

Exploring Community Inclusion in Older Adulthood through the use
of Computers and Tablets

Kelly Leonard

A Thesis
in
The Department
of
The Individualized Program

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts (Individualized Program) at
Concordia University
Montreal, Quebec, Canada

August 2017

© Kelly Leonard, 2017

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By: Kelly Leonard

Entitled: Exploring Community Inclusion in Older Adulthood through the use
of Computers and Tablets

and submitted in partial fulfillment of the requirements for the degree of

Master of Arts (Individualized Program)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final Examining Committee:

Dr. Andrew Ryder, Associate Professor Chair

Chair's name

Dr. Felice Yuen, Associate Professor Examiner

Examiner's name

Dr. Kim Sawchuk, Professor Examiner

Examiner's name

Dr. Shannon Hebblethwaite, Associate Professor Supervisor

Supervisor's name

Approved by _____.

Chair of Department or Graduate Program Director

_____ 2017

Dean of Faculty

ABSTRACT

Exploring Community Inclusion in Older Adulthood through the use of Computers and Tablets

Kelly Leonard

The population is aging, and it is predicted by 2050, there will be more individuals over the age of 60 than any other age group. With this in mind, some older adults also experience physical, financial or social constraints, more so than other age groups. In addition, older adults were found to be least likely to engage with computers and tablets, and they are the smallest group using digital social networks. Therefore, in this research project, the issue of social isolation and computer and tablet use was explored amongst older adults experiencing social isolation. Interviews were conducted with six socially isolated older adults, as well as six Therapeutic Recreation practitioners and four volunteer coordinators in order to explore meaningful opportunities for older adults to engage with the community using computers and tablets. The findings suggest that although there are programs and resources currently available to help engage older adults in the community such as online communities and virtual lectures, the biggest barrier that older adults experience is the lack of knowledge with using the device. Participants in this study mentioned that they enjoyed working with younger adults and it is suggested that pairing younger adults to teach older adults how to use computer or tablets devices could compensate for their lack of digital literacy skills. Furthermore, it is recommended that TR practitioners and volunteer coordinators encourage the use of devices in practice and facilitate more digital literacy programs. Programs that can be implemented include online discussion groups, support groups, and educational groups.

ACKNOWLEDGEMENTS

First, I would like to express my sincere gratitude to my supervisor and mentor Dr. Shannon Hebblethwaite for the continuous support throughout my Masters, and for her patience, motivation, and immense knowledge. Her guidance has not only helped me in writing my thesis, but also with disseminating my research to professional conferences and to highly recognized academic journals. I could not have imagined having a better advisor and mentor for my Master degree.

Besides my advisor, I would like to thank the rest of my thesis committee: Dr. Kim Sawchuk and Dr. Felice Yuen, for their insightful comments and encouragement. Their hard questions, as well as their academic experiences have encouraged me to widen my research from various perspectives.

My sincere appreciation also goes to my fellow peers and friends at the Ageing + Communication + Technologies (ACT) research project, who have provided me with the opportunity to join their team as a research assistant. Without their support, it would not have been possible to conduct this research study.

I would also like to thank my partner Thomas Borel for all his support, and helping me to excel in my research endeavors. Without his motivation, stimulating discussions, and constructive feedback, I would not have been able to complete the process of composing this thesis.

Thank you to all the individuals, research groups and organizations who have either connected me with participants or provided me with funding opportunities throughout my Masters study. Specifically, I would like to thank Erica Botner at the Cummings Centre, Centre de Recherche et d'Expertise en Gerontologie Sociale, Ageing + Communication + Technologies, Darlene Dubiel in the department of the Individualized Program at Concordia University, Social Sciences and Humanities Research Council of Canada, and the Therapeutic Recreation Ontario conference committee 2016.

Last but not least, I would like to thank my family and friends for supporting me spiritually throughout my graduate degree. I would especially like to thank my parents for always encouraging me to follow my passions, and because of their support, I have been able to do just that throughout my Masters studies.

Table of Contents

CHAPTER 1: INTRODUCTION	1
1.1 Rationale	3
CHAPTER 2: LITERATURE REVIEW	6
2.1 Community Engagement	6
2.1.1 Sense of Belonging and Inclusion.....	7
2.1.2 Social Capital.....	9
2.1.3 Disengagement Theory	11
2.1.4 Agency	13
2.2 Older Adults’ Engagement with Computers and Tablets	14
2.3 Computers and Tablets as a Leisure Activity	18
2.3.1 Leisure in Older Adulthood	20
2.4 Therapeutic Recreation Practice	23
2.4.1 Computers and Tablets in Therapeutic Recreation Practice	24
2.4.2 Providing Digital Literacy Skills Through Leisure Education	25
2.5 Online Volunteering	27
2.5.2 Volunteering and Leisure.....	33
2.6 Summary	34
CHAPTER 3: METHODS	36
3.1 Purpose	36
3.2 Guiding Conceptual Framework	37
3.3 Sampling	39
3.3.1 Participants.....	40
3.4 Ethical Considerations	40
3.5 Data Collection	40
3.6 Data Analysis	42
3.7 Trustworthiness	44
CHAPTER 4: FINDINGS	47
4.1 Participants	47
4.1.1 Older Adults.....	47
4.1.2 Therapeutic Recreation Practitioners	48
4.1.3 Volunteer Coordinators.....	49
4.2 Overview of the Findings	49
4.3 How to Engage with the Community using Computers and Tablets	50
4.4 Computer and Tablet Challenges for Older Adults	55
4.5 Computers and Tablets in Therapeutic Recreation and Volunteer Practices 61	
4.5.1 Organizational Challenges.....	63
4.6 The Potential of an Online Volunteering Program	68
4.7 Summary of the Findings	69
CHAPTER 5: DISCUSSION	71
5.1 Computer and Tablet Program Ideas for Older Adults	71
5.1.1 An Asynchronous Community Engagement	74
5.1.2 Disengagement as a Form of Agency	76
5.3 Computer and Tablet Programming in Therapeutic Recreation Practice	77

5.3.1 Providing Leisure Education to Older Adults.....	79
CHAPTER 6: CONCLUSIONS	81
6.1 Study Limitations.....	82
6.2 Recommendations for Future Research	83
6.3 Recommendations for Practice.....	84
6.3 Final Remarks	85
REFERENCES.....	86
APPENDICES	102
Appendix A - Interview Guide for Older Adults	102
Appendix B - Consent form for Older Adults	104
Appendix C - Interview Guide for Therapeutic Recreation Practitioners	107
Appendix D - Consent form for Therapeutic Recreation Practitioners	108
Appendix E - Interview Guide for Volunteer Coordinators	111
Appendix F - Consent form for Volunteer Coordinators.....	112

CHAPTER 1: INTRODUCTION

Older adults make up the most rapidly growing segment in the North American population (MacNeil & Gould, 2012). The first members of the baby boomer generation reached the age of 65 in 2011 (McPherson & Wister, 2008). In 2015, 18.5% of the Canadian population was 65 and older (Statistics Canada, 2015), and by 2050, more than a quarter of the North American population will be over the age of 60 (McPherson & Wister, 2008). As of July 2015, and for the first time in the history of Canada, the number of individuals aged 65 years and older exceeded the number of children aged 0 to 14 (Statistics Canada, 2015). Consequently, leisure service providers and leisure theorists need to better understand the unique perceptions of an older adult population (Liechty & Genoe, 2013).

Older Canadians, however, are faced with a proliferation of digital technologies, including mobile-connected devices. These devices have already exceeded the number of people living on the earth, and it has been estimated to reach 10 billion by 2018 (Cisco Systems Inc., 2014). Although we know that 86% of Canadians aged 18–29 use information and communication technologies (ICTs) (Madden, 2010), no similar statistics regarding ICT devices are available with respect to older adults (Blanche, 2015). As a consequence, concepts of the digital divide and digital ageism—the act of being aged by culture—(Crow & Sawchuk, 2014) permeate the discourse about technology and aging. As technology continues to become even more prominent throughout society, and the experience of older adults with respect to ICTs is not being accounted for, it is imperative to carry out research that will help understand why older adults are not engaging with ICTs, and how to better meet their needs.

Additionally, social isolation accelerates cognitive decline in older adulthood, and individuals who experience social isolation are two to four times more likely to experience an increased risk of mortality compared to those with extended ties to friends, family, and their community (Berkman, Glass, Brissette, & Seeman, 2000; Bowling & Grundy, 1998; Eng, Rimm, Fitzmaurice & Kawachi, 2002). Loneliness has been linked with depression (Bekhet & Zauszniewski, 2012; Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006; Hagan, Manktelow, Taylor, & Mallett, 2014; Heikkinen & Kauppinen, 2004) and impaired mental health among older adults (Wilson et al., 2007). According to the Government of Canada (2014), over 30% of Canadian seniors are at risk of experiencing social isolation. As cited in “Report on the Social Isolation of Seniors”, conducted by the Government of Canada, 19% of individuals aged 65 and over felt a lack of companionship, left out, or isolated from others (2014). Moreover, almost one in four adults over the age of 65 (24%) reported that they wanted to participate in more social activities (Government of Canada, 2014). Thus, it also is important to research how to decrease loneliness and social isolation of an older population to maintain their mental health and wellbeing. In this thesis, an older population, an older adult, or an older person refers to individuals or groups over the age of 60.

In light of these trends, this study had two objectives. The first was to understand how technology-based programs could be used in therapeutic recreation (TR) practice by exploring the opportunities and challenges that computer and tablet devices provide to older adults. The second objective was to explore online volunteering as an intervention tool to facilitate community engagement for older adults, and to help them overcome loneliness and social isolation. Specifically, this study explored how online volunteering

could facilitate a sense of community for older adults by interviewing volunteer coordinators in both urban and rural communities.

1.1 Rationale

Scholars, such as Kingwell (2000), have stated that the only way citizens can be involved in their community is when they venture outside of the house and into the public. Some also have suggested that the key factors influencing social capital and community engagement is health and independence (Hebblethwaite & Pedlar, 2005). However, some older adults are confronted with additional challenges such as financial, physical, and social constraints that affect their ability to engage with their community.

For example, people living on a low income are less likely to engage in community activities because of the associated costs. Edwards and Anderson (2015) found that older adults frequently carry debt into retirement, which causes financial distress. Approximately 17% of retirees in older adulthood are still paying their mortgages, and a quarter of them continue to owe credit card or medical care debt (Edwards & Anderson, 2015). Thus, older adults are likely to have financial constraints that cause a restriction on how they can participate in their community.

In older adulthood, physical limitations are another factor that influences community participation. Data derived from a European survey, the Survey of Health Ageing and Retirement; found that functional impairment increases significantly with age (Hajek & König, 2016). Good health increases opportunities for older adults to engage in community life, whereas poor health can restrict or limit opportunities (Whyte & Sharpe, 2016). Furthermore, Paggi, Jopp, and Hertzog (2016) found that older adults with physical impairments are less likely to be involved in community activities because of

their health status. Thus, health status rather than age is a key factor influencing older adults participation with their community (Paggi et al., 2016).

Finally, some older adults are confronted with social constraints. Social constraints can be a result of not having enough activities available in the community that is appropriate or of interest to older adults. Older adults are not a homogenous population that can be easily categorized (Canadian Library Association, 2002). The information needs and interests of older people range widely, even though gerontology service providers believe they have certain common factors (Canadian Library Association, 2002). In addition, some older adults are full-time caregivers for their spouse and are not able to leave the house to engage in their community. Older adult caregivers are tens times more likely to experience social isolation and a decrease in quality of life than of their peers and community members (Hayes, Hawthorne, Farhall, O’Hanlon, & Harvey, 2015). Thus, it is imperative to accommodate these social limitations by exploring new opportunities for community engagement.

Those who experience financial, physical, and social challenges should therefore, not be denied access to developing a sense of community; instead, they should be provided opportunities to better meet their needs. For instance, if older adults would like to volunteer at their local community center, but they are unable to physically complete the required duties of a volunteer—such as lifting, preparing food, etc.—they should be provided with alternative tasks that they are capable of completing. In this context, technology can help to maintain cognitive health and well-being by facilitating community engagement (Morrow-Howell, Hinterlong, & Sherraden, 2001).

Although the literature regarding the challenges and benefits of ICTs has offered some insights into the experiences of older adults, their use of technology—specifically computers and tablets—should be further explored. Within the context of leisure, it is important to understand what is needed to facilitate successful TR programs using ICT devices. Furthermore, in the present study, a specific activity, namely online volunteering, is explored in depth to understand its potential for addressing social isolation among older adults. The literature review begins by examining the concepts of community engagement to better understand older adults experiences with their community. This is followed by a brief overview of the use of computer and tablets in TR practice and the leisure experiences ICTs provide older adults. The review concludes with an examination of online volunteering and volunteering as a leisure activity for an older adult population.

CHAPTER 2: LITERATURE REVIEW

2.1 Community Engagement

Community can be understood as “the life world, where we communicate with others, deliberate, come to agreements about standards and norms, and pursue in common efforts to create a valuable form of life” (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1998, p. 17). Pedlar and Haworth (2006) define community as a function through which an activity or project is shared that brings members together. They also suggest that five types of communities (physical, emotional, psychological, social, and economic) exist, and each type falls into one of two domains (Pedlar & Haworth, 2006). The first is called *Gemeinschaft*, which refers to communities that are closed, exclusive, determined by one’s fixed status, and are non-conducive to both individual growth and flourishing individual rights (Pedlar & Haworth, 2006). A *Gemeinschaft* community is generated by intensive daily contact with people, which encourage a thick internal trust amongst its members only and distrust of the wider society (Arai & Pedlar, 2003). The second type of community is called a *Gesellschaft* community, which supports individual independence and lacks the need for social interactions and social ties that are prominent features of daily life (Pedlar & Haworth, 2006). A *Gesellschaft* community marks the replacement of status and is motivated by the importance of interacting with others, and these interactions determine people’s life prospects (Pedlar & Haworth, 2006). Thus, a *Gesellschaft* type of community would better suit the needs of older adults experiencing social isolation because it involves being included socially and accepted into an open and inclusive environment.

2.1.1 Sense of Belonging and Inclusion

Belonging to a community can enhance feelings of happiness, develop more social support systems, provide a greater sense of meaning in life, and foster self-determination (Whyte & Sharpe, 2016). In the field of community recreation and leisure studies, inclusion and belonging are at the heart of the practice (Whyte & Sharpe, 2016). A strong connection to community contributes to good health and protects individuals against distress (Gold, 2007), and a healthy community depends on openness and belonging (Pedlar, 2006). When individuals have weak connections to their community, they do not have a strong feeling that they belong and are at greater risk in engaging with deviant like behaviours, such as smoking and over eating (Cacioppo & Patrick, 2008). Furthermore, individuals who do not have a sense of belonging are also at greater risk of social exclusion, and older adults who have weak connections to their community are prone to decreased cognitive functioning (Baumeister, Twenge, & Nuss, 2002).

Belonging, therefore, is the goal of community building, and three fundamental factors must exist before people can experience a sense of belonging within a community: presence, participation, and relationships. Presence means they have to be in the community space; participation means they have to be involved in community activities and not be just a bystander; and finally relationships means they must have connections and bonds with other community members (Whyte & Sharpe, 2016). However, a difference exists between a sense of belonging and actual belonging. For instance, superficial connections fail to protect individuals against daily pressures, which leads to negative outcomes (Walton, Cohen, Cwir, & Spencer, 2012).

Inclusion is characterized by both the feeling and reality of belonging (Whyte & Sharpe, 2016). In an inclusive society, citizens feel valued, individual differences are respected, and individuals are able to have their needs met through social interactions. For older adults to feel part of an inclusive community, four dimensions must be addressed. The first is feelings of belonging that are encouraged by being included and accepted (Mahar, Cobigo, & Stuart, 2013). People, including older adults, need to feel that they are important to others, and that others respect and accept them for who they are. The second dimension is feelings of being part of something larger than the individual (Block, 2009). Older adults need to belong to a system or community that is larger than themselves, while simultaneously feeling a sense of connectedness and perceived cohesion. For example, volunteering with a well-organized group of like-minded associates can lead to psychological benefits, such as increased self-esteem (Nimrod, 2009). The third dimension of belonging is called dynamic, meaning that it can only develop after the individual joins a community, which is influenced by the existing community members who create a welcoming environment (May, 2011). Forsman, Herberts, Nyqvist, Wahlbeck, and Schierenbeck (2013) have highlighted that being part of a social group with common aims and purposes creates a sense of belonging. Finally, the fourth dimension is freedom of choice (Whyte & Sharpe, 2016). Older adults need to feel they are in control of their decisions about joining a community rather than feel as though the decision was forced upon them (Mahar et al., 2013). Thus, the components involved in having a sense of belonging—inclusion and acceptance, being part of something, a dynamic interaction with the community and its members, and freedom of choice—all need to be present to engage older adults. Older adults would therefore

benefit from participating in community activities that both enhance their sense of belonging and increase their social capital.

2.1.2 Social Capital

According to Glover, Shiner, and Parry (2005), “social capital is the consequence of investment in and cultivation of social relationships, allowing individuals access to resources that would otherwise be unavailable to him or her” (p. 87). Social capital seldom can be acquired without the investment of material resources or the possession of cultural knowledge, and it can establish valued relationships with others (Portes & Landolt, 2016). Defining social capital has been problematic because a tendency exists to confuse the ability to secure resources through networks with the actual resources themselves. This perspective supports the notion that social capital leads to positive outcomes, and without it, negative outcomes occur (Portes & Landolt, 2000).

Additionally, defining social capital can be difficult because the emphasis on the positive consequences of social ties asserts that the exclusion of these relationships will inevitably cause less desirable outcomes. For example, social capital can lead to negative outcomes when it develops into a social clique group that leads to the “exclusion of outsiders, excess claims on group members, restrictions on individual freedoms, or downward leveling norms” (Portes & Landolt, 2016, p. 532). Thus, one must be cautious in assessing the role of social capital as an independent causal factor in community development or in generalizing from successful examples (Portes & Landolt, 2016). Despite these issues with defining social capital, it is still associated with a person’s relationships with others, and the effects of these relationships are linked to an array of material and informational benefits (Glover, 2006). Thus, the more an individual bonds

with others who share a similar social identity and diversifies his or her social identity, the more social capital that individual will have at his/her disposal (Glover, 2006).

Older adults, therefore, not only need to gain a sense of belonging to create an inclusive community, but also require deep social bonds to develop personal connections (Whyte & Sharpe, 2016). Yuen and Glover (2005) have examined social capital in relation to the resources that are embedded within social networks. “Given that social capital is obtained by virtue of membership in different social structures (Portes, 1998), its maintenance and reproduction are made possible only through the social interactions of members and the continued investment in social relationships” (Yuen & Glover, 2005, p. 23). The ties that are associated with social capital often are referred to as weak or strong ties and function in ways that bridge to other individuals and communities or bond people within a community (Pedlar & Haworth, 2006). Furthermore, a healthy and open community can provide opportunities for building older adults’ social capital to enhance connections with resources outside of their community (Pedlar & Haworth, 2006).

In addition, opportunities for socialization and the development of social capital need to be embedded within any community development project (Yuen, 2013). Various factors have been identified as important aspects of social capital in old age, such as support systems, social networks, and social participation, which are key mental health resources for older adults (Cramm, Van Dijk, & Nieboer, 2013). Furthermore, the importance of social capital increases with age because of physical, financial, and social constraints; and a greater need for practical help and support in everyday life (Cramm, Van Dijk, & Nieboer, 2013).

Social capital also contributes to the well being of older adults (Cramm, Van Dijk,

& Nieboer, 2012; Forsman et al., 2013). Social ties and social integration often play a beneficial role in the maintenance of psychological well-being and mental health (Glover, 2006). Being involved with different types of clubs, social groups, and volunteer programs provides older adults with opportunities to use the skills and knowledge they gained during their working years, which contributes to their sense of community (Liechty & Genoe, 2013). Specifically, volunteer activities for an older adult population can facilitate their sense of community, encourage the establishment of new social ties, and provide a sense of purpose.

2.1.3 Disengagement Theory

To understand how older adults can engage with their community, it is important to understand the process of disengagement. Carstensen (1995) stated that disengagement is a social inactivity and suggested that turning away from the social world is a natural part of the aging process. Disengagement theory believes that natural detachment from society is not only inevitable but also desirable (Whitbourne & Whitbourne, 2010). Disengagement theory implied that social workers and other administrators should not attempt to keep their elderly clients active because they were in the process of disengaging before death (Achenbaum & Bengtson, 1994). According to Whitbourne and Whitbourne (2010)

Rather than describing a desirable end product of a mutual withdrawal process, critics of disengagement theory regarded it as disrespectful of older adults and as a justification for what is already harsh treatment by society of its older adult members. (p. 28)

Thus, the thought of older adults wanting to be ignored and that they could benefit from social isolation reinforced negative treatment for older adults (Whitbourne & Whitbourne, 2010).

Cumming, Dean, Newell, and McCaffrey (1960) developed a theory of aging in regards to this disengaging process by explaining that when an individual disengages from his/her social network, this shift usually is accompanied by certain inner changes. Due to these intrinsic reasons, the process of disengagement is a self-centered and idiosyncratic style of behaviour (Cumming et al., 1960). Hochschild (1975) however critiqued Cumming and Henry's (1961) work on disengagement theory by arguing that disengagement is a variable process. He suggests that:

Engagement is conceived as having two aspects, [first] a social aspect which refers to the existence of social bonds in the spheres of work, family and leisure life, [and second,] a normative aspect which refers to the meanings the individual imputes to these social bonds. (Hochschild, 1975, p. 267)

Social and normative engagements are independently related to each other or age (Hochschild, 1975), which means that a direct correlation to disengagement does not exist. In other words, if some older adults choose to disengage from society because they merely want to, then it is possible that disengagement is not necessarily a negative action. Rather, older adults may exhibit the disengagement process for reasons that are specific to each individual. In fact, disengagement theory fails to take into account individual agency in decisions about how and when older adults can engage with their community.

2.1.4 Agency

Malhotra (2003) has described agency as the ability of an individual to act on behalf of what she/he values and has reasons to value. Sen (1985) has defined agency as a person's free ability to do what they want and achieve whatever goals and values he/she regards as important. Older adults who are experiencing physical, financial, and social constraints may not have the freedom to engage with their community by choosing the activities in which they would like to engage. Freedom of choice has been found to be essential to leading a good life, and has been demonstrated to be more important than economic wealth (Sen, 1987). According to Knight (1982), "The fact that freedom to perform an act is meaningless unless the subject is in possession of the requisite means of action, and that the practical question is one of power rather than of formal freedom" (p. 7). One reason freedom may be important is that choosing is an important function (Sen, 1987). Thus, having the freedom to choose rather than being told what to do is important to older adults when expressing their agency.

In addition to freedom, agency has many benefits. Ibriahim and Alkire (2007) have proposed four expressions of agency. These four indicators include having the power to choose, taking control of decisions, inflicting chance, and most importantly, changing aspects in communal life. All communities comprise of shared values, joint efforts, and the involvement of all members in an activity or way of life, with an understanding that the activity or way of life may or may not be admirable (Pedlar & Haworth, 2006). Furthermore, concern for people's agency plays an essential role in the process of development (Ibriahim & Alkire, 2007). Greater freedom enhances the ability to help them and influence the world, which are essential to the process of development

(Sen, 1999). Therefore, older adults who can express their agency are likely to enhance their sense of empowerment, development, and well-being.

2.2 Older Adults' Engagement with Computers and Tablets

Before discussing the benefits of ICTs for older adults, it is important to recognize some of the challenges older adults experience with technology. Older adults are the largest demographic not to engage with ICT devices (Blanche, 2015), and they remain significantly marginalized from Internet usage compared to other age groups (Buse, 2010). Due to this digital divide, older adults experience different forms of discrimination in several ways, which can be reasonable cause for a lack of ICT use. First, terms and phrases have been found within the literature that only target older adults. For example, when computers emerged in the marketplace, technical illiteracy was a term that referred to older individuals' insecurities (Ostlund, 2005), and strikingly, this term is never used to describe younger individuals' views or insecurities about technology. Second, civil society is being reconstructed, in part, at the local and global levels through networks of activists who often are organized through the Internet (Castells, 2004) rather than in a physical setting or through face-to-face interactions. Those who do not have access to the Internet are excluded from these debates and activist networks. Additionally, information regarding some governmental services can only be found online (Sawchuk, 2013). This lack of access creates discrimination, not only amongst older adults, but also amongst social classes, for those who are unable to afford the cost of the technology or its service providers (Weaver, Zorn, & Richardson, 2010).

According to Gullette (2011), "Ageism and middle-ageism have become a profound problem for our nation" (p. 15). Ageism is defined as being aged by culture

through stereotypes and discrimination (Nelson, 2002). In Western culture, the body is the most essential representation of old age, which is predominantly negative (Buse, 2010). All positive features of the body—created and encouraged by the profit motives of a consumer culture—relate to youthfulness, vitality, physical strength, and attractiveness (Wohlmann, 2012). Gullette (2011) has argued that society describes “the old” as discarded waste, whereas the young are praised and worshipped for being new and fresh. According to Buse (2010), “Online interactions offer possibilities for creating new images of the ageing body, and for escaping the negative judgments based on its outward appearance” (p. 989). In other words, through the Internet and online connections, older adults can create new identities that often reflect these idealized representations of particular bodies and reproduce the power relations that define desirable identities (Buse, 2010). Importantly, virtual worlds, such as Second Life, do not provide an option for participants to choose a character that represents an older adult body, which reinforces the notion that old age is not desirable, and encourages ageism.

ICTs are also known to cause distractions and interruptions to communication practices that some have considered being rude or impolite. From this perspective, technologically mediated communication is assumed, and framed to be, a lesser form of communication that is eroding authentic modes of communication, like talking face-to-face (Sawchuk & Crow, 2012). Computers are beneficial as a way to keep up with and connect to grandchildren, but some researchers have found that ICTs can prevent grandchildren from physically visiting their grandparents because it is easier to just communicate with ICT devices (Weaver et al., 2010). Therefore, ICTs may create

challenges related to ageism and the digital divide, while also directly impacting individuals by changing communication mediums.

Nevertheless, despite these challenges, ICTs can provide many benefits for some older adults, such as a sense of empowerment, agency, improved quality of life, and an overall decrease in social isolation. The purpose of using ICTs in Therapeutic Recreation (TR) practice would be to help alleviate some of these challenges older adults experience with technology, so they can have access to more information, a sense of empowerment, and community engagement (Nimrod, 2009). Social media has been found to provide some older adults with empowerment, which refers to a global sense of connectedness and increased control and self-efficacy (Vosner, Bobek, Kokol, & Krecic, 2016). Barak, Boniel-Nissim, and Suler (2008) have found that older adults who participated in online activities gained a sense of empowerment. In turn, these empowered feelings provided several benefits such as the (1) psychological impact of writing, (2) expression of and connection to emotions, (3) gaining of information and knowledge, (4) effects of interpersonal relationships and social processes, and (5) influences on decision-making and resulting action (Barak et al., 2008). In addition, information and knowledge are key factors in gaining a sense of empowerment, especially since information is an essential source of wealth and power (Castells, 2004). Computers and the Internet can also be empowering tools for older adults who use them to become active citizens (Romero, Hyvonen, & Barbera, 2012) by participating in public debates and community issues online. Furthermore, access to reliable online health information has been associated with reduced anxiety, increased feelings of self-efficacy, and a decreased utilization of ambulatory care (Nimrod, 2009).

The use of ICTs by an older adult population has been found to help facilitate agency by enabling choices about when and for what they use their devices. Agency is the ability to act on personal values (Malhotra, 2003), and the ability for a person to do what they want in order to achieve whatever goals or values he/she regards as important (Sen, 1985). One example of how older adults can represent agency online are countdown blogs. Countdown blogs are written by people who define a specific date, (for example, an approaching birthday), and write blog post until another particular date, during which the writer tracks significant life events that they found important and willing to share with the public (Wohlmann, 2012). According to Wohlmann (2012), “Countdown blogs reveal new complexities in Foucault’s otherwise compelling concept of entrepreneurial selves, which encourages reassessment of the relation between life writing, temporality, and aging” (p. 91). The purpose of a countdown blog is to encourage people to fight against their dependent powerless position, and to become their own entrepreneur (Wohlmann, 2012). Thus, countdown bloggers use their blogs to determine their own market value through self-evaluation and self-observation, and make decisions for themselves, instead of having society define their values for them (Wohlmann, 2012). Moreover, having an opportunity to create positive self-images is associated with an increased feeling of self-satisfaction and overall well-being

In addition to agency, ICTs can improve the quality of life of older adults by decreasing loneliness and social isolation (Boz & Karatas, 2015). ICTs provide more social support and leisure activities, enhancing self-efficacy and perception of self-control, and integrating them into society (Boz & Karatas, 2015). Romero and colleagues (2012) have found that ICTs “enhance the quality of life and creativity of older people,

and support family members and caregivers” (p. 424). The World Health Organization (WHO) defines quality of life as “the individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (WHOQoL, 1998). As a communication medium, the Internet can therefore provide more opportunities for social interaction for older adults, which in turn, can protect them from social isolation (Nimrod, 2009).

2.3 Computers and Tablets as a Leisure Activity

Older adults, specifically in the transition to retirement, may seek new leisure pursuits, which have been found to increase life satisfaction (Liechty & Genoe, 2013). An innovative avenue to engage older adults is to introduce technology, computers and tablets, as a leisure activity. Some researchers have found that ICTs and the Internet are sources of information for older adults, which have been associated with higher levels of social connectivity, higher levels of perceived social support, decreased feelings of loneliness, lower levels of depression, and generally more positive attitudes toward aging (Boz & Karatas, 2015; Llorente-Barroso, Viñarás-Abad, & Sánchez-Valle, 2015; Nimrod, 2009). The use of the Internet to search for information and to communicate with others also has been found to contribute to an increase in older adults’ social capital and well-being (Boz & Karatas, 2015). Through the Internet, older adults can access social media networks for enjoyment, engaging in social contacts, receiving social support (Leist, 2013), and making social connections with friends and family (Delamere, 2012). According to Liechty and Genoe (2013), using the Internet as a leisure resource helps older adults cope with retirement and the distance from their former social networks. Furthermore, some researchers also have found that digital gaming contributes

to older adults social capital and provides three distinct benefits that promote healthy aging and independence for people living with dementia (Cutler, Hicks, & Innes, 2016). These benefits include the promotion of lifelong learning; optimization of mental, physical, and social health through stimulation; and increasing independence (Cutler et al., 2016). The Internet therefore, can function as a means of communication, an opportunity to meet new people, and a convenient way to keep up-to-date with modern times (Sourbati, 2009).

Online social networks can help older adults who may have limited mobility by providing them with the means to maintain existing relationships with other people, and to establish new relationships (Vosner et al., 2016). Some researchers have identified online communities as places where people can get together and engage in social contacts that can be used later to provide and receive social support (Leist, 2013). Increasingly more individuals, particularly those who are unable physically to attend support groups or leisure activities, find it easier and more convenient to have their needs met through participation in online communities (Nimrod, 2009). Delamere (2012) has pointed out “computer-generated communications in virtual worlds do decrease barriers of time and space” (p. 241). Siriaraya, Ang, and Bobrowicz (2014) found that older adults who participated in virtual worlds were able to form deep interpersonal relationships, and many of their study participants emphasized how virtual worlds enabled them to meet new people and keep in touch with existing friends. Furthermore, virtual worlds have helped to empower older adults with disabilities by facilitating social engagement, providing mental stimulation, and strengthening relationships online (Delamere, 2012; Siriaraya et al., 2014). Thus, the Internet can help people to expand existing interests and

explore new ones by facilitating self-expansion and self-invention (Khvorostianov, Elias, & Nimrod, 2012).

Despite the positive outcomes ICTs can offer, older adults are a minority in social networking sites and consequently miss opportunities to stay connected with their family and friends (Vosner et al., 2016). Only 13% of older adults, who are presently online, are among the Facebook and LinkedIn masses (Madden, 2010). Some older adults' needs can be met through connections to social media, including compensation for the barriers that prevent them from participating in the community (Nimrod, 2009). Therefore, TR practitioners may be able engage older adults in online communities and support groups to help them better meet their needs.

2.3.1 Leisure in Older Adulthood

Leisure has been characterized by the “quality of activity defined by relative freedom and intrinsic satisfaction” (Kelly, 1996, p. 22). For those in later life, leisure has been defined as the “combination of free time and the expectation of preferred experience” (Kleiber, 1999, p. 3), and some have viewed leisure as a means to a larger goal, such as beginning a new life phase or maintaining physical and mental health (Hutchinson & Wexler, 2007). In fact, many retirees view aging positively and consider their later years as a time to increase their participation in leisure, try new activities, and contribute to the community (Liechty & Genoe, 2013).

From an older adults' perspective, leisure usually has three distinct outcomes: well-being, meaning making, and challenge (Nimrod, 2009). Promoting well-being through leisure seems to be a central factor explaining successful transitioning to older adulthood and positive coping with negative life events (Nimrod, 2009). For instance,

retired individuals who are satisfied with their life tend to have a greater level of involvement in freely chosen activities, and in activities that challenge their knowledge and skills, which require effort and investment (Leitner, & Leitner, 2004). Furthermore, the older women in Hutchinson and Wexler's (2007) study viewed leisure as an arena for empowerment, self-care, and self-expression. Thus, leisure provides opportunities for older adults to increase their life satisfaction and overall well-being.

The second characteristic of older adults' leisure is that it becomes a main source of meaning in life. During adulthood, people have three main sources for meaning in life that include their careers, families, and leisure activities (Nimrod, 2009). However, for an older adult, a career may no longer be a central source for meaning making. Engaging in meaningful leisure can serve as a replacement for work and a reconstruction of one's identity (Liechty & Genoe, 2013). For example, those who identified themselves as a lawyer during their working years may need to find something to replace that identity, such as becoming a hiker, skier, artist, etc. Thus, leisure can assist those who may have an identity crisis with the transition into retirement, while enabling them to participate in activities they always had wanted to do but never had the time while working full-time (Liechty & Genoe, 2013). Leisure can therefore play an essential role in creating a sense of purpose for the retirement years.

The final characteristic of leisure in older adulthood is the challenges experienced when participating in leisure activities. Leisure activities must be somewhat of a challenge in order to achieve optimal arousal (Csikszentmihalyi & Csikszentmihalyi, 1992). However, sometimes challenges can turn into constraints, preventing older adults from leisure participation. Specifically, older adults can experience four types of

constraints: cultural-environmental, health-related, psychological, and technical. First, cultural-environmental constraints can lead to social isolation due to the need to follow age-related norms or the lack of companions caused by aging and mortality of friends and relatives (Nimrod, 2009). Second, health-related constraints that prevent older adults from engaging in leisure activities include both physiological (e.g., disabilities, chronic illness, or less energy) and psycho-physiological (e.g., concentration or memory) constraints. Third, the psychological constraints identified by Nimrod (2009) consist of decreased motivation, low self-esteem, and fear of trying a new activity. Finally, technical constraints may most strongly impact individuals who may have a lower income, a lack of access to certain activities, or a lack of time (Nimrod, 2009).

Despite these constraints, leisure researchers have argued that leisure engagement should be associated with enjoyment and satisfaction because, unlike other types of activities, leisure is primarily characterized by intrinsic motivation and freedom (Kuykendall, Tay, & Ng, 2015). Consequently, leisure has the potential to satisfy a wide range of psychological needs. For instance, Kuykendall et al. (2015) have demonstrated that leisure engagement is correlated strongly with leisure satisfaction, and is correlated moderately with subjective well-being. Subjective well-being has been defined as an individual's overall state of subjective wellness and is commonly conceptualized as both affective and cognitive (Diener, 1984; Eid & Larsen, 2008). The affective component reflects the extent to which an individual experiences positive feelings and few negative feelings (Diener, 1984). The cognitive component refers to an individual's overall evaluation of life satisfaction (Diener, Inglehart, & Tay, 2013). It is therefore important for leisure service providers to find creative ways to compensate for various constraints,

and encourage leisure participation to increase older adults' subjective well-being by addressing both its affective and cognitive components.

In summary, leisure has the potential to increase older adults' happiness by providing a sense of purpose and facilitating opportunities for meaning making. In later life, leisure becomes essential to individuals' health and well-being, and also provides new opportunities for older adults to meet people and develop skills. It also can help those who are struggling with the transition into retirement by providing an activity with that an individual can identify with. Thus, the role of a TR practitioner is to find innovative ways to engage with older adults to facilitate their leisure engagement.

2.4 Therapeutic Recreation Practice

TR practice can be defined as “the purposeful utilization or enhancement of leisure as a way to maximize a person’s overall health, well-being, or quality of life” (Robertson & Long, 2008, p. 4). The purpose of TR practice is to identify strategies that will help individuals meet their goals by addressing challenges they may be facing. TR differs from other therapies because it involves physical, cognitive, social, and emotional experiences that are freely chosen and intrinsically motivated (Robertson & Long, 2008). Since individuals are able to choose and direct their leisure in a goal-oriented manner, their health and well-being are greatly enhanced, which is the ultimate goal of TR practice. TR practitioners encourage individuals to seek experiences that are both meaningful and autonomous, which Stumbo (2009) suggests leads to improved self-image and provides a means to an end—achieving a stated goal. It is believed TR professionals can provide ICT programs and digital literacy education to older adults that will directly impact individual outcomes. Boz and Karatas (2015) have found that older

adults, after participating in an ICT education program, experienced a significant decrease in their loneliness and social isolation. They also discovered that computer programs have the potential to improve well-being (Boz & Karatas, 2015). Therefore, the integration of computers and tablets into TR practice should be further explored as a program tool to provide access to additional resources for an older adult population.

2.4.1 Computers and Tablets in Therapeutic Recreation Practice

One way to include ICTs in TR practice is to provide educational and skill development opportunities. Social connections and community inclusion often play a beneficial role in the maintenance of psychological well-being and a better state of mental health, and so providing tools that enable older adults to be part of social networking website may produce similar benefits (Cornejo, Tori, Ten, & Favela, 2013). However, older adults often do not engage in using ICTs due to the fear of the potential harmful use of their information by other users, the harmful behaviour of other users, or the misuse of personal information with criminal intent (Leist, 2013). Another reason older adults do not participate in social networking websites is the initial difficulty of joining online social networks or online communities (Leist, 2013), perhaps due to the lack of education and training around such programs. Thus, TR practitioners can play a vital role as educators and assist those clients and individuals who are interested in learning about ICTs.

Learning how to use a computer or tablet and gaining digital literacy skills can enhance older adults' sense of independence and create a process of empowerment (Nimrod, 2009). In addition, education and training programs have been found to contribute to older adults health and quality of life (Stumbo, 2009). Learning new skills

and providing opportunities for growth also can create a sense of empowerment, which ICTs offer to older adults who are willing to learn (Weaver et al., 2010). However, some research has indicated that computer use does not have any significant impact on older adults' well-being, and this discrepancy, according to some researchers, is caused by failing to separate the effects of computer use and the effects of being involved in a training program (Nimrod, 2009). Nimrod (2013) demonstrated that some research studies believe that the use of the computer and Internet do not have an impact on older adults well-being. However, it is possible that the study participants had relatively high scores on the measures prior to the intervention, and as a result, the training intervention did not produce statistically significant results (Nimrod, 2013). Thus, if technology can be used in TR as a tool for learning and development, TR practitioners need to individualize their programs by taking into account various skill levels and providing opportunities for meaningful engagement with ICTs.

2.4.2 Providing Digital Literacy Skills Through Leisure Education

As mentioned previously, one main barrier for older adults initially joining online social networks or online communities is the lack of education and training around such programs (Leist, 2013). A recent study that focused on loneliness and social isolation in older adults found that interventions using the computer have the potential to improve their well-being (Boz & Karatas, 2015). If older adults require training and education for computer and tablet use, TR practitioners could provide this through leisure education. Involvement in learning basic computer skills and how to use a networked computer can be stimulating activities in themselves (Sourbati, 2009). Furthermore, Sourbati (2009) found that the older adults who had tried the Internet or wished to do so had family

relatives and friends who were online. By providing ICT programs and education sessions, TR practitioners can stimulate positive learning outcomes with their older adult clientele. Specifically, as Cutler et al. (2016) have shown, participants with dementia were able to learn complex movements and button combinations that relied on mental, physical, and fine motor skills. Their study participants were also able to develop this learning to acknowledge and correct mistakes, even before they were pointed out (Cutler et al., 2016). The findings of this study suggest that participants displayed a willingness and desire for continued learning, which shows that people with dementia are keen and able to partake in novel activities and learn new concepts, all of which are beneficial to their healthy aging (Cutler et al., 2016).

E-inclusion is a social movement, where the goal of its programs is to end the digital divide by targeting low-income areas to improve opportunities for education, healthcare, and employment and deliver access to world markets and consumer credit (Rouse, 2005). Some E-inclusion programs are implemented in order to prevent exclusion as well as an opportunity to use Internet resources (Mancinelli, 2008). Thus, E-inclusion programs and methodologies are needed to make the Internet more user-friendly for older adults by providing them with the proper tools and training to do so (Llorente-Barroso et al., 2015). In addition, normative age-related changes in ability must be taken into account when designing products and training programs for aging adults. The expectation is that age/cohort lags also will lessen if psychologists can provide better guidelines and tools for designers to aid them in creating technology products better attuned to the capabilities of older adults. Otherwise, many older adults may fail to

benefit from technological advances that could significantly improve their independence and well-being (Charness & Boot, 2009).

Learning how to operate social media can be used to advance health-related knowledge, such as information on the prevention, diagnosis, and treatment of specific conditions and disorders. However, learning about and providing training on the use of computers and tablets have both positive and negative aspects. For instance, social media has been found to help in overcoming loneliness, relieving stress, and raising feelings of control and self-efficacy (Leist, 2013). In contrast, a risk exists with respect to the misuse of personal data and the distribution and uncritical adoption of potentially harmful information via online communities (Leist, 2013). Nevertheless, access to reliable online health information has been associated with reduced anxiety, increased feelings of self-efficacy, and a decreased utilization of ambulatory care (Nimrod, 2009).

2.5 Online Volunteering

Online communities provide a sense of belonging for older adults through virtual interactions and belonging to a collective group. The Internet—through providing access to online social support systems and relationships, such as those established in chat rooms or discussion groups—enables individuals with mutual interests or experiences to obtain information and encouragement from others who are like-minded (Swickert, Hittner, Harris, & Herring, 2002). For instance, virtual volunteering forums like *SeniorNet* (2009) and *Service Leader*, as well as host chat rooms, book clubs, and online bulletin boards for virtual volunteers have been found to consciously create a sense of community (Mukherjee, 2011). Such forums were found to be extensions of Internet-based social

activities, and the virtual volunteers who often visited these websites, did so even when they were not directly assigned a task (Mukherjee, 2011).

Online volunteering—an alternative way to volunteer—compensated for some lost abilities and eliminated the need for older adults to be physically present in a space. According to Morrow-Howell (2010), volunteering rates among older adults are lower compared to younger cohorts because of the necessity of being physically present in a space and their inability to perform certain volunteering tasks. In addition, the physical distance between the participant and volunteer venue has been found to be a contributing factor in volunteer retention, which often leads to higher dropout rates among older adult volunteers (Ellis & Cravens, 2000). Furthermore, Theurer et al. (2015) found that nursing home residents lacked meaning in their lives and had limited opportunities to contribute to their community. One of the study participants reported that she had little interest in the activities provided by the nursing home, and that no opportunities were available for her to continue her favorite leisure activity—volunteering (Theurer et al., 2015). Thus, online volunteering can address some of the limitations faced by older adults, and can provide a flexible schedule for them to perform voluntary tasks from their own home (SeniorNet, 2009).

Mukherjee (2011) has demonstrated that online volunteering provides multiple benefits for older adults. Participants in his study acknowledged that the convenience of carrying out volunteering tasks from their own home enabled them to consider participating in more community activities. Specifically, Mukherjee's program had an online bulletin board that posted community events and information that older adults could participate in or discuss with others through word-of-mouth (Mukherjee, 2011).

Having this information readily available to the participants informs and keeps them up to date with what is happening in their community. Furthermore, 44% of study participants reported having a chronic illness such as arthritis, diabetes, heart conditions, etc., and found that online volunteering compensated for their health limitations. Finally, online volunteering contributed to older adults' social capital because the Internet provided them with opportunities to go beyond their immediate geographic surroundings and become associated with people, places, and organizations previously inaccessible (Mukherjee, 2011).

Voluntary associations could begin to include activities online and facilitate online volunteering by providing a forum to create collective networks. As argued by Arai and Pedlar (2003), voluntary associations play an important role in maintaining civil society and community. Techno volunteers (Arai, 2000) are volunteers who have been recruited by organizations for specific skills. Although techno volunteers may not have a full understanding of an organization's mission statements or values, they are given decision-making power within the organization. These volunteers "contribute to social capital through the formation of thin trust networks with individuals in the voluntary association and outside of the organization" (Arai, 2000, p. 344). Being a techno volunteer also has been found to lead to psychological benefits, such as self-esteem and a sense of belonging (Nimrod, 2009). Thus, voluntary organizations could provide online opportunities that would require techno volunteers, which could help older adults who are struggling with the transition from work to retirement and are in need of an activity to replace their previous work.

Voluntarism is an example of a social activity that ties individuals to the community and the community to individuals (Joseph & Martin-Matthews, 1993). With respect to volunteering, an emphasis is placed on the importance of social capital because it leads to the development of stronger communities (Glover, 2006). According to Bradley (1999), “Those who are integrated into their community are far more likely to volunteer than those who do not know their neighbours” (p. 46). Furthermore, individuals who express a desire to help and feel they share common interests with others in their community are more likely to volunteer than those who do not express these feelings (Bradley, 1999).

Volunteer activities and generative activities, such as teaching or counseling, contribute to the quality of life of older adults and societal functioning (Snyder & Clary, 2004). Older adults who participate in volunteer activities find it meaningful to work with service recipients as a way to help them improve their lives. In this context, several motivational components can influence individual participation in volunteering. First is authenticity, which means they genuinely want to participate and be involved in their community (Snyder & Clary, 2004). Second is cultural demands, which is assuming responsibility for the next generation by performing explicit acts of concern for that generation (Snyder & Clary, 2004). Finally, those who believe in human goodness tend to act on these concerns by volunteering (Snyder & Clary, 2004), and continue to volunteer to the extent to which these motivations are fulfilled.

Individuals use volunteering to construct an enhanced sense of purpose by doing things for others (Bradley, 1999). The most prevalent reason for older adults to volunteer is to make a difference in the community in which they live (Bradley, 1999). Voluntary

activities that provide opportunities to express values related to altruistic and humanitarian concerns for others are most beneficial for older adults (Snyder & Clary, 2004). Being able to help other people, through organized voluntary work and in everyday life, has positive impacts on the psychological well-being of older adults because it instills feelings of being needed and appreciated (Forsman et al., 2013). Helping others also can provide new insights about people, places, personal skills, and oneself (Snyder & Clary, 2004). In addition, helping others encourages older adults to talk with other community members about their personal problems or concerns that they would not be able to address otherwise (Snyder & Clary, 2004), which increases the social capital of older adults and provides them with more support.

Volunteering also may serve as an opportunity to engage older adults in new activities that help to facilitate the creation of new reference groups, while at the same time developing new skills (Snyder & Clary, 2004). For example, volunteering for an organization provides more structure than informally helping out a neighbour or a friend, and the routine of voluntary activity provides a volunteer with a sense of direction and accomplishment (Bradley, 1999). Thus, volunteering may serve as a function for personal growth and development that facilitates positive self-reflection (Snyder & Clary, 2004). Bradley (1999) found that older adults choose to volunteer to explore something that had captured their attention, and to gain a voluntary experience that could become a way of achieving personal growth.

By providing a forum for communities to form collective networks, voluntary associations could move beyond individual benefits and the experiences of the volunteering activity itself. These voluntary associations play an important role in

maintaining a civil society and a community that embodies reciprocal social relations and in which social capital is most powerful (Arai & Pedlar, 2003). Voluntary associations may be involved in pressuring for public policy, which ultimately is driven by the self-interests of their associated members (Pedlar, 1996). Being involved in voluntary activities is a process to improve some identifiable aspect of community life (Pedlar, 1996), and thus may promote the essential elements of deep democracy and increase individuals' social capital (Pedlar, 2006).

Arai (2000) has linked volunteering to various responsibilities that contribute to community involvement. Older adults' citizenship status was found to increase in terms of civic participation because of the increase in responsibility for other community members. For example, leaders in a gardening project reported significantly stronger political orientations (Glover et al., 2005). As Pedlar (2006) has pointed out, "Citizenship is dependent upon open communities and belonging, since one's ability to express citizenship is based on a social concept of the person as a member of the community" (p. 432). In addition, Glover (2004) has suggested that "Citizenship performs an integrative function by enabling the individual to integrate the various roles he or she plays and by immersing him or herself into the community" (p. 66). The intensity of membership in voluntary associations is important to the development of democratic citizens (Glover et al., 2005). For instance, participating in a gardening group has been found to facilitate social exchanges and heightened critical consciousness about neighbourhood issues, which encourages participants potentially to adopt and practice democratic values (Glover et al., 2005). Community gardens also appear to be mediums through which democratic values can be practiced and reproduced, and thus, it is believed that voluntary

activities can produce the same affects. Furthermore, voluntary activity may promote essential elements of deep democracy (Pedlar, 2006). Deep democracy implies that every voice matters, both the majority and minority, and the most important decisions should be made collectively (Pedlar, 2006). Therefore, the act of volunteering encourages older adults to become democratic citizens when they include their perspective in the community decision-making process.

2.5.2 Volunteering and Leisure

Volunteering can become a replacement for work in older adulthood, especially when a person participates in this type of activity on a daily or weekly basis (Nimrod, 2009). This category of leisure is characterized by a considerable amount of commitment and perseverance within a well-organized participant group of like-minded associates with whom members identify (Nimrod, 2009). Volunteering may involve some inconveniences, but it also may lead to psychological benefits, such as self-esteem and a sense of belonging (Nimrod, 2009). Therefore, volunteering is an activity that can assist older adults with community inclusion and, for some, can be considered a leisure activity. Individuals involved in self-determined action during their leisure often experience growth with regards to learning new skills, become more vocal, and gain a sense that they can stimulate change (Glover et al., 2005). Furthermore, leisure in later life can be viewed as a means to a larger goal, such as beginning a new life phase or making a decision to maintain physical and mental health (Liechty & Genoe, 2013).

2.6 Summary

Social capital, agency, and a sense of belonging contribute to community engagement for an older adult population. Social capital is one of the most important factors that contribute to community development because it allows older adults to become contributing members to a community. Moreover, social ties and social inclusion often play a beneficial role in the maintenance of psychological well-being and mental health. A weak connection to community leads to greater health risks and reduces cognitive functioning, whereas a strong connection contributes to good health and protects older adults against distress.

Leisure in older adulthood provides older adults with various benefits such as an increase in overall health and well-being, and also can provide purpose and meaning. Volunteering facilitates both community inclusion and social capital. Volunteering can provide older adults with personal benefits and opportunities to develop democratic values. However, volunteering as a leisure activity requires older adults to be physically present, and as such, excludes those who may have various challenges such as financial constraints, health limitations, and social barriers. TR practitioners have been strongly encouraged to develop creative programs and approaches to engage older adults in leisure pursuits that they find meaningful, such as volunteering.

Thus, online volunteering is a proposed solution that can address this issue by enabling older adults to engage in community activities, despite any limitations they may have. Online volunteering with a *Gesellschaft* community perspective can hopefully create a community that encourages social cohesion, openness, acceptance of differences, and engagement in the common good (Arai & Pedlar, 2003). Online volunteering also

contributes to social capital by connecting older adults to people, places, and organizations not within their social networks or close to their geographical area.

Online volunteering has been proven to be beneficial to those who struggle with certain constraints and lack a sense of purpose or meaningful activity. However, further research is needed regarding the use of computer and tablet education programs in TR. In addition, further research is required with respect to what this type of program would involve and how it could provide a sense of purpose and meaningful experience for an older adult population.

CHAPTER 3: METHODS

3.1 Purpose

The purpose of this research study was to explore the ways in which computers and tablets can facilitate the inclusion of socially isolated older adults with their community. Specifically, this research attempted to gain a better understanding of whether TR can be used to facilitate an online volunteering program for older adults. Since some older adults struggle with various physical, financial, and social constraints, they may not be able to leave their home to participate in community-organized activities. This study, therefore, explored online volunteering as an alternative way for them to engage in their community. Furthermore, this study was framed through the lens of a TR practitioner in the hope that the results of the study could be put into practice by those practitioners who work with older adults.

This study was guided by two main objectives. The first was to understand how technology-based programs could be used in TR practice by exploring the opportunities and challenges that computers and tablet devices provide for older adults. The intent was to explore the possibility of using computers and tablets in TR practice as tools to promote a sense of belonging, increase social capital, and to investigate the possibilities of using technology-based programs to foster a sense of community for older adults. Community inclusion through leisure activities has been found to foster a sense of belonging, which has been linked to social and psychological health and well-being (Whyte & Sharpe, 2016). Therefore, TR practitioners could provide digital literacy programs to target the needs and interests of older adults.

The second objective was to gain a better understanding of whether online volunteering, as an intervention tool, could facilitate community engagement for older

adults. According to Mukherjee (2011), online volunteering contributes to social capital, encourages community participation, and compensates for lost abilities. Providing access to online volunteering can assist older adults who are experiencing financial constraints, health limitations, or social barriers to community inclusion. Thus access to online volunteering incorporates the core components of TR practice by minimizing the constraints older adults experience with respect to community participation, and by increasing their health and well-being.

3.2 Guiding Conceptual Framework

Qualitative research provides rich insights into human behaviour (Hesse-Biber & Leavy, 2004) by engaging directly with individuals about their ideas, insights, and perceptions. The present study explored community inclusion as a human behaviour by using qualitative inquiry approach. Qualitative inquiry is an approach for exploring and understanding the meaning that individuals or groups ascribe to a social or human problem (Creswell, 2014). In this qualitative study of the experiences of older adults, the social issues are social isolation and a lack of community inclusion. The process of qualitative research involves the emergence of questions and procedures, and the data collection is conducted in the participants' own settings (Creswell, 2014). Also in qualitative research, the data analysis is inductively built from particulars to general themes, and the researcher makes interpretations and meanings out of the data (Creswell, 2014). Furthermore, in the social sciences, certain patterns of relationships occur, and when carefully examined, these patterns make sense (Berg & Lune, 2004). By carefully examining three different populations and their human perceptions, this present study

gained a better understanding of social isolation among older adults, and obtained rich data overall (Charmaz, 2006).

A social constructivist worldview guides this qualitative research study. Social constructivists seek to understand the world in which they live and work, and believe that knowledge is created in the mind and in the interactions individuals have with their environment, which is ultimately subjective (Daly, 2007). Individuals develop subjective meanings of their experiences, and these meanings can be similar or varied, so the researcher must examine a complexity of views rather than narrowing meaning into a few categories (Creswell, 2014). To understand the historical and cultural settings of their study participants, social constructivists often focus on the specific contexts in which people live and work (Creswell, 2014). According to Hesse-Biber and Leavy (2004), “Constructions are more or less true, but less informed and sophisticated [than numerical statistics and percentages]” (p. 26). Social constructivism is therefore appropriate for the current study based on the belief that “realities are comprehensible in the form of multiple, intangible mental constructions, socially and experientially based, local and specific in nature, and dependent on their form and content of the individual persons or groups holding the constructions” (Hesse-Biber & Leavy, 2004, p. 26).

The present study examined multiple constructions using interviews that were conducted with individuals who work in the field of TR, older adults who feel isolated in the community, as well as coordinators from voluntary organizations. It is also important to recognize that multiple realities can coexist with each other because people have different social, political, cultural, economic, ethnic, and gender backgrounds (Hesse-Biber & Leavy, 2004). Although the participants interviewed for this research study did

not hold the same opinions, the findings of our study uncovered commonalities among its participants, which can be applied to the research field and to TR practice.

3.3 Sampling

Patton (1990) has pointed out, “Qualitative inquiry typically focuses in depth on small samples, and even single cases” (p. 169). The present study did not predetermine its sample size, but rather in each phase, participants were recruited and interviewed until saturation occurred. Saturation occurs when no further new knowledge is being gained from additional interviews, and so recruiting and interviewing participants continues until no new code emerges from the analysis (Henderson, 2006). In addition, the trustworthiness, meaningfulness, and insights generated from this present study focused more on the richness of the information than on sample size (Patton, 1990).

Participants were recruited through purposeful and criterion sampling, specifically using the snowball and opportunistic sampling method. Purposeful sampling is defined as selecting information-rich cases based on whether they will illuminate the questions under study (Patton, 1990). Information-rich key informants were located using a snowball method—current participants told the researcher that they knew individuals who would be suitable for the study and provided information for contacting them for an interview (Patton, 1990). Opportunistic sampling combined with a snowballing sampling method was also frequently used throughout the study. For instance, the TR practitioners were recruited at a professional conference, the volunteer coordinators were recruited at a volunteer fair, and the remaining older adult participants were recruited through a TR practitioner who facilitates digital programs for socially isolated older adults. A criterion sampling method, in which participants must meet predetermined criteria (Patton,

1990), was used to determine whether participants were appropriate for this study (see criteria in Section 3.3.1).

3.3.1 Participants

This study included three different groups of participants: TR practitioners, older adults, and volunteer representatives. First, six TR practitioners who had worked with older adults in a clinical or community-based setting were selected to participate. Including practitioners who worked in different settings provided information-rich data and added depth to the research findings. Second, six older adults over the age of 60 living independently in the community and who self-identified as being socially isolated, were also selected to participate. Finally, four volunteer coordinators participated in this study; three worked for non-profit organizations, and one worked for the municipal volunteer bureau. The volunteer coordinators were required to have experience with managing volunteers, and their organization had to target older adults.

3.4 Ethical Considerations

The Concordia University Human Research Ethics Committee approved this study. Participants signed an informed consent form before they participated, and they were able to choose the level of disclosure they wanted to share with the researcher. Pseudonyms were assigned to protect the participants' identity and their affiliations (Tri-Council Policy, 2010).

3.5 Data Collection

As Charmaz (2006) has suggested, "Grounded theory quickened the speed of gaining a clear focus on what was happening in the data without sacrificing the detail of

enacted scenes” (p. 14). It also allowed me, as the researcher, to shape, reshape, and refine the data collected. Individual interviews were used to collect the data as a directed conversation (Lofland & Lofland, 1984), which is contextual and negotiated (Hesse-Biber & Leavy, 2004). The purpose of the individual interviews was to generate knowledge that provided the researcher with an understanding of the participants’ worldviews (Salmons, 2009). Thus, the interviews of TR practitioners, older adults, and volunteer coordinators enabled a generation of knowledge about the community engagement of socially isolated older adults.

Specifically, the present study used intensive interviewing to collect its data. An intensive interview “permits an in-depth exploration of a particular topic or experience and is a useful method for interpretive inquiry” (Hesse-Biber & Leavy, 2004, p. 25). Intensive interviewing provided opportunities for the participants to share their experiences (Hesse-Biber & Leavy, 2004) and provided the interviewer with the flexibility to clarify participant details in order to obtain in-depth information. Intensive interviewing has been useful for the data collection of various types of qualitative research, including grounded theory (Charmaz, 2006). Intensive interviewing complements grounded theory methods because they both are open-ended, directed, shaped, emergent, paced, and unrestricted (Hesse-Biber & Leavy, 2004). The in-depth nature of intensive interviewing fosters each participant’s interpretation of his or her experience (Charmaz, 2006). By developing open-ended and non-judgmental questions, the researcher was able to encourage participants to share unanticipated statements and stories. Furthermore, intensive interviews enabled the researcher to go beneath the surface of the described experience by deeply exploring certain statements or topics of

interest (Hesse-Biber & Leavy, 2004). Intensive interviews also enabled the researcher to return to earlier points, check for accuracy, slow or quicken the pace, shift the immediate topic, and validate participants' perspectives (Hesse-Biber & Leavy, 2004). Furthermore, individual descriptions or statements could be elicited and refined during the researcher and participant interactions (Hesse-Biber & Leavy, 2004)— in other words, participants were encouraged to share more of their perceptions and experiences about a topic.

Therefore, the present study used intensive interviews in each phase of its analysis.

Interview guides and consent forms were created for older adults (Appendix A and B), TR practitioners (Appendix C and D), and volunteer coordinators (Appendix E and F). Interviews were conducted using a semi-structured format and ranged from ten minutes to one hour in length. The use of a semi-structured format allowed for probing and follow-up questions, which in turn, assisted in the development of a deeper understanding of participants' experiences. This format also enabled participants to freely discuss personal experiences in a private setting and to develop a relationship with the interviewer (Henderson, 2006).

3.6 Data Analysis

This applied research study used grounded theory as its methodology for data analysis. A theory can be defined as a comprehensive set of statements or propositions that describe different aspects of a phenomenon (Hagan, 2006; Silverman, 2006). In an applied context, theories can be understood as interrelated ideas about various patterns, relationships, concepts, processes, or events (Berg & Lune, 2004). Grounded theory provides systematic, yet flexible guidelines for collecting and analyzing qualitative data that researchers can use to construct theories “grounded” in the data. A constant

comparative method generates the “bones” of the analysis (Charmaz, 2006). These bones then develop into a skeleton that shapes an analysis frame on which to build the final analysis (Charmaz, 2006).

Using grounded theory, I coded the transcript from each interview. As Charmaz (2006) has pointed out, “Coding is the pivotal link between collecting data and developing an emergent theory to explain the data” (p. 46). Throughout the coding process, I defined what happened in the data and began to grapple with what it meant (Charmaz, 2006). Importantly, I avoided forcing the data into preconceived codes and categories, and avoided developing codes based on my opinions or pre-existing ideas. First, I coded the data openly, which was a process of describing each line in the interview transcript, and then coding each line description (Charmaz, 2006). These codes closely related to what was being said, and were provisional because I remained open to other analytic possibilities and created codes that best portrayed the data (Charmaz, 2006). After comparing the different data, I then developed a focused code (Charmaz, 2006). The focused coding process was more selective and “the most significant or frequent initial codes were used to sort, synthesize, integrate, and organize large amounts of data” (Hesse-Biber & Leavy, 2004, p. 46). Focused coding enabled me to make decisions about which initial codes made the most sense from an analytical perspective, which then enabled me to sort the data into different categories (Charmaz, 2006). As Hesse-Biber and Leavy (2004) have suggested, “The focused coding, therefore, was used to pinpoint and develop the most salient categories in large batches of data” (p. 46).

The third phase of the coding process is called axial coding, which has a purpose to sort, synthesize, and organize large amounts of data and reassemble it in new ways

after the open coding process (Charmaz, 2006). The goal of axial coding was to link categories with subcategories, determine how they are related, and extend the analytic power of emerging ideas (Charmaz, 2006). The final phase of the data analysis included theoretical coding. Theoretical codes are integrative, which means they create relationships between categories that were developed in the focused coding stage (Charmaz, 2006). Furthermore, these codes help to tell a coherent analytic story, and conceptualize how the substantive codes are related, which eventually moves the analytic narrative in a theoretical direction (Charmaz, 2006). Thus, grounded theory coding is more than sorting and synthesizing data, since it also permits a researcher to begin to unify ideas analytically and to make theoretical inferences from the collected data.

3.7 Trustworthiness

Qualitative research emphasizes the need to explore individual experiences, describe phenomenon, and develop theories (Vishnevsky & Beanlands, 2004). A major challenge for researchers using qualitative methods is to strive for the highest possible quality when conducting and reporting their research (Cope, 2014), and in qualitative research, this challenge can be addressed by attending to trustworthiness. Trustworthiness can be achieved by adhering to four criteria: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility refers to the confidence in the authenticity of the findings and can be established by one of the following techniques: prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy, and member checking (Lincoln & Guba, 1985). The present study achieved credibility through triangulation by using multiple data sources—

such as TR practitioners, older adults, and volunteer representatives—as a way to produce an understanding that is rich, robust, comprehensive, and well developed.

Transferability was achieved by providing a thick description, which Lincoln and Guba (1985) describe as a way of achieving external validity. By describing a phenomenon in sufficient detail, researchers can evaluate the extent to which any conclusions drawn from the data are transferable to other times, settings, situations, and people. Thick description also refers to the detailed account of field experiences in which a researcher describes explicit patterns of cultural and social relationships, and puts them into context (Holloway, 1997). I achieved this kind of thick description by exploring how the present research could be applied to three different populations who came from different settings and backgrounds.

Dependability ensured that the findings were consistent and could be replicated by others not involved in this study, which was achieved by doing an external audit (Lincoln & Guba, 1985). An external audit fosters the accuracy of a study and provides an opportunity for an outsider to challenge the research process and research findings (Lincoln & Guba, 1985). With respect to the present study, my supervisor and committee members ensured that it was both accurate and valid by challenging my thoughts and assumptions, and by providing feedback for improvement. Feedback from external researchers led to additional data gathering and the development of stronger and more articulated findings (Lincoln & Guba, 1985).

Finally, confirmability is defined by the degree to which neutrality is achieved, and which findings have been shaped by the respondents’—not the researchers’—biases, motivations, or interests (Lincoln & Guba, 1985). The conformability process involved

identifying personal biases and maintaining an awareness of them throughout the research process (Lincoln & Guba, 1985). To achieve confirmability, I conducted a confirmability audit and audit trials, used a triangulation method, and was reflexive throughout the research process. As previously mentioned, I used a triangulation method to gain a diverse understanding of my research questions. Furthermore, I was reflexive throughout the research process—by keeping a journal and writing entries before and after each interview—to confirm my personal biases were excluded from the data analysis. Therefore, I upheld the trustworthiness of the present study throughout all its stages, which ensured a high level of accuracy and a high level of quality of the data analysis.

CHAPTER 4: FINDINGS

I collected the data for the present study over a ten-month period from June 2016 to March 2017. The data collection process consisted of semi-structured interviews, either one interviewer and one participant or two participants and one interviewer. In addition, throughout the research process, I kept a journal to address methodological issues and personal reflections.

In this chapter, I present the findings from the interviews conducted with older adults, TR practitioners, and volunteer coordinators. These findings are grounded in the stories of the participants, and I have included their direct quotes to illustrate the trends and themes in the data. These themes and emerging theories are examined in detail in Chapter 5.

4.1 Participants

For the present study, I interviewed three groups: older adults, TR practitioners, and volunteer coordinators. All participants are identified by pseudonyms to protect their anonymity.

4.1.1 Older Adults

I interviewed six older adults, age 60 years and older. Each participant lived independently in the community and self-identified as being socially isolated. Each participant also experienced social isolation, but in different ways. First, Olivia and Robert—a couple living in a retirement home in the suburbs of Montreal, Quebec—experienced social isolation because of physical and financial constraints. They explained that they could not physically leave their house unless a third party accompanied them, and each visit outside of their home involved transportation costs. They also explained

that they felt isolated because they could no longer access their social group at the community center due to their constraints. Second, I interviewed Leah—who currently lives in downtown Montreal—over the Internet using Zoom. Leah explained that she felt isolated because she is completely homebound due to her responsibility as the primary caregiver for her husband. In her interview, she mentioned that she rarely leaves her home unless her husband is participating in a group or is with his support worker. Leah also explained that her “lifeline” to the world is through a computer, and she was pleased to share her experience with technology. Penny—who lives independently in the suburbs of Montreal—was the fourth participant I interviewed. She mentioned that she has various financial constraints that prevent her from participating in community groups. She also explained that a lot of programs offered for her age group do not interest her. Charlie, the fifth participant—an older man living in Ontario—was experiencing substantial pain due to a hernia at the time of the interview. He lives alone and explained that he likes to be alone and is not interested in engaging with a community or learning about technology. Finally, Ruth—an older woman living with her husband in a rural community in central Ontario—had a cancer removed from her jaw and has experienced many limitations related to eating, and feels very self-conscious around others. In addition, she mentioned that a lot of programs are available in her neighbourhood, but she is content with being alone.

4.1.2 Therapeutic Recreation Practitioners

I recruited six female TR practitioners at the Therapeutic Recreation of Ontario Association Conference (Summer 2016) and interviewed them later for the study. Each practitioner works with an older population in both community and clinically based

settings, and they all mentioned that they are currently using or are interested in using computers and tablets in their practice. To protect their personal and organizational anonymity, only their pseudonyms will be provided here: Stefanie, Jessica, Hailey, Sylvie, Audrey, and Margaret.

4.1.3 Volunteer Coordinators

I recruited four female volunteer coordinators at Concordia's Volunteer Fair (Fall 2016) and interviewed them later for the study. Three coordinators work for a non-profit organization, and one works for the volunteer bureau in an urban Quebec city. Each coordinator is responsible for recruiting volunteers who work one-on-one with older adults living in the community. Their insights were taken into consideration with respect to computer and tablet programming, and the logistics of constructing an online volunteering website/forum. To protect their personal and organizational anonymity, only their pseudonyms will be provided: Madison, Lisa, Michelle, and Danielle.

4.2 Overview of the Findings

All of the older adult participants openly shared their experiences with using a computer or tablet, and the challenges they faced with respect to community engagement. The findings demonstrate that these older adult participants experienced physical, financial, and social barriers that prevented them from participating in their community. When discussing their use of computers or tablets, many felt that they lacked the digital literacy skills to operate these devices. Furthermore, after discussing the programs they could participate in on the Internet using a computer or tablet, some program ideas emerged including continuing education, online discussion and support groups, and

intergenerational programming with younger adults. These ideas can help to facilitate the community engagement of older adults.

The interviews with the TR practitioners and the volunteer coordinators highlight some of the benefits and challenges they experienced in their profession with respect to the use of computers and tablets. Each profession experienced similar barriers, including the issue of confidentiality, financial constraints, and lack of time. TR practitioners mentioned that technology is becoming more prominent in their profession, and it is being considered a leisure pursuit for some older adults. Some practitioners discussed how they already have a structured digital literacy program implemented in their practice. With respect to online volunteering, the volunteer coordinators suggested that the program could be more effective if it targeted older adults, and ensured that the virtual volunteers were younger adults. The notion of online volunteering is discussed in more detail at the end of this chapter.

4.3 How to Engage with the Community using Computers and Tablets

After conducting the interviews with the older adults, TR practitioners, and volunteer coordinators, three main ideas emerged for how computers and tablets could assist socially isolated older adults with community engagement. First, the notion of education was considered—older adults expressed that they enjoyed learning new things and felt that the learning process gave them purpose. Second, discussion groups and support groups were put forward as ways for older adults to engage with the community and increase their social capital using a computer or tablet. The older adults enjoyed discussing topics with other participants in the group, and some felt the need to share their experiences with others who were in similar situations as them. Finally, many of the

older adult participants mentioned that they enjoyed working with younger adults, and that an intergenerational program would be of interest to them. These three main emergent ideas are discussed in more detail later, and I believe they can be incorporated in TR and voluntary practices through the use of computers and tablets.

Penny—one of the older adult participants—discussed how she uses her tablet to search the Internet for information because she is curious and wants to learn more: “I want to know everything and anything about all the wonderful things that happen in Texas. You know, I'm just really curious. I know absolutely nothing but it's the Lone Star state kind of thing” (personal communication, February 9th, 2017). She also mentioned that she used to attend a course at a university in downtown Montreal. When I asked Penny why she attended the course, she said: “It's excellent, really excellent for the simple fact is you learn about different religions. It's compacted, really because what you'd have to take is one course per religion, but it was... I found it very interesting” (personal communication, February 9th, 2017). In addition to Penny's interest in learning about new topics, Leah commented on how she would be interested in learning more about technology: “I always want to learn a new technology, it's exciting, and that there are new things happening. You know I'm learning languages using my computer, it's fantastic” (personal communication, February 2nd, 2017). Based on these comments, learning new things provides purpose and value, and is also interpreted as a meaningful leisure experience for these older adults. Sylvie—a TR practitioner who works in a Montreal community centre—discussed her new program that she and her team developed called Virtual Lectures. Individuals, such as retired professors, are hired to

give a live lecture on a particular subject, and participants who are not able to physically attend the lecture at the community centre, can watch it live on their computer or tablet:

So it's a three-year grant funded by Health Canada and the goal is to decrease social isolation and increase resiliency um using technology. The funding is specifically for English speaking seniors in Quebec. Which is actually quite a vulnerable population because they don't... a lot of services are in French, especially for seniors in small communities. (Sylvie, personal communication, October 13th, 2016)

Sylvie further discussed what the virtual lectures involve:

We have them in all kinds of topics. So like Friday mornings we have a free lecture. People come in and talk about areas of their interest or expertise. The topics are health related; sometimes they're like travel, or virtual travel. Sometimes people who have traveled show their pictures and talk about what they've experienced. Sometimes they're researchers from different universities coming to talk about their research. So all kinds of different topics and then we also have in the evening some big lectures where we get like three or four hundred people by really well known researchers. We had one on sleep I think recently. We have big Parkinson's public lectures that with Parkinson's Canada, brain health, all kinds of stuff like that. So the money that we got from the grant was specifically to record those lectures. Webcast them live so that people at home could watch them live and then create a video library of all of the recordings that we've done so far. (Personal communication, October 13th, 2016)

Sylvie also mentioned that providing online learning opportunities for older adults is being recognized in TR practice, especially for those practitioners working with older adults who are experiencing social isolation.

In addition to continuing education, discussion and support groups were discussed as opportunities to engage older adults experiencing social isolation. Leah—who currently participates in the Virtual Lectures facilitated by Sylvie—suggested that a discussion group should be held after each given lecture: “I’d love to see [a] discussion group after the webinar” (Leah, personal communication, February 2nd, 2017). When discussing the programs that Robert and Olivia enjoy, and what they used to participate in, they mentioned that they missed having good discussions:

I remember we used to have very good discussions at [Flowerings] in person with- I used to go there regularly? [Olivia interrupts: “Yes. We miss that place. It's the best of all places.”] Good discussions, word games, stuff like that. (Personal communication, February 14th, 2017).

Later in the interview, Robert shared his thoughts about online volunteering; he mentioned that he would be interested in helping to educate others about strokes by sharing his experiences of having a stroke himself:

I think a lot about counselling people on stroke cause I’ve had two, so I thought I could counsel people on stroke. It's a very scary experience. You know when you wake up in the morning and you can't move that's pretty scary. I can tell people what it's like and what to look for and what to do about it and so on. (Personal communication, February 14th, 2017)

A support group for individuals who had a stroke or other illnesses seems like a good opportunity to help engage older adults in their community. Jessica, a TR practitioner, also mentioned the idea of using online support groups for community engagement:

Like maybe with substance use, like there I could really see it working because you know they've gone through, they've, you know cause they do a lot of mentoring. After they've been clean for quite a while they, you know, come in and they speak to the group. And I think they have a speaker every evening at seven on the substance... on the Meadow Creek, which is like ah yeah... Anyway, one of them, substance use or that one where someone who you know has been clean for so long comes in and they speak about, you know, their journey. (Jessica, personal communication, July 5th, 2016)

Although joining an online discussion group or support group may help to provide a sense of belonging, some doubt that this would be enough to make people feel they are connected to the community:

As you were talking one of the things that came to mind is even if we do online discussion groups, a check-in point, someone who picks up the telephone and calls so that there's a live interaction might make the difference. (Leah, February 2nd, 2017)

In addition to providing learning opportunities and discussion/support groups, some older adults mentioned that they would be interested in working with younger adults:

I would go down to lectures, either at [University] they were free or whatever. And I enjoyed that because there was a lot of young people of course, and they

were interesting. Not that I understood every single lecture, but I really, truly enjoyed that. (Penny, personal communication, February 9th, 2017)

Thus, facilitating an intergenerational program that involves computers and tablets as well as digital literacy education could be a possibility for online programming.

It is also important to point out that stereotypical programs for older adults such as bingo, cards, knitting, etc. may no longer be an appropriate leisure activity to facilitate in TR practice. For instance, Penny mentioned that she does not enjoy the activities offered at her community center:

I find older people, they're either knitting, crocheting, or playing cards. You know I don't knit. I don't crochet, and I don't play cards, so really I never realized it, cause of course, because I was always busy taking care of my family, my parents, my uncle, and my husband, so for years, I don't know. It's just one of those things that I wasn't interested in and I never thought anything about it. It's just that most of the programs are exercise or how do you call it? Playing cards, you know? I suggested if they have a lecture or something you know. (Personal communication, February 9th, 2017)

4.4 Computer and Tablet Challenges for Older Adults

Physical, financial, and social constraints were some of the main reasons why the older adults in this study were not able to engage in their community. Ruth discussed how her surgery had previously affected her participation with community groups:

I had 'Mandibulectomy', my right mandible removed every place, restructure and its... It has well; it has impacted my speech so much. So certainly my eating and

so much of our age group social events are focused around food. (Personal communication, March 24th, 2017)

Similar to Ruth, Penny also experienced some physical barriers. Penny explained that because of these challenges, she has stopped attending programs in the community:

Something's wrong with my legs so I forever going and buying extra little things, aids because of my neurological problem, but so I stopped going. I just decided. I stopped going once a week. I think when you have a serious illness or a life threatening illness you reassess, and what's really important, and I don't know I guess some people tend to go more inward, but I still love people and I still love meeting people but I don't seek it anymore. (Personal communication, February 9th, 2017)

Penny also described how she used to be a regular volunteer at the hospital, and now has stopped because the hospital cannot accommodate her limitations: "I told them I have a walker. And so that was a deterrent to two hospitals" (personal communication, February 9th, 2017). Another barrier that the older adult participants frequently discussed was the cost of participating in community activities. Olivia briefly explained that, due to financial constraints, her and her husband could no longer attend the groups at their community center: "You have to pay for your transportation too, back and forth. So that was tough a little bit. We were subsidized by our son, so our pension and everything is very little" (personal communication, February 14th, 2017).

Finally, social barriers prevented Leah and Ruth from engaging with their community. Leah shared her experience of engaging with the community while being homebound:

I am housebound so my life is the computer. I do everything, I do my shopping I do my socialization. I could not live without the technology that we have today. The only time I'm out of the house is for caregiving support group or if I drop my husband off at a day program than I get a chance to swim for the time that he's in the program. Other than that I'm totally housebound. (Personal communication, February 2nd, 2017)

Ruth also shared some of the social challenges she faces with being a new member in her community:

You know entering into an established community where people have ties and family. So sometimes it's hard to break that barrier, the newcomer. Although we've gotten very friendly with the mother and daughter across the road, they've kind of like adopted us and likewise so they're like second family. (Personal communication, March 24th, 2017)

With these barriers in mind, computers and tablets can provide opportunities for community engagement for older adults experiencing social isolation.

After interviewing the older adults about the types of programs they would like to participate in using a computer or tablet, three main themes emerged in regards to why they were not using these devices, which included cost, lack of interest, and lack of knowledge:

It's just, I don't know. It just seems like people are stuck to Facebook, Twitter, or that. I'm not on Twitter cause I don't even know what to do other than I've read occasionally when they emailed me something. I'm not really interested, but I told my daughter, this idea of Skype, there has to be a world out there that... Skype

doesn't cost anything, because my sister said she Skype's to her grandchildren. She lives in the Middle East, and they live in the States, so she does that to them (Penny, personal communication, February 9th, 2017)

In his interview, Charlie firmly stated: "I'm not interested in that stuff [meaning technology]." Shortly after, he said: "See that stuff to me would be no good for me because I wouldn't know the first thing about it" (personal communication, March 10th, 2017). In addition to Charlie—who believes he lacks the digital literacy skills to operate a computer or tablet—Olivia explained how she is also not confident with operating her husband's iPad, but for health reasons: "I'm not great on that [referring to the iPad] because I had a minor stroke too so yeah. It's taken all its toll right?" (Personal communication, February 14th, 2017). For the older adults, a relationship seemed to exist between a lack of interest and a lack of knowledge. It appeared that they were not interested in technology because they were not sure how to use it, despite the many possibilities and benefits it could provide for them. Margaret, a TR practitioner, pointed out that some of her patients needed assistance with technology and some did not: "Some people need help, and then some people really are independent with their technology" (personal communication, June 23rd, 2016). Incorporating technology into TR practice may help older adults learn to use computers and tablets, and Stefanie, from a hospital-based setting, fully agreed:

Just usual TR, any program that you do, right, you're going to have a program protocol for it, so we, I don't have the binder in front of me, but we have a whole binder that goes through all of the most popular forms of social media. So there are program protocols for teaching Facebook, Skype, Twitter. It's laid out for the

patients, so it has screen shots that makes it very easy for them to follow along. It can be given to them post-discharge for them to take home with them and review. And also includes information on any risks involved with the programs. So like the Facebook one has information on all the privacy settings that you might want to include on their profile and things like that. (Personal communication, June 15th, 2016)

However, it is also worth mentioning that some older adults, like Ruth and Charlie, chose to disengage from their community, and felt content with being alone:

Yes! There's a lot of opportunities here in [Bloomington]. They have aqua fit and they have, I think the Y provides um exercise, Smart fit. And there are wonderful tracks like walking tracks in [Bloomington]. And there's a lot of walking a beautiful walk walking track and gym up in [Red Falls]... And there are a lot of learning programs you know for like Elder learners that you can get into. So it's my choice not to go. (Ruth, personal communication, March 24th, 2017)

I'm pretty well much by myself, pretty much. I don't get involved with people. I got a few friends but you know, but you know but I don't go to these meetings and all these other kind of stuff the town does, I don't do none of that stuff.

[Interviewer interrupts "Did you used to participate in any activities when you were younger, like sports?"]. Yep, no sports. I guess I'm just one of those guys that didn't do nothing. (Charlie, personal communication, March 10th, 2017).

Based on the findings discussed so far, it seems possible that using computers and tablets can provide older adults with a sense of belonging while assisting them with community engagement. Nevertheless, as was mentioned previously, being physically

present in a space may be necessary for socially isolated older adults to feel connected to their community:

For myself I was a psychotherapist and the difference between being in a room and talking with people and connecting at the energetic level as opposed to being on the technology, it doesn't really compare. We can talk, we can see each other but we're not really connected in the same way as we are when were in the same room. We all have our boundaries, and when were in a room together, we either feel each others boundaries, we go away or we get closer to each others boundaries and we become one and that doesn't happen often with technology.

(Leah, personal communication, February 2nd, 2017)

When asked whether any type of program could help her gain a sense of community, Leah continued to believe that being physically present face-to-face in a space with others was absolutely necessary:

I think the only way that that could happen is if we begin to have a sense of touch and we're not there yet computer wise. Maybe once our wires are attached to our brains maybe that will happen. And its interesting cause I do a lot with the [George] Centre and I don't feel connected to the [George] Centre because I physically don't go there, so like you are my lifeline but my lifeline is the technology rather than the [George] center, of course its provided by, but its an interesting feeling. One thing I found is that in these virtual communities is if you have even once a year, at one point where you can connect physically it makes a real big difference. (Personal Communication, February 2nd, 2017)

4.5 Computers and Tablets in Therapeutic Recreation and Volunteer Practices

After discussing with older adults about their experiences with community engagement, and the types of programs they would be interested in using a computer or tablet, I had similar conversations with TR practitioners and volunteer coordinators. The point of including two different practices (TR and volunteer) was to learn about and understand how technology-based programs could be introduced to older adults experiencing social isolation. Many practitioners expressed that they were already using computers or tablets in practice, but more as a passive activity, or as a means to assist themselves with program implementation:

I'm starting to use more, so there are certain patients that I know like Mickey Mouse for example. Like he, I guess he was a huge Mickey Mouse fan, he has lots of Mickey Mouse collectible type stuff, so I try it with him, but I find within two to five minutes he's asleep watching it, yep. (Jessica, personal communication, July 5th, 2016)

So we mentioned Bingo that we have an electronic Bingo program that we have on the three large screens, and it has a number very large, and also what's already been called. So if someone happens to have to leave for any reason, or comes in late for any reason, they can get themselves caught up, or check. Someone who doesn't speak English, it's really helpful. (Margaret, personal communication, June 23rd, 2016)

So the way I use the technology here is like in my mindfulness group, it's depending on what the topic is, there's a lot of different videos, YouTube videos, motivational speakers and stuff. I will utilize that with the iPad through the TV to

show the patients, or to show them also how to access it themselves once they go home and stuff. (Audrey, personal communication, June 17th, 2016)

However, some practitioners like Sylvie were utilizing computers and tablets beyond a passive activity, such as her Virtual Lecture program as well as her Digital Book Club. Stefanie was also a strong advocate for technology, and spoke about how she incorporated it into her assessments with her patients and the TR process:

So if they report to me that using technology as part of their baseline leisure routine, then I'm going to try and normalize their life as much as possible during their length of stay to continue any sort of involvement while they're here. So part of my assessment would be to ask them, 'Do you use a computer?' If yes, you know, 'What are you using it for? Are you using it for social media, games, banking, etc.?' And if not, I'll ask them, 'Are you interested in learning how to use the computer?' (Personal communication, June 15th, 2016)

Stefanie continued to discuss the assessment process she has with her clients in regards to the use of technology:

If that's what's personally meaningful to them, then I will do that. If they don't express that that's really of high importance to them, then you know that's fine too. I'm not going to be like, 'Oh, you have to do this.' So the use of technology is a leisure interest for a lot of people already. Our job is to assess and to teach leisure skills, so absolutely it falls within our scope of practice to help people access leisure. (Personal communication, June 15th, 2016)

Although the discussions with the participants in both practices generated some ideas about how online volunteering could foster community engagement, the major focus was on the many organizational challenges that came with using computers and tablets.

4.5.1 Organizational Challenges

Both TR practitioners and volunteer coordinators mentioned that they could not incorporate computers and tablets into their practice because of hospital/organizational policies:

So they're actually looking at it I guess about trying to give patients access, but we're a hospital, there's policies, there's so much stuff to like, you know. And also, we have a forensic unit, so if you say yes to a patient on geriatrics, then the forensic patients are going to be like, 'Why can't I?' And then there are more issues, and so I think it is a pretty big deal. (Jessica, personal communication, July 5th, 2016)

Hospital policies seemed to be associated with other challenges that emerged, such as confidentiality, Wi-Fi, lack of financial resources, time constraints, and logistical issues. Confidentiality seemed to be the most prominent challenge for both TR practitioners and volunteer coordinators:

We did have a patient recently when we were in the courtyard and she was talking to someone on FaceTime, that's right, and she started showing the family member you know the courtyard and all of us sitting there. I was like, 'No, no, no, you can't do that because of confidentiality,' so that was an issue actually. (Jessica, personal communication, July 5th, 2016)

I think specifically working in mental health it's been a challenge. You know, and there's so many more we have to go through um, usually like the Ethics Committee and stuff, just because of the privacy issues and concerns and stuff.

(Hailey, personal communication, June 23rd, 2016)

A volunteer coordinator from a non-profit organization discussed how her volunteers are required to make phone calls to the clients, but only using the organization's telephone. In addition, volunteers making phone calls from their own telephone was strictly prohibited because the organization would be unable to monitor the interactions between the volunteer and the participant:

We used to allow it on the outside, but... I'm going to use the word control but that's not what I mean. Then we don't have control of the communication that they're giving and taking from the clientele. So we've, we've pretty much stopped most of our volunteer exterior work and brought it in house. If we have a friendly caller now we ask them to come to the center. (Lisa, personal communication, November 2nd, 2016)

Danielle also spoke about the issue of confidentiality in regards to the volunteers making telephone calls to the clients: "Yeah, because as a volunteer here, the policy that we have is that volunteers cannot give their phone number or personal information to clients because of their right to privacy" (Danielle, October 4th, 2016). Some practitioners felt that their organization would never be able to overcome the issue of confidentiality and were obligated to exclude computer and tablet programming from their practice:

We're probably not there yet. With the confidentiality and there's a lot of, you know, very strict about that. They'll be a lot of monitoring so it would be extra

work for our organization, yeah. Some other organizations I think it would work out differently, yeah. (Margaret, personal communication, June 23rd, 2016)

The issue of Wi-Fi also seemed to be an ongoing struggle in regards to who was allowed to access the Internet. TR practitioners experienced many restrictions and generally had issues with connecting to the Internet during programming:

We do have Wi-Fi in the activity room but in the patients' rooms no. You know maybe there's one patient, if we're lucky, you know he can get the Wi-Fi. If not they have to sign up with you know a company to get Internet use in their rooms. (Audrey, personal communication, June 17th, 2016)

Providing the Wi-Fi password or access, even when it was available, was also described as a challenge: “I don't have Internet access to give out to patients with their own devices, so if they bring their own tablet to the hospital, I don't have the ability to give them free Internet access” (Margaret, personal communication, June 23rd, 2017). “It has Wi-Fi, but it just won't... You're not allowed to give the password to the patients” (Jessica, personal communication, July 5th, 2016). When patients are in the hospital and do not have access to the Internet, it can affect their daily routine: “Sometimes some of them do need access to their emails or cause it's something to do with paying bills or an appointment that's coming up that they need to cancel or rearrange and stuff” (Jessica, personal communication, July 5th, 2016).

In addition to Wi-Fi and confidentiality, a lack of financial resources emerged in the interviews with TR practitioners and volunteer coordinators: “I think a lot of them would use it more if they had the resources available. I think money is always a big issue in our field that there's not enough” (Hailey, personal communication, June 23rd, 2016).

“It's hard to tell exactly how much. But that's to cover staff time to do the webcasts, which is very expensive actually (Sylvie, personal communication, October 13th, 2016). “The funds are limited, so that's why we rely on volunteers to do a lot of our work (Lisa, personal communication, November 2nd, 2016). Some study participants also mentioned that government funds seem to be less every year, and conducting technology-based programs can be costly with respect to purchasing the devices and their coinciding services:

The government hasn't been very good, in my eyes, with providing funding for new things. Like even in this hospital as a whole, last year, this year and next year we have the exact same budget. There's no increase in the budget for 3 years. So you get more patients you need to provide more services, but yet you have less funds to do it with. (Jessica, personal communication, July 5th, 2016)

Time constraints were other challenges experienced by both professions for why they were not incorporating computers and tablets in their programs. Many of them were interested in using computer or tablets, but they did not have enough time to commit to a technology-based program:

I did get enough money for two iPads, but I thought, you know what let's try one first and see how it goes. And for months, and months, and months I didn't use it just cause I was too busy on the unit and it was just a bit crazy. I've only started using in the last few months. I need to use it more, and it's just again, more time. And it's really challenging to find large group programming because our people are just so individual it's just ... Yeah, so a lot of the patients don't get seen you know because I just don't have time. [Interviewer: “What is your biggest

challenge in practice?"] Time constraints... Yeah. It's very difficult to find volunteers who are available during the day, especially because most of our volunteers are younger. They're students or they're working full-time. So time constraints. (Jessica, personal communication, July 5th, 2016)

Some TR practitioners who already had computer and tablet programs implemented experienced some logistical issues while conducting their programs: But when there is a computer problem or someone can't join us or something like it's not working for someone, it's a lot of scrambling like to get and make sure it's still working. I find that sometimes it's limited by visual just cause the screen tends to be quite small even though we have a full-size iPad. (Sylvie, personal communication October 13th, 2016)

Despite these challenges, older adults should be provided with the opportunity to learn how to use a computer or tablet to help them compensate for any physical, financial, or social barrier they may be facing. Furthermore, it is important for everyone to have the basic skill sets to operate such devices for carrying out activities of daily living. For instance, Margaret, a TR practitioner, mentioned the importance of teaching older adults digital literacy skills, which are transferable to accomplishing the tasks of daily living:

I'm just thinking of booking transit. A successful transit could be booked online, so one to one would be learning how to book wheel trans. Some patients aren't able to vocalize. If they've had any apraxia speech or aphasia, they're not able to vocalize on the phone, and so being able to book rides on the computer is a really important skill for them. (Personal communication, June 23rd, 2016)

4.6 The Potential of an Online Volunteering Program

The discussions with TR practitioners and volunteer coordinators about the possibility of implementing an online volunteering program did not produce a lot of positive feedback. Many mentioned that it was a great idea, but it would not work for the people they were serving: “A lot of them don't have... They're not tech savvy. A lot of them don't have computers at all; some don't even have answering machines. So in that sense that would not work here” (Lisa, personal communication, November 2nd, 2016). Madison discussed that older adults would not be interested in an online volunteering program “It could, but what the seniors are really looking for face-to-face, like a presence, and a lot of them now are really asking to go out for a walk or something or play a board game or things like that so...” (Personal communication, December 9th, 2016). Jessica also felt that older adults would not benefit from online volunteering, but for different reasons than Madison and Lisa:

Some of them [patients] could volunteer at different places, but the benefit of them volunteering at other places is to get out and to be social, so going on a computer and doing that kind of thing, I can't see it working, but the main reason is just that they're too ill” (Jessica, personal communication, July 5th, 2016).

Michelle, who works in a volunteer bureau, mentioned that an online volunteering project to target a younger population to become virtual volunteers would be starting soon:

Well, actually we're just doing a pilot project with [B.W.]. They want for us to give them requests that we receive for between 12- and 17-year-olds so they could just get on their phone and see, ‘Oh, I'm downtown. Is there anything I could do

here downtown?’ and boom, you know get it. (Personal communication, September 8th, 2016)

This is an interesting approach to targeting volunteers, and to resolve the challenge of volunteer retention:

Don't know why. I think the... Life has changed. People who used to come and volunteer, the young-uns like 50 plus are... The dynamics has changed. Those people are now looking after ailing parents or things like that so they don't really have time to give. So it's become a task. (Lisa, personal communication, November 2nd, 2016)

Although the initial idea was to explore how an online volunteer infrastructure could help facilitate community engagement for older adults, the practitioners I interviewed perceived online volunteering to be more suitable for a younger population. Thus, online volunteering might be considered an opportunity for younger adults to teach older adults digital literacy skills.

4.7 Summary of the Findings

This chapter has provided an in-depth analysis that emerged from the data gathered from six older adults, six TR practitioners, and four volunteer coordinators. The findings showed that these older adults experienced physical, financial, and social barriers that prevented them from participating in community activities. However, some older adult participants were interested in community engagement by participating in continuing education, discussion groups, support groups, or intergenerational programming. When older adults were asked about their computer or tablet use, three main themes emerged. First, they discussed the expensive costs of the devices and their

services. Second, some really were not interested in using a computer or tablet. Third, and the most common answer, was that they felt they did not have the knowledge to operate a computer or tablet. In addition, one surprising theme that emerged from the data was that some older adults who were considered to be socially isolated, felt content with being alone and did not desire a connection to their community. Therefore, the design of technology-based programs for older adults should take into consideration their interests and challenges, while also understanding their needs and personal goals.

The discussions with the TR practitioners and the volunteer coordinators raised many concerns for technology-based programming. Specifically, organizational barriers such as hospital policies was a prominent challenge and seemed to be associated with other issues such as confidentiality, Wi-Fi, lack of financial resources, time constraints, and logistical issues. In addition, many TR practitioners and volunteer coordinators felt that online volunteering would not be a suitable program for older adults because they were either not interested or they were too ill to participate. However, some felt that online volunteering could be an opportunity for younger adults to engage more with their community through voluntary activities. Furthermore, the presence of technology in TR practice is becoming more popular, and some practitioners are using computers and tablets beyond passive activities. These themes and their relationships, which emerged from the findings, are discussed in more detail in Chapter 5.

CHAPTER 5: DISCUSSION

This discussion contextualizes the findings with respect to each research question. The first question involves how to engage older adults—who are experiencing social isolation—in their community by using computers or tablets. Some ideas include providing older adults with opportunities to continue their education, interact with younger generations, and access stimulating programs that are of interest, specifically support and discussion groups. In addition, disengagement theory and agency are two major themes that emerged in relation to community engagement, which are discussed in more detail later in this chapter.

Second, online volunteering, while not without significant constraints, can provide opportunities for community engagement. The TR practitioners and volunteer coordinators expressed the challenges they faced with program implementation, such as hospital policies, confidentiality issues, lack of financial resources, lack of time, poor Wi-Fi connections, and logistical issues. Indeed, older adults who currently are not using computers or tablets are choosing to disengage or do not have the knowledge to engage with these technological devices. Thus, TR practitioners and volunteer coordinators could provide education to decrease the digital divide and provide more opportunities for digital inclusion. A discussion about online volunteering as an alternative activity to help foster community engagement concludes the chapter.

5.1 Computer and Tablet Program Ideas for Older Adults

Hutchinson and Lord (1979) have pointed out “one important element which helps to ensure successful integration is quality generic services and programs” (p. 65). However, as Penny—an older adult living independently in the suburbs of Montreal—

mentioned, she has no interest in the programs offered for older adults in her community, since she is just not into “old-people-like activities”. In other words, generic programs may not always lead to successful outcomes, and some leisure programs—such as bingo, card and board games, etc.—may not be appropriate for all older adults. The three most preferred leisure interests that emerged from the data were peer-led support groups and discussion groups, continuing education, and intergenerational interactions. The older adult participants expressed that these programs seemed to be interesting and meaningful.

First, Robert—an older adult living in a retirement home with his partner Olivia in the suburbs of Montreal—mentioned that he would be interested in counselling people who have had a stroke because he had two strokes himself, which were frightening experiences. Although the Internet can provide an accessible, 24-hour a day means to promote chronic disease management (Kaufman, 2010), implementing an online peer-led support group, in which older adults can share their experiences, is not only about getting information, but it can provide individuals with a sense of self-worth by helping others through online interactions. Cotterez, Durant, Agne, and Cherrington’s (2014) research into Internet interventions related to diabetes suggests that interventions need to focus more on participants’ interactions through online communities that are independent of the an individual’s geographical location. This approach would enable the same intervention to be used in multiple geographical areas, and more users could connect with one another as well as with the members of the health worker community (Cotterez et al., 2014). Furthermore, online communities have been identified as places where people can provide and receive social support (Leist, 2013), and some find it easier and more

convenient to have their needs met through participation in online communities (Nimrod, 2009).

Second, the older adult participants expressed interest in being involved in discussion groups. For example, throughout their interview, Olivia and Robert said multiple times how they missed discussions with their peers at their former community centre. Cattan, White, Bond, and Learmouth (2005) have found that many older adults express interest in therapy type support groups and peer- and professionally-led discussion groups. Anderson (1985) found that older women who lived alone and who discussed health-related topics significantly reduced their loneliness and increased their social contacts, self-esteem, and participation in organized activities. Thus, discussion groups—peer or professionally led and accessed through computers or tablets connected to the Internet—on the topics of interest can engage older adults with a community.

Older adult participants also were interested in continuing education. Specifically, Penny mentioned that she missed attending classes at a local university, and Leah said she loved to continue learning new things. Learning continues throughout life, with an aim to improve knowledge, skills, and competencies within a personal, civic, social, and/or employment-related context (European Commission, 2001). Moreover, lifelong learning can be formal (educational institutions), non-formal (sponsored), or informal (day-to-day tasks) (Merriam & Kee, 2014). Penny and Leah were interested in formal and informal learning, which can be done through computers or tablets in two different ways. One way is to implement a virtual learning program similar to the one that Sylvie, a TR practitioner, developed. The second way is to teach older adults about existing programs they can access on their own using a computer or tablet. Lifelong learning has been

associated with enhancing social capital and well-being “by helping develop social competencies, extending social networks, and promoting shared norms and tolerance of others” (Field, 2009, p. 23). Therefore, continuing education should be considered a program objective for those who may be experiencing social isolation.

Some of the older adults in the present study expressed interest in interacting with the younger generations. Using a computer or tablet can potentially facilitate interactions between older adults and adolescents. For instance, *Cyber Seniors* is a technology-based program where adolescent volunteers taught older adults how to use a computer to enhance their digital literacy skills, while simultaneously, facilitated intergenerational interactions. Specifically in the beginning, *Cyber Seniors* was a film project that focused on the digital divide—adolescents were filmed teaching older adults how to use a computer or tablet (Cassaday, Rusnak, & Singer, 2009). The film demonstrated the challenges older adults experienced when learning new digital literacy skills, and also highlighted the meaningful connections and friendships made between the older adults and adolescents. Therefore, an intergenerational program has the potential to facilitate community engagement.

5.1.1 An Asynchronous Community Engagement

Computers and tablets alone cannot develop a sense of belonging and community inclusion. The findings of the present study demonstrate that asynchronous engagement, the blending of online and offline connections, would be the most beneficial strategy for older adults experiencing social isolation. The participant who spoke most strongly to this dynamic of online and offline worlds was Leah, a full-time caregiver to her husband. Even though she was very connected virtually to her local community centre, she still felt

isolated and lacked connections with her physical community. For older adults to feel included in their community, four dimensions must be addressed: inclusion; acceptance; being part of something dynamic; and freedom of choice (Whyte & Sharpe, 2016).

Although Leah may have had the freedom to do what she wanted on her computer, she did not have the freedom of choice in her daily life activities, which may be a barrier to community development through online forums. Weaver et al. (2010) have suggested that computer social interactions are not intimate connections. Kingwell (2000) also has found that people need to venture outside of their homes and into the public to feel connected with their community. Although some have argued that older adults who are coping with physical, financial, or social constraints can experience a sense of community through online interactions, it seems that Leah felt this could never happen without physical face-to-face contact.

On the other end of the spectrum, some researchers have found that ICTs and the Internet are sources of information for older adults that are associated with higher levels of social connectivity, higher levels of perceived social support, decreased feelings of loneliness and depression, and generally more positive attitudes toward aging (Boz & Karatas, 2015; Llorente-Barroso et al., 2015; Nimrod, 2009). Furthermore, Boz and Karatas (2015) have found that using the Internet to search for information and communicate with others contributes to an increase in older adults' social capital and well-being. In her interview, Penny said that the only way she would be able to see pictures of her grandchildren was through Facebook. Even Leah mentioned that the computer was her lifeline to the world. Therefore, computers and tablets may provide a sense of community by offering avenues for engagement. However, these findings

suggest that community engagement cannot solely be relied on to achieve these positive effects; rather, community engagement needs to be asynchronous, a mixture of online and offline worlds.

5.1.2 Disengagement as a Form of Agency

The disengagement theory of aging, as outlined by Cumming and Henry (1961), states that it is inevitable for older adults to withdraw or disengage from their communities, which results in a decreased interaction between aging persons and their social systems. Significant critique of this theory has proven that withdrawal from society is not inevitable, however, some older adults may choose to disengage as a means to express their agency. Both Ruth and Charlie discussed how they did not engage with their community, and how they were not interested in increasing their community participation. They also mentioned how their health status is one reason why they choose to disengage from their community. Sen (1985) has suggested that:

If a disabled person, physically crippled, happens to be contented—through resignation or by coming to terms with his disability—and takes pleasure in small mercies, then in the space of utilities (i.e., happiness, or desire fulfillment, or choice), his deprivation (in the form of not being able to move about freely) will not be adequately reflected in the metric of utility. (p. 15)

Ruth stated that the onset of her illness made her reassess her connections with her community, and she is content with being alone. Charlie said he never participated in community activities, and he does not like to attend meetings or engage in activities that involve others; he also is content with being alone. Bjorklund (2011) found that “the least disengaged adults have reported greater satisfaction with themselves and their lives” (p.

368). However, those who choose to not participate, and who would be considered to be the most disengaged, like Ruth and Charlie, are in fact happy and content with their level of disengagement. Thus, professionals who work with similar clients should recognize that some older adults express their agency by choosing to disengage from their community and its activities.

Agency has been defined as the ability to act on behalf of what he or she values (Malhotra, 2003), and a person's free ability to do what they want to achieve whatever goals or values she/he regards as important (Sen, 1985). Agency in a health professional setting has been categorized as an objective to help keep individuals healthy and independent. However, and as Baars, Dohmen, Grenier, and Phillipson, (2014) have suggested, agency can be expressed separately from health. TR practitioners can act as agents (Sen, 1999) by helping people achieve their goals and enhance their well-being through the act of bringing about change. Therefore, enabling people to choose the activities in which they would like to participate would contribute to older adults' abilities to act agentially.

5.3 Computer and Tablet Programming in Therapeutic Recreation Practice

Findlay (2003) evaluated 20 years of literature on interventions that were designed to reduce social isolation amongst older adults. He discovered that although numerous interventions to address social isolation have been implemented across the globe, there is very little evidence to show that they work. His conclusions suggested "future intervention programs aimed at reducing social isolation should have evaluation built into them at inception" (p.647). Although I agree with Findlay (2003) in that many program interventions are not successful in reducing social isolation, it might be fair to

say that social isolation is not an objective factor; rather, it is very subjective. For instance, some older adults, like Ruth and Charlie, choose to be isolated and feel empowered by disengaging. While others, like Leah, experience social constraints that prevent them from engaging with their community altogether. It is suggested that several programs should be implemented to help reduce social isolation, because each individual's experiences are unique and subjective.

TR practitioners sometimes search for programs that will hopefully solve a social phenomenon, such as social isolation, and often are disappointed by the results. TR practitioners are also sometimes informed of successful programs but believe the program could never be implemented within their work environment. Technology is somewhat limited, as with other TR programs, and the findings in this thesis suggests that it is unlikely that computers and tablets can solve the issue of social isolation alone. However, introducing technology-based programs would be beneficial for older adults who are experiencing physical, financial, or social constraints that cause them to feel isolated. Specifically, TR programs with the goal of teaching digital literacy skills will help older adults to gain access to new social networks and digital communities through online forums. Therefore, one program cannot reduce social isolation amongst older adults, rather multiple programs implemented simultaneously is more likely to alleviate feelings of loneliness. Thus, it is suggested for TR practitioners to incorporate computers and tablets into practice, in addition to appropriate leisure activities and community oriented programs.

5.3.1 Providing Leisure Education to Older Adults

Social media and online support groups have been proven to provide older adults with many benefits, although the lack of digital literacy skills to access them is a barrier. Not only has interest, cost, ergonomic impediments, and complexity constrained older adults' engagement with technology, but also the lack of knowledge has been found to be the main barrier (Gitlow, 2014). Furthermore, access to shopping or government services, for example, is becoming limited without an Internet connection or email address, and thus can prevent older adults from accessing certain services. This is not to say that older adults are to blame for their lack of knowledge; rather this lack of knowledge highlights the importance of providing meaningful opportunities for older adults to learn about what technology can do for them. My research reveals that older adults likely do not use a computer or tablet because they do not have the knowledge to operate such a device. Fortunately, a movement is growing to increase knowledge opportunities for older adults in regards to the use of computers and tablets. Madison, one of the volunteer coordinators I interviewed, described how her organization is beginning to recruit volunteers to teach digital literacy skills to older adults in the community.

In addition, language and usability may be other reasons why older adults lack this knowledge or choose not to engage with computer or tablet devices. Burkhard and Koch (2012) found that older adults who have dry or wrinkled fingertips had a significant higher touch recognition error rate on some tablets. Also, companies who make computers and tablets do not seem to consider the level of their users' cognitive-related skills (Burkhard & Koch, 2012). For instance, Olivia mentioned how having a stroke made it more difficult for her to learn how to use an iPad. Consequently, when providing

education and opportunities for older adults to enhance their digital skills, it is important to consider the different types of interfaces and ICT devices available. Furthermore, to address older adults lack of knowledge in regards to the use of ICT devices, TR practitioners can begin to incorporate more digital literacy programs. Providing more digital learning opportunities therefore, enables older adults to access more resources, which, in turn, can enhance their connections to their community and foster digital inclusion.

CHAPTER 6: CONCLUSIONS

This study set out to examine the experiences of older adults with being socially isolated from their community. Specifically, the purpose of this study was to explore how computers and tablets could facilitate a sense of community for older adults, and whether TR practitioners and volunteer coordinators could assist with this process. Based on the findings and discussion, one of the most meaningful ways to engage older adults using a computer or tablet is to provide them with education to enhance their digital literacy skills. The learning process can be seen as an opportunity for older adults to engage in the community and expand their social capital because they would be likely to meet people outside their immediate networks. Furthermore, having a younger person, either a volunteer or an intern, teach digital literacy skills could facilitate more intergenerational interactions, which many older adults in the interviews perceived as positive. Online discussions and support groups were also found to be positive ways to engage socially isolated older adults in the community, giving them a sense of empowerment and purpose. In addition, some older adults choose to be socially isolated and felt content being alone, which exemplified their disengagement and agency. Older adults cannot be told to engage with their community; instead, they must have the freedom to choose. Many older adults who are experiencing physical, financial, or social constraints are limited in what they can participate. Providing more opportunities for them to learn digital literacy skills through leisure education would, therefore, assist older adults with community engagement, if an online connection were desired.

Exploring online volunteering was the secondary purpose of this research study to determine whether older adults had an interest, and whether TR practitioners and

volunteer coordinators thought this type of program would be helpful. Most volunteer coordinators and TR practitioners felt that their clientele would not be interested in or have a need for this type of program, nor would it be easy to implement it in their workplace due to various organizational barriers. These challenges revolved around hospital policies, and the issues associated included confidentiality, Wi-Fi, financial, time, and logistics. Some also mentioned that an online volunteer program might be more appealing for a younger generation and could have a positive effect on volunteer retention. However, with respect to TR and volunteering practices, organizational challenges—specifically confidentiality and privacy—would need to be addressed to successfully facilitate an online volunteer program, or any other type of program involving computers and tablets.

6.1 Study Limitations

Several limitations emerged during throughout this research endeavour. First, this study used a snowball sampling method, where one participant recommended another participant for me to interview. Although I interviewed many participants, the sample was relatively a heterogeneous group. For instance, some participants lived in rural Ontario, whereas others lived in the suburbs of Montreal. In future research projects, recruiting a more homogeneous sample would help to explore specific experiences in greater depth.

Second, I conducted each interview one-on-one or in a small group (two participants and myself as interviewer). The interviews with two participants and myself as the interviewer could have possibly changed the dynamics of the conversations—

compared to the one-on-one interviews—which could have influenced the types of experiences shared.

Finally, asking the participants about a hypothetical online volunteering program, and not having access to past individual experiences with online volunteering, was challenging. TR practitioners and volunteer coordinators were not interested in online volunteering as a program, and the older adult participants did not comment much on the idea. Furthermore, volunteer coordinators and TR practitioners felt that an online volunteer program could not exist because of organizational barriers, or because their clients would not be interested in that type of program. However, because this type of program has never been implemented in their workplace, it was difficult for them to accurately determine whether their clients would be interested, or what barriers they would experience with implementation.

6.2 Recommendations for Future Research

Based on the findings and the discussion of this study, there are three recommendations for future research. First, it is recommended that future researchers re-examine the foundations of community engagement, specifically looking at the asynchronous relationship of online and offline communities. While there is an abundance of research exploring community engagement, both online and offline, no other studies explored an asynchronous relationship. Second, it is recommended for researchers to continue to explore community engagement opportunities using computers or tablets. While the benefits of online communities are clear, there could be more programs available for an older adult population. In addition, those who are experiencing physical, financial and social constraints could be providing with more opportunities to

engage with their community through online forums. Finally, the notion of disengagement theory as a form of agency was a new idea introduced in this thesis. It is recommended for researchers to explore disengagement and agency in similar research projects, and to evaluate whether their participants had similar experiences. Further knowledge of community engagement will therefore aid in the development of programs to assist older adults experiencing social isolation.

6.3 Recommendations for Practice

In order to make better use of ICTs in TR practice, TR practitioners must first address the challenges of confidentiality, lack of Wi-Fi and financial resources, as well as their own time constraints. To develop and implement successful programs using computers or tablets, these challenges need to be resolved. However, this should not inhibit individual TR practitioners from finding their own solutions within their practice. Rather than giving up on ideas for innovative programming, TR practitioners need to take a solution-oriented approach, and focus on how to eliminate barriers to program implementation. Second, it is important to recognize that some of the programs that are currently being offered for older adults may not be appropriate. For instance, bingo, card games, knitting, etc. are stereotypical programs for an older generation, and may not be acceptable or appropriate leisure activities for all older adults. As mentioned earlier, older adults are a heterogeneous population, and so a variety of activities should be offered to better meet their needs. Finally, introducing more digital literacy programs into TR practice will provide leisure education to older adults experiencing social isolation and provide different opportunities for community engagement. Providing leisure education regarding the use of computers and tablets can also help decrease the digital divide and

provide older adults with improved access to online information. Therefore, the intent of these three recommendations is for TR practitioners to consider using more computers and tablets in their practice and to encourage more leisure education opportunities for an older adult population.

6.3 Final Remarks

The concepts and theory building that emerged from this study contribute to the current knowledge and will be useful in the development of future studies into communication, TR, and community development. This research project has provided me with an opportunity to share knowledge from both TR and volunteering professions—the people who work day to day with older adults. In addition, I was able to share older adults' experiences with social isolation and provide a better understanding of their perspective on community engagement. This research experience has enabled me to learn more about the opinions of older adults towards community engagement and their use of computer and tablet devices. Furthermore, I was able to gain a different perspective of both TR and volunteer practices, and the various challenges these practitioners experience with implementing technology-based programs. It is my hope that I have been able to capture the depth of these experiences, and that this thesis is reflective of the different community engagement opportunities for older adults experiencing social isolation.

REFERENCES

- Achenbaum, A. W., & Bengtson, V. L. (1994). Re-engaging the disengagement theory of aging: On the history and assessment of theory development in gerontology. *The Gerontologist, 34*(6), 756-763.
- Andersson, L. (1985). Intervention against loneliness in a group of elderly women: An impact evaluation. *Social Science and Medicine, 20*(4), 355–64.
- Arai, S. M. (2000). Typology of volunteers for a changing sociopolitical context: The impact on social capital, citizenship and civil society. *Society and Leisure, 23*(2), 327–352. doi:10.1080/07053436.2000.10707534.
- Arai, S., & Pedlar, A. (2003). Moving beyond individualism in leisure theory: A critical analysis of concepts of community and social engagement. *Leisure Studies, 22*(3), 185–202. doi:10.1080/026143603200075489
- Baumeister, R. F., Twenge, J. M., & Nuss, C. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology, 83*, 817-827.
- Barak, A., Boniel-Nissim, M., & Suler, J. (2008). Fostering empowerment in online support groups. *Computers in Human Behavior, 24*(5), 1867-1883.
- Baars, J., Dohmen, J., Grenier, A., & Phillipson, C. (Eds.). (2014). *Ageing, meaning and social structure: Connecting critical and humanistic gerontology*. London, UK: Policy Press.
- Bekhet, A. K., & Zauszniewski, J. A. (2012). Mental health of elders in retirement communities: Is loneliness a key factor? *Archives of Psychiatric Nursing, 26*(3), 214-224.

- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1998). *Habits of the heart: Individualism and commitment in American life*. New York, NY: Harper & Row Publishers.
- Berg, B. L., Lune, H., & Lune, H. (2004). *Qualitative research methods for the social sciences* (5th ed.). Boston, MA: Pearson.
- Berkman, L. F., Glass, T., Brissette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine*, *51*, 843–857.
- Blanche, D. (2015). *Statistical summary on ageing and ICTs*. Barcelona, Spain: Ageing + Communication + Technologies, Concordia University. Retrieved from <http://actproject.ca/wp->
- Block, P. (2009). *Community: The structure of belonging*. San Francisco, CA: Berrett-Koehler Publishers.
- Bjorklund, B. R. (2011). *The journey of adulthood* (7th ed.) Boston, MA: Prentice Hall.
- Bowling A., Grundy E. (1998). The association between social networks and mortality in later life. *Review of Clinical Gerontology*, *8*, 353–361.
- Boz, H., & Karatas, S. E. (2015). A review on Internet use and quality of life of the elderly. *Cypriot Journal of Education*, *10*(3), 182–191.
- Bradley, D. B. (1999). A reason to rise each morning: The meaning of volunteering in the lives of older adults. *Generations*, *23*(4), 45-50.
- Burkhard, M., & Koch, M. (2012). Evaluating touchscreen interfaces of tablet computers for elderly people. In H. Reiterer & O. Deussen (Eds.). *Workshopband Mensch & Computer 2012* (pp. 53-59). München, Germany: Oldenbourg Verlag.

- Buse, C. E. (2010). E-scaping the ageing body? Computer technologies and embodiment in later life. *Ageing and Society*, 30(06), 987–1009.
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging*, 21(1), 140.
- Cacioppo, J. T., Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*. New York, Ny: W. W. Norton & Company.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada. (2010). Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. Access online at:
http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf.
- Carstensen, L. (1995). Evidence for a life span theory of socioemotional selectivity. *Current Directions in Psychological Science*, 4(5), 151-156.
- Cassaday, S., Rusnak, B., & Singer, G. (2009). *Cyber seniors: Connecting Generations* [Documentary]. Retrieved from <http://cyberseniorsdocumentary.com/>.
- Castells, M. (2004). Afterword: Why networks matter. In *Network Logic Who Governs in an Interconnected World* (pp. 221–225). London, UK. Retrieved from:
http://www.kirkarts.com/wiki/images/5/51/Castells_Why_Networks_Matter.pdf.
- Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: A systematic review of health promotion interventions. *Ageing & Society*, 25(1), 41-67.

- Charmaz, K. (2006). *Constructing grounded theory*. Thousand Oaks, CA: Sage Publications Ltd.
- Cisco Systems Inc. (2014). Cisco visual networking index: Global mobile data traffic forecast update, 2013 – 2018. *Cisco Public*, 1–40.
- Charness, N., & Boot, W. R. (2009). Aging and information technology use potential and barriers. *Current Directions in Psychological Science*, 18(5), 253-258.
- Canadian Librarian Association, Interest Group on Services to Older Peoples. (2002). Canadian guidelines on library information services for older adults. Retrieved from: <http://cla.ca/wp-content/uploads/Library-and-Information-Services-for-Older-Adults-Nov-2007.pdf>.
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41(1), 89-91.
- Cornejo, R., Tori, M. Ten, & Favela, J. (2013). Enriching in-person encounters through social media: A study on family connectedness for the elderly. *International Journal of Human Computer Studies*, 71(9), 889–899.
- Cottrez, A., Durant, N., Agne, A., & Cherrington, A. (2014). Internet interventions to support lifestyle modification for diabetes management: A systematic review of the evidence. *Journal of Diabetes and its Complications*, 28(2), 243-251. doi: 10.1016/j.jdiacomp.2013.07.003.
- Cramm, J. M., Van Dijk, H. M., & Nieboer, A. P. (2013). The importance of neighborhood social cohesion and social capital for the well being of older adults in the community. *The Gerontologist*, 53(1), 142-152.

- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. London, UK: Sage Publications Inc.
- Crow, B., & Sawchuk, K. (2014). New and old, young and old: Aging the mobile imaginary. In A. Hermann, J. Hadlaw, & T. Swiss (Eds.), *Theories of the Mobile Internet: Materialities and Imaginaries* (pp. 187–199). Abingdon, UK: Routledge.
- Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1992). *Optimal experience: Psychological studies of flow in consciousness*. Cambridge, UK: Cambridge University Press.
- Cumming, E., Dean, L. R., Newell, D. S., & McCaffrey, I. (1960). Disengagement: A tentative theory of aging. *Sociometry*, 23(1), 23-35.
- Cumming, E., & Henry, W. E. (1961). *Growing old: The process of disengagement*. New York, NY: Basic Books.
- Cutler, C., Hicks, B., & Innes, A. (2016). Does digital gaming enable healthy aging for community-dwelling people with dementia? *Games and Culture*, 11(1-2), 104–129.
- Daly, K. J. (2007). *Qualitative methods for family studies and human development*. Thousand Oaks, CA: Sage Publications Ltd.
- Delamere, F. (2012). *Second Life as a digitally mediated third place: Social Capital in virtual world communities* (pp. 236–249). Abingdon, UK: Routledge.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542– 575.
<http://dx.doi.org/10.1037/0033-2909.95.3.542>.
- Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research*, 112, 497–527. [doi.org/10.1007/s11205-012-0076-y](http://dx.doi.org/10.1007/s11205-012-0076-y).

- Edwards, K., & Anderson, M. (2015). *A profile of debt-burdened older adults*. Poster presented at student research symposium Utah State University, Logan, UT.
- Eid, M., & Larsen, R. J. (Eds.). (2008). *The science of subjective wellbeing*. New York, NY: Guilford Press.
- Ellis, S. J., & Cravens, J. (2000). *Virtual volunteer guidebook*. Washington, DC: United Nations Volunteer Program.
- Eng, P. M., Rimm, E.B., Fitzmaurice, G., & Kawachi, I. (2002). Social ties and change in social ties in relation to subsequent total and cause-specific mortality and coronary heart disease incidence in men. *American Journal of Epidemiology*, *155*, 700–709.
- European Commission. (2001). Making a European area of lifelong learning a reality (COM[2006]678Final). Brussels: Author. Retrieved from: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0678:FIN:EN:PDF>.
- Field, J. (2009). Well-being and happiness: Inquiry into the future of lifelong learning (Thematic paper 4). Leicester, UK: National Institute of Adult Continuing Education. Retrieved from: http://www.academia.edu/2550251/Well-being_and_happiness.
- Findlay, R. A. (2003). Interventions to reduce social isolation amongst older people: Where is the evidence? *Cambridge University Press*, *23*(5), 647-658. doi: 10.1017/S0144686X03001296.

- Forsman, A. K., Herberts, C., Nyqvist, F., Wahlbeck, K., & Schierenbeck, I. (2013). Understanding the role of social capital for mental wellbeing among older adults. *Ageing and Society*, 33(05), 804-825.
- Gitlow, L. (2014). Technology use by older adults and barriers to using technology. *Physical & Occupational Therapy in Geriatrics*, 32(3), 271-280.
- Glover, T. (2004). The “Community” center and the social construction of citizenship. *Leisure Sciences*, 26(1), 63–83. doi:10.1080/01490400490272486.
- Glover, T. (2006). Toward a critical examination of social capital within leisure contexts: From production and maintenance to distribution. *Leisure/Loisir*, 30(2), 357–367. doi:10.1080/14927713.2006.9651357.
- Glover, T., Shiness, K., & Parry, D. (2005). Association, sociability, and civic culture: The democratic effect of community gardening. *Leisure Sciences*, 27(1), 75–92. doi:10.1080/01490400590886060.
- Gold, M. (2007). The gold standard: A sense of belonging. Retrieved from: <http://ontario.cmha.ca/network/the-gold-standard-a-sense-of-belonging/>.
- Government of Canada (2014). Report on the social isolation of seniors. *National Seniors Canada*. Retrieved from: http://www.seniorscouncil.gc.ca/eng/research_publications/social_isolation/page03.shtml.
- Gullette, M. M. (2011). The new regimes of decline. In *Agewise: Fighting the New Ageism in America* (pp. 1–17). Chicago, IL: University of Chicago Press.
- Hagan, F. E. (2006). *Research methods in criminal justice and criminology* (7th ed.). Boston, MA: Allyn and Bacon.

- Hagan, R., Manktelow, R., Taylor, B. J., & Mallett, J. (2014). Reducing loneliness amongst older people: A systematic search and narrative review. *Aging & Mental Health, 18*(6), 683-693.
- Hajek, A., & König, H. H. (2016). Longitudinal predictors of functional impairment in older adults in Europe-evidence from the survey of health, ageing and retirement in Europe. *PloS one, 11*(1), 1-12.
- Hayes, L., Hawthorne, G., Farhall, J., O'hanlon, B., & Harvey, C. (2015). Quality of life and social isolation among caregivers of adults with Schizophrenia: Policy and outcomes. *Community Mental Health Journal, 51*(5), 591-597. doi: 10.1007/s10597-015-9848-6.
- Hebblethwaite, S., & Pedlar, A. (2005). Community integration for older adults with mental health issues: Implications for therapeutic recreation. *Therapeutic Recreation Journal, 39*(4), 264–276.
- Heikkinen, R. L., & Kauppinen, M. (2004). Depressive symptoms in late life: A 10-year follow-up. *Archives of Gerontology and Geriatrics, 38*(3), 239-250.
- Henderson, K. A. (2006). *Dimensions of choice: Qualitative approaches to parks, recreation, tourism, sport, and leisure research* (2nd ed.). State College, PA: Venture Publishing.
- Hesse-Biber, S. N., & Leavy, P. (2004). *Approaches to qualitative research: A reader on theory and practice*. Oxford, UK: Oxford University Press.
- Hochschild, A. R. (1975). Disengagement theory: A critique and proposal. *American Sociological Review, 40*(5), 553–569.

- Holloway, I. (1997). *Basic concepts for qualitative research*. London, UK: Blackwell Science.
- Hutchinson, P., & Lord, J. (1979). *Recreation Integration: Issues and alternatives in leisure services and community involvement*. Ottawa, ON: Leisure Ability Publications Inc.
- Hutchinson, S. L., & Wexler, B. (2007). Is “raging” good for health?: Older women's participation in the Raging Grannies. *Health Care for Women International*, 28(1), 88-118.
- Ibrahim, S., & Alkire, S. (2007). Agency and empowerment: A proposal for internationally comparable indicators. *Oxford development studies*, 35(4), 379-403.
- Joseph, A. E., & Martin-Matthews, A. (1993). Growing old in aging communities. *Journal of Canadian Studies/Revue d'Études Canadiennes*, 28(1), 14.
- Kahlbaugh, P. E., Sperandio, A. J., Carlson, A. L., & Hauselt, J. (2011). Effects of playing Wii on well-being in the elderly: Physical activity, loneliness, and mood. *Activities, Adaptation & Aging*, 35(4), 331–344.
- Kaufman, N. (2010). Internet and information technology use in treatment of diabetes. *International Journal of Clinical Practice*, 64(s166), 41-46.
- Kelly, J.R. (1996). *Leisure* (3rd ed.). Boston: Allyn Bacon.
- Khvorostianov, N., Elias, N., & Nimrod, G. (2012). “Without it I am nothing”: The internet in the lives of older immigrants. *New Media & Society*, 14(4), 583–599.
- Kingwell, M. (2000). *The world we want: Virtues, vice, and the good citizen*. Toronto, ON: Viking Press.

- Kleiber, D.A. (1999). *Leisure experience and human development*. New York, NY: Basic Books.
- Knight, F. H. (1982). *Freedom and reform: Essays in economics and social philosophy*. Indianapolis, IN: Liberty Fund.
- Kuykendall, L., Tay, L., & Ng, V. (2015). Leisure engagement and subjective well-being: A meta-analysis. *Psychological bulletin*, 141(2), 364-403.
- Leist, A. K. (2013). Social media use of older adults: A mini-review. *Gerontology*, 59(4), 378–384.
- Leitner, M. J., & Leitner, S. F. (2004). *Leisure in later life*. Philadelphia, PA: Haworth Press.
- Liechty, T., & Genoe, M. R. (2013). Older men's perceptions of leisure and aging. *Leisure Sciences*, 35(5), 438–454. doi:10.1080/01490400.2013.831287.
- Lincoln, Y.S. & Guba, E.G. (1985). Trustworthiness. In Y.S. Lincoln & E.G. Guba (Eds.), *Naturalistic Inquiry* (pp. 289-331). Newbury Park, CA: Sage.
- Llorente-Barroso, C., Viñarás-Abad, M., & Sánchez-Valle, M. (2015). Internet and the elderly: Enhancing active ageing. *Comunicar*, 23(45), 29–36.
- Lofland, J., & Lofland, L. (1984). *Analyzing social settings*. Belmont, CA: Wadsworth.
- MacNeil, R., & Gould, D. (2012). Global perspectives on leisure and aging. In H. Gibson & J. Singleton (Eds.), *Leisure and Aging: Theory and Practice* (pp. 3–22). Champaign, IL: Human Kinetics
- Madden, M. (2010). *Social networking use among those ages 50 and older nearly doubled over the past year*. Washington, DC: Pew Internet and American Life Project.

- Mahar, A. L., Cobigo, V., & Stuart, H. (2013). Conceptualizing belonging. *Disability & Rehabilitation, 35*(12), 1026-1032.
- Malhotra, A. (2003). Conceptualizing and measuring women's empowerment as a variable in international development. In *Measuring Empowerment: Cross-Disciplinary perspectives Workshop* (pp. 4-5). Washington, DC: Work Bank.
- Mancinelli, E. (2008). E-Inclusion in the information society. *Information Society. From theory to political practice. Coursebook*, 171-182.
- May, V. (2011). Self, belonging and social change. *Sociology, 45*, 363-378.
- McPherson, B. D., & Wister, A. (2008). Aging as a social process: Canadian perspectives. Don Mills, ON: Oxford University Press.
- Merriam, S. B., & Kee, Y. (2014). Promoting community wellbeing: The case for lifelong learning for older adults. *Adult Education Quarterly, 64*(2), 128-144.
- Morrow-Howell, N., Hinterlong, J., & Sherraden, M. (2001). *Productive ageing: Concepts and challenges*. London, UK: The Johns Hopkins University Press.
- Morrow-Howell, N. (2010). Volunteering in later life: Research frontiers. *Journal of Gerontology: Social Sciences, 65B*(4), 461–469, doi:10.1093/geronb/gbq024.
- Mukherjee, D. (2011). Participation of older adults in virtual volunteering: A qualitative analysis. *Ageing International, 36*(2), 253–266. doi:10.1007/s12126-010-9088-6.
- Nelson, T. D. (2002). *Ageism: Stereotyping and prejudice against older persons*. Cambridge, MA: MIT Press
- Nimrod, G. (2009). The internet as a resource in older adults' leisure. *International Journal on Disability and Human Development, 8*(3), 207–214.

- Nimrod, G. (2011). The fun culture in seniors' online communities. *The Gerontologist*, 51(2), 226–237. doi:10.1093/geront/gnq084.
- Nimrod, G. (2013). Applying Gerontographics in the study of older Internet users. *Journal of Audience & Reception Studies*, 10(2), 46–64.
- Ostlund, B. (2005). Design paradigms and misunderstood technology: The case of older users. In B. Jaeger (Ed.), *Young Technologies in Old Hands: An International View on Senior Citizen's Utilization of ICT* (pp. 25–41). Copenhagen, DN: DJOF Publishing.
- Paggi, M. E., Jopp, D., & Hertzog, C. (2016). The importance of leisure activities in the relationship between physical health and well-being in a life span sample. *Gerontology*, 62(4), 450-458. doi:10.1159/00044441.
- Patton, M. (1990). Purposeful sampling. In *Qualitative Evaluation and Research Methods* (pp. 169-186). Newbury Park, CA: Sage Publications.
- Pedlar, A. (1996). Community development: What does it mean for recreation and leisure? *Journal of Applied Recreation Research*, 21, 5–23.
- Pedlar, A. (2006). Practicing community development and third way politics: Still faking it? *Leisure/Loisir*, 30(2), 427-436.
- Pedlar, A., & Haworth, L. (2006). Community. In C. Rojek, S. M. Shaw, & A. J. Veal (Eds.), *A handbook of leisure studies* (pp. 518-532). New York, NY: Palgrave Macmillan.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1-24.

- Portes, A. & Landolt, P. (2000). Social capital: Promise and pitfalls of its role in development. *Cambridge University Press*, 32, 529-547.
- Robertson, T., & Long, T. (2008). *Foundations of therapeutic recreation*. Windsor, ON: Human Kinetics.
- Romero, M., Hyvönen, P., & Barberà, E. (2012). Creativity in collaborative learning across the life span. *Creative Education*, 3(4), 422–429.
doi:10.4236/ce.2012.34066.
- Rouse, M. (September, 2005). *Definition: E-Inclusion*. Retrieved from:
<http://whatis.techtarget.com/definition/e-inclusion>.
- Salmons, J. (2009). *Online interviews in real time*. Thousand Oaks, CA: Sage Publications Ltd.
- Sawchuk, K. (2013). Tactical mediatization and activist ageing: Pressures, push-backs, and the story of RECAA. *Journal of Media and Communication Research*, 29(54), 47-64.
- Sawchuk, K., & Crow, B. (2012). “I’m G-Mom on the Phone”: Remote grandmothering, cell phones and inter-general dis/connections. *Feminist Media Studies*, 12(4), 496–505.
- Sen, A. (1985). Well-being, agency and freedom: The Dewey lectures 1984. *Journal of Philosophy*, 82(4), 169-221.
- Sen, A. (1987). Freedom of choice: concept and content. *European Economic Review*, 32(2-3), 269-294.
- Sen, A. (1999). *Development as freedom* (1st ed.). New York, NY: Knopf Press.
- SeniorNet. (2009). *SeniorNet*. Retrieved from: <http://www.seniornet.org/jsnet/>.

- Silverman, D. (2006). *Interpreting qualitative data* (3rd ed.). Thousand Oaks, CA: Sage Publications Ltd.
- Siriaraya, P., Ang, C. S., & Bobrowicz, A. (2014). Exploring the potential of virtual worlds in engaging older people and supporting healthy aging. *Behaviour & Information Technology*, 33(3), 283–294. doi:10.1080/0144929X.2012.691552.
- Snyder, M., & Clary, E. G. (2004). Volunteerism and the generative society. In S. Aubin, D. McAdams, & K. Tae-Chang (Eds.), *The Generative Society: Caring for Future Generations*, (pp. 221-237). Washington, DC: American Psychological Association.
- Sourbati, M. (2009). “It could be useful, but not for me at the moment”: Older people, internet access and e-public service provision. *New Media & Society*, 11(7), 1083–1100.
- Statistics Canada. (2015). *Canada's population estimates: Age and sex*. Retrieved from: <http://www.statcan.gc.ca/daily-quotidien/150929/dq150929b-eng.htm>.
- Stumbo, N. J. (2009). *Professional issues in therapeutic recreation: On competence and outcomes*. Champaign, IL: Sagamore Publishing LLC.
- Swickert, J. R., Hittner, B. J., Harris, L. J., & Herring, A. J. (2002). Relationships among Internet use, personality, and social support. *Computers in Human Behavior*, 18(4), 437-451.
- Theurer, K., Mortenson, W. B., Stone, R., Suto, M., Timonen, V., & Rozanova, J. (2015). The need for a social revolution in residential care. *Journal of Aging Studies*, 35, 201-210.

- Vishnevsky, T., & Beanlands, H. (2004). Qualitative research. *Nephrology Nursing*, *31*, 234–238.
- Vosner, H. B., Bobek, S., Kokol, P., & Krecic, M. J. (2016). Attitudes of active older Internet users towards online social networking. *Computers in Human Behavior*, *55*, 230–241.
- Walkton, G. M., Cohen, G. L., Cwir, D., & Spencer, S. J. (2012). Mere belonging: The power of social connections. *Journal of Personality and Social Psychology*, *102*, 513-532.
- Weaver, C. K., Zorn, T., & Richardson, M. (2010). Goods not wanted: Older people's narratives of computer use rejection. *Information, Communication & Society*, *13*(5), 696–721.
- WHOQOL group. (1995). The World Health Organization quality of life assessment (WHOQOL): Position paper from the World Health Organization. *Social Science & Medicine*, *41*(10), 1403-1409.
- Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelly, J. F., Barnes, L. L., Tang, Y., & Bennett, D. A. (2007). Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry*, *64*, 234–40.
- Whitbourne, S. K., & Whitbourne, S. B. (2010). *Adult development and aging: Biopsychosocial perspectives*. Hoboken, NJ: John Wiley & Sons.
- Whyte, C., & Sharpe, E. (2016). Fostering inclusion and belonging. In E. Sharpe, H. Mair, & F. Yuen (eds.) *Community Development: Applications for Leisure* (pp. 27-38). State College, PA: Venture.

- Wohlmann, A. (2012). Let the countdown begin: Aging experiences of young adults in countdown blogs. *Journal of Aging Studies, 26*(1), 90–101.
- Yuen, F. (2013). Building Juniper: Chinese Canadian motivations for volunteering and experiences of community development. *Leisure/Loisir, 37*(2), 159–178.
doi:10.1080/14927713.2013.803677.
- Yuen, F. C., & Glover, T. D. (2005). Enabling social capital development: An examination of the festival of neighborhoods in Kitchener, Ontario. *Journal of Park and Recreation Administration, 23*(4), 20–38.

APPENDICES

Appendix A - Interview Guide for Older Adults

Interview Guide

Introduction:

1. How you are you currently involved with your community?

Essential:

2. What kinds of activities would you like to maintain or get involved in with your community?
 - a. Probes: Digital book club? Online lectures? Discussion groups? Volunteering? Lectures?

Follow-up:

3. How important is Physical contact with people in your community?
 - b. Probes: Not very? Very? By telephone/email is enough?

Essential:

4. Are there any leisure programs that you wish you could participate in?
 - a. Probes: Games? Fitness club? Social club? Swimming?

Follow-up:

5. What is preventing you from participating in these programs?
 - b. Probes: Constraints (i.e., financial, social, mobility?), Caregiver?

Essential:

6. In order increase your participation in the community, what support would you need or would like to have?
 - c. Probes: Volunteers? Computer? Money

Follow-up:

7. What about voluntary activities; have you or currently participate in any?

Essential:

8. Does anything prevent you from volunteering in the community today?
 - a. Probes: No opportunities? Mobility issues? Not enough energy?

Follow-up:

9. Would you be interested in volunteering if there we're no barriers in your way?

Essential:

10. What kind of volunteer work would you like to engage in?
 - a. Probes: Talking with youth? Helping Non-profit organizations?

Follow-up:

11. If you could do volunteering activities using technology, would you be interested in learning?

Essential:

12. What technology devices you currently use?

- a. Probes: for instance a computer, tablet, smartphone, or all of the above?

Follow-up:

- 13. What do you do with your devices for?
 - a. Probes: Email? Facebook? Skype? News? Cummings virtual learning?
 - b. Probes: How often to you use your devices?
 - c. Probes: All the time? Once a day? When you have time? Part of your regular routine?

Essential:

- 14. What is it like communicating with others on a device?
 - a. Probes: Easy, good, bad, frustrating?

Follow-up:

- 15. What would help make your communications on your device meaningful?
 - a. Probes: If there was a purpose? Seeing the actual person? Hearing the actual person?

Essential:

- 16. If we were to create online volunteering using your device, what would you like it to involve?
 - a. Probes: Skype? Facebook? Blog? Organizational website?

Follow-up:

- 17. What would you need from this program to help you gain a sense of community?
 - a. Probes: Face-to-face contact? Physical meet-ups? Lots of contact via email or messenger?

Closing:

- 18. In this interview, I was looking to explore your involvement in the community through volunteering and your opinion regarding online volunteering. Is there anything you would like to add or that I missed?

Thank you for your time.

Closing:

- 19. Is there anything that you wanted to say that you didn't get a chance to say?



INFORMATION AND CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: Exploring Community Inclusion in Older Adulthood through the use of Computers and Tablets

Researcher: Kelly Leonard

Researcher's Contact Information: leonard.kellychristine@gmail.com

Faculty Supervisor: Dr. Shannon Hebblethwaite

Faculty Supervisor's Contact Information: shannon.hebblethwaite@concordia.ca

Source of funding for the study: Social Sciences and Humanities Research Council of Canada

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to gain an understanding of how older adults are engaging with their community, and to explore thoughts and ideas about online activities.

B. PROCEDURES

If you choose to participate, you will be asked to partake in an interview, lasting approximately 30 to 45 minutes and a possible follow-up phone call at the end of the series to verify what you have said during the focus group, lasting approximately 15 minutes.

C. RISKS AND BENEFITS

There are no foreseeable risks to participation in this study. This research is not intended to benefit you personally. Your participation will help the researcher gain a

better understanding of community engagement and online activities for an older adult population.

D. CONFIDENTIALITY

We will gather the following information as part of this research: interview.

We will not allow anyone to access the information, except people directly involved in both participating and conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered in the focus groups will be disclosed to the research group, and other participants will know your identity. You can choose whether or not the researcher reveals your identity in the publication of the results.

We will protect the information by storing all audio recordings on a password-protected computer in a locked research office.

We will destroy the information five years after the end of the study.

We intend to publish the results of the research. However, it is up to you to decide whether your identity is revealed or not in the published results. Please indicate below whether you accept to be identified in the publications:

I accept that my name and the information I provide appear in publications of the results of the research.

Please do not publish my name as part of the results of the research.

In certain situations we might be legally required to disclose the information that you provide. This includes situations where you report the intent to harm yourself or others. If this kind of situation arises, we will disclose the information as required by law, despite what is written in this form.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. At any time you can determine your level of

participation, including withdrawing completely from the interview. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you do not want us to use your information, you must tell the researcher before March 20th, 2017. After this date, only your name and identifiable information can be retracted from this study.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information. Your choice to participate or withdraw will in no way affect your participation during the conference or in your future practice.

However, you are not waiving any legal right to compensation by signing this form.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page I. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix C - Interview Guide for Therapeutic Recreation Practitioners

Interview Guide

1. Brief explanation of what your organization specializes in, and the population you work with.

Essential:

2. What do your typical interactions with clients look like?

Follow-Up:

3. If you could summarize the majority of your clients needs, what would they be?

Essential:

4. Can you tell me a little bit about your current technology-based programs?

Follow-up:

5. What are some of the benefits and challenges around implementing these programs?

Essential:

6. What do these interactions look like when they involve technology?
 - a. Probes: Teaching one how to use a certain device? Looking up information on a device? Communicating with by email?

Follow-up:

7. What are some of the benefits and challenges around your client's interactions with technology?
 - a. Probes: Limited resources? Wi-Fi connection? Comfort level with the clients?

Essential:

8. What does your organization think about recreation therapy and the use of technology?
 - a. Probe: Negative? Positive?

Follow-up:

9. What do you think other rec. therapist think of technology-based programs?
 - a. Probe: Negative? Positive? Does not help the client?

Essential:

10. If you could develop a new technology-based program, what would it involve and purpose would it be?
 - a. Probes: To connect people? Teach others? Volunteer?

Follow-Up:

11. If a program such as online volunteering would be created, do you think this is something your clients and other rec therapists would be interested in?

Closing:

Do you have any final comments before we end our discussion?

Appendix D - Consent form for Therapeutic Recreation Practitioners



INFORMATION AND CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: Practitioners' Perspectives on ICT Interventions in Therapeutic Recreation Practice

Researcher: Kelly Leonard

Researcher's Contact Information: leonard.kellychristine@gmail.com

Faculty Supervisor: Dr. Shannon Hebblethwaite

Faculty Supervisor's Contact Information: shannon.hebblethwaite@concordia.ca

Source of funding for the study: Social Sciences and Humanities Research Council of Canada

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to explore therapeutic recreation practitioner's perspectives on Information Communication Technologies (ICTs) (e.g., iPads, computers, cell phones, etc.) programs into their practice.

B. PROCEDURES

If you choose to participate, you will be asked to partake in a interview, lasting approximately 30 - 45 minutes and a follow-up phone call to verify what you have said during the focus group, lasting approximately 15 minutes.

C. RISKS AND BENEFITS

There are no foreseeable risks to participation in this study. This research is not intended to benefit you personally. Your participation will help the researcher gain a better understanding of therapeutic recreation practitioner's perspectives on ICTs.

D. CONFIDENTIALITY

We will gather the following information as part of this research: one-on-one interview about your practice and technology-based programs.

We will not allow anyone to access the information, except people directly involved in both participating and conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered in the focus groups will be disclosed to the research group, and other participants will know your identity. You can choose whether or not the researcher reveals your identity in the publication of the results.

We will protect the information by storing all audio recordings on a password-protected computer in a locked research office.

We will destroy the information five years after the end of the study.

We intend to publish the results of the research. However, it is up to you to decide whether your identity is revealed or not in the published results. Please indicate below whether you accept to be identified in the publications:

I accept that my name and the information I provide appear in publications of the results of the research.

Please do not publish my name as part of the results of the research.

In certain situations we might be legally required to disclose the information that you provide. This includes situations where you report the intent to harm yourself or others. If this kind of situation arises, we will disclose the information as required by law, despite what is written in this form.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. At any time you can determine your level of participation, including withdrawing completely from the interview. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you do not want us to use your information, you must tell the researcher before August 2016. After this date, only your name and identifiable information can be retracted from this study.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information. Your choice to participate or withdraw will in no way affect your participation during the conference or in your future practice.

However, you are not waiving any legal right to compensation by signing this form.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page I. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix E - Interview Guide for Volunteer Coordinators

Interview Guide

Essential:

1. Can you tell me what your role is as a volunteer?

Follow-up:

2. What do your interactions involve with the older adults?
 - a. Probes: You teach them basic computer skills? Advanced computer skills? They are frustrated? Patient? They tell you advice? Tell stories? Essential:
3. What motivates you to volunteer for the Yellow Door?
 - a. Probes: The organization? The activity itself? The people? The thought of helping or giving back is satisfactory?

Follow-up:

4. What is it like volunteering for the Yellow Door?
 - a. Probes: Fun? Enjoyable? A lot of work? Boring?

Follow-up:

5. In what way can the Yellow Door improve your volunteer experience?
 - a. Probes: Training? Instructions? Orientation?

Essential:

6. Do you participate in other volunteer activities?
 - a. If yes→is your role as a volunteer similar or different to it is here at the Yellow Door?

Essential:

7. What impact do you think you have on the participants in this group?
 - a. Probes: Supportive? Helpful?

Follow-up:

8. What impact do they have on you?
 - a. Probes: Provide good advice? Tell stories of their past?

Essential:

9. Is there any club/activity would you also be interested in participating in at the Yellow Door?
 - a. Probes: Social club? Garden club?

Follow-Up:

10. Is there any activity or club that is not at the Yellow Door that you would want to volunteer at?
 - a. Probes: Fitness club? Music club? Outdoors club?
 - b. Follow-up: Why is this activity appealing to you as a volunteer?
 - i. Probes: More contacts with the participants? More inclusive activity? Provides more support?



INFORMATION AND CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: Exploring Community Inclusion in Older Adulthood through the use of Computers and Tablets

Researcher: Kelly Leonard

Researcher's Contact Information: leonard.kellychristine@gmail.com

Faculty Supervisor: Dr. Shannon Hebblethwaite

Faculty Supervisor's Contact Information: shannon.hebblethwaite@concordia.ca

Source of funding for the study: Social Sciences and Humanities Research Council of Canada

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to gain an understanding of how volunteer coordinators manage their volunteers in a community-based organization and explore their opinion towards the idea of online volunteering and online voluntary activities.

B. PROCEDURES

If you choose to participate, you will be asked to partake in an interview, lasting approximately 45-60 minutes and a possible follow-up phone call to verify what you have said during the focus group, lasting approximately 15 minutes.

C. RISKS AND BENEFITS

There are no foreseeable risks to participation in this study. This research is not intended to benefit you personally. Your participation will help the researcher gain a better understanding of volunteer coordinators perspectives towards ICTs and online volunteering.

D. CONFIDENTIALITY

We will gather the following information as part of this research: one-on-one interview about your duties at work and how you manage your volunteers.

We will not allow anyone to access the information, except people directly involved in both participating and conducting the research. We will only use the information for the purposes of the research described in this form.

The information gathered in the focus groups will be disclosed to the research group, and other participants will know your identity. You can choose whether or not the researcher reveals your identity in the publication of the results.

We will protect the information by storing all audio recordings on a password-protected computer in a locked research office.

We will destroy the information five years after the end of the study.

We intend to publish the results of the research. However, it is up to you to decide whether your identity is revealed or not in the published results. Please indicate below whether you accept to be identified in the publications:

I accept that my name and the information I provide appear in publications of the results of the research.

Please do not publish my name as part of the results of the research.

In certain situations we might be legally required to disclose the information that you provide. This includes situations where you report the intent to harm yourself or others. If this kind of situation arises, we will disclose the information as required by law, despite what is written in this form.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. At any time you can determine your level of participation, including withdrawing completely from the interview. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you do not want us to use your information, you must tell the researcher before August 2017. After this date, only your name and identifiable information can be retracted from this study.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information. Your choice to participate or withdraw will in no way affect your participation during the conference or in your future practice.

However, you are not waiving any legal right to compensation by signing this form.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page I. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.