews. The privacy management options had been adjusted to the highest possible levels during registration for the service in the group discussions, but they were still considered confusing when the participants were actually posting profile content. Nonetheless, the intervention period provided the participants with experience of an SNS in a real-life context, which was then discussed in the second interview.

Use of Personal Computers

When discussing the older adults’ understanding of SNSs, first we have to pay attention to the attitudes, skills, and habits related to use of computers, because we found the preconceptions associated with computers being one of the factors hindering older adults’ use of an SNS.

Attitudes and Skills

Even though our participants had used computers regularly both at work and in leisure, we noticed that the participants found computers difficult and awkward to use and they did not trust their own computer skills. They found computers more a tool for working than a tool for fun or for communication. It seems that the participants were familiar with computers in a work context and felt comfortable using them when someone else is responsible for the equipment. As one participant put it, *“We’ve done work with [the equipment] and our companies have been responsible for our computers.”*

However, the participants used computers for specific purposes in their spare time, such as for e-mail, banking, reading the news, and seeking information. Nonetheless, their interest in using them can be summarized as follows: *“I’m familiar with some particular uses for computers and those uses are the only ones I have. Other uses for computers are in a way difficult -- I have used a computer for many years now, but, in spite of that, I’m not very interested in it.”* However, some of the participants also said that they would be keen on using the internet if they only knew what it could provide to them: *“In a way, I’m pretty curious about what kinds of content there are on the internet.”* This suggests that, although the participants were not “into computers”, they were interested in finding new content and uses. It

follows that the media content must be valuable in order to expand the range of uses for the participants.

There were also usability problems that hindered forays into use of Netlog. For example, some participants did not know how to upload photos or could not always recognize whether they were online or offline, and one of them did not know that one can navigate on the internet by clicking hypertext links. This implies that older adults might face usability problems unfamiliar to those who are very familiar with the internet. In this sense, using a computer is an effort for the participants, since they face such difficulties deriving from unfamiliar principles of user interfaces.

Habits of Use

The participants use phone calls, SMS, and e-mail for computer-mediated communication with their social networks. Most of them were happy with their current communication methods, although some mentioned that if they had to transmit information that is relevant for several people, it would be nice to have some kind of channel for that. They also said that communication via e-mail is sometimes difficult since many of their age do not read e-mail regularly. When we compared their communication habits to their experience of the Netlog service as a communication method, we could see that in order to get the participants to utilize a new communication method, we should be able to show the benefits of it.

The participants did not manage to find any motive for using an SNS; instead, they cited many reasons for deeming it useless and unnecessary for them to do so. They made an effort to invent good uses for the Netlog service, but some of them came to the conclusion that the service is nearly useless for them: *“I surfed on there a couple of times and I was thinking ‘What could I do here on Netlog now?’ After that, I did not use it, since it did not really inspire me; I did not really come up with reasons I need these features.”* The main reason was that the system did not provide any added value: *“I already have a phone and e-mail. I’m wondering where I’d need this.”*

Even if the participants themselves might find such a service useful, it might become useless, since getting their social networks to utilize it is not under their control and may turn out to be an impossible task. As mentioned, their age-mates do not read e-mail regularly, so it follows that it would be even harder to get them to use some other means than phones or e-mail for communication. The participants preferred phone calls with their friends and family, for several reasons. First, the internet has a lack of social cues, and thus they found it a “cold” way to interact with their close friends and family members. Also, they found the SNS laborious to use and even too slow for communication, since their friends did not visit it regularly: *“I prefer to place a call if I want to know something. That way, I receive the answer immediately.”*

In summary, the current computer-mediated communication habits of the participants did not seem to support use of the site. Moreover, the SNS tested did not

provide our participants with any added value when compared to their current mediated communication habits: phone calls, text messages, and e-mail.

We conclude that older adults would benefit from using SNSs only if they were developed in view of older adults' level of experience with computers and the things they are interested in when using the internet. Moreover, the difficulties of getting one's social network to use the service must be taken into account. In the "Discussion" section, we provide suggestions as to how developers of SNSs could act on these findings.

Elements Valued in Friendship and Social Interaction

We argue that by understanding the elements older adults value in their friendships and social interaction, we can develop SNSs that better match the conceptions and patterns of older adult social relationships and hence make the services more attractive in this stage of life. In the next section, we present the elements we found important for older adults' friendships. Some of the dimensions valued could be enhanced through SNSs. However, we find an underlying theme explaining the unsuccessfulness of SNSs: difficulty in constructing a common frame for interaction in a friendship.

Reciprocity and Similarities

Our findings support those of previous research on the most important aspects of friendship for older adults [22]: Friendship was not defined as doing everything without expecting any reciprocal services. Instead, *reciprocity* was a crucial factor defining close relationships. Moreover, it brings weaker ties closer. Reciprocal action can take the form of concrete help (shopping, taking care of the house, or arranging things in case of death) or helping in others' crises by listening to each other's worries: "*If I were in a hospital, she would sit there night and day, and if my husband were to die, she would probably come here to take care of matters.*" In any case, friends were given help with their problems even if the other had not experienced a similar crisis – a close friend was given this kind of help, or someone became a closer friend at least when help was given.

Another theme that has been found important both in earlier studies [1] and in our own is *similarities*. This includes similar changes in life, such as divorce, children of the same age, and, more generally, similarity of values and interests. As one participant put it, "*Trust is a central issue there, and then of course with that good friend you need to have the same kind of thoughts and hobbies, being oriented a bit the same way.*"

Clearly, SNSs afford expressions of reciprocity as well as presentation of similar interests. Attention and favors – such as friend requests or asking "How are you doing?" – are easy to return with a click of the mouse. In Netlog, for example, one can list hobbies and even personal characteristics from among predefined options. We argue that, although many features of SNSs could afford possibilities to express dimensions older adults value in social relationships, fears of not controlling these possibilities in a socially acceptable way may hinder the

use of SNSs.

Privacy and Self-Expression

Uploading photos of themselves proved to be a critical issue for the participants. They did not want to upload photos of themselves to the internet, for two reasons. First, they thought that by showing a photo of oneself, one shows too much. It seems that intentional self-presentation is not socially acceptable among older adults: "*If someone of my age put her photo on the net, I would think she is a little silly and empty-headed*". Blogs, for example, were associated with politicians or celebrities, not ordinary people. Self-presentation arose as a critical issue also in discussion of attributes of users of an SNS in general. The participants did not seem to want to be profiled as active users of an SNS, because of fear of being labeled as self-conceited and vain. This implies that active use of such services might stigmatize them.

Second, our participants perceived uploading photos as not safe. The participants were very careful about providing personal details related to names, relationships, and families. In fact, they stated that they want to keep private all such personal details as concern the circles of personal life. Our participants did not feel comfortable posting any kinds of media they had created to Netlog, because they were not sure whether their writings were on public display or sent as private messages to their friends. In addition, the service offered many features of a similar nature, such as a blog, a diary, and a guest book, and participants could not recognize the difference between them. Sometimes they did not even recognize which of the blogs or guest books was their own and which were their friends'.

The participants spoke about two general ways in which privacy concerns might be realized. First, the male participants were worried about hackers having access to almost any content on the internet, whereas those in the female group thought that their own level of skills might be harmful for them. They were worried about the fact that they might unintentionally publish private content by hitting the wrong key.

Further, privacy concerns kept our participants from discussing online the topics they most liked to discuss with their social networks. They wanted to discuss these favorite topics through non-internet media, since they did not regard the internet as safe to use. Many of them mentioned that they do not use e-mail for telling secrets or for confidential matters, because of safety concerns, and topics they want to discuss with their friends quite often encompass confidential matters.

To gain new acquaintances through SNSs, one has to publish at least some kind of information about oneself. Otherwise, friendships on the internet stay on a superficial level. None of our participants expressed a need for new acquaintances or new contacts; by contrast, they considered themselves to have no need for "superficial" friends or at least not for "net friends". The main concern in their unsympathetic stance towards new acquaintances on the web was that there might be suspicious people among internet users, who would misuse their details. With

close friends, the participants felt no need to discuss superficial topics such as “Hi. It’s a nice day today, isn’t it?” or could not see any sense in informing others of what they will do in their private lives. One said, “*Why would I write there something like ‘well, I’m planning to go to have lunch at the shopping center?’*” From this it follows that SNSs do not seem to fit the everyday communication of older adults well.

Common Frame for Interaction in a Friendship

We interpret the aforementioned elements valued in friendships and social interaction as reflecting an underlying theme of building a common frame for interaction in a decades-long friendship. The concept of a frame is derived from the work of Goffman [14]. He argues that interaction occurs in a frame that participants define together, and that the participants act from their interpretation of this common definition. We use the concept to refer to how, in a long friendship, the ways of behaving toward each other as friends are negotiated and learned. On the basis of our findings, we add that this is especially salient in the case of older adults, because a friendship of long duration includes experiences of different situations with the friend. Through these experiences, common definitions for how to act together are formed: “*People don’t become close very quickly. Someone might become close, but the biggest part is that you’ve learned to know the person better and better in different situations.*”

Common experiences and the common frame negotiated through them increase the likelihood of the positions of those involved in the friendship becoming settled: “*First of all, the fact that we have a very long personal and work friendship, and that we probably know everything about each other... And that is the thing: you don’t have to act any role, you can be yourself when you’re in this group, and everyone knows you.*”

While previous studies did not uncover the common frame for interaction as an element of friendship, at least as such, they nonetheless have found aspects of friendship that can be interpreted as crucial for building this common frame, such as confiding. We consider this element comparable to the devotion and self-disclosure elements found by Patterson et al. [22] and Adams et al. [1]. With someone who is close, things considered private are shared in trust that others will not know about them and that the person understands and does not judge: “*If we’re talking, I don’t have to say [whispers], ‘Don’t tell anyone.’ She’s of that kind that she knows the limits.*” This does not include only talking about things considered private; one interviewee offered a good example of letting the other “*arrange one’s wardrobe*”.

Controversial issues can be brought up within the common frame – one knows how far one can go without ruining the relationship – and even then the confidence in the stability of the close relationships will remain. Similarly to Patterson et al. [22], we found that metaphors of familial relations are attached to close friendships: a friendship is regarded as being as stable as a blood tie, even though real relatives might not be close at all:

“When one has known the others this long, sometimes it feels that we are closer than relatives are. We’ve always said that they are like hand-picked relatives. It’s been a very important group for us.”

We interpret constructing this kind of a common frame as difficult in mediated communication for older adults who are not aware of, or do not want to comply with, the norms of communication set by younger generations. There are no common experiences through which a common frame for interacting with others through an additional medium would have been formed. For younger generations, whose interaction has been mediated to some extent often throughout the relationship, there has been time to build this common frame. When one cannot rely on a common frame when communicating with others, stable confidence in others is not formed. Without stable confidence, one does not want to interact when worried about breaking the norms for interaction.

DISCUSSION

For our participants, the internet was an unsafe place where personal information should not be disclosed because of the risk of malicious use or the risk of doing something socially unacceptable: a third party misusing their personal data or they themselves committing social blunders or giving the wrong impression to their friends. A major factor in this view was their perception of their own limited computer skills. At the same time, usability problems and reliance on certain concepts of use alienated the participants from the technology even further.

Our findings also point to design solutions to address the negative perceptions and attitudes discovered in our study. As mentioned previously, current SNSs already afford expressions of reciprocity and presentation of similar interests. Therefore, the main issues to address, on the basis of the findings above, are the users’ computer skills, transferring or constructing a common frame (a common experience), and paying special attention to management of privacy and publicity of personal and social information. Before addressing design implications highlighted in our findings, we draw attention to the problem of building a critical mass of users for a SNS.

Critical Mass of Social Contacts

One clear finding in our study was the non-use of the Netlog service used in the intervention study. The site did not become part of the participants’ communication habits, the main reason being that none of their acquaintances or friends were using the technology (apart from the other participants in the study). If the site had included more of their friends, relatives, or other acquaintances, perhaps then it would have had enough “critical mass” to become a meaningful communication technology.

This problem is common to all social networking technologies but perhaps especially challenging in building social networking for older adults. As discussed at the beginning of this paper, older adults’ use of SNSs is relatively low; therefore, a service designed for this age

group could not take advantage of any existing SNSs and their networks. However, existing services used by younger people (such as Facebook) would most probably have users from the older adults' offline social network (among them children, grandchildren, and other relatives, as well as friends, colleagues, and ex-colleagues of a younger age). A popular SNS would in that sense overcome the problem of critical mass (at least of a critical mass of younger people).

Nevertheless, whether the service concerned is a new one targeted at older adults or an existing service aiming to attract older adult users, it must address the challenge that, according to our study, the internet was not felt to be a place of social interaction. We now discuss each of the issues discovered, by suggesting designs that could address the concerns raised in our study and make SNSs better suit older adults.

Through Social Events to a Social Networking Site

One of our main findings was that the internet is perceived as an unwelcoming place for sociality. To alleviate this concern, the technology could be designed to be used in a more welcoming environment, namely, a physical real-life context familiar to the age group under discussion.

Therefore, the introduction to the new technology (the social networking site) could be a social event such as a computer course or a social space such as an informal computer clubhouse for older adults. An educative course in computer use is a familiar concept and also gives people an opportunity to be comfortable about their potentially limited knowledge of computers and the internet. A club setting can also be an educative environment in which learning and socializing are inherent. Also, an educative atmosphere would directly address the computer skill issues brought up in our study.

Extending and Constructing a Common Frame

One of our findings was that conceptualizations of friendship among older adults build on a common frame defined through common experiences. To design SNSs that are attractive for older adults would necessitate a possibility of building a common frame in which to interpret the actions of other people on the site. At least to our participants, the dominant perception of SNSs was of places for dating or celebrities, not for themselves. To make older adults perceive SNSs as places for them and their friends, the services have to be designed to fit their understandings of friendship. SNSs, as they are now, do not necessarily contradict these conceptualizations (e.g., they offer possibilities for reciprocity and articulating similarity), but the common frame built over decades of friendship is hard to transfer to a new environment.

In arranging the aforementioned social events or spaces for older adults, it could be suggested that the participants "bring a friend". In other words, they would attend the event or space with a person with whom the common frame of interaction is already constructed (i.e., a friend). The event itself and the SNS used would become a social object binding the friends and other attendees together. In

other words, the course, the technology, and the site would be part of the common frame among all attendees. Also, using the SNS with a friend would facilitate extending that friendship's common frame into mediated communication. In other words, sitting side by side with a friend and learning to use a social networking technology could lower the threshold for transferring part of the "old" social interaction into the "new" mediated interaction.

In practice, the actual tasks performed by the pairs could involve the sharing of objects related to the common interests of the pair of friends and among all participants in the event (or members of the club). The shared objects might be photos of newly built houses, choir notes, flowers grown, recipes for favorite foods, or jokes. The end result would be that the SNS would have a meaning as a new social object building on existing ones.

Clear and Simple Privacy Management

One of the main concerns raised by our participants was that of misuse of their personal information. Therefore, to implement the activities discussed above, special attention should be paid to management of one's privacy online.

Our participants did not appreciate publicity as such, as younger generations might, but instead regarded telling details of one's life to others as boasting. Also, according to our findings, sharing of personal issues would erode the friendship if these details were to be shared with everyone. Moreover, our participants saw SNSs as differing from e-mail, wherein the recipients are controlled similarly to in traditional mail. Older adults often may not have the same mechanisms for managing these privacy-related issues in mediated communication as younger generations have. Therefore, the functions for controlling the recipients of the content published should be clear and simple, perhaps even at the cost of sophisticated and flexible configuration options and mechanisms.

In addition, promotion of disclosure of content and information should perhaps be rethought. Often SNSs promote publicity and openness towards other users, and, therefore, privacy settings are by default set for disclosure of information rather than keeping everything private. Our findings suggest that the other way around could make an older adult user feel more in control. For example, when sharing "blog posts" or photos, an older adult could feel more comfortable if required to choose the recipients from a list of actual names before disclosure rather than having general previously defined privacy settings that automatically affect all communications.

Clear and rigorous privacy management would allow control in sharing of content and maintaining relationships without the feeling of breaking self-disclosure-related norms. Understandable privacy management would also enhance the sense of security from malicious third parties.

Implications for Social Networking Sites for All Ages

Our suggestions for introducing and designing an SNS for older adults have potential implications for SNSs for all ages. Older adults may be the ones who still dare to question the usefulness of technology, and we can interpret our findings from that perspective.

The privacy concerns brought up by our participants are valid for users of any age. Popular SNSs have addressed the issue of how to build understandable privacy management mainly by providing flexibility and high granularity of configuration. Perhaps simplifying the models for privacy and disabling automatic disclosures of information would create better user experiences. On the other hand, unsophisticated and “conservative” privacy settings would not suit some users who are familiar with more complex mechanisms for managing one’s private information. Nevertheless, our suggestion is that building an unsophisticated and simple privacy model (even at the cost of flexibility and configurability) could prove to be popular also outside the age group of older adults.

Also, the long-term relationships of older people could shed some light on how to design SNSs that will stand the test of time. In other words, would it be possible to use one SNS from one’s teens to old age? Currently, it seems, people move from one SNS to another as their life situation changes (e.g., from high school to college or from college to the world of work). Whether such a lifelong web service seems a panacea or not, a sustainable SNS – or an open standard for transfer of personal data from one service to another – could ease efforts to maintain dispersed contacts in life transitions. A lifelong SNS could also function as an archive of personal digital information (such as photographs or messages), and it could be a business the value of which grows over time.

CONCLUSION

The factors most hindering older adults in their use of SNSs as found in our study were

- their lack of confidence in their personal computer skills in combination with concerns about malicious third parties using their personal information,
- fear of accidental social blunders in mediated social interaction through not understanding privacy settings and privacy management,
- incompatibility of their perceptions of social relationships with their preconceptions and assumptions about social networking sites, and
- that extension of the interaction habits formed through very-long-term relationships to a new interaction environment was regarded as costly.

To alleviate the costs of extending interaction to SNSs in older adult life, we have suggested real-life social events and social spaces for negotiating how to use the services initially in face-to-face communication. However, a key challenge remains in implementation of clear and simple privacy management options – potentially even at the cost of flexibility and configurability.

These actions are suggested means of giving older adults the option to participate in mediated social interaction online through technology that better takes their life situations and attitudes into account. Older adults aged 55–65 form a major proportion of most industrialized societies. We believe that these societies cannot afford to exclude such a large part of the population from the online social interaction that SNSs enable. However, SNSs are, first of all, commercial enterprises, and, therefore, taking these actions requires efforts from the entities that benefit from their success financially. We hope this study will provide a strong step toward building successful services for older adults.

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