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What Seniors Value About Online Community

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Abstract

Seniors are involved in online communities around the world. Human-computer interaction researchers have investigated how understanding the values of users can improve technology design, but until now few such investigations have involved systems for seniors. Similarly, although various aspects of networked communities have been researched, few studies have explored ones involving seniors. This interpretivist/constructivist study reveals what a particular community run by and expressly for seniors, value about their community. Of the six key social values identified, their single most important value was 'belonging to a community of peers'. These values have implications for the design of online communities involving seniors.

Keywords

Aged; ethnography; human-computer interaction; neighborhood; user centered design; value sensitive design.

Introduction

Many seniors are technologically capable. They are using social networks (Karahasanovic et al., 2009; Pfeil, Arjan, & Zaphiris, 2009), engage with each other online and participate in online communities (Burmeister, 2009; Ito, Adler, Linde, Mynatt, & O'Day, 1998). There are many online communities that cater to the needs of seniors. Examples include SeniorNet, Australian Golden Girls, Silver Surfers, Seniors Helping Seniors and many more. The focus of this study were members of Australia's largest online community for seniors (Burmeister, 2008), greypath.com.au (GreyPath).

In the mid 1990s a new design methodology, value sensitive design (VSD), emerged within the human-computer interaction (HCI) discipline that focused on values (Friedman, 1996). Since then many researchers have seen the need to discover the values of users and incorporate them in technological design (Flanagan & Nissenbaum, 2007; Flanagan, Nissenbaum, Belman, & Diamond, 2007; Friedman et al., 2008; Friedman, Kahn, & Borning, 2005; Silverstein, Nissenbaum, Flanagan, & Freier, 2006). In one such approach, that of Values at Play (VAP) (Flanagan, et al., 2007), the first step is that of Discovery, in which it is deemed important to discover the values of the users of technology. To date, proof of concept work has built new technology from scratch that incorporates value choices in the design process. There have been numerous values-based studies, mostly to do with school and university students, as well as workplace technologies. This study is the first attempt to discover what seniors value about online community.

Part of the VAP Discovery process is to move beyond the discovery of all values of the users, to the key moral and social values. The VAP literature advocates a focus on moral and social values, arguing that other considerations such as commercial or usability values are addressed in existing design methodologies. VAP does not seek to replace existing methodologies, but is put forward as an additional design consideration. Designers cannot incorporate all values of users, but should consider in their designs, the values users consider most critical.

In the values literature there are universal values such as human well being, human dignity, justice, welfare and human rights (such as equality of access) (Flanagan, Howe, & Nissenbaum, 2008; Schneiderman, 2002). Aside from universal values, other values that have been identified in the literature include: privacy (Ackerman & Cranor, 1999; Bowers, 2005), ownership and property (Lipinski & Britz, 2000), physical welfare (Leveson, 1991), freedom from bias (Friedman, 1996), universal usability (Schneiderman, 2001, 2002), autonomy (Suchman, 1994), informed consent (Millet, Friedman, & Felten, 2001), accountability (Friedman & Kahn, 1992), courtesy (Wynne & Ryan, 1993), identity and identity management (Bers, Gonzalez-Heydrich, & DeMaso, 2001; Bowers, 2005), calmness (Friedman & Kahn, 2003), environmental sustainability (Brundtland, 1987; Friedman, Kahn, & Borning, 2002), and trust (Fogg & Tseng, 1999).

This paper shows that social values predominate for members of GreyPath, when they describe what is really important to them about online community. One of the six dominant values, neighbourhood-as-community, appears to contradict some of the literature that sees modern social interaction as moving away from the neighbourhood concept. Instead GreyPath

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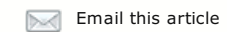
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members though not entertaining spatially bound notions of neighbourhood, conceptualise their interaction in neighbourly terms.

The GreyPath portal

GreyPath is a not-for-profit organisation, which manages the portal greypath.com.au. Membership is restricted to seniors, which it defines as 50 and over. In sociological terms, participation is not spatially determined, as traditional communities have been (Wellman & Leighton, 1979), but ubiquitous (Wellman & Hogan, 2004). That is, the community has members in every state and territory of Australia, including some who are travelling (have no fixed address) and overseas members (their chat rooms regularly have seniors participating from Europe, the Middle East, Asia, and North America). GreyPath has 35 volunteers who freely give of their time and skills to maintain the site. Almost all contributors, management, administrators, technical support personnel and ordinary members are seniors.

A significant feature of the GreyPath portal is its multi-faceted approach. It allows for all manner of users, from novice technology users, to people very technologically literate. It has members who rarely use the site and then only to find specific information, and others who use the site for many hours every day, for social interaction with other members. GreyPathians can enrol in free or nominal cost courses, they can contribute to or receive information on a wide variety of topics. There are chat rooms and forums, each moderated by a senior volunteer who has a name and a face on the site.

Method

An interpretivist/constructivist philosophy was chosen to underpin this research, based on the nature of the data to be collected and the purpose for the study. It was a study to discover the values of seniors in a chosen online community and therefore their perceptions of their values were crucial. The nature of this study meant that a positivist approach was inappropriate as it would necessarily entail an emphasis on quantitative data. Such an approach might have sought to survey members of the online community, to elicit their values. Given no prior studies had been reported of seniors' values when using technology, such a survey could not have been reliably scripted. In order to quantify and then generalise the findings of a survey, the values themselves first need to be established. Therefore in order to discover those values, an inductive approach involving in-depth interviews with seniors was seen as more appropriate.

Interpretivists/constructivists emphasise the meanings of participants within the social phenomenon under study (Glesne, 1999; Sudweeks & Simoff, 1999; Wilhelm Jr, 2003; Williamson, 2002; Williamson 2006). This was appropriate to the present study of an online community, because the aim was to understand the 'meanings' of participants with regard to their values. For example, in the study it was important to know how people in the particular social context interpret social actions such as friendship, respect or trust, where the researcher needed to understand the meanings that constitute the action, that is the meanings of the people engaged in the social setting (Schwandt, 2003).

Interpretivist/constructivist researchers use an inductive approach, where "researchers develop concepts, insights and understanding from patterns in the data" (Reneker, 1993, p. 499). Patton (2002) distinguished inductive analyses from hypothetical-deductive approaches, based on the latter requiring variable specification before data collection. Since this study was to explore descriptions of values not previously identified in other studies, making such variable specification would have been inappropriate. Instead, the nature of the study required an inductive approach, one in which themes related to values would emerge during analysis, and would be grounded in, and checked against, observations and interview transcripts. The observations that preceded the interviewing stage and were the basis of the questions asked during the interviews, are not reported here, but have been partially reported previously (Burmeister, 2008).

The 30 interviewees for the study were chosen on the basis of purposive sampling, which is appropriate to interpretive research. Patton (2002) describes various types of purposive sampling. Because no prior study in the domain existed and there were no known specific variables to focus on, the one most appropriate to this study was 'criterion sampling'. Criterion sampling uses a particular set of criteria to guide sample selection. In this study, the criteria for selection of participants were determined prior to the commencement of the sample selection, in order to aid as widely as possible the understanding of GreyPath members' social and moral values.

There was a four step analytic process for both stages of the research where all categories were values and therefore called 'value categories'. The clustering of categories into themes was the second step. The next two steps followed the VSD literature, with the aim of the third step being to reduce the total list of value categories, by determining if a value category was a specific instance of a larger category. The final step was to identify the key value categories amongst the many value categories that emerged. The complete process is illustrated in Figure 1.

Figure 1: Four-step analytic process used in study

Key values were determined as a result of examining the frequency with which certain values were mentioned, and by examining the emotional intensity with which certain values were expressed. Key value categories were taken to be those which were expressed by at least four participants, and those which appeared to provoke the most emotional commitment. Gauging emotional commitment was a subjective judgment, resulting from an analysis of the language used, and how it was expressed. The initial categories and themes, determined during the observation phase and after the initial interviews, were continually reassessed and expanded as more data were collected. Of the themes identified, the one GreyPath members considered most important, namely online community values is reported here.

Results

A lot of research has gone into online communities (Arnold, 2007; Preece, 2000), including online communities involving seniors (Burmeister, 2010b; Ito, O'Day, Adler, Linde, & Maynatt, 2001; Xie & Jaeger, 2008). There has also been extensive research in concepts to do with community, both online and off-line (Boase & Wellman, 2006; Garton, Haythornthwaite, & Wellman, 1999; Hampton & Wellman, 2000; Wellman, 1999; Wellman & Gulia, 1997; Wellman & Leighton, 1979). Some of these studies have focused on particular groups, be they based on ethnicity, gender, particular work groups, school children and many other situations. However, few previous studies have attempted to find out what seniors in particular value about community. Figure 2 below summaries the findings of this study, in relation to the theme online community values.

Figure 2 Defining online community through key social values

Figure 2 captures the idea that all six values are related, and yet, distinct. Each value is composed of related concepts as will be explained for each one below. As might be expected, all the values within the theme are closely related. Nevertheless, two of the values, mutual support and information sharing, were more closely related than the other ones; hence the doubled-headed arrow that is shown linking them. Interview data showed that members who provided mutual support to each other frequently also engaged in sharing information but, people interested in sharing information were not necessarily interested in mutual support. Although all six values were important, belonging to a community of peers is placed at the top of the figure to show that, of all six values, interviewees saw this as the most important one. The figure also shows that despite the focus of the values literature being on both moral and social values (Benkler & Nissenbaum, 2006; Flanagan, et al., 2008; Nissenbaum, 2004; Nissenbaum & Walker, 1998), the key values that emerged for this theme were all social values. The results for each of these six values are now discussed in detail.

A community of peers

For GreyPathians the major value linked to the theme online community values was that of 'belonging to a community of peers.' This value meant they were members of, socially interacted with, and fellowshipped with a group of like-minded people. As seen in Figure 2 this value was linked to the other five key values in this theme. The value of belonging to a community of peers was important to GreyPathians, as illustrated by the following comments:

It's a peer interest group as far as I'm concerned, it's older people like myself and it's people who have got those sort of similar interests ... I think it's very important. I value that very much, I think that gives you comfort. [Female, TAS, 70-74]

You need to be an older person to value GreyPath, really, because, a younger person's not going to see the value that we're going to get out of it. [Female, VIC, 75-79]

My wife died, and the reaction was wonderful, and people know because they've been through the same thing [they are peers likely to have had similar experiences] and they can give advice and help first hand, because they know exactly what's happened ... They're only people of the same or similar age who know these things, and they are very helpful, and very kind. [Male, SA, 70-74]

In the following example, the participant related her experience in another community of peers to two of the GreyPath forums, the Coffee Shop and Senate forums.

A group of females, you know, as a fifty-five and over, that's all, and that's purely social... Yeah, that's on-line... AGG – Australian Golden Girls... There's about thirty-five members, that's all. And it's a social group, once more, and they have – well it's more like the Coffee Shop, you now, mixed with a bit of Senate, all in one... And they're easy going people, and you can just talk to them like one female to another, because there's no men in that, it's all females. And you can get a bit of feminine side of everything. [Female, NT, 75-79]

Although a community of peers was important to most participants, there were objections. A few participants said they did not want to relate exclusively with other seniors, as was captured in the following quotation:

I don't think I'd want to go into a retirement home or anything, because it's all seniors. I like to sustain a mixture of groups of people ... I like to go to the seniors groups to get information on what's available and things like that, but I don't want entirely to be in a seniors group. [Female, VIC, 60-64]

A related concept to a community of peers, is that of peer learning. Below is a quote from a participant who is an administrator with the Australian Seniors Computer Club Association (ASCCA), as well as being a member of GreyPath.

I know older people like to be taught by their peers ... someone of a similar age, or similar set up. ... [You can admit that] you don't know something, but you're not so keen if a younger person tells you, you don't know it. Also a younger person is far more likely to say, when they're talking about a computer thing, "Okay, do this, do that, do the other" and whoops, too fast. So it's difficult. So we do like to learn from our peers. [Female, NSW, 70-74]

Several participants liked the way GreyPath displayed images of the people who contributed help, such as the editor, the experts (for travel information and computer help, for example), and those for other volunteer contributors. The display was valued because it demonstrated that the majority of the online instruction within GreyPath was provided by fellow seniors.

Ownership was also seen as an important expression of this value. Ownership was typified by expressions such as 'my' community. One interviewee described himself as a 'GreyPathian',

which is another way of describing that he felt he belonged to this group. It also conveyed a sense of ownership in that he identified himself as a member of the community in this way. Also associated with 'ownership' were joining the GreyPath group, becoming a member, and being a member of GreyPath, as illustrated in the following examples:

I think the secret is that word 'member'. It makes you feel you are still part of the world, you're not isolated by age. [Female, NSW, 70-74]

You have to be a member to participate in [many of the GreyPath activities], which is a good thing – I think it's a good thing to be a member, instead of being just a spectator all the time. [Male, SA, 70-74]

This is the only consistent thing that I will go to that I belong to. So that's why I say it's a community. So I will go and check out what my community is doing, and that's important to see where they're at. [Female, VIC, 60-64]

By nature I'm not necessarily a joiner or if you like a person who would actively go out of my way to join clubs or organisations. I guess what's important about GreyPath to me personally is that it's a way I can do that fairly easily. [Male, VIC, 55-59]

Still another reason that this value was important to participants was its association with ones' fellows (fellowship), as the following comment indicated:

I just enjoy it generally. I like to have my say on different things and reply to different things. ... I think a site like GreyPath fulfils a very important role. It's just a fellow feeling you get I think. Fellow feeling is the thing: fellow feeling, fellowship. [Male, VIC, 75-79]

Related to this concept of 'fellow feeling' was the notion of being part of social interaction within a community:

It's a community all in itself... I can go there. I know most of the people on there, and I know more or less what their feelings are, and I mean you get to know them... So, it's – it's social. [Female, NT, 75-79]

The same person expressed similar sentiments in discussing the GreyPath Coffee Shop forum elsewhere:

You just get to know people. It's almost like chatting to one another, and you know who they are, and you know what's wrong with them, and you know what – virtually, who their brothers and sisters are, and you know. Once again, it's social interaction. [Female, NT, 75-79]

Thus, from all these examples emerge a number of different reasons which, in aggregate, demonstrate the importance of the key value of belonging to a community of peers to participants in the present study.

There is limited support for these findings in the literature. Research by Ito et al. (2001) showed that while general public Internet use was individualistic, for seniors, especially members of SeniorNet, Internet use was centered around social activity and social exchanges with other seniors. Similar findings have also been reported in a study involving Chinese seniors who participated in media-rich, technology-based social interaction (Xie, 2008).

The literature also provides support for the view that older people prefer computer instruction from their peers (Alsa, Williamson, & Mills, 2006; West, 2002). This desire among seniors to learn from peers has also been documented in other settings. Scott, Roberts and Burmeister (2002) reported that the most successful uptake of online banking among seniors occurred when retired staff of the Commonwealth Bank of Australia conducted training sessions.

A neighbourhood community

Among the cluster of values related to GreyPath conceptions of online community is that of 'neighbourhood'. Participants viewed neighbourhood-as-community as reflecting a closely-knit social network. It is a value that linked to all other values of this theme. For instance, for most participants, the neighbours they chose to interact with were their peers. Exemplary quotations include:

[It] is like being able to chat to a neighbour across the fence. [Female, NSW, 70-74]

Well quite honestly, it feels as if I'm just talking to the guy next door over the garden fence [laughing]. That's about as simple as I can put it, and I don't think you could improve on that comment, really. [Male, OVERSEAS, 75-79]

The last illustration was from a man with a disability because of which he was unable to leave his house, and most days, was unable to leave his bedroom. Furthermore, he lived in Europe, while most GreyPath members were located in Australia. Yet despite the disability and the spatial separation, he conceived of other GreyPath members as his neighbours.

One reason for the neighbourhood-as-community conception was provided by a participant who said that, although she lived in a physical neighbourhood of mainly retirees, the people she interacted with in GreyPath were more like neighbours to her than those physically nearby. This was because she frequently could not leave her house and, even when she did, people in her area kept very much to themselves. In other words, the GreyPath community provided more of what she thought of as neighbourly interaction, than her actual physical neighbours. This was in keeping with another participant in a similar situation who stated about the GreyPath community:

Well I've made quite a few friends there and I mean, if I want to sort of go on about that, like, there's no neighbours these days, you know. So the people I've met on GreyPath have become my neighbours. [Female, VIC, 75-79]

This sense of interacting in a neighbourhood even extended to a participant describing having a cup of tea with virtual neighbours:

Whereas, you could sort of, whip over the road to your neighbour, you can't do that anymore, because neighbours are just not, you know, don't interact anymore. So I think, okay, I'll get on site, see if anyone's on there. And that's basically how I would describe it – just like a family or a neighbour, that's taken the place of my neighbours. I'll make a cup of tea and I go and sit at the computer, whereas once I'd make a cup of tea and invite a neighbour over. [Female, VIC, 75-79]

The last quotation also suggests another reason why participants saw neighbourhood as important, namely, that it reflects a depth of social interaction that in some ways is reminiscent of familial ties. That was also borne out by other participants:

They have become my neighbours, really because neighbours don't talk to you anymore. They have become my GreyPath family. [Female, VIC, 75-79]

For another participant, this familial neighbouring related to discussion of the ordinary affairs of life, rather than to deep and meaningful issues:

What I've noticed is that obviously quite a few of these people that are on chat have got to know each other very, very well because they've been long term on it and they are family. You can almost feel the family relationship coming through you know [such as] "What did you do today? I went to the bank". Just ordinary sort of conversations that you'd have with your family. That's really terrific actually. [Female, VIC, 70-74]

Another participant spoke of GreyPath as a replacement family:

Once your children have all left home, which mine have, you know, all married and gone, you miss ... that interaction with family and discussions ... so the GreyPath takes that over. [Female, VIC, 75-79]

This conceptualisation of the community as a neighbourhood contradicts the work of some studies. For example, Wellman and Leighton (1979), writing in pre-Internet times, saw the concept of community as having left the notion of 'neighbourhood only' behind. They envisaged a traditional neighbourhood as a local, spatially bound community that formed just one of multiple social networks in which people participated.

Although writing somewhat earlier, for Berger and Luckman (1967) neighbourhood was tied to 'location' and it involved a focus on taking place at certain synchronous (not their term) events. They saw social knowledge construction, which was the focus of their book, as people sharing knowledge in a tight-knit, physical neighbourhood at a particular point in time. The difference here is that the GreyPath community is able to engage in social knowledge construction asynchronously in a virtual neighbourhood, in the traditional sense of what a neighbourhood constitutes.

The present study shows that there has been a move from spatially- bound to socially-bound neighbourhoods. For the GreyPath community, the physical neighbourhood has diminished in importance, but the concept, or metaphor, of neighbourhood has not. At least, for members of GreyPath, this notion of neighbourhood-as-community has been restored but, without losing the idea that people belong to multiple social networks. Some members of GreyPath are also members of one or more other online communities, such as silver surfers, Australian golden girls, and other non-senior specific ones, such as online bridge (a card game), and networks to do with the former occupation of GreyPath members.

An inclusive community

The theme online community values also revealed that 'inclusion' was important to GreyPath members. This key value involved inclusion in a broad sense, not limited to including disadvantaged members, but also involving the active effort of including people who had recently joined GreyPath and its activities. The value also involved showing understanding to other members who, for some reason, needed support. As will be seen in the comments about this value, participants sought to promote inclusive discussions that did not alienate people by being too argumentative, with inclusion being seen as helping to overcome isolation.

One reason why participants saw inclusion as important, was that they understood the challenges that come with age. For example, one participant expressed a concern about her failing eyesight:

I've got AMD, so I'm going to have to do away with a lot of these face-to-face meetings and I will be relying far more on the Internet interaction on things like GreyPath because I can enlarge those and read them and then put them down again. The thing that really upsets me about sites is the ones [not GreyPath] that you can't enlarge. [Female, TAS, 70-74]

The implication here was that this participant felt included because of the way GreyPath considered people with disabilities. Related to this association between inclusion and disability was the following comment by a participant who had a disability that was not age-related, but that had worsened with age. He expressed strong feelings about being included:

I am, I would say, 95% housebound. I can't get out much and I just log on, the times I know somebody's there, and we just sit and talk like I'm talking to you now, and it's as simple as that. [Male, OVERSEAS, 75-79]

Another reason that inclusion was seen as important was its relationship to the desire of participants not to be isolated:

[When people type] "Hello I'm new here", it's [saying] 'I want to be part of this community I don't want to be isolated.' ... That's another issue with GreyPath that people are egalitarian within it and they're not cliques ... and we've created that, that's created by

the ambience of the site and the initial standings and the attitudes that people pick up and then telegraph to others about what's right and what's wrong for the site and what we are and what we aren't. [Male, VIC, 70-74]

The value of inclusion is both applicable to GreyPath and transferable to a wider context, namely the whole of the Australian society. The Australian Department of Education, Science and Training put out a list of ten values that were required to be implemented within public school curriculums across the nation from 2004 to 2008 (Curriculum Corporation, 2003). One of those ten was 'inclusion and trust.' Similarly, by reviewing the development of government policies over the past century, Harris and Williams (2003) showed that social inclusion had become part of the national identity in Australia. Also mentioned in the quotation above was 'egalitarianism,' used here in the sense of promoting inclusion. Like social inclusion, equality has been a significant value in Australian society going back to its earliest days. It is now one of the values that immigrants applying for Australian citizenship, are encouraged to embrace (Immigration Citizenship, 2009).

GreyPath members also expressed their frustrations about feeling isolated because of location, as for example, through living in remote rural locations. They did not want others to experience the same frustrations and therefore took deliberate steps to include people, and to help them learn what they needed to know in order to participate fully in GreyPath community activities. In several cases, people interviewed even said that they had made an effort at their own expense to either telephone other members and talk them through technology problems, or visited them for the same reason. Two of the volunteer contributors even made a point of visiting retirement villages and showing interested people there how they could get involved with GreyPath, because they themselves had found belonging to GreyPath so personally rewarding, in terms of being included.

A community that shares information

One of the key things valued by members of this online community was that they could share information, particularly information helpful to seniors. The value of 'information sharing' involved seeking information covering a range of topics. It also concerned finding sources of support. However, as Figure 2 shows, there is a particularly strong association with the key value discussed next, namely mutual support.

One reason that this value was as important for participants was that they felt a need to keep informed. However, in the GreyPath context, this value was also associated with support:

Just to keep informed and to keep members informed...I suppose it's an information exchange, but you add that social bit too you know. How are you feeling? Don't do too much. Slow down. [Female, NSW, 70-74]

A lot of ... [my information seeking] could be [at] 2 am, 3 am and, ... if I ask a question at that time, I'll get the answer: "Oh, I noticed you were having a bad night again" ... There's such a wide base of knowledge there that, [if not a direct answer] you'll get at least two to three sites to go to, to get your answer, and they've never let me down. ... That's paramount to me, the fact that, it's like knowing if I fall over, there's going to be someone there to bandage me. [Male, NSW, 70-74]

Participants often looked out for information that might be of interest to other members they knew as is illustrated in this example:

I have correspondence from people I talk to. We swap DVD discs, and even novels, books, or anything, and I keep them up to date with ... any BBC programmes that are to do with Australia, and yeah, everyone seems to be grateful, and the other way around. [Male, OVERSEAS, 75-79]

Two participants did not participate in forums or other GreyPath community activities, such as chat rooms or blogs. One of these people had no fixed address, but travelled with her husband up and down the Australian east coast, staying in one house-sit after another. They sourced their house-sits from GreyPath and regularly checked the site for new possibilities. As it turned out, this member did not know that there was a social interaction option on GreyPath (which she would have used). Having started to use the site for the specific purpose of finding house sitting opportunities, her only other contact with GreyPath had been the newsletters that GreyPath sent to members. From a design point of view, people like her could be encouraged to participate in community activities with a simple expedient such as links to chat and forum areas, from other parts of the site such as jobs for seniors, ePals, house swaps and house sits.

Another participant used GreyPath purely as a means to finding information concerning seniors that might be relevant to him. His main focus was part-time employment, but he also used the site to keep up-to-date with political matters affecting seniors. He was aware that there was a community aspect to GreyPath, but chose not to get involved with that. Nevertheless, he also said that he thought GreyPath was a community, but because he was part of a local, physical community, did not see the need to get involved in that aspect of GreyPath. In other words, this is an example of a person who was interested in sharing information, without being interested in mutual support. That is, the two values of mutual support and information sharing while closely related for most participants, were not closely related for everyone.

The close relationship between the value of information sharing and the next one discussed, providing mutual support, has some support in the literature. Some community networks are what Arnold (2007, p. 9) described as "instrumental," in that they exist for a specific purpose. He described examples of where people might engage in social relations to find information about fish or fruit, but their interest is in the fish or fruit, not the other person. He contrasted that with "phatic" communities, which he compared to people meeting at the local tram-stop. Discussions may be about fish or fruit, but the communication goes beyond subject matter or informational content. The socialisation itself is the main point of the exchange. Arnold's descriptions are, in effect, a further development of the ideas expressed earlier by Wright (2000a, 2000b) who researched the use of discussion boards for social support by participants

in SeniorNet. He found that participants valued community, and that this value was expressed as a combination of informational (instrumental) and emotional (phatic) support between members. Similarly, a recent study by Pfeil and Zaphiris (2010) also distinguished between information sharing and mutual support. They reported that "members are more connected and closer to each other in the social sub-networks that are based on emotional communication compared to factual communication" (Pfeil & Zaphiris, 2010, p. 1). They further argued that "emotional communication is linked to a stronger inclusiveness compared to factual communication" (Pfeil & Zaphiris, 2010, p. 26). Similarly, for GreyPath participants, it seems the mutual support activities, more so than the information-sharing activities, build the sense of being part of a community.

A mutually supportive community

As mentioned above, this value was an important contributor to participants' experience of a sense of community, and hence, belongs with the theme of online community values. The key value of 'mutual support' can be defined as social exchange that may include the simple act of information exchange, but goes beyond it. For GreyPath members this value was about providing support in a variety of ways to each other, and about relationship building. As seen above, it is linked to both information sharing and to inclusion.

Several people interviewed said that the chat rooms became most active late at night and in the very early morning. During those times, GreyPath members from Europe, the Middle East, Asia, Canada and the USA were active in the chat rooms. These members appreciated getting news from Australia and also offered help where they could. An example of chat, as a means of providing support, is seen in the following illustration:

[In the] chat groups it seemed to me that the same people were coming in and they knew each other and they knew their nicknames and it was a very friendly sort of banter thing ... and then I found out ... there was one [person] from Montreal and my husband's got a cousin over there who's an elderly lady and so I just asked if they would help her and I was delighted that this chap in Montreal said "Yes, I will go and see this person". [Female, TAS, 70-74]

Other examples of mutual support were:

Recently I had a problem with a leaking fish tank. I put it up on the Coffee Shop Forum and also mentioned it on Chat. I received lots of advice and one member actually contacted his son for advice for me. [Female, VIC, 70-74]

There's emotional support when you need it. ... They're just there, it's someone there. [Female, VIC, 75-79]

These comments express the support given by members of the community to each other, even across national boundaries. Another example of support was seen in the way that several members demonstrated a willingness to travel small distances to support fellow members. The following comment is from one of the administrators of GreyPath:

I've visited a few when they've had a bit of a problem ... I'll eventually say look I'll come down and ... something's going wrong. What you're telling me doesn't make any sense at all ... [sometimes they] say: "Look will you come and talk to our nursing home?" Then I'll go and do that and then that way I'll meet them and others. [Male, VIC, 70-74]

GreyPath members come from many different backgrounds, including from outside of Australia, yet they share the common experience of retirement, of age-related illnesses, of the death of life partners and more, because of their common seniority. (Hence, the overlap between this value and that of belonging to a community of peers.) This type of support, arising from shared life experiences, was seen in the following example:

We know a few things about each other, and when my wife died a little while ago, the reaction was terrific, there was really very helpful people, really kind. [Male, SA, 70-74]

Other studies of online communities, both with seniors (Pfeil, 2007) and with other age groups (Preece & Ghazati, 1998, 2001), have similarly shown that, when people have comparable life experiences, they tend to be very supportive communities.

Such willingness to engage with each other's challenges is an example of one of two main types of social capital discussed by Quan-Haase and Wellman (2002). They claimed that civic engagement, seen in the willingness of people to become involved in their community, is a form of social capital. The other type, that of social contact, is seen in various interpersonal communication patterns. Wellman (1997) pointed out that it is the relationships social network members have with other people, which strongly affect their social resources (social capital), mobility, happiness, and many other important things about them. Thus, whenever members mutually support each other, or help other members overcome challenges they are facing, they are increasing the social capital available within the GreyPath community.

What is described here as the value of mutual support has been described in the literature in terms of empathy. An empathic community is one that provides participants who have similar life experiences with a place to exchange both informational and emotional support (Preece & Ghazati, 2001). Preece (1998), in a study of empathic support in a community of patients with knee injuries, classified 44.8% of messages as empathic and only 17.4% as concerned with factual information, reinforcing the notion that while information sharing is important, frequently, the dominant focus is on mutual support. In Arnold's (2007) terms, the information sharing value is predominantly instrumental, whereas the value of mutual support is phatic.

A community that encourages personal contact

The final key value within the theme of online community values was the 'ability to contact others personally'. This value revealed that participants strongly endorsed extending their socialisation with other community members to multiple forms of interaction. To them it appeared that GreyPath, as a community, encouraged exploring multiple ways of keeping in

touch. Although much of the interaction that took place in GreyPath was communal, having the ability to also engage with community members in other ways was important to many participants. The forums were open discussions, where everyone, even non-members, could 'listen in.' Chat rooms permitted both private and public discussion. However, many GreyPath members also had contact with each other outside of GreyPath.

An example of the personal contact, appreciated by members, was that of a participant who won a GreyPath competition. She wrote (via snail mail) to GreyPath management and received a written reply as well:

I wrote and thanked them for it, how tickled pink I was to get it and he wrote back and said "not many people say thanks, that was nice of you" and I thought oh gee what a nice guy. [Female, WA, 70-74]

GreyPath has an ePals section and several interviewees said they had developed friendships by making contact with people advertising for an ePal on GreyPath. The majority of the personal contact resulting from this was via email, with some instances of physical exchanges of letters, visits, DVDs and more. Through such extensions of personal contact participants managed to extend online friendships within the community. One example, which was also used to illustrate the value of information sharing, was:

I have correspondence from people I talk to. We swap DVD discs, and even novels, books, or anything, and I keep them up to date with ... any BBC programmes that are to do with Australia, and yeah, everyone seems to be grateful, and the other way around. [Male, OVERSEAS, 75-79]

During the course of the interviewing, several GreyPath members in South Australia organised a morning tea get-together. This was one of several similar events that members had organised. GreyPath also advertises social events and locations on their site, so that members, local to that area, can physically meet and socialise. Such activities, in addition to telephone calls, the use of Voice-over-IP (VoIP), snail mail exchange, ePals, house-sits and house swaps which inevitably, involve physical meetings, and other types of visits, all add to the fabric of community building activities. This supports claims by researchers that online interaction does not isolate people socially, as some have suggested, but instead, leads to increased social interaction both online and off-line (Burmeister, 2010a; Hampton & Wellman, 2003; Wellman, 1997; Wright, 1999; Xie, 2008).

In a grounded theory study about the civic engagement of Chinese seniors online, Xie (2008) reported three different types of computer-mediated communication (CMC). She looked at voice-based chat, text-based forums and media-rich instant messaging (IM). She claimed that earlier critiques of socialisation online concerned text-based interchanges, that were no longer applicable in the media-rich context of modern Internet usage, although agreeing that text-based CMC environments reduce, or filter out, physical and contextual social cues, making it difficult to develop close relationships online. In her study, close relationships were formed among Chinese seniors, even in text-based forums, because of the multi-dimensional use of CMC; that is, users tended to interact in two or more forms of CMC, and therefore went beyond the limitations of purely text usage.

Similar to Xie (2008), the key value discussed in this section indicates that such multidimensional use of CMC was also evident among GreyPath members. Many members engaged with each other in numerous ways both within GreyPath (chat rooms and forums) and beyond it (physical meetings, telephone, mail, email, IM and more). However, there were some members who felt they belonged to the community and had close relationships, even though their primary, or only interaction, was via one of the forums, which were all text-based. The latter view finds support in a study by Walther (1995), who claimed that intimate online relationships can be formed with text only CMC, but such relationships take longer to develop than with media-rich CMC. In Xie's (2008) study chat was mostly used for forming new relationships, whilst IM was preferred for the further development of existing relationships. Similarly, in the few instances where people mentioned the use of IM, it was to take relationships that had formed online within GreyPath to a more personal level.

Conclusions

The above interview results revealed what participants valued about their online community. They valued interacting with peers in a way that was similar to how they used to interact with neighbours. Participants valued being able to exchange information and supporting each other. They also valued being able to have personal contact with their online friends and to do so in an inclusive manner, accepting of many points of view.

Boase and Wellman (2006, p. 716) claimed that "frequent Internet users have neither a higher nor a lower sense of overall community." However, the results from this study of GreyPath users, many of whom were frequent users, dispute their assertion. Thirteen of the 30 participants accessed GreyPath daily, a further three accessed GreyPath more than three times per week, and a further nine participants accessed it at least, weekly. Therefore, the majority of participants in this study could be classified as frequent Internet users. However, unlike Boase and Wellman's assertion, frequent GreyPath users appeared to have a heightened sense of overall community.

Many participants who engaged in mutual support also engaged in information exchange, but the reverse was not necessarily true. That is, some people engaging in information exchange were not interested in mutual support. In addition, the act of seeking support did not always involve information exchange although it is likely to have occurred in a peripheral, incidental way. Information seeking was one of the two main reasons participants gave for joining GreyPath. However, the interview data revealed that, whilst information seeking drew people to the portal, it was the mutual support and community building interaction that predominantly kept them there.

The emergent value of mutual support also highlighted a distinction made in the method section above, about this researcher's decision to undertake an inductive study. A positivist study of 222

Australian seniors which investigated how the Internet affects social capital and wellbeing, reported that most participants used the Internet for four purposes. These were for communication, information seeking, commercial or entertainment purposes (Sum, Mathews, Pourghasem, & Hughes, 2008, p. 209). However, they employed a survey instrument in which the questions, and hence, the variables of interest, were predetermined. Mutual support, although arguably an important consideration for a study into the wellbeing of seniors, was not considered by the researchers and consequently, was not a survey choice for their respondents. In the above method section it was argued that, because very little values research had been conducted with seniors, variable choices were difficult to make. This study not only informs HCI design, but also reveals new categories of investigation for researchers in various fields, such as those in the positivist study, above. Were such a study repeated in the future, and mutual support included as a consideration, then the most common responses might not be the same as the four they discovered.

The findings from the present study revealed that online community was both a personal and social construct for participants. Twenty-eight of the thirty participants viewed GreyPath as a community. One viewed community as requiring face-to-face physical meetings, and the other only used GreyPath as a means to an end, in her case finding house sitting opportunities. The former expressed the belief that she felt very much a part of GreyPath, but that for her, community had to do with face-to-face contact. The latter, did not view GreyPath as a community in the way that another online community was; it became apparent during the interview that she was unaware of the community involvement opportunities GreyPath offered. All other people interviewed saw GreyPath as a community, with the six key values detailed above seen as the things they most valued about the GreyPath online community. Of those six, belonging to a community of peers was the most important value. For the majority of participants, the construct of GreyPath as a community is demonstrated in the many expressions of support, encouragement and neighbourliness that take place within the site.

The close relationship between all six values is best seen in the example of the overseas member who had a disability that meant he was house-bound. He valued neighbourhood, but a neighbourhood of peers, and felt included, despite his disabilities. He exchanged information such as news and DVDs, not just for information's sake, but also for mutual support. He had personal contact with members, including physical visits. The latter actions also demonstrated inclusion, in that those members who travelled overseas willingly included a visit to him in their itinerary.

Interestingly, other studies of seniors using technology (not just online communities) have demonstrated "that older people show a higher perceived well-being when they have more social interactions" (Pfeil, 2007, p. 4). Similarly, studies have shown that the social capital available to seniors through participation in online communities was viewed as a significant aid to coping with old age and its attendant limitations (Pfeil, et al., 2009; Stone, 2003; Sum, et al., 2008; Xie, 2008). The descriptions above of the perceived benefits derived by GreyPath members from community participation lend further support to such findings. Therefore, from a design perspective, facilitating social interaction is especially important, when the online community involves seniors.

This study has for the first time revealed what some seniors (the members of GreyPath) value about online community. It has debunked the notion that neighbourhood-as-community is a thing of the past. The six key values discovered give designers of online communities involving seniors specific areas to address in their designs.

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