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Interviews with digital seniors: ICT use in the context of everyday life

Anabel Quan-Haase[a] , Kim Martin[b] and Kathleen Schreurs[b]

[a]Faculty of Information and Media Studies, Department of Sociology, The University of Western Ontario, 1151 Richmond Street, London, Ontario, Canada N6A 5B7; [b]Faculty of Information and Media Studies, The University of Western Ontario, 1151 Richmond Street, London, Ontario, Canada N6A 5B7

ABSTRACT

The literature on the digital divide suggests that seniors continue to lag behind in access to the Internet, digital skills, and engagement in various online activities. Much of the research, however, gains insight from large-scale survey research and neglects to examine the challenges and opportunities that digital seniors, those who are connected, experience in their everyday use of information and communication technologies (ICTs). We employed the theoretical lens of ICT use in the context of everyday life to inform this study. Twenty-one digital seniors (60 +) took part in interviews about how ICTs influenced their routines and practices such as news consumption, library use, information seeking, and reading. The interviews were transcribed and analyzed using grounded theory. Three key findings emerged. First, digital seniors are developing new practices and routines around their ICT use; these are novel and emerge out of ICTs' affordances. Second, digital seniors are creating *hybrid practices*, where they seamlessly combine traditional habits with new ones emerging from ICT use. Finally, digital seniors are recreating existing practices with digital means, i.e. the digital enhances or sometimes even replaces traditional practices. We find that agency is central to our understanding of digital seniors' adoption and use of ICTs, they critically consider various options, and make choices around their preferences, convenience of use, and affordability. For digital seniors, ICT use is not a binary because they want to have the flexibility to choose for themselves under what circumstances and for what purposes the use of ICTs is appropriate.

Introduction

The stage of life that follows working life but precedes old age is frequently termed the third age. The third age is an era of personal fulfillment characterized by a search for new experiences, a realization of dreams, and the learning of new and interesting things (Blaikie, 1999; Laslett, 1989). As the Baby Boomer generation (those born 1946–1964) continues to move into the third age (Martel & Ménard, 2011), there is a growing need to understand their use, adoption, and knowledge of information and communication technologies (ICTs). Literature on the digital divide consistently shows that those in the

third age continue to lag behind younger generations in ICT adoption and use (Rainie, 2015), are more reluctant to adopt digital tools (Niehaves & Plattfaut, 2014), and when online, they engage in fewer online activities, such as searching and banking, than younger adults (Haight, Quan-Haase, & Corbett, 2014; Zickuhr & Smith, 2012).

Much of the research examining seniors relies on large-scale studies in which age is one factor studied among other demographic variables such as gender, socioeconomic status (SES), and education (e.g. Haight et al., 2014; Smith, 2014). As a result, these studies do not focus on the activities that seniors are engaged in and passionate about as an entry point toward understanding technology adoption and use. Also, these studies tend to disregard the fact that adoption is not a binary (DiMaggio & Hargittai, 2001), rather it is an iterative process in which potential adopters constantly seek out new information about a technology, are influenced by peers and families in their attitudes, and adjust their behavior as their life circumstances change (Rogers, 2003). A growing body of work is starting to look at seniors' adoption and use of ICTs from a qualitative approach, engaging with seniors to learn about their opinions, attitudes, and experiences (Gatto & Tak, 2008; Selwyn, 2004; Selwyn, Gorard, Furlong, & Madden, 2003).

This study makes three contributions to this literature. First, it examines *digital* seniors, those that are already online. It is critical to better understand the challenges and opportunities experienced by seniors who are connected. This focus on digital seniors has important social, economic, and informational implications. As Cotten, Ford, Ford, and Hale (2012) have noted, tech-savvy seniors gain numerous benefits by socializing with friends and family, and fostering new channels of communication. This demonstrates that obtaining a better grasp of adoption and use of ICTs by digital seniors has tangible benefits. Second, our study examines digital seniors' use of technology in the context of their everyday life, the aspects of their life that they enjoy and do routinely. Whether it is reading the local news, borrowing a book from the library, or seeking information online, the changing practices of digital seniors require careful examination to ensure that their needs are met as this user group continues to grow. Finally, our study examines the tensions between ingrained practices and new practices that result from ICT adoption. How do routine practices such as getting the news change for seniors? The following three research questions guide our qualitative investigation:

(1) How are ICTs embedded into existing routines and practices of digital seniors?
(2) How do digital seniors develop new routines and practices in their everyday life around the use of ICTs?
(3) How do digital seniors adopt ICTs in their everyday life?

Literature review

The digital divide literature has consistently shown that discrepancies in access to and use of ICTs lie along key demographic characteristics (Reddick, Boucher, & Groseilliers, 2000). These findings are relevant for several reasons (Attewell, 2001; Howard, Busch, & Sheets, 2010; Ono & Zavodny, 2007): first, there exist real economic and social repercussions for groups whose access and skills remain restricted (Broady, Chan, & Caputi, 2010; Norris, 2001; Witte & Mannon, 2009); second, lack of access to the Internet limits the ability of

individuals to get information in real time and their participation in both local and national politics (Norris, 2001), and lastly, ICT use is a strong predictor of social capital (Ellison, Steinfield, & Lampe, 2007; Wellman, Quan-Haase, Witte, & Hampton, 2001).

Originally used to describe the stark line that separates individuals that have access to the Internet from those that do not, the digital divide has been reconceptualized in recent years as a result of sharp criticism (Stevenson, 2009; Vehovar, Sicherl, Hüsing, & Dolnicar, 2006). DiMaggio and Hargittai (2001) argue against this binary view, and instead propose the term digital inequality, which refers not just to 'differences in access, but also to inequality among persons with formal access to the internet' (p. 1). In addition, the digital divide concept is informed by assumptions that the advancing of the information society was both inevitable and desirable and that connectivity has a positive impact on the lives of all citizens (Bell, 1973; Drucker, 1969; Rheingold, 1993), without taking sufficiently into account an individual's social context.

One social group that has consistently been identified as lagging behind in terms of access to technology, comfort with new devices, and digital skills is the senior population, those aged 60+ (Blank & Groselj, 2014; Hale, Cotten, Drentea, & Goldner, 2010; Haight et al., 2014; Peacock & Künemund, 2007; Robinson et al., 2015). This raises concerns, as the gap has narrowed for other populations. Even those seniors who are connected tend to engage in fewer activities (Haight et al., 2014; Zickuhr & Smith, 2012) and the lack of digital skills has been identified as a barrier for taking full advantage of the possibilities the Internet affords (Gatto & Tak, 2008).

Seniors' technology adoption and use

While much scholarship has tended to examine seniors' connectivity as a binary or the barriers that exist to adoption, there is a need to further examine how seniors are integrating technology into their everyday lives once connected. When seniors, like other segments of the population, are presented with technologies that are beneficial to their way of life, they tend to adopt them more readily (Kok, Williams, & Yan, 2012; Rogers, 2003). Cotten, Anderson, and McCullough (2013) found that seniors in assisted and independent living communities (AICs) who used the Internet experienced decreasing levels of loneliness and increasing levels of social contact, suggesting that 'the maintenance of personal relationships through the Internet could be critical to well-being for this segment of the population' (p. 9). Similarly, Winstead et al. (2012) found that members of the same population increased the ways in which they communicated and demonstrated a further sense of connectedness after participating in an eight-week training course on ICT use. As both Cotten et al.'s (2012) and Winstead et al.'s (2012) papers are part of a longitudinal study, it remains to be seen if these positive side-effects resulting from ICT use will continue after the completion of the study. These studies show that understanding the long-term impact of technology use in the senior population is critical and suggest that digital seniors can derive many benefits (Baker, 2013; Barnard, Bradley, Hodgson, & Lloyd, 2013; Nasmith & Parkinson, 2008).

Recent work has not only investigated how programs can be implemented to help seniors become digital, but also how seniors are taking an initiative to adopt technologies that fit with their lifestyles and needs. Through interviews with 20 seniors, Tsai, Shillair, Cotten, Winstead, and Yost (2015) examined the use of tablets by this population, their

decision to adopt tablets, barriers to technological self-efficacy, and the impact of tablets on seniors' lives. This work shows that seniors are very interested in various forms of digital media (Kolodinsky, Cranwell, & Rowe, 2002), and that having more time to themselves in those years when children have left the home or retirement occurs means more time for technological exploration (Blaikie, 1999; Quan-Haase, Martin, & Schreurs, 2014). This shows that there is a need for further investigation into how seniors embrace ICTs, with a specific focus on the everyday life context of adoption and use.

Theoretical framework for the everyday

Everyday life has drawn much attention from social theorists, who examine and theorize the 'common ground' (Lefebvre, 1991) which is mundane, familiar, and often goes unnoticed. Gardiner (2004) has distinguished between mainstream theories of the everyday and those that are based on critical approaches. These theoretical writings on the everyday have also influenced our understanding of the role the Internet plays in people's lives. Early writings stressed how the Internet is a unique sphere, a space dominated by different assumptions and dynamics than everyday life (Rheingold, 1993; Turkle, 1984), but since these have received much criticism. Wellman and Haythornthwaite's (2002) collection *The Internet in everyday life* argues that the Internet is not a standalone, separate sphere, but rather is embedded in everyday life practices and routines, and normalized through the regular, mundane behaviors of its user population:

> Ignoring the Internet is as huge a mistake as seeing it as a savior. It is the boringness and routineness that makes the Internet important because this means that it is being pervasively incorporated into people's lives. It is time for more differentiated analyses of the Internet that take into account how it has increasingly become embedded in everyday life. (Wellman & Haythornthwaite, 2002, p. 7)

This theory necessitates a different theoretical perspective, one that instead of focusing on what seniors cannot do, focuses on how they are integrating ICTs into their existing practices, information needs, and routines (Baym, 2010; Hogan & Quan-Haase, 2010; Wellman et al., 2001).

The approach of looking at ICT use in the context of everyday life differs in three significant ways from that of previous quantitative research examining seniors' ICT adoption and use patterns:

(1) it moves away from looking at the Internet as a separate sphere which 'has perpetuated a dichotomized view of human behavior' (Wellman & Haythornthwaite, 2002, p. 8); rather, it integrates Internet use into mundane practices, like cooking, completing a cross-word puzzle, and finding a new book to read;

(2) it allows for the examination of social change resulting from ICT adoption not as a given, unquestionable external force, but as a complex set of social processes, taking 'into account people's non-Internet attributes and behavior' (Wellman & Haythornthwaite, 2002, p. 11).

(3) it moves away from a binary understanding of Internet use. Instead of asking, 'do you search information online or not', it examines in what social contexts online information seeking becomes relevant.

Methodology

We utilized a qualitative research design, which 'attempts to make sense of, or interpret, phenomena in terms of the meanings people bring to them' (Denzin & Lincoln, 2008, p. 4). Our aim was to capture and examine the experiences of seniors with ICTs in the context of their everyday life routines and practices, instead of reporting quantifiable phenomena. This theoretical lens influenced the formulation of questions on our interview guide and allowed for a more nuanced understanding of what ICTs mean to this population.

Participants

As we utilized a qualitative research design, the study used a convenience sample, which is a non-probability sampling technique focused on characteristics of relevance in a population and based on the strategy of theoretical sampling as outlined by Corbin and Strauss (2008). Two characteristics were of relevance: we were interested in seniors, age 60+, and within this demographic, our interest was in digital seniors, those who had prior experiences with ICTs. Because we were interested in a homogenous sample, our recruitment was targeted and relied on three strategies (Quan-Haase et al., 2014). First, we advertised the study at seniors' events, including church and community events, and university alumni gatherings. Second, we disseminated posters at libraries and resource centers for seniors. Finally, we relied on snowball sampling as an effective way to target a population that is difficult to both locate and recruit. The participants' age ranged from 61 to 84 (Median = 68), age was a key criterion for eligibility. Twenty-one participants were included, of which 17 were female. Nine participants were married, five widowed, four divorced, and two single.[1] The participants' professions reflected the recruitment strategies, as they indicated having been a teacher, zoologist, and social worker (see Appendix 1). Many of the professions listed required computer use in the workplace and therefore can be seen as an indication of skill level and knowledge of technology. Of our participants, 17 owned personal computers at home, some owned more than one. Six participants owned an e-reader or tablet in addition to having a computer. All had access to the Internet and 9 identified their connection as high-speed and wireless. Overall, our sample can be described as consisting of individuals who were retired, middle class, educated (often with post-secondary education), and socially well connected.

Data collection

Twenty-one interviews, lasting about 60–90 minutes, were conducted from January 2012 to December 2013. The interviews were digitally recorded and then transcribed verbatim for coding purposes. We utilized semi-structured interviews as our data collection method because interviews are commonplace in qualitative research (Denzin & Lincoln, 2008), and allow for participants to describe their ICT experiences in their own words (Berg, 2007). For qualitative researchers 'the primary issue is to generate data which give an authentic insight into people's experiences' (Silverman, 2014, p. 89). Silverman (2014) also attests that while these experiences generate rich narratives they are context specific and lack objectivity and therefore are not representative of some 'truth' in the world, rather they are glimpses into true experiences of real people. Interview questions were intentionally left

open-ended to elicit thick descriptions and this also allowed us to probe further into answers that opened unforeseen avenues for discussion (Berg, 2007). Following suggested qualitative research practices, the interview guide was adapted and fine-tuned after the first five interviews were coded in order to incorporate additional topics (Glesne & Peshkin, 1999; Merriam, 1998), enabling us to take advantage of theoretical sampling (Corbin & Strauss, 2008) and, 'focus and shape the study as it proceeds' (Glesne & Peshkin, 1999, p. 130).

Data analysis

Grounded theory was employed to analyze the interview data, as it allowed us to work closely with the data during collection and analysis. There are several different schools of thought in Grounded Theory (Corbin & Strauss, 2008; Dey, 1999; Glaser & Strauss, 1967) and we followed primarily the work of Charmaz (2014) because of her clear and detailed accounts of coding, memo writing, sampling, and saturation. For Charmaz (2014), this method of analysis 'consists of systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories from the data themselves' (p. 1).

We undertook several steps to ensure that the coding process demonstrated what was happening in the data (the who, what, and where?) and what these actions and events might mean (the how and why?). This was particularly important because of our focus on everyday routines and practices. First, an initial stage of open coding was conducted by two researchers on five of the interviews, followed by memo writing on each of the themes that emerged. A discussion between the research team indicated that themes around information behavior, use of the library, and reading were apparent. The use of the library was broken down into two categories (digital tools at libraries and web and libraries) so that the coders could reflect on the differences between these codes. Reading was also broken down into a series of preferences, in terms of physical and digital environments.

Memoing and the constant comparative method were used throughout the remaining interviews (Charmaz, 2014; Glaser & Strauss, 1967). One coder looked at the interviews, compared themes and codes, and added memos to individual codes. Two new themes developed during this time: news consumption, which was a much debated topic for our participants, and forced adoption, which demonstrated why many of our participants had started using digital tools. The following coding scheme (see Table 1) was established, and employed to code all interviews.

Table 1. Coding scheme.

Codes	Descriptions
News consumption	Reading news
Library use – web	Use of the digital library in lieu of the physical
Library use – digital tools	Use of digital tools at the library (i.e. checkout) in lieu of a person
Information seeking	Using the web or other digital tools for information seeking
Expanding interests online	Using the web to gain information about particular interests, e.g. genealogy, cooking
Reading preferences	Reading of books in non-traditional formats (audio, e-books, etc.)
Forced adoption	When participants feel they should be engaged with technology, or indicate they feel this way about others

We followed the concept of saturation, which in qualitative research is reached when no additional insights are gained from the analysis (Corbin & Strauss, 2008). To ensure we reached saturation, we examined the data to confirm that no new themes emerged from coding additional interviews.

The use of direct quotes from interviews is another central tenet of qualitative work, as this allows for the participants to not only speak for themselves (Aronson, 1995), but also to describe phenomena in their own terms, often using language that is unique to their social and cultural background. These sensitivities were particularly important because of the goal of the study to understand ICT use in the everyday life of digital seniors.

Results

Existing and emerging practices

We report the results for RQ1 and RQ2 together because they are closely related, as they look at how digital seniors embed ICTs in existing practices and develop new practices. We look at four themes that emerged from the coding process: news consumption, library use, information seeking, and reading practices.

News consumption

The media that our senior population was most divided on, and most passionate about, was the news and in particular the format in which they chose to receive their newspaper (Lin, Lin, & Yueh, 2014). We found that participants continued with their established practices of reading newspapers in print format, adopted new digital formats, or used a hybrid means of getting the news. Some participants were still in the process of developing new routines around digital news consumption. Eleven of the participants had at least one newspaper delivered to their homes either daily or weekly. P13 exemplifies the everyday experience of newspaper reading:

> I really like getting the newspaper and sitting with my coffee reading the newspaper.

Tradition was a major reason for people's reading preferences, especially when it came to reading print news. P18 shows how strong a role habit and established routines play when even a reduction in the cost of her newspaper was not enough to persuade her to move to a digital subscription:

> I see that my *National Post* is going up in price for the printed version, but I can have the new digital one available for much, much cheaper, but I'm not going to do it.

Those that had decided to convert their newspaper subscriptions to a digital format had a number of reasons for doing so. Three participants (P2, P4, P13) felt the quality of their local paper was slipping, and decided to get it online in order to evade paying a delivery charge. Others (P6, P9) tended to browse the news only, and found that the online version was sufficient for these needs especially for non-local news.

Many of our participants reported reading the news both in print format and online, depending on the context and purpose. P6 had the local paper delivered, but preferred digital formats for national and international newspapers:

… just check to see what the main stories are and if it is something that catches my interest I read their story.

P13, being accustomed to print papers, had only recently decided to switch formats and felt that new habits had not as yet been well established around this new routine:

I just decided to convert my *Free Press* (local paper) subscription to an online subscription, and it's fairly recent, so I haven't even developed a good habit about it.

The choice of format, then, is allowing these participants to receive the news how they best see fit, and is swayed largely by their normal routine, the way they consume local or national news, and their justifications of paying for certain sources of information.

Information seeking and expanding interests online

When it comes to acquiring information, most participants see the benefits of searching online (17/21). Nonetheless, for some participants, print formats and people were still the preferred sources of information, this was often linked to perceived trustworthiness. P7 noted that print was preferred for in-depth information tasks:

I don't look a lot up on the Internet. I'm not all that comfortable with it.

Comfort and trust were important for establishing routines around information seeking, particularly in an area that the participants were not already knowledgeable about. Other participants did not outright reject digital information sources, but did see them as only adequate for some searches. This suggests a hybrid kind of practice that relies on ICTs for some searches, but not others. P11 said that although he might rely on search engines for simple information needs, it did not suit him all the time:

For other information, if it is something that I need to know in depth, then I would go to the library and get a book out on it, definitely.

In 17 of the 21 interviews, participants noted some form of online information searching. The types of information they went in search of varied, with recipes, genealogical research, travel information, and news being the most common. Although the participants were aware of different search methods, Google was the most used search engine by far. P18 noted that Google helps when she forgets things:

Gosh. I Google. I Google a lot. And I find it's just a blessing for people my age who like me, my memory is … there is no doubt it's going.

P5 said that she uses Google as a dictionary to find information:

If I read something either in the paper or in a book, and I don't know enough about it, so I go and ask Mr. Google to tell me about it.

The literature shows that digital seniors were not the only ones who rely primarily on Google for their information needs (Kemman, Kleppe, & Scagliola, 2013). Information seeking as a means of supplementing resources was a new practice for our participants, as they would read something in print format and then look it up online. This often supplemented other information sources.

When it comes to expanding their pre-existing interests, however, doing research online proved to be a very popular choice. Genealogy in particular was a pursuit of

many participants, who often went to the web to expand their existing knowledge of their own family histories. P6 summarized why searching online for this information was beneficial:

> Primarily I've used that kind of resource with family history where I've, through some of those sites, located some local family history or local history material that I don't know if I would have come across in any other way.

Other scenarios where digital seniors were more comfortable with online searching involved expanding their recipe collection, and looking up local information such as house prices or the weather forecast. These types of searches happened frequently as part of participants' routines:

> If I'm just getting information on something that I don't really need to retain … then I really would prefer to get it digitally.

Library use

Library use was one of the habits that participants noted had changed over the course of their lifetime, mostly due to an increased reliance on the library homepage from the comfort of their homes. We found that many new practices were developed by digital seniors around the use of the library and the acquisition of reading materials. When speaking about their own childhood reading habits, nine participants considered themselves lifelong readers, recalling the love for the printed word from when they were very young. P7 noted

> I don't remember not having books. Mom and Dad both read to us and I still have some of my old books from my childhood.

For six of our participants, the local library often brought about a sense of nostalgia, whether the library as a place being memorable (P3, P7, and P15) or the habit of going to the library for reading material (P11, P12, P13). For the majority of the participants, however, the use of the library as digital seniors had changed dramatically. Eleven of the 21 participants said that they no longer visited the library to read, browse, or participate in groups/clubs. Instead, they visited the library's online collection ahead of their visit and ordered their reading materials online, which was perceived as convenient. As P16 stated:

> To be honest with you I haven't in years wandered through a library unless I'm looking for something specifically because I get my books when I order them online.

While the convenience of the library website and the ability to order books to your closest library branch means that these users continued to borrow books, it is these technologies that have also changed the way that the library space was conceived of and utilized.

Getting e-books was very relevant to many participants, as they depend on these copies for participating in book clubs, but often there were long waits for newer books. For P20, who suffers from increasingly poor vision, the inability to get the book club picks in e-format through the library meant leaving the book club altogether:

> I used to come to the book club here. But I cannot really do that anymore because the books that they might choose might not be on an e-book or I might not be able to get it in time for the monthly meetings.

However, many digital seniors were aware of the library offering e-book collections and for those who read digitally, or planned to read digitally, the availability of those collections affected which technology (e-reader) they choose for reading. When comparing the Kindle and the Kobo e-readers, P6 remarked:

> There is no huge difference between the two, so in picking Kobo, I think maybe one of the tipping points is the fact that I can connect to the library system with it, while Kindle is a little more problematic from that standpoint. So I will probably by the end of the week have a Kobo.

Reading preferences

As can be expected from a group of largely avid readers, who do not see it as an instrumental practice (Luyt & Ann, 2011), there was an overall preference for the printed page over e-books, though we did observe established practices prevailing, and new and hybrid practices evolving (Martin & Quan-Haase, 2013). Thirteen of the 21 participants preferred to read their books in the printed format, though 10 of them (obviously with some overlap from the print readers) understood the utility of e-books and e-readers; six of them actually owned a device for reading purposes.

There was no 'right' choice of format in which digital seniors preferred to read. There were many choices, and even avid e-readers had times and certain items that they preferred to read in the printed format. For example, P13 said the following of his dedication to reading the *New Yorker* in both formats:

> I've had a subscription to it for 50 years, I suppose. And now I read it online, but I still have the paper copy come because, there again, the two experiences are so different.

This shows how a new practice has recently evolved for P13, but the habitual way of reading for 50 years is still in parallel prevailing. Both play a role in his reading practice. Participants were willing to try new formats of reading, sometimes even despite their initial reservations. For example, P11 spoke about her dedication to print when she stated:

> I like the feel of books, and I like to pass them on to friends and family. If someone gave me a device, I would try it.

Reading formats were not simply a matter of distinguishing between print or electronic media. Several participants found that audiobooks were beneficial to their lifestyle. Three of them often used audiobooks in different formats (CDs, MP3s) and one of them had just started to get into this type of reading. Importantly for this population, choice also revolved around changes in their physical capabilities such as sight. For P20, audiobooks and e-books have made it possible for her to continue a lifelong reading habit. Without her Daisy Player and the free material from the Canadian Institute for the Blind (CNIB), she would be, in her words, 'very depressed.' Thus, developing new practices and hybrid practices also empower digital seniors and provide alternatives they did not have prior to becoming digital.

Forced adoption and agency

To address RQ3, we relied primarily on the theme of forced adoption, which sheds light on how ICTs came to be a part of the participants' everyday lives. Whether through the

adoption of e-books, computers, email or social media, there was more often than not a sense that the participants felt pressure to become digital. Much of this pressure came from family members – either children, nieces, and nephews, or their more tech-savvy siblings. This pressure was not necessarily perceived as negative, many participants felt that it had motivated them to adopt new practices, as P7 stated:

> My brother decided I should have a computer.

P7 now searched via Google regularly and read about her book club selections online. Some participants were also reliant on these family members for help once they had become accustomed to the technology. As P19 explains:

> If I had any trouble [with my computer], I would go to my kids. So basically they embarrassed me into knowing how to use it.

Once the computer had become a part of their lives, various programs and media were then also often adopted because the participants felt others wanted them to take part. Where P7 felt more comfortable with a printed encyclopedia than she did online, she said of her information seeking habits:

> It is changing slowly because my kids are at me all the time, going 'Oh Mom! Look it up on the Internet.'

Surely the convenience and omnipresence of search engines like Google are a factor, but pressure from family members seems to be one of the main reasons that ICTs are adopted.

The participants also adopted social media solely on the recommendation of their family members. There were only three participants who had Facebook profiles, and one of them, P20, did so unwillingly:

> My son wanted me on Facebook and set it up, but I don't like it. Umm, seems to me, I thought I could keep in touch, but I just don't give a darn about their cats' trips to the vet.

The participants readily admitted that they were aware of social media, but for most of them, this was not a method of communication with which they were comfortable. Interestingly, when family members lived at a distance, many participants used Skype to stay in touch. Seven of the 21 participants used Skype to talk to friends or family members that were not close by. Another participant was desperate to use Skype, but had no one to show her how to do so. Sometimes the person who lived away had taken the step of actually creating the account for the participant, like in the case of P10:

> My friend from England, when she was over, said 'Oh you've got to get on Skype. I'll just put Skype on this' and she's the only person that I Skype with, but I do Skype with her.

Others were accustomed to using Skype to see their grandkids, or to talk to others who lived overseas. The shift from the telephone to Skype is not, perhaps, as dramatic as the shift to broadcast media such as Facebook or Twitter. The participants who use Skype are only speaking to their family members; they have the added benefits of being able to see who they are talking to, and usually at a much reduced cost for what they would be paying to phone the same person.

We find that agency is central to our understanding of digital seniors' use of ICTs, they critically consider various technological options, and make choices around personal

preferences, convenience, and affordability. For digital seniors, ICT use is not a binary, they want to have the flexibility to choose for themselves how to engage with ICTs.

Discussion

An important contribution of this article consists of employing the theoretical lens of ICT use in everyday life to provide a more in-depth understanding of how digital seniors adopt and use ICTs. This provides unique insights because ICTs are not perceived as external to the life of seniors, but rather embedded in their everyday practices. We identified three core categories: 1) new practices around ICT use, 2) hybrid practices, and 3) recreating existing practices with digital means.

(1) *New practices*. Digital seniors are developing new practices and routines around their ICT use; these are novel and emerge out of ICTs' affordances. Perhaps more than any other generation seniors have had to reinvent themselves in our increasingly digital society. While other generations have had the benefit of learning ICTs in school, seniors have had to consciously adapt.

(2) *Hybrid practices*. Many of the choices that our participants felt were beneficial revolved around going back and forth between the printed word and the web, whether for pleasure reading, news consumption, or information seeking. Seniors engage with the digital often on their own terms. Seniors create hybrid practices, where they seamlessly combine traditional habits with new ones emerging from their use of ICTs. This adaptability is exemplified in our study through the daily practices of digital seniors and how they choose to consume the news. Many seniors use a combination of print and digital sources to keep informed. Some choose digital sources for quick information or to receive selected newspaper articles that may not be of primary interest to them, while also choosing to read print sources for topics or areas where they desire in-depth coverage. Although comfort with technology may play a role in the adoption of ICTs, the skills required to access digital versus print news were not viewed as a barrier for adoption, instead emphasis was placed on personal preference, rather than technological skill level.

(3) *Recreating existing practices with digital means*. For digital seniors, the digital enhances or sometimes even replaces traditional practices. For some of the participants it was important to find reliable information in the printed format, because they were either uncomfortable or did not trust what they found online. However, these same participants would rely on the web for short-term information, such as the weather forecast or a recipe for dinner, mostly out of convenience. Also, the ease of e-readers helps them establish new reading practices (Werner, Werner, & Oberzaucher, 2012). This shows that as younger generations become more and more dependent on digital technology, digital seniors are adaptable and move between formats depending on their needs, uses, and preferences.

Adoption is not a simple binary and past experience with computers does not necessarily predict future use. Selwyn (2004) found that many individuals who had used computers at work, chose to make no use of them during retirement. Those in higher socioeconomic groups did not see it as having any role to play in their retirement and

became non-users. We noted a similar involuntary and somewhat reluctant ICT adoption by our digital seniors. We learned in our study that family members, in particular grown-up children and grandchildren, often impose their beliefs around the usefulness of a specific ICT on seniors. We termed this phenomenon forced adoption and noted how seniors carefully navigate their families' pressures to embrace technology and their own views around how technology fits with their lives. This allows us to examine more closely the assumptions about the inherently beneficial, empowering consequences of increased use of ICT for the older generation. From this, *agency* emerges as an important dimension in the study of ICT use in seniors' everyday lives.

This study examined how ICTs become integrated in the everyday life practices of digital seniors. While the third age is often characterized by retirement, increased leisure, and an opportunity to explore new avenues in life (Laslett, 1989), this optimistic view of retirement does not apply to all individuals 60+. Critiques of the third age perspective paint a gloomy picture, where many older individuals need to continue working well beyond 65 to earn a living, often they engage in precarious labor, and even if retired, need to make ends meet on minimal pensions, often living at or below the poverty line. Thus, issues of inequality greatly affect the experience of digital engagement in the third age. Future research needs to look more closely at how structural elements such as socioeconomics, family structures, and employment impact seniors' decisions to adopt ICTs as well as their experiences with ICTs because this will greatly influence their ability to reinvent themselves as digital seniors.

Note

1. One response was missing.

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Notes on contributors

Anabel Quan-Haase is Associate Professor at The University of Western Ontario and investigates the adoption, use, and social implications of information and communication technologies, with a focus on social media, social networks, privacy, and social capital.[email: aquan@uwo.ca].

Kim Martin is a PhD candidate in Library and Information Science at the University of Western Ontario. She investigates the role of serendipity in the research process of historians, and the information practices of digital humanities scholars.[email: kmart5@uwo.ca].

Kathleen Schreurs is a PhD candidate in Library and Information Science at the University of Western Ontario. Her areas of research include the shifting roles of literary authors in electronic environments, the e-writing experiences of literary authors, building online communities around texts, and the perceptions of children about e-book reading.[email: kschreur@uwo.ca].

ORCID

Anabel Quan-Haase 🄳 http://orcid.org/0000-0002-2560-6709

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Appendix 1

Interview #	Gender	Age	Profession (before retirement)
1	F	76	Business person
2	M	67	Writing for the web
3	F	67	Educational assistant
4	M	70+	Zoologist
5	M	87	Piano teacher
6	F	68	High school teacher
7	F	69	Piano teacher, mission worker with the United church
8	F	69	Teacher, and sold church bells
9	F	68	Teacher
10	F	66	Social worker
11	F	69	Social worker
12	F	68	Teacher
13	F	76	Mother
14	F	66	Librarian
15	F	81	Physiotherapist, mother, admin
16	F	64	Accountant, medical secretary
17	M	73	Social worker
18	F	61	Teacher

Continued.

Interview #	Gender	Age	Profession (before retirement)
19	F	84	Medical secretary, college teacher
20	F	82	Stay at home mother, director of senior volunteer program
21	F	65	Ministry specialist in the office in the registrar