The Role of Information and Communication Technology in End-of-Life Planning Among a Sample of Canadian LGBT Older Adults

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Version Post-print/Accepted manuscript

Citation Mock, S. E., Walker, E. P., Humble, Á. M., de Vries, B., Gutman, G.,

(published version) Gahagan, J., ... Fast, J. (2019). The Role of Information and

Communication Technology in End-of-Life Planning Among a Sample

of Canadian LGBT Older Adults. Journal of Applied Gerontology.

https://doi.org/10.1177/0733464819848634

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Mock, S., Walker, E., **Humble, A. M.**, De Vries, B., Gutman, G., Gahagan, J., Chamberland, L., Aubert, P., & Fast, J. (2019). The role of information technology and communication technology (ICT) in end-of-life planning among a sample of Canadian LGBT older adults. *Journal of Applied Gerontology*. Advance online publication. doi:10.1177/0733464819848634

This is an author-generated post-print of the article- please refer to published version for page numbers

Abstract

To better understand the role of technology in later-life planning among older lesbian, gay, bisexual, and trans (LGBT) adults, we conducted focus groups to explore factors linked to diverse sexual orientations and gender identities. Twenty focus groups were facilitated across Canada with 93 participants aged 55 to 89. Constant comparative analysis yielded four categories: (a) fear, (b) individual benefits, (d) social elements, and (d) contextual elements. Fear related to technology and fear of end-of-life planning. Individual benefits referred to technology as a platform for developing LGBT identities and as a source of information for later-life planning. Social elements were establishment and maintenance of personal relationships and social support networks. Contextual elements referred to physical and situational barriers to technology use that limited access and usability. These findings can inform technological practice and services to enhance later-life planning.

Keywords: bisexual, lesbian, gay, transgender, later-life planning, Internet and communication technology

The role of information technology and communication technology (ICT) in end-of-life planning among a sample of Canadian LGBT older adults

Information and communication technologies (ICT) can help maintain and enhance quality of life for older adults (Erikson & Johnson, 2011; Gatto & Tak, 2008). Although much research on older adults' use of technology focuses on potential barriers (e.g., Charness & Boot, 2009), population-based data show that a substantial percentage (over 40%) of adults over age 65 use ICT (Gell, Rosenberg, Demeris, LaCroix, & Patel, 2013). Older adults use ICT to access information on health and wellness, and communicate with family and friends (Vroman, Arthanat, & Lysack, 2015; Yoon, Jang, Vaughan, & Garcia, 2018). ICT use can play a role in informed decision-making about health issues, later-life planning, and end-of-life planning (Cajita, Whitehouse, Budhathoki, & Hodgson, 2016; Carr & Khodyakov, 2007). Consideration of the individual and social contexts that influence ICT use is important to for maximizing older adults' engagement with technology (Rogers & Fisk, 2010; Wahl, Iwarsson, & Oswald, 2012). Older adults with diverse sexual orientations and gender identities (e.g., lesbian, gay, bisexual, trans, LGBT) represent individual and social contexts that are often overlooked (Brown, 2009).

LGBT adults have developmental needs similar to cisgender heterosexual adults who also may use technology to help overcome isolation and stigmatization. However, lesbian, gay, and bisexual adults, and trans adults in particular experience greater stigmatization and social isolation compared to the general cisgender heterosexual population of older adults (de Vries, 2013; Finkenauer, Sherratt, Marlow, & Brodey, 2012; Fredriksen-Goldsen et al., 2014) these factors likely create unique benefits of and barriers to ICT use (Brotman, Ryan, & Cormier 2003; Meyer, 2003). The Internet has been a valuable networking tool for those with stigmatized identities, helping people find similar others to share experiences and coping resources (Bargh &

McKenna, 2004). However, online communities and sources of information can be hostile for LGBT adults (Fredriksen-Goldsen et al., 2014; Hughto, Reisner, & Pachankis, 2015), adding to concerns beyond the typical ones older adults may have about ICT use (Charness & Boot, 2009). Thus, the purpose of this study was to examine technology use among LGBT older adults with a focus on later-life planning, social integration, and potentially unique factors linked to diverse sexual orientations and gender identities. Later-life planning includes planning for all activities associated with life transition and advancing age (e.g., retirement planning, living arrangements, health care, power of attorney, end of life arrangements, etc.).

Rates of Information and Communication Technology Use Among Older Adults

Little research has examined the rates and nature of ICT use among LGBT older adults, however, research not examining diverse sexual orientations or gender identities can serve as a starting point. Despite older adults' lower use of ICT compared to younger adults, technology plays an important role in their lives. For example, in a study of 235 older adults (ages 64 to 104) with diverse living arrangements (e.g., community-dwelling or retirement homes), the majority had access to phones (including smartphones) and computers, using these technologies to stay in touch with family and friends and over half searched for health and wellness information online (Vroman et al., 2015). Similarly, Erickson and Johnson (2011) found that a significant number of Canadian adults 60 years and older used the Internet for email and research. Moreover, they found that older adults' frequency of Internet use was linked to greater life satisfaction, generalized sense of self-efficacy, and perceived support (Erickson & Johnson, 2011).

Potential Technology Barriers and Benefits for Older Adults

ICT use is sometimes hindered by barriers related to socioeconomic status, attitudes

toward technology, and fears or concerns about technology. In a review of literature on ICT use and aging, barriers included lower socioeconomic status, less positive attitudes toward technology, privacy concerns, and interface designs unresponsive to different memory and cognitive functioning (Charness & Boot, 2009). Similar findings emerged from research in the UK (Selwyn, Gorard, Furlong, & Madden, 2003) and the Netherlands (Slegers, Van Boxtel, & Jolles, 2009). In Gatto and Tak's (2008) study of Internet users 60 years and over, barriers included frustration with the time it took to acquire the skill to navigate the online environment and frustration with pop-up advertisements and spam. In the same study, however, the most frequently cited benefits of Internet access were the ability to maintain a sense of connectedness and access to online services (e.g., financial services, shopping). In a Swiss study of older adults (Seifert & Schelling, 2018) participants said the Internet was as a useful tool that enhanced everyday coping and supported independence.

In examining the impact of involvement in online communities for older adults, Nimrod (2014) noted a number of benefits and barriers. Benefits included a sense of joyfulness and stimulation (e.g., new sensations and excited by ideas), companionship, service, and self-expression. Barriers included aggressive and insulting posts enabled by online anonymity, and not identifying with other older adults online (e.g., mismatch on political beliefs) (Nimrod, 2014). Relevant to our study, research with older adults has shown that perceived benefits and positive aspects of ICT use outnumbered negative aspects (Mitzner et al., 2010). Benefits included access to health information and the ways technology makes work easier, more efficient and sustains social integration. Thus, despite potential risks, ICT is an important resource for older adults that sustains social integration and access to information.

Health, Later-Life Planning, and Technology

As suggested earlier, older adults often use ICT to access information about health and ways to enhance well-being. One important domain for health and well-being in later life is information about end-of-life care. Later-life health-care planning (e.g., living will, power of attorney) can inform preferences for end of life and avoid unnecessary or unwanted care. People are more likely to have a living-will if they have children, or a family member confidante, or have had informal discussions about end-of-life planning (Carr & Khodyakov, 2007). In a study of personal and social factors associated with end-of-life planning among older adults (65 and over) two-thirds had discussed their end-of-life preferences with others, and had an advance directive (Kahana, Dan, Kahana, & Kercher, 2004).

ICT can serve as an important facilitator of end-of-life planning and health decision-making, via its ability to enhance communication and increase access to health information and end-of-life planning resources. A 2016 study by Cajita et al. examined health-related decision-making and Internet use among older adults. Internet use in general, and health-related Internet use in particular, was associated with a greater preference for active decision-making. This suggests that ICT may support more active decision-making and engagement in later-life planning that leads to greater likelihood of having informal discussions about later-life and end-of-life preparations (e.g., living-will) (Carr & Khodyakov, 2007).

LGBT Older Adults

While the majority of older adults have similar developmental, social, and psychological needs (Mock, Taylor, & Savin-Williams, 2006), older LGBT adults experience unique challenges and needs that shape their experiences with ICT. For example, worse mental and physical health outcomes are commonly found among LGBT adults compared to the general cisgender heterosexual population (Clements-Nolle, Marx, Gutzman, & Katz, 2001; Fredriksen-

Goldsen et al., 2014; Graham, et al., 2011). These poorer outcomes stem largely from stigmatization and marginalization experienced by those with diverse sexual orientations and gender identities and the psychological toll of concealing a LGBT identity (Meyer 2003). LGBT adults are less likely to call upon family for care when the need arises and more likely to engage friends, though such caregivers are lesser recognized and supported (de Vries, 2013). As noted by Knochel, Quam, and Croghan (2011), LGBT adults are a significantly underserved and largely invisible population with respect to the planning and provision of aging services (Brown, 2009). Thus, for older LGBT adults, the potential for ICT to enhance quality of life and social integration may be valuable.

Summary and Present Research

ICT offers many potential benefits and challenges for older adults. It may enhance agency and social integration in later life and be a resource for decision-making and later-life planning. To better understand the role of technology in the social integration, well-being and later-life planning of older LGBT adults, we conducted focus groups with older LGBT adults. Grounded theory methods inform this research (Strauss & Corbin 2008), an appropriate approach when seeking to understand a relatively unknown or unexplored phenomena. The meaning of technology to older LGBT adults, how it impacts their social integration, and the role of ICT in later-life planning were guiding themes for this research.

Method

This study employed focus group methodology (Morgan, 1997). Focus groups rely on the interaction between participants to elicit attitudes and opinions, generating rich contextualized data that would not be obtainable by other methods (Morgan 1997), and are useful when dealing with minority populations and marginalized or disempowered groups (Hughes & Dumont, 1993;

Kitzinger, 1994). The collaborative nature of the focus group environment allows for underlying assumptions, cultural values, and group norms that are a result of a shared experience to come to the surface (Robinson, 1999).

Focus groups were carried out in five Canadian cities: Vancouver, Edmonton, Toronto, Montreal, and Halifax. Ethics approval was obtained from each of the participating universities: Simon Fraser University, University of Alberta, University of Waterloo, University of Quebec at Montreal, Mount Saint Vincent University, and Dalhousie University. In each city, four distinct focus groups were held: (a) lesbians and bisexual cisgender women, (b) gay and bisexual cisgender men, (c) trans individuals, and (d) service providers. This paper reports on data from only the first three groups, and as such is a *subset selection analysis* (Hinds, Vogel, & Clarke-Steffen 1997).

Co-investigators in each city worked with community partners (e.g., LGBT-focused community centres and agencies) to recruit participants through announcements on organizational websites, newsletters, email listservs, and in-person information sessions. Prospective participants contacted each research site to determine their eligibility (research assistants used an inclusion/exclusion-screening tool). Because we sought to understand the role of ICT use among older LGBT adults to manage issues related to health and later-life planning, eligibility criteria included LGBT adults who were 60 years or older, spoke English or French (Montreal), had two or more chronic health conditions, and were comfortable using online technology (e.g., using email). The same screening tool assessed age in years, sexual orientation with options of bisexual, gay or lesbian, heterosexual, or an open-ended option, and gender with male, female, and an open-ended option. Gender identity was further assessed with the question "is the gender with which you currently identify different from the gender that was assigned to

you at birth?" (Yes/No), and "are you or have you been transgender?" (Yes/No).

Prior to the start of each focus group, participants provided written informed consent and demographic information, and were provided with a \$25 gift card for a local store. Focus groups lasted between 40 minutes and 2 hours. Broadly, questions focused on end-of-life preparation challenges faced by older LGBT individuals, the role of community in later-life planning, and how technology could be used to support care and later-life planning. For the present analyses we focus on the role of ICT use in later-life planning. Each focus group was audio-recorded and transcribed verbatim, with pseudonyms used for participants. Before the focus group sessions ended, participants completed a brief survey that assessed demographic characteristics (e.g., relationship status), the role of technology in later-life planning, and end-of-life conversations.

Analysis

Constant comparison methods (Strauss and Corbin, 2008) were used to analyze the transcripts. Open coding identified main concepts, categories, and subsequent subcategories. Recurring key words and ideas of importance were also noted during this first stage of coding. Axial coding (Strauss & Corbin 2008) explored linkages or themes that arose from the initial coding process. Finally, focused coding ensured full saturation of each of the themes (Charmaz, 2003). Throughout this process, memo writing (Charmaz, 2003) established connections between various themes and further contextualized and layered the existing categories. This ensured compatibility with the data already coded and assisted in the development and investigation of emerging themes.

Results

The sample comprised 92 adults: 39 gay men, 28 lesbians, 1 bisexual woman, 1 bisexual man, 6 trans men (4 reported a gay orientation, 1 a heterosexual orientation, and 1 other), 17

trans women (8 reported a lesbian orientation, 2 a bisexual orientation, and 7 a heterosexual orientation), and one participant who did not claim a gender identity or sexual orientation. On average, participants were 69 years old (range: 55 to 89 years). Approximately 40% of the gay cis men were married or in a relationship, compared to approximately 50% of lesbian cis women participants and 33% of trans participants. Just over 20% of the gay cis men had children and approximately 48% of the lesbian cis women and 70% of the trans women and men had children.

Themes were broadly organized into the following categories: (a) fear, (b) individual benefits, (c) social elements, and (d) contextual elements (Table 2). These categories served to organize and manage the data analysis, but they are interconnected.

Fear

Fear was based on an apparent threat related to actual or perceived harassment and discrimination associated with sexual orientations and gender identities. Several individuals expressed concerns that they would be "outed" by technology. Specifically, they were concerned that information related to their health, sexual orientation, or gender identity would inadvertently or otherwise be released. One trans woman recounted a story in which her credit card information was stolen. She contacted the company to put a hold on the account but because her voice did not match the indicated gender/name on file, the company refused to deal with her. Concerns about malicious uses of technology also contributed to fear. "I don't like my information being out there [online]... [It] gets shared and you have no control over it... that worries me" (Payton, trans female focus group). Participants spoke about ICT being used to "bully" and "segregate." "Trolling" that targeted LGBT individuals with vitriolic messages or threats to disclose sexual orientation made many fearful of going online. "[It's] called flaming...

cyberbullying where people are pushed to suicide.... [The Internet] can be used as a weapon" (Robin, trans male focus group). All of these factors contributed to fear of technology, but most persisted in using ICT because the benefits outweighed the drawbacks.

In addition to threats related to identity disclosure or harassment, participants expressed anxiety about ICT use itself. Participants talked about feeling overwhelmed with the complexity of technological devices: "I just want the phone to ring... nothing else" (Kelly, lesbian focus group). This left some of them feeling "frustrated" and "angered" and ultimately avoiding technology. "I'm just so overwhelmed; I'm overly stimulated... so I choose not to be on social media" (Robin, trans male focus group). Concerns related to privacy and confidentiality also contributed to their fear of technology. Many spoke about the security of their personal information: "I don't want mine [information] floating around out there [online]" (Terri, lesbian focus group).

Individual Benefits

Technology provided opportunities to realize a number of individualized benefits. These included providing a venue for the exploration and expression of personal and gender identities, and to access resources such as end-of-life planning and medical information.

The Internet served as a resource to learn about and engage with diverse sexual orientations or gender identities. "[The Internet] was why I was finally able to figure out my identity in the first place" (Sam, trans female focus group). Others noted that it made the process of "transitioning" and "coming out" easier by enabling them to connect to the larger LGBT community. Technology also played a role in the expression and embodiment of identity. Online message boards and social media (i.e., Facebook and Twitter) emerged as important spaces in which participants expressed their identity. Participants talked about online communities being

the first place they felt safe to be "out" and express their true emotions. "I can be myself [online]" (Kerri, lesbian focus group), "nobody judges me" (Albert, gay focus group), and "no one questions what sex I am" (Sharon, trans female focus group). As such, technology served as a resource that helped participants come to understand what it meant to be sexual and/or gender minorities and in turn to better understand their own sexual orientations and gender identities.

Technology played an important role in accessing resources for later-life planning. Participants used online resources such as DIY (do-it-yourself) wills, virtual funeral planning, and online legal forms to prepare for later-life transitions. "My husband and I did our wills online... it was quick, and easy, and will stand up in any court" (Ken, gay focus group). The Internet was also used to research estate planning, retirement, end-of-life directives, and other legal issues. "[If] I want to know something about making a will or power of attorney I just look it up online" (Karen, lesbian focus group). The online nature of these resources was especially relevant. Many participants reported experiencing unique challenges such as complicated legal proceedings or medical issues related to being LGBT. The ability to access these resources online was viewed as an advantage because it provided anonymity, and was generally seen as easier and less stressful than doing these things in person.

Participants leveraged technology for health-related purposes. Similar to later-life planning, they used online resources to research, plan for, and access health assets. Much of this was done through formal channels such as websites like WebMD and various provincial health boards, but also through more informal social networking websites such as Facebook, Xtra, and Prime Timers.² This use of technology to access information on health was particularly relevant for gay men in this study: in a number of the focus groups, discussion emerged around the impact of HIV/AIDS and how technology such as preventative screening and online information

sources had helped to alleviate some of the stigma associated with the disease. "When I was diagnosed 20 years ago it was a death sentence... people are beginning to view it differently" (Brad, gay focus group). Participants also used social networks to identify LGBT-friendly resources such as long-term care facilities and physicians. "I'm trying to find a gay-friendly massage therapist because I'd rather go to [a] guy rather than a woman for a massage" (Brad, gay focus group).

Online medical information was of particular significance to the trans women and men. "It's hard to find a doctor that is trans friendly... that even knows what it means to be trans" (Michel, trans female focus group). Participants noted a lack of understanding or research about ageing as a trans person and the medical impacts of long-term hormone use. As such, social networks where they could chat and share information with similar individuals became very important. A number of trans participants who did not meet the criteria for gender affirmation surgery as outlined by their provincial health policies spoke of using social networking websites to acquire "black market" or "under the table" hormones.

Social Elements

Social elements relate to the establishment and maintenance of personal relationships and social support networks. Social networking websites (i.e., Facebook, PrimeTimers, Xtra, Gay Fathers) enabled individuals to expand their social circles, specifically with other LGBT older adults. "Unless you're able to get online it's very difficult to make connections" (Tracy, lesbian focus group). This was particularly relevant for people from places with small LGBT populations who did not have access to a vibrant LGBT community. For them, this virtual community connected them to individuals and community information and in doing so played a role in the expression of their social identities.

Technology had an impact on the development and maintenance of social support networks for older LGBT adults. Participants used cell phones and the Internet, to connect to individuals in the LGBT community who often became a de facto support system. "You can get and receive... we all support each other quite regularly" (Beth, trans female focus group). The concepts of "fictive kin" and "families of choice" surfaced as participants talked about relying on people outside of biological kin to fill support roles such as providing personal care (toileting, bathing, etc.) and assistance with financial transactions. Participants talked about using "telephone trees" and social network sites to coordinate support groups of volunteers to visit palliative care units. "There's always somebody out there that's got some crisis or other going on, and everyone can sort of pitch in" (Gene, trans female focus group). This was particularly relevant for trans individuals as they spoke of using these expanded social support networks to aid in the process of transitioning, specifically asking for help after surgery or other procedures.

These informal support networks also helped with end-of-life needs. Participants used social networks to expand care circles as a form of alternative planning when biological kin were not in the picture. Websites such as Facebook, SilverDaddies, PrimeTimers, and Xtra, and online personal ads such as Craigslist, and Backpage were used by some gay men to find potential caregivers. These men posted ads online seeking people who would be willing to participate in a "mutually beneficial relationship" in which they would provide some sort of remittance for taking care of them.

"[This guy] started writing to me on Silver Daddies, and he has become part of our life. He and I are intimate, not my partner... I started talking to him about long-term care, because I thought, well, maybe when we get to know each other, I could put him down for advanced care planning"

(Rich, gay focus group).

These individuals were frequently integrated or included in the gay men's primary relationships, often in an intimate way, but not in all cases. What emerged was a model of support that blurred the line between an intimate relationship and an exchange-based relationship.

Contextual Elements

Contextual issues related to physical and situational barriers that make accessing technology difficult for older LGBT individuals. All participants noted benefits associated with ICT use, however, some participants experienced significant challenges in accessing and using this technology. Cost and general access/usability were two significant barriers. Cost was most relevant; many participants cited technology costs (e.g., buying computers, data plans, Internet usage) as prohibitive factors limiting their use of technology. "Technology is great if people have the resources" (Ruby, trans female focus group). Having a fixed income and additional costs related to health care (e.g., medications or "transitioning" costs) were the main reasons for this cost sensitivity.

Access and usability also impacted LGBT older adults' technology use. Many experienced difficulties in actually accessing technology. Many did not own a personal computer; others noted that the facilities they lived in were not set up for Internet access.

Because they did not have access at home they had to go to a public location such as a library or a family member or friend's house. This was further restrictive as many could not or did not drive and relied on public transportation.

Discussion

We found LGBT older adults shared many fears, benefits, social factors, and contextual factors related to the role of technology in later-life planning, social integration, and well-being

seen in research on cisgender and heterosexual older adults. Our findings also show the unique challenges in older LGBT older adults' experiences with technology and later-life planning related to sexual orientation and gender identity. Although it is important to consider our findings in relation to the aging population in general, it is vitally important that the unique issues experienced among LGBT adults are accounted for in future work.

Our findings correspond to barriers and benefits found in other research on technology use among older adults, such as privacy concerns and insulting posts that occur in online discussion forums (e.g., Charness & Boot, 2009; Nimrod, 2014). Online harassment was a particular concern for some focus group participants, especially as it related to diverse sexual orientations or gender identities, found in other research on technology use among older adults (Charness & Boot, 2009). Some of the fears or concerns expressed by participants about later-life or end-of-life planning echoed those found in other research. Namely, having confidentes and informal conversations are commonly linked to higher likelihood of making end-of-life plans (Carr & Khodyakov, 2007; Kahana et al., 2004) and the role of ICT in reducing isolation may facilitate these conversations.

Findings from this study about the potential benefits of technology and its role in later-life planning and well-being are consistent with previous research (Wahl et al., 2012), ICT is considered a valuable tool for maintaining or enhancing social integration for older adults (Erikson & Johnson 2011; Nimrod 2014). Focus group participants also acknowledged the benefit of online resources for later-life planning and wills.

Interestingly, concerns about stigmatization and isolation, considered unique factors for LGBT older adults (e.g., Clements-Nolle et al., 2001), in many ways amplified the barriers and benefits of technology use. For example, although potentially hostile Internet content is a

concern for all older adults, it was particularly so for some of our participants. Similarly, the fears or worries many older adults have about the transition to long-term care may be amplified for older LGBT adults. Reflecting this sense of vulnerability regarding long-term care or other institutions, one participant noted a discontinuity that exists between policy and practice in that LGBT-friendly policies were not always carried out. Thus, despite institutional policies that support LGBT individuals, these policies sometimes do not translate into practice.

Just as typical fears and concerns regarding technology and later-life planning may be amplified among LGBT adults, so are the potential benefits of information technology use. Information technology in general, and the Internet in particular, are acknowledged as uniquely supportive media for LGBT older adults. Information available on the Internet and from online LGBT communities are key resources for understanding identities and creating a sense of community, becoming a form of "safe space" where individuals can be free of ridicule and discrimination. The role of LGBT-focused online communities to find "LGBT-friendly" services and personals websites (e.g., SilverDaddies) for relationships and care support in later life is also relevant.

The insights we gained from lesbian, gay, bisexual, and trans adults reveal not only the similarities and differences between LGBT and other adults with respect to technology use, social integration, and later-life planning but also substantial heterogeneity among LGBT older adults. It is worth noting that, although most participants acknowledged the potential benefits of ICT, some acknowledged variability in access. For some, medical costs, including costs related to transitioning, may make Internet access and computer equipment a lower priority. Trans participants' also noted unique challenges related to rigid definitions of gender in health service systems and misunderstandings of gender identity.

Limitations

Great efforts were made to recruit a diverse sample of participants, but older non-white, bisexual, and rural LGBT individuals were underrepresented. Although rates of technology use among older adults are increasing, our selection criteria excluded those with no or limited access to technology and cannot speak to their experiences. All participants were comfortable with identifying as a member of the LGBT community, and we do not have insight into the experiences of those who are not "out." Our findings are not meant to be transferable to all older LGBT populations in Canada; rather, these data offer important methodological considerations to address in future research in the area of end-of-life decision-making.

Practice Implications

Findings have implications for multiple levels of practice and policy that support later-life planning for older adults in general and LGBT adults in particular. For example, fear related to identity protection online, malicious use of technology, and the complexity of technology has implications for the design of user interfaces. Website designers and administrators might take into consideration ease of use, clear information regarding identity protection, and monitoring of harassment. Given that participants found the Internet to be a valuable resource for later-life planning, financial advisors, legal consultants, and health care professionals who support older LGBT adults may want to be explicit in their online resources about the ways they support the LGBT community.

Future Directions

The present study links several key societal shifts, namely, the aging of the population, increasing pervasiveness of ICT in all aspects of life, and growing recognition of diverse family forms, sexual orientations, and genders. Technology use among older LGBT populations holds

great promise in leveling the information playing field for end-of-life decision-making. This is particularly salient for many older LGBT individuals who do not have immediate, biological family connections to draw on in making end-of-life decisions. Additional research comparing technology users and non-users and studying technology use over time would help us better understand the effects of access to LGBT relevant end-of-life information and resources.

Notes

¹Trolling refers to the act of posting inflammatory or deliberately offensive material online with the intent of inciting fear or eliciting anger.

²Xtra and Prime Timers are websites dedicated to LGBT issues.

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Table 1. Focus Group Participant Characteristics

	Halifax	Montreal	Toronto	Edmonton	Vancouver	Total
Lesbian & Bisexual Cis Wo	men					
Lesbian	5 ^a	5	4	2	12	28
Bisexual	1					1
Gay & Bisexual Cis Men						
Gay	8	6	5	5	15	39
Bisexual			1			1
Trans						
Gay			1 TM		3 TM	4
Lesbian	2 TF		3 TF		3 TF	8
Bisexual			2 TF			2
Heterosexual	1 TF	2 TF	1 TM		3 TF	8
			1 TF			
Other			1 ^b	1 TM		2
Total	17	13	19	8	36	93

^{**}Note** TF = trans female; TM = trans male

^a One participant was a trans female

^b One participant did not identify a gender or sexual orientation

Table 2. *Categories and Themes*

Category	Themes
Fear	Fear of Technology
Individual Benefits	Development of Identity End-of-Life Planning Resources Access to Medical Information
Social Elements	Development and Maintenance of Social Support Networks
Contextual Elements	Access to Technology