Connecting the unconnected: Exploring the impacts of digital socializing platforms on social life of older adults living in Brightside Buildings

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Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

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Abstract

This research explores the roles and impacts of digital socializing platforms for low-income senior residents living in Brightside multi-unit affordable buildings. Employing multiple methods, including focus group discussions and interviews, this study highlights the vital role of digital platforms in combating social isolation among low-income seniors who live alone. It sheds light on how socializing technology can enhance social connectedness among low-income seniors, especially in the post- COVID-19 pandemic moment. COVID-19 dramatically altered the landscape of community programming and social interactions. Impacts of COVID-19 on neighbourhood environments have altered older adults' level of social and physical activity in their local communities and have transitioned some of their place-based social activities to online interactions. This research shows that online platforms enable seniors to maintain connections regardless of geographical barriers, time constraints, or limited mobility. As such, it challenges conventional perspectives on social quality of life among low- income older adults aged 65 years or older who live alone. Findings illustrate that balancing virtual and face-to-face interactions, and improving digital literacy are crucial considerations for age-in-place initiatives.

Keywords: Community Housing; COVID-19 Pandemic; Online Socializing; Social Connectedness; Social Interaction

Dedication

To my parents and grandparents, whose sacrifices and encouragement paved the way for my academic journey.

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List of Acronyms

BCNPHA	BC Non-Profit Housing Association
HNC	Hey Neighbour Collective
CoV	City of Vancouver
PWD	People with disabilities
OSP	Online Socializing Platforms

Chapter 1.

Introduction

In recent years, the discourse surrounding social connectedness among urban seniors has gained significant attention. As cities evolve, many older adults aged 65 years and above find themselves increasingly alienated from meaningful public interactions. Urbanization has led to more superficial social interactions due to the fast-paced nature of urban life, the great volume of daily encounters with others, and physical spaces that hinder deep connections. Consequently, this shift has contributed to a growing number of seniors living alone in cities, heightening the risk of loneliness and social isolation (Klinenberg, 2012; Yan & Lauer, 2021). The emergence of the COVID-19 pandemic further heightened challenges for older adults, with tighter restrictions and physical distancing policies limiting their access to community programs and social interactions (Finlay et al., 2022; Seifert et al., 2021).

What impact does that use of digital socializing platforms have on social connectedness? Drawing on data collected from older adults aged 65 and older living in two Brightside multi-unit affordable buildings, I aimed to learn whether and how digital socializing platforms enabled the kind of social connectedness that translates to having meaningful and constructive relationships with others. In other words, my research sought to assess whether virtual socializing facilitates social connectedness among low-income seniors living in community housing[1]. Two additional questions supported this research:

- In what ways do older adults use digital communication platforms for being socially connected?
- How do digital communication platforms intersect with traditional means of providing social connectedness?

Statistics Canada reports that approximately 16% of older adults were socially isolated in 2020, with an additional 30% at risk of becoming isolated (Statistics Canada,

[1] Community housing refers to “community-based housing that is owned and operated by nonprofit housing societies, housing co-operatives or public housing owned by provincial, territorial or municipal governments” (CMHC, 2018).

2020). These figures are expected to increase as Canada's population ages, with projections indicating that by 2030, 24% of the population will be 65 years or older, as compared to 19% in 2023 (Statistics Canada, 2024). Furthermore, nearly 3 in 10 older adults (26%) reported living alone in 2022, and over a third reported feelings of loneliness due to the pandemic (Ooi et al., 2023; Statistics Canada, 2022a).

Recent scholarship shows that low-income seniors can feel more connected to others through virtual socializing. There is a link between using online socializing applications and community engagement among older adults. However, the concept of the digital divide, which refers to the gap between those who have access to and can effectively use digital technologies and those who cannot, is particularly pronounced among older adults. According to Anderson and Perrin (2017), almost one-third of all adults aged 65 and above, and over half of those with household incomes below $30,000, said that they never utilize the Internet. Furthermore, even elderly individuals who are able to use the Internet may possess a restricted range of skills when it comes to utilizing the technology. This research sought to examine the impacts of digital platforms and their challenges and limitations on enhancing social interaction for low-income seniors.

1.1. Pandemic and post-pandemic implications: social connectedness in a time of crisis

As a result of the Covid-19 health restrictions, older adults' access to their immediate physical neighbourhood, social programs and social networks was diminished, and they were less likely to interact with their community (Devine-Wright et al., 2020; Finlay et al., 2022).

However, during the pandemic, the use of digital technologies enabled many activities that once happened in-person, such as shopping, learning, working, meeting and socializing, to happen online (Pandya & Lodha, 2021).The population in general, including seniors, has become more dependent than ever on digital technologies. Nevertheless, compared to younger people, older adults are less likely to use the Internet and technological interventions, and because of Covid-19 they may experience a disproportionate impact of being excluded from digital society and feeling even more isolated. Barriers to seniors' participation in online socializing platforms include lack of

access to the Internet, lack of digital literacy, and a broader digital divide that is shaped by the unaffordability of technology like smartphones and tablets (Barbosa Neves et al., 2019; Seifert et al., 2021; Sinclair & Grieve, 2017).

In post-pandemic times, after lockdown restrictions are lifted, social infrastructure like recreation and community spaces again plays an important role in reducing social isolation and restoring access to public spaces. However, this may not be the case for urban seniors as they may not be able to bounce back to their pre-pandemic routine easily. Implications of COVID-19 on neighbourhood environments have altered older adults' level of social and physical activity in their local communities and have transitioned some of their place-based social activities to online interactions. Identifying and addressing the pandemic's long-term implications for place-based social connections is crucial (Finlay et al., 2022).

The COVID-19 pandemic has imposed significant constraints on physical interactions, highlighting the importance of digital socializing platforms as effective tools for maintaining social connections and supporting mental well-being among older adults. In addressing these challenges, it is equally crucial to investigate how older adults can recover and return to their pre-pandemic social life.

Context

In Canada, studies highlight the adverse health impacts of loneliness and social isolation among older adults, emphasizing the importance of the built environment in mitigating these effects (Lubik & Kosatsky, 2019). While British Columbia municipalities have endorsed programs such as "Age-friendly Community Planning and Implementation" and "Enhanced Senior Outreach," further policy improvements are needed to combat social isolation and enhance connectivity, especially in urban contexts like Vancouver.

As of the 2021 Census, the city of Vancouver, where my case study is situated, includes 106,000 individuals who are 65 years old or older, accounting for 17% of the total population. Between 2016 and 2021, the size of this group increased at a rate that was five times higher than the rate of growth of the population under the age of 65, as seen in Figure 1 (Vancouver, 2022).

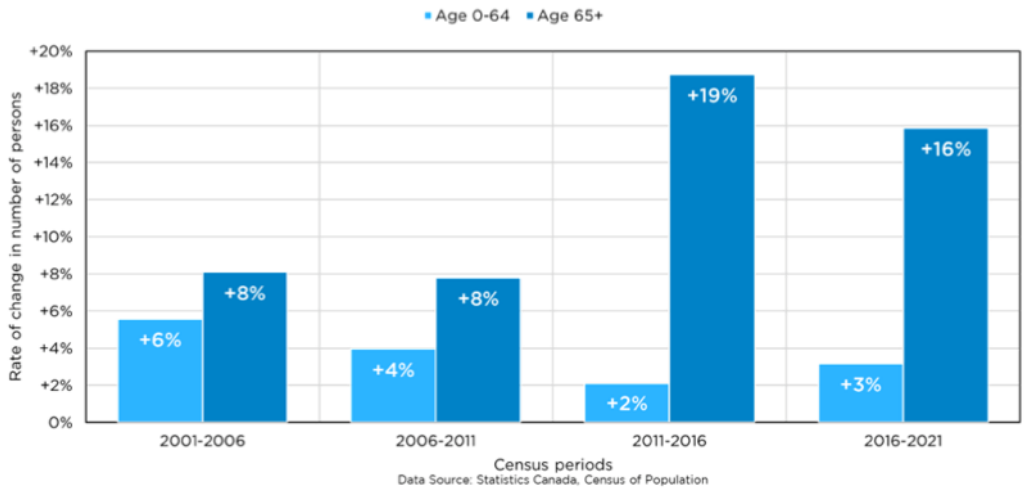

Figure 1- Vancouver net population growth by age group 2001-2021
Source: (Vancouver, 2022)

In Vancouver, policymakers have increasingly recognized the importance of combating social isolation among seniors. Social connectedness is one of the 13 long-term goals of the Vancouver's "Healthy City Strategy". Additionally, the City of Vancouver's "The Space to Thrive: Vancouver Social Infrastructure Strategy" aims to enhance social connectedness, especially among seniors, through community-driven initiatives and accessible social spaces (City of Vancouver, 2021). The focus of this report is physical environments in cities, such as social service centres, that can enhance social connectedness among seniors with place-based solutions (City of Vancouver, 2021). Recognizing the limitations imposed by the COVID-19 pandemic, the report also highlights a shift towards digital solutions, evidenced by recommendations from the City of Vancouver (CoV) Seniors' Advisory Committee to utilize online social networking as a means to prevent loneliness and isolation among seniors (Elmer, 2018).

The presence of global crises such as the COVID-19 pandemic, has prevented seniors from accessing social spaces and programs due to health measures, especially when seniors need them the most. Additionally, the closure of social service centers, adds more uncertainty to the effectiveness of place-based solutions for meaningful social interactions in the future. The CoV Senior's Advisory committee's recommendation shifted the focus from physical places to virtual environments even though it was prepared before the COVID-19 crisis. The Committee (in accordance with the Healthy City strategy) suggests that seniors and their families use technology, such

as online social networking, to prevent loneliness and social isolation, as well as being prepared in case of disasters or emergencies, by having an adequate social network.

On a practical scale, the charitable organization, United Way's Digital Learning/Active Aging Plus program[2] exemplifies an approach to provide inclusive integration of technology and digital literacy among older British Columbians. This initiative, which includes funding for non-profits to develop virtual activities for older adults as well as free tablets with data plans, has successfully integrated technology into the daily lives of their participants. Following a global pandemic, it is more evident than ever that community resilience, in particular among seniors, must be enhanced with innovative solutions such as digital communication platforms for upcoming crises (Elmer, 2018; Karmann et al., 2023).

Brightside Community Home Foundation

In the Canadian context, the term 'community housing' encompasses housing properties that are managed and owned by non-profit societies, housing cooperatives, or the government, as per the Canada Mortgage and Housing Corporation (CMHC, 2018). This form of housing plays a crucial role in providing affordable living options. Yet, it also presents unique challenges for residents, particularly in terms of limited autonomy over their living spaces and neighbourhoods to make it feel like home. Factors such as limited choice in residence location, lack of control over heating or acoustic comfort, and uncertain security of tenure can restrict residents' ability to engage in neighbourly activities and create a homely environment, which are essential for community building and personal well-being. Recognizing these constraints is the first step towards understanding the innovative approach of Brightside in enhancing community housing experiences (Holden et al., 2024; Zhu et al., 2021).

Brightside Community Homes Foundation, formerly known as British Columbia Housing Foundation, is a non-profit and charitable organization that was founded in 1952 with the purpose of building and providing housing for vulnerable groups in Vancouver. It started with a focus on low-cost housing for seniors, but later expanded its

[2] https://uwbc.ca/program/healthy-aging/

scope to include families and people with disabilities. It currently owns and operates 26 buildings of affordable rental homes across the city, serving low-income seniors, families, and adults with disabilities. Some of its buildings are exclusively for seniors, while others house all three groups. Brightside is part of the “affordable rental housing” category in the Housing Continuum, located between “social housing” and “market rental housing.”

Central to Brightside's vision is a commitment to realizing a future where individuals of all income levels have access to secure housing[3]. The foundation collaborates with like-minded non-profit organizations such as BC Non-Profit Housing Association (BCNPHA) and Canadian Housing and Renewal Association (CHRA) to advance community housing initiatives in Vancouver. Brightside offers various rental agreements, including low-income subsidized housing, rent-geared-to-income housing, and rent-controlled housing. While some buildings benefit from government subsidies, others operate independently.

Brightside tenants are mostly seniors all of whom are required to register with BC Housing. The Registry is designed to consider eligible applicants for available units in subsidized housing. Eligibility is determined based on gross household income, which must fall below certain criteria[4]. Currently, Brightside provides approximately 940 units at 26 properties in Vancouver for independent seniors who are able to manage their day-to-day activities (Brightside, 2022).

Before the pandemic, Brightside offered several opportunities for residents to develop social connections and resilience through community development programs, including in-person gatherings like BBQ events, holiday parties, and community gardening (Brightside, 2022). Additionally, residents had access to social spaces and organizations such as CoV senior centers, which offered a range of in-person social and recreational programs for seniors.

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[3] https://brightsidehomes.ca/who-we-are/our-approach/

[4] https://www.bchousing.org/housing-assistance/rental-housing/subsidized-housing (*BC Housing*, n.d.)

However, the emergence of the COVID-19 pandemic dramatically altered the landscape of community programming and social interactions. As restrictions came into effect, CoV and affiliated social spaces, including the West End Community Centre, Coal Harbour Community Centre, and Barclay Manor, were forced to close their doors in March 2020. This closure resulted in the cancellation of ongoing programs until September 2020, with limited offerings thereafter. The subsequent re-openings faced continuous challenges due to evolving health guidelines, ultimately leading to the suspension of various programs and activities, including group fitness classes, arts courses, and social gatherings (West End Community Centre Association, 2021).

Two buildings were at the centre of participant discussions: Bridgeview Place and Gordon Fahrni House. Brightside Community Homes Foundation owns and operates these buildings. They are home to many seniors, and most of them live alone.

Table 1- Brighside buildings information

Bridgeview Place 238 Davie St.	Built in 1993	72 units	Families, PWD, Seniors	10-story building	shared laundry; balconies; elevators; amenity
Gordon Fahrni House 1630 Barclay St.	Built in 1969	42 units	Seniors	9-story building	shared laundry; balconies; elevator; amenity room with Wi-Fi

This unprecedented reduction in physical social interactions provided a unique opportunity for this research to explore virtual social interactions. This research delves into the critical question of whether digital socializing platforms may be a relevant social connection tool for low-income older adults in periods of interaction limitations. Therefore, it is important to understand how virtual social connectedness is perceived by older adults and what aspects of social contact are important to them to facilitate their social interactions and strengthen social networks through virtual platforms.

1.2. My Positionality as a Researcher

My journey into this research was deeply influenced by my prior engagement with the Hey Neighbour Collective (HNC) and Brightside as a research assistant. I initially contributed to the analysis of the Resident Surveys data (2020, 2021) and later participated in a qualitative study involving focus groups. This experience allowed me to

develop a familiarity with the community and its unique dynamics, and fostering a sense of trust with the participants. The insights gleaned from these earlier research phases, particularly around the use of online socializing platforms, sparked my interest in further exploring this topic.

My current research has subsequently informed the revision of the next round of Resident Surveys (2023), creating a cyclical process of knowledge generation and community impact.The decision to focus on Bridgeview Place was partly motivated by my pre-existing relationship with a group of seniors there, who had openly shared their experiences with online socializing platforms in a previous focus group.

1.3. Outline of the thesis

In this thesis, Chapter 2 will explore the literary and research context. In particular, reviewing literature on seniors and social connectedness, social infrastructures and aging in place, and digital socializing platforms. Chapter 3 will outline the study methodology, recruitment methods and data analysis. Chapter 4 will describe the results of analysis on virtual socializing for seniors, while Chapter 7, will present seniors' perspectives on in-person socializing. Chapter 6 will explore the impact of COVID-19 pandemic as a window for understanding online socializing among older adults. Finally, Chapter 7 will provide the findings of this research, leading to a discussion and conclusion. This chapter will summarize the discussion points into practical recommendations and policy suggestion that can assist planners, policy designers and housing providers in helping community housing senior residents to be more socially connected.

Chapter 2.

Conceptual Framework

My conceptual framework is built on three bodies of literature to understand the impact of using digital socializing platforms on social connectedness among older adults, 65 years or older living in Brightside buildings, who are low-income, live alone, have access to the Internet and use online socializing platforms. My three bodies of literature are as follows: seniors and social connectedness, importance of place-based social infrastructure, including neighbourhood infrastructure in shaping social interactions, and online socializing platforms' impact on social life.

In the first body of literature, seniors and social connectedness, I show how social connectedness is a critical issue for seniors living in cities and urban areas, and how social connections can be fostered. There is considerable literature highlighting the negative health impacts of social isolation on older individuals, especially with the introduction of public health measures following the COVID-19 pandemic, which intensified social isolation among this population.

In the second set of literature, I explore vital social infrastructures that support social connectedness and aging in place for urban seniors, specifically as they take shape in neighbourhoods and through public social institutions. This body of literature provides a broader context for framing my research question within the theme of aging in place. It underscores the importance of physical environments and place-based community development in enhancing social interactions among older adults. Moreover, this literature review enables me to, focus on the role of virtual socializing platforms in satisfying seniors' social needs compared to traditional social infrastructure.

Aging in place is fundamentally about supporting older adults to live independently and maintain their quality of life within their communities. While my research centers on virtual socializing platforms (non-place-based social connections), it directly relates to aging in place by exploring how technology can facilitate social connections and address the social needs of seniors when physical access to social institutions is limited. Understanding how virtual platforms can supplement or substitute

for traditional social infrastructure is crucial for supporting aging in place initiatives in urban settings, particularly in times of crisis like the COVID-19 pandemic.

This critical perspective allows for a deeper examination of the transition from physical to virtual social interactions, which serves as a foundation for the subsequent literature review focused on the dynamics of virtual socializing and its impact on seniors' social lives. As my third body of literature, I explore the impact of digital socializing platforms on seniors' social lives. As the backbone of my conceptual framework, I investigate the debate on whether digital technology enhances meaningful social connections and supports mental health among seniors. I also use this body of literature to understand the role and power of digital socializing platforms and virtual communities to engage social connectivity of seniors with different needs and abilities. Overcoming barriers such as the digital divide is also discussed in this section. This literature allows me to highlight a gap in research and identify areas for future study, and policy development.

Taken together, this study is grounded in these three bodies of literature to explore whether virtual socializing facilitates social connectedness and decreases social isolation among seniors living alone in the context of community housing. My project considers COVID-19 as a window into answering this question because the conditions of the pandemic limited physical connections and removed urban seniors from their usual social environments. Studies about online social connections for seniors are relatively recent, and it is important to examine how online social platforms provide an alternative space for daily social life and how they differ from place-based social interactions in terms of their purpose of use and social effects.

2.1. Seniors and social connectedness

Social connectedness in general is defined as "feelings of interpersonal connection and meaningful, close, and constructive relationships with others" (Ottoni et al., 2022, P.1). The critical role of social connections in extending lifespan and promoting mental and physical well-being among seniors is well-documented (Ashida & Heaney, 2008; Janssen et al., 2022; Pandey et al., 2021; Waycott et al., 2019; Yu et al., 2016). Glei et al. (2005) show that more social activities such as community programs, group activities, or training workshops lead to positive cognitive outcomes (including memory

and fine motor skills, such as hand–eye coordination), and can improve social interaction among older adults. (Hausknecht et al., 2015; Sen et al., 2022).

Conversely, lack of social connections and low quantity and quality of contact with others may result in feelings of loneliness and social isolation (Hausknecht et al., 2015; Waycott et al., 2019). As people get older, maintaining social connections becomes more difficult because of factors such as life-style changes (e.g., retirement), and age-related loss of social or professional roles, contacts, and physical abilities. As a result, people may feel lonely and socially isolated, and suffer serious negative health consequences, including deteriorating cognitive functions, raised blood pressure, and an increased mortality rate (Barbosa Neves et al., 2019; Cotten et al., 2013; Duarte & Coelho, 2019; MacCourt, 2016; Ottoni et al., 2022; Sinclair & Grieve, 2017; Waycott et al., 2019; Wiwatkunupakarn et al., 2022; Xie et al., 2020; Yu et al., 2016).

In the urban context, social connectedness is defined through ways in which cities may influence social connectedness and health. Social connections are influenced by both the built environment's facilitation of activity (for example, opportunities for social interaction) as well as the feelings attached to places (for example, sense of belonging). Developing and maintaining robust social connections is fundamental to fostering a healthy and resilient urban environment, a principle that aligns with the concept of age-friendly neighbourhoods (Sones et al., 2021).

However, challenges persist: in contemporary North American urban centres, for example, a decline in community participation was identified by Putnam (1995). This decline in social engagement and civic participation has particularly impacted urban seniors, leading to increased social disconnection and isolation, especially among those living alone (Yan & Lauer, 2021; Leavell et al., 2019).

Research suggests that dementia and Alzheimer's incidence are associated with low social participation and sense of isolation among older adults. The loss of their engagement in the community has high societal costs, as older adults bring a wealth of experience and volunteer power to their communities (Lubik & Kosatsky, 2019).

I used this literature to better understand the elements of social connectedness and its importance to urban seniors' health. Moreover, defining social isolation and its related issues for urban seniors can help set up my second concept, "social

infrastructure in neighbourhoods," which explains how social connections are shaped, enhanced or diminished in seniors' social life within their neighbourhoods and social places. The next section will address what aspects of place-based social contacts are important to older adults, and what social needs are satisfied in a physical context, to compare interactions in the physical context and the virtual context. In section 2.2, I show how the next body of literature helps to identify aspects of social connectedness that can be maintained through online socializing despite pandemic physical distancing.

2.2. Importance of neighbourhoods and social infrastructures in shaping social interactions

Creating social connections requires physical conditions and places (Lofland, 1998), and physical spaces function as social infrastructure. According to Klinenberg (2018, P.21) "building real connections requires a shared physical environment—a social infrastructure". Social infrastructure here refers to physical places and organizations that shape the way people interact. In urban planning, the focus is on the opportunities for social interaction available in public spaces. Despite the argument that local communities and neighbourhoods are becoming less important (Putnam, 1995), many urban studies and geography scholars believe that place matters when it comes to the quantity and quality of social interactions (Sampson (2012), Jacobs (1961), and Friedmann(2010)). Likewise, municipal governments recognize community gardens, libraries, and senior centres as examples of place-based social infrastructure that provide opportunities for seniors to meet, gather, and interact with others (City of Vancouver, 2021). As a result of a robust social infrastructure, friends and neighbours can get in touch, support one another, and collaborate.

In Places for the People, Klinenberg (2018) defines different types of social infrastructure in the local environment, explaining that each supports a different kind of social relationship (for example, libraries provide space for recurring interactions and more durable relationships, whereas looser connections are supported by street markets). He argues that developing and maintaining social connections requires a range of physical and institutional infrastructures, and virtual space is not a social infrastructure. Responding to Mark Zukerberg's idea that Facebook helps us connect with others and build relationships he stated that "…rebuild[ing] society requires recurrent social interaction in physical places, not pokes and likes with "friends" online."

(page 91). However, the City of Vancouver defines social infrastructure as including "physical spaces, technology platforms, or even mechanisms that enable relationships" (City of Vancouver, 2021). Indeed, Mark Zuckerberg used social infrastructure as a guiding concept for developing Facebook Neighbourhood in 2017, stating: "In times like these, the most important thing we at Facebook can do is develop the social infrastructure to give people the power to build a global community that works for all of us" (Klinenberg, 2018, P.91).

To compare differences in purpose, impacts and role of physical and virtual social infrastructure in the literature, it is critical to understand how neighbourhoods and social institutions shape and build social connections among seniors to help them age-in-place successfully. Examining this concept directly, the next section extends the understanding of forms and use of social infrastructure to neighbourhood abilities that enables older adults to age-in-place.

Aging "in place"

When urban neighbourhoods are designed to support older adults aging in place, they incorporate features such as parks, accessible transportation, recreation programs, local services, amenities, and opportunities for socializing with family and friends, such as community or senior centers (Verma & Huttunen, 2015). Living in a neighbourhood that has the physical and social infrastructures mentioned above, is a way for older adults to maintain their social connections with locals while aging in place (Wiles et al., 2012).

Aging in place allows seniors to live at their home and familiar neighbourhood as long as possible, and prevents the common practice of moving seniors into facilities where they can access graduated care as they age (Zhang et al., 2022). Older adults are emotionally attached to their familiar physical environments (S. M. Golant, 2020) and their relationships to their immediate environments and their community contribute to a stronger sense of social connectedness and well-being (Bigonnesse & Chaudhury, 2020; S. M. Golant, 2020). Disrupting older adults' connections to their physical surroundings and communities can lead to social isolation due to a loss of attachment to their immediate environments or neighbourhoods and local communities.

However, maintaining strong connections within that community increases resilience and reduces the risk of isolation. Sustained interactions with the local community or participation in groups centred around shared interests foster a sense of belonging and promote social connectedness among older adults (Waycott et al., 2019).

While the concept of aging in place resonates with many, it is not without its critics. Some scholars contend that remaining in the same dwelling as one ages can, in certain circumstances, lead to unintended consequences. As individuals experience changes in health, mobility, or social networks, their once-familiar environment may no longer adequately support their well-being. Golant (2015) proposes a shift in focus towards "aging in the right place," emphasizing the dynamic interplay between individual needs and environmental factors across the lifespan. This approach recognizes that the optimal living situation may evolve over time and prioritizes the selection of environments that foster a sense of belonging, competence, and control, regardless of an individual's age or functional capacity.

Social interactions in neighbourhood settings play a crucial role in seniors' physical and social well-being (Waycott et al., 2019). In their study, Stewart and colleagues (2015) examined the short but frequent interactions older adults have with local shopkeepers. These interactions led to older adults feeling more visible, independent, and valued as members of their local communities. Understanding how social connectedness is fostered through interactions with neighbours and local communities in a neighbourhood setting can help in better recognizing the impact of the COVID-19 pandemic, which suddenly disrupted seniors’ ability to interact within their physical neighbourhoods and engage with members of their community.

The literature reviewed in this section highlights the impacts of social infrastructure and place-based interactions on older adults' social connectedness. The subsequent section will explore how virtual social infrastructure influences seniors' social connectivity.

2.3. Online communication platforms and impact on social life

Digital socializing platforms (including but not limited to email, instant messaging, and video conferencing) enable users to easily build and manage social networks, regardless of their distance or time (Ang & Chen, 2019). Older adults may benefit from these platforms by using them to maintain relationships with close family and friends, locating long-lost friends and keeping in touch with people they don't see often, and enhancing their sense of social connectedness (Yu et al., 2016).

There is a large body of scholarly research that shows technological interventions can be used to enhance older adults' social connectedness, and to support their ability to age-in-place (AGE-WELL, 2019; Baez et al., 2019; Chaudhury & Oswald, 2019; Cosco et al., 2021; Duarte & Coelho, 2019; Mahmood et al., 2008; Sixsmith & Sixsmith, 2008; Smith, 2009; Waycott et al., 2019). Digital technologies have gained popularity among older adults in recent years (Yu et al., 2016). A 2020 study by AGE-WELL of 2,026 older Canadians shows that almost 65% of respondents 65 years or older own a smartphone, 88% of them use the Internet daily, and 74% feel confident using current technology (AGE-WELL, 2020). Findings show that despite the various obstacles seniors face when using technologies, including anxiety, many of them are now exposed to digital technology, and take advantage of them every day (Baez et al., 2019).

As a result of the pandemic and the increasing reliance on digital socializing platforms, it is increasingly important to study how these tools help older adults become more socially connected and resilient in times of crisis, as they are more vulnerable to disease and may have decreased access to safe face-to-face social interaction (Devine-Wright et al., 2020). Figure 2 shows the transformation of urban space and a changing dynamics of social/physical network with an increase in use of online social technologies. It also shows the transformation of digital space as a result of the COVID-19 pandemic and quarantine.

This figure underscores the transformation of urban space as digital platforms become increasingly integrated into daily life, a change that is further accelerated during quarantine periods. It highlights the shift from physical to virtual interactions, where

digital socializing takes on a central role in urban practice, especially when socio-spatial interactions and public life are restricted. This visual serves as a reminder of the evolving nature of social networks and the importance of digital spaces in maintaining social connectedness in times of crisis.

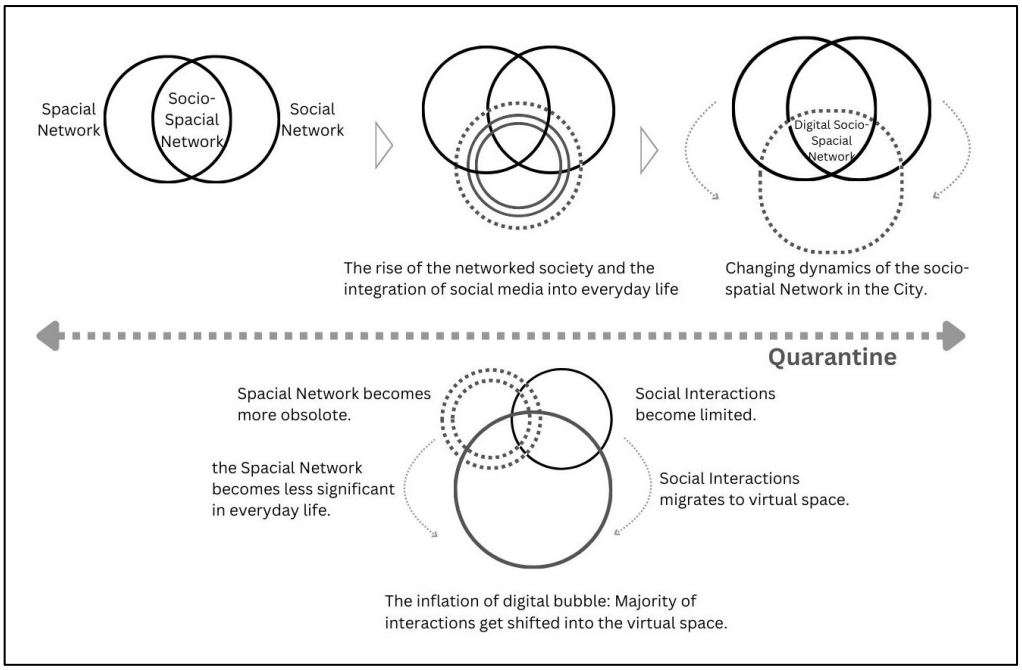

Figure 2- Top: the transformation of urban space with emerging digital space. Bottom: The transformation of digital space under quarantine
Source: Created by author (Iranmanesh & Alpar Atun, 2020)

Research on the use of digital communication platforms to enhance social connectedness among older adults is characterized by conflicting findings and perspectives. In the first instance, there is the positive augmentation view also called “participationist view” by Veenhof et al. (2008), which holds that technology can enhance social connections. Findings of a study by Wallinheimo and Evan (2022) indicate seniors who used communication technologies like e-mail more frequently reported being less lonely or isolated. Similarly another study done on 5,203 American older adults reported that social technologies reduced loneliness, social isolation, and facilitated relationships (Heo et al., 2015). Additionally, Ibarra et al. (2020) conducted a review of the literature, evaluating the impact of technology on seniors’ social connections in 25 research papers. Eighteen of the studies reported positive outcomes, mainly a decrease in loneliness and isolation and increased network size and connectivity among seniors (Ibarra et al., 2020). Similarly two other studies show that technologies can be designed

to improve social relations within an existing neighbourhood to create a sense of community among older adults and enrich their social connectedness (Duarte & Coelho, 2019; Waycott et al., 2019).

Despite their many advantages, digital socializing platforms do not always benefit individual users. These platforms can often exacerbate the social isolation of lonely individuals (Kim et al., 2009; Sinclair & Grieve, 2017). The displacement perspective, also called the “isolationist view” by Veenhof et al. (2008) holds that digital communication platforms can consume a large amount of time, preventing people from engaging in other valuable activities such as face-to-face communication (Nie, 2001; Putnam, 1995), thus limiting social relationships with family, friends and their community. Consequently displaced users who lose the real-time connections such as in-person socializing, volunteering and community participation, may experience a negative sense of well-being (Ahn & Shin, 2013; Stepanikova et al., 2010).

Meta-analyses of digital communication platform use and its effects on physiological well-being (including depression and loneliness) do not support either the augmentation or the displacement hypothesis (Huang, 2010). According to Shklovski et al. (2006), Internet use can either facilitate or hinder social interactions. As a result, neither augmentation nor displacement have been confirmed or disproven (Ahn & Shin, 2013), indicating that more well designed studies are needed to draw conclusions on this debate (Casanova et al., 2021).

A study done in Toronto by Quan-Haase et al. (2017) has invalidated concerns that digital media are insufficient for meaningful interpersonal communication by demonstrating that older persons perceive social support received through digital media as genuine and meaningful. This study revealed four distinct mechanisms via which older persons utilized online socializing platforms to exchange social support: (1) coordination of in-person gathering with friends, family and neighbours, (2) tie maintenance, (3) casual conversation, and (4) expertise inquiry. The first three methods are linked to the concept of companionship, whereas the final one is connected to the provision of small services shown in Figure 3.

E-mail was predominantly utilized for communication with acquaintances like friends rather than relatives, whereas Skype was primarily employed for maintaining

close kin relationships with family ties. This study reveals that older adults utilize digital media, particularly email, and to a lesser extent, Facebook and Skype, to uphold and reinforce their current social connections.

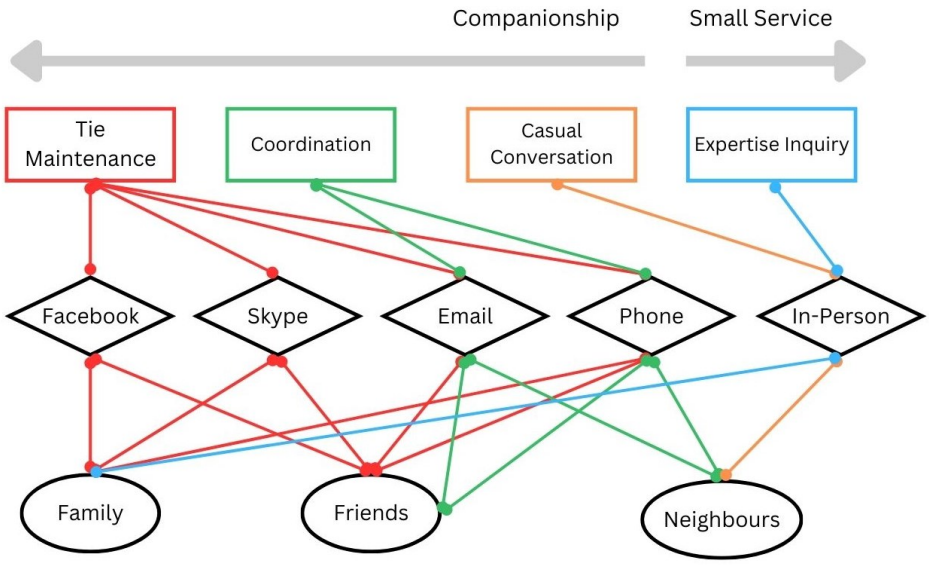

Figure 3- A model of social support mobilization in a population of older adults by type of tie, media, and type of support
Source: Created by author (Quan-Haase et al., 2017)

In order to preserve their relationships, the study participants dedicated a significant amount of time to contacting their long-time friends and family, a large portion of whom had become scattered across different locations. Several individuals favoured utilizing the telephone. However, they utilized email as a complementary tool to overcome geographical boundaries and temporal differences, and for its convenience in sending brief messages that did not necessitate rapid responses.

Engaging in casual conversations with others without the purpose of offering assistance (such as friendly chats, sharing jokes, gossiping) primarily occurred face-to-face, typically with neighbours. Many individuals mentioned that exchanging greetings like 'Hello' is simply a customary gesture among neighbours. Neighbours did not utilize digital media for communication (Quan-Haase et al., 2017).

In the case of Brightside, first I want to explore what factors have contributed to satisfy the social needs of senior residents and its health outcomes in a post pandemic

context. Second this study seeks build upon the definition of social infrastructure and to find out the role of digital socializing platforms as a form of social infrastructure, enhancing seniors' social interactions. Furthermore, I will investigate whether these technologies helped seniors to age-in-place successfully specially within a post-crisis setting. These factors are explained in the previous body of literature. Finally, from a broader perspective, this research reflects upon the performance of virtual socializing platforms on enhancing social connectedness among the Brightside residents and helps fill in the gap among literature.

The next chapter presents the research methodology and describes the different phases of analysis for this case study. The research design explains how the concepts from these bodies of literature will be used to analyse the social experience of Brightside residents with digital communications, and to answer the research question.

Chapter 3.

Research Design, Methodology and Analysis

Three main sources of data were collected to answer my research question:

1- Secondary data: Hey Neighbour Collective (HNC) focus group, 2022

2- Secondary data: HNC Resident Surveys, 2020-2023

3- Two forms of primary data: focus group and interview data, 2023

This research project constitutes part of the ongoing HNC research program. HNC is a collaborative initiative that unites various stakeholders including housing providers, non-profit organizations, researchers, local and regional governments, and health authorities. Their collective goal is to explore and understand methods for fostering community, enhancing social ties, and building resilience within the rapidly expanding multi-unit housing communities in British Columbia. HNC runs annual Resident Survey, and my study contributes to this ongoing initiative by building upon key themes of interest emerging from the resident survey results. Due to my previous experience working with HNC and Brightside as a research assistant for several months, I was able to complete this research.

This study uses a mixed methods (qualitative and quantitative) approach to analyze secondary data from Brightside Tenant Surveys (2020, 2021, and 2023). I also conducted content analysis of two focus groups and one interview with seniors living in two Brightside buildings, Bridgeview Place and Gordon Fahrni House.

The first focus group, held in the spring of 2022, offered limited input about online socializing platforms. The second focus group, held in the fall of 2023, had 5 participants and focused exclusively on online social connections. One of the participants could not join the focus group so I interviewed that participant independently. The findings of both focus groups and the interviews were then integrated with the rest of the data and analyzed together. Furthermore, this study incorporated the insights gained from interviewing a member of Brightside Community Homes Foundation.

I developed this research in partnership with HNC and Brightside. The context for this study is the City of Vancouver. The Community Enhancement Survey (2022), which is done every year, shows that most of Brightside's residents are older adults (76% are over 65 years old), live by themselves (69%), and are women (59%). Moreover, of those who are 65 years or older, 88% lived alone, which places them at high risk of feeling socially isolated. In terms of making a focus group happen, I chose Bridgeview Place and Gordon Fahrni House for this study. I chose Bridgeview Place because of my pre-existing relationship with a group of seniors living there who participated in the first focus group in 2022 and shared stories about using online socializing platforms.

3.1. Recruitment of older adults and key informants

The study used a purposive sampling method to recruit older adults who are residents of Bridgeview Place and Gordon Fahrni House. Recruitment flyers were posted on the building announcement boards, where potential participants could see them; as well, I answered questions in an "in-person recruiting" session. In order to enroll participants, older adults called me for more information about the study; at that time, I screened participants with specific inclusion criteria and obtained their consent through this brief telephone conversation or a follow-up email. During this screening interview, residents' information was collected; this included age, gender, access to the Internet and digital technology, and physical health status (including disabilities). These factors were considered due to their potential impact on older adults' perceptions and use of virtual socializing platforms. For instance, having a physical disability could significantly influence an individual's experience with digital socializing compared to other participants.

Inclusion criteria for the study were: adults 65 years and up, living alone in Bridgeview Place or Gordon Fahrni House, and who socialize online. Exclusion criteria covered the following: people under the age of 65, as well as those living with others (including spouse, partner, friend or roommate), and those lacking fluency in verbal and written English.

In addition, one key informant with knowledge about seniors' use of the Internet and digital socializing platforms, Brightside's manager of housing services and engagement, was recruited through available connections with HNC and the Brightside

community. Interviewing the housing provider offered the advantage of providing deeper insight into the lives and habits of residents, even those who may not be interested in participating in interviews and filling out surveys.

3.2. Secondary data

HNC focus group

Based on the secondary content of the previous focus group conducted in 2022, I conducted a feasibility test to determine if current research is valid for this population, and whether they use digital socializing technology. The feasibility test was done through reviewing the transcripts of the 2022 focus group and related conversations were extracted. The quotes were further combined with the 2023 focus group transcripts and analysed as secondary data.

According to 2022 focus group, Zoom and the Internet were lifesaving tools for some seniors during the pandemic. It was this point that drove me to explore the impact of virtual socializing on seniors' social connections during and after the pandemic, as it seemed important to investigate the perceived influence of digital socializing on older adults' connectedness.

This review of the secondary data accompanied the primary data collection (focus group) and provided an understanding of seniors' general attitude towards virtual social connections compared to place-based interactions. Review of secondary data also helped me to define my focus group questions based on the quantitative findings.

Resident surveys

I utilized secondary case study data from a project titled Brightside Tenant Survey conducted in 2020, 2021, and 2023 as part of the document analysis. Using the HNC data use policy, I had access to the survey data according to approval by SFU's Department of Research Ethics for minimal risk research involving human subjects. In this survey, people were asked to complete an online survey through SurveyMonkey or complete it in-person (one survey per unit). The survey was completed by a total of 673 Brightside residents (223 in 2020, 210 in 2021, 240 in 2023). The survey asked

questions related to demographic information, social connections, isolation and loneliness, and online or in-person socializing. These factors provided insight on the profile of Brightside residents (Appendix D).

The study builds on research done on Brightside seniors in 2020 and 2021 about their social life and well-being but sheds light on digital communication technology use and its impacts on social connectedness. In the 2020 research, there were a number of questions that went beyond demographics and explored social connections, well-being, and use of online communication platforms. Two examples are: “What is your preferred method of communicating with Brightside? (Select all that apply)” (216 respondents), and “Would you like to have regular communications with Brightside by email?” (205 respondents). More than one third of respondents indicated their interest in using email for regular communication with Brightside. However, their main barriers for doing so were technical difficulties or a lack of computer access. This data was helpful in determining whether Brightside residents use digital communication methods. Moreover, this survey data provided evidence that indicated how and if digital communication platforms such as email are preferred in-line with physical interactions among Brightside residents.

3.3. Primary data

Semi-structured key informant interview

Prior to recruiting participants, I met with my connections at Brightside. This meeting involved a presentation of the objectives and goals of this research, a request for guidance including a final decision on choosing buildings, and support to recruit participants from among the residents. Further, I obtained Brightside's approval to distribute recruitment materials inviting tenants to participate in the focus group. In addition, I conducted a semi-structured interview with the Brightside’s manager of housing services and engagement to better understand residents’ social needs and interactions, internal provisions and programs in the buildings to foster in-person and virtual social connections among neighbours, as well as seniors’ challenges and barriers in using digital communication technologies.

Focus group and interview

To develop a deep understanding of personal feelings, experiences, and perceptions about digital technology and virtual social participation, I conducted a detailed in-depth conversation with five respondents as the last part of my research design. Initially, five participants were recruited for a focus group; however, one participant was unable to join. Subsequently, I conducted an individual interview with this participant a few days after the focus group.

The focus group was conducted in a loosely scripted manner, with enough room for respondents to share and discuss their needs and preference in regard to online socializing. Through this approach, residents were able to articulate how digital communication technologies had impacted their social lives. Data and insights produced through the focus group, were unique to the group's discussion (Babbie, 2018), for example, during the focus group discussions, participants built upon each other's comments, and brought up new topics, perspectives, and experiences that were not anticipated or included in the initial set of questions and prompts. Some participants shared personal anecdotes or challenges related to using digital communication technologies that had not been covered in the focus group guide. These unplanned contributions enriched the data by providing a more comprehensive understanding of seniors' experiences with technology and virtual social participation.

To summarize, group discussions with older adults is particularly beneficial for several reasons. Firstly, group settings may encourage participation among seniors, as they can motivate each other to contribute and introduce new topics of discussion during the focus groups. This dynamic interaction is crucial for generating rich and diverse insights into the experiences of seniors with digital technologies. Additionally, participating in a group setting may be more comfortable for seniors, especially when accompanied by a friend or neighbour with whom they share common interests or familiarity. This setup can help alleviate social anxiety, which many seniors reported experiencing due to the pandemic, as interacting with familiar individuals can reduce feelings of unease or self-consciousness.

Moreover, recognizing the lived experiences of the Brightside tenants was important, particularly as they belong to a low-income and aging community whose

expertise is frequently undervalued. Their local knowledge, time, and efforts are crucial, especially in light of the mental or physical challenges that may accompany aging. The focus group was held in an SFU classroom, chosen for its convenience and accessibility to the participants.

Focus groups included open-ended questions about participants use of digital communication platforms and how it has impacted their social connectedness. The List of questions to generate a dynamic group discussion is provided in the Appendix B.

Individual interviews, while different in format, are equally important. In the case of the participant who could not join the focus group, the individual interview allowed for a deeper exploration of his singular viewpoint, enriching the overall research and complementing the group findings.

3.4. Ethics consideration

In partnership with Brightside, the study was conducted through the HNC ethics application and data use policy stating that anonymized data are available to HNC members and other researchers. To clarify, this project did not necessitate an additional ethics application; rather, it was incorporated as an amendment to the ongoing HNC ethics approval. All participants received a consent form at the beginning of the focus group in order to obtain their consent and preferences on how their data will be shared and credited. Participants were assured that their involvement would not impact their tenancy at Brightside buildings and that neither their housing provider nor property manager would receive any identifying information. “This information will be kept in confidence and should not pose any risks to the participant. Researchers guarantee that your decision not to participate in any part of the project will not have any effect on your housing or employment.”

3.5. Data analysis

3.5.1. Secondary data analysis

Combining methods enabled me to overcome the shortcomings of each method individually (Babbie, 2018). Data analysis and interpretation are conducted in stages,

with the first phases shaping the direction of focus groups and informing the subsequent stages of data collection.

Analysis of a complementary piece of data is based on the adoption and use of the Tenant Survey 2020, 2021 and 2023 that provided a better understanding of Brightside tenants. I used a descriptive analysis, cross tabulation, and a memoing system for the variables such as respondents' socio-economic characteristics, level of online and in-person connectedness, and well-being, all of which are relevant to the goal of my research and used SPSS and Excel to explore them further quantitatively. I prepared graphs and tables to visualize the findings of secondary analysis. These visuals accompany the qualitative findings in the data findings chapter.

Moreover, as parts of secondary data analysis, some important themes from focus group 2022, were identified, such as the importance of using virtual connections for digital literacy and people with disabilities, as well as for mental and physical well-being, including being able to bounce back to normal life after a crisis. These data and themes were combined with the rest of the primary data gathered and were added to NVivo for further analysis.

This review of the secondary data accompanies the primary data collection stage (focus group and interviews) by providing a baseline and context to understand seniors' online socializing behaviors and use of Internet. Based on this analysis of Resident Surveys, I framed the narrative of the focus group and interviews, and led the discussion to the topics and questions that were more relevant to research question.

3.5.2. Primary data analysis (Focus group and interviews)

I used the process of thematic coding to analyze the focus group and interview data. In order to code and organize textual data, I exported the transcription from Otter (which was audio-recorded with the consent of the participants) into NVIVO.

To begin thematic coding, I used descriptive predetermined categories derived from the literature review and analysis of secondary data. These categories included themes such as experiences of social interactions online, perceptions of virtual connectedness versus place-based interactions, mutual aid for digital connections,

disability considerations, online recreation programs, and reasons/places for in-person social connections.

As I progressed through the coding process, some pre-identified themes evolved based on emergent patterns in the data, allowing for inductive coding. I iteratively analyzed the coded data, looking for patterns and developing explanatory narratives. Following Babbie's (2018, P.253) approach, the analysis "primarily begins with observations, and it is analytic because it goes beyond description to find patterns and relationships among variables". As narratives revealed common themes and reached data saturation, the key insights became apparent.

Chapter 4.

Data Findings: Online Socializing

4.1. Introduction

In this chapter and subsequent sections, I present the findings regarding the impact of online socializing platforms on social connectedness and aging in place within community housing based on the themes identified in the literature. Figure 5 includes a visual representation of the themes, sub-themes, and findings. seniors socializing online and in-person connections were the two dominant themes.

The analysis was guided by the following research questions: (1) whether virtual socializing facilitates social connectedness among low-income seniors. (2) In what ways do older adults use digital communication platforms for being socially connected? (3) How do digital communication platforms intersect with traditional means of providing social connectedness?

After analyzing the data from the focus group and interviews, I discovered two dominant themes and nine sub-themes that explain the effects of online socializing on older adults' social connections. The two dominant themes, online socializing and in-person socializing, provide the order for presenting the research findings.

This chapter begins with an overview of older adult demographic profiles and information provided by the key informant. In section 4.2, comments from participants on online social platforms and how they act as barriers or facilitators of aging in place are presented. The subsequent section presents findings related to the challenges that arise from the digital divide for older adults' online socializing.

Participant and Building Profiles

Before discussing the findings, it is necessary to introduce the participants and the context of the buildings. The summary of characteristics provided here was shared with me during the focus group and interview. I collected these details to understand participants' diverse backgrounds and social relations. This information helped me to

interpret their responses to questions about online social connectedness. Names and identifying details have been anonymized according to the focus group and interview consent agreement.

A total of five participants took part in a 90-minute focus group and interview session. Among these participants, three were men and two were women. The majority of participants (four) resided in Bridgeview Place, while one participant lived in Gordon Fahrni House. Four participants were between the ages of 71 and 75 during the focus group, and the other participant was in his early 80s. The participants had diverse social backgrounds: one was an immigrant who had been living in Canada for over 10 years and had a disability, one identified as gay, and two were retired from professional occupations. Additionally, all participants lived alone.

As an organization, Brightside prioritizes independent living. This was explained by Brightside's Manager of Housing Services and Engagement, the key informant. She noted that the organization does not offer programming directly to residents and instead aims to connect residents with existing community programs. She stated:

> As a landlord, we don't necessarily do too much in terms of individuals. as an organization [Brightside] doesn't offer programming to residents, because we're independent living. So what we would try to do is offer information about or maybe connect people to programs that are being offered in community.

She went on to explain that connecting residents to resources or programs tends to occur through traditional methods like hardcopy newsletters and in-person communication rather than mass emails. However, she acknowledged the potential for using email in the future for disseminating information:

> We don't have a mechanism like an email list for residents. I think over time that will change. And that would be very helpful for us to disseminate information for everybody, but right now that we don't use email as an organization to reach out en masse to residents at this point.

However, the key informant emphasized that Brightside has a commitment to respecting residents' autonomy and confidentiality. Collecting information from residents is practiced cautiously, emphasizing the importance of privacy and anonymity. As a result, the organization does not maintain a list of Internet users, or tenants' email

addresses and, she noted that they “don't ask direct questions about those things, necessarily outside of surveys, which are anonymous.” She went on:

> We have to be very careful of the balance of maintaining privacy for people. We're very careful about how much information we get or asking directly of individual tenants for just the purpose of that they might not trust what we're going to do with that information.

In sum, Brightside’s approach to independent living means that they have not yet invested in infrastructure that would allow them to know how many of their tenants have an online presence or reach their tenants through this mode of communication.

Bridgeview Place

Built in 1993, Bridgeview Place is a high-rise concrete building located in Vancouver’s West End neighbourhood. This building consists of bachelor, one-bedroom, and two-bedroom units. It also has a common room with a balcony overlooking David Lam Park and False Creek, which is not equipped with a wireless connection. The amenity room is shared with laundry space and residents usually socialize in that room while doing their laundry. As explained by the Brightside key informant, Bridgeview had an agreement with an Internet provider called NOVUS prior to COVID, which meant that:

> Bridgeview building was on an exclusivity agreement with NOVUS, (which has now ended), so it never made sense to do it [provide mandatory group rate Internet for residents] as all residents were mandated to have Internet as part of their building fees/rent. Once that ended, we were in COVID and the amenity room was not open to residents.

This means each resident has to obtain their own Wi-Fi connection to be able to socialize online. As a result, the common room at Bridgeview Place was never equipped with free Wi-Fi access. However, because Brightside tenants are low-income, lack of Internet provision impacts residents’ ability to access online resources. As the Brightside key informant indicated:

> What we do find probably, […] is that it isn't necessarily having the device or having the smartphone or the tablet or the computer, it's the ongoing cost of those plans. I can say though, in some of the buildings we do have a Wi-Fi where maybe by being in the common area, they might have access to it.

Gordon Fahrni House

The Gordon Fahrni House, erected in 1969, is a tall structure made of concrete located in the English Bay area, providing residents with a lively community atmosphere. The structure consists of both bachelor and one-bedroom dwellings, designed to accommodate seniors. The tenants have access to an amenity room within the building, which is equipped with free Wi-Fi. This can promote a connected and inclusive living environment for low-income residents.

The Resident Survey 2023 as part of the HNC research was sent to 771 units of Brightside buildings. Overall, 240 Brightside residents participated in the survey. The response rate for this round of survey was 31%. The result of survey shows that 68% of the Brightside participants were 65 years or older, and of those older adults 93% lived alone. Moreover, 57% used online socializing applications at least a few times of the week, and 32% almost never went online for socializing. Given the importance of this topic my preliminary research informed the creation of this question about the use of online socializing in the 2023 round of Resident Survey, which I then analyzed as part of my study.

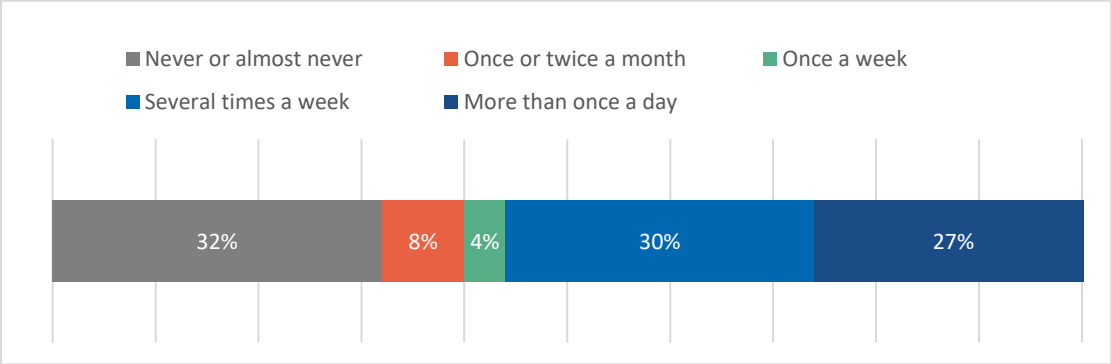

Figure 4 - Question #20: How often do you use the World Wide Web, or the Internet, to socialize or interact with others?
2023 Survey results, Brightside tenants, total of 218 older adult respondents

Of those who never socialize online, 70% almost never participate in in-person community engagement activities. In contrast, only 42% of those who socialize online at least a few times a week refrain from engaging in in-person activities and programs.

Older adults who reported that they never or almost never used the web to socialize had 2.3 times lower odds of participating in in-person community engagement

activities compared to respondents who used it at least once or twice a month. In other words, individuals who do not socialize online are 2.3 times less likely to participate in physical community engagement activities.

In contrast, older adults who reported socializing online at least once a month had 2.5 times higher odds of engaging in physical community engagements at least once a month. This suggests that older adults who socialize online more than once a month are 2.5 times more likely to engage in physical community engagement activities.

These findings show the strong association between the use of online socializing applications and community engagement among older adults. Having this survey result information as background provides a better understanding of the participants' social lives.

Thematic Overview

Figure 5 features two dominant overarching themes and nine subthemes that link coding categories and offer insightful information regarding the online socializing of seniors. The following are two dominant themes emerged during the focus group:

1. Seniors socializing online
2. Defining in-person connections (before, during and after Covid-19)

The first theme portrays what online socializing looks like for seniors. It captures several types of online socializing, purpose of use, digital divide and negative features of these platforms, as well as the perceptions that seniors had about utilizing them. It also discusses the effects that socializing online might have on their lives. In addition, different roles that online socializing platforms can play in seniors' social lives are discussed. This section analyzes how online socializing platforms facilitate socialization among seniors, as well as the benefits and challenges they encounter while using these platforms.

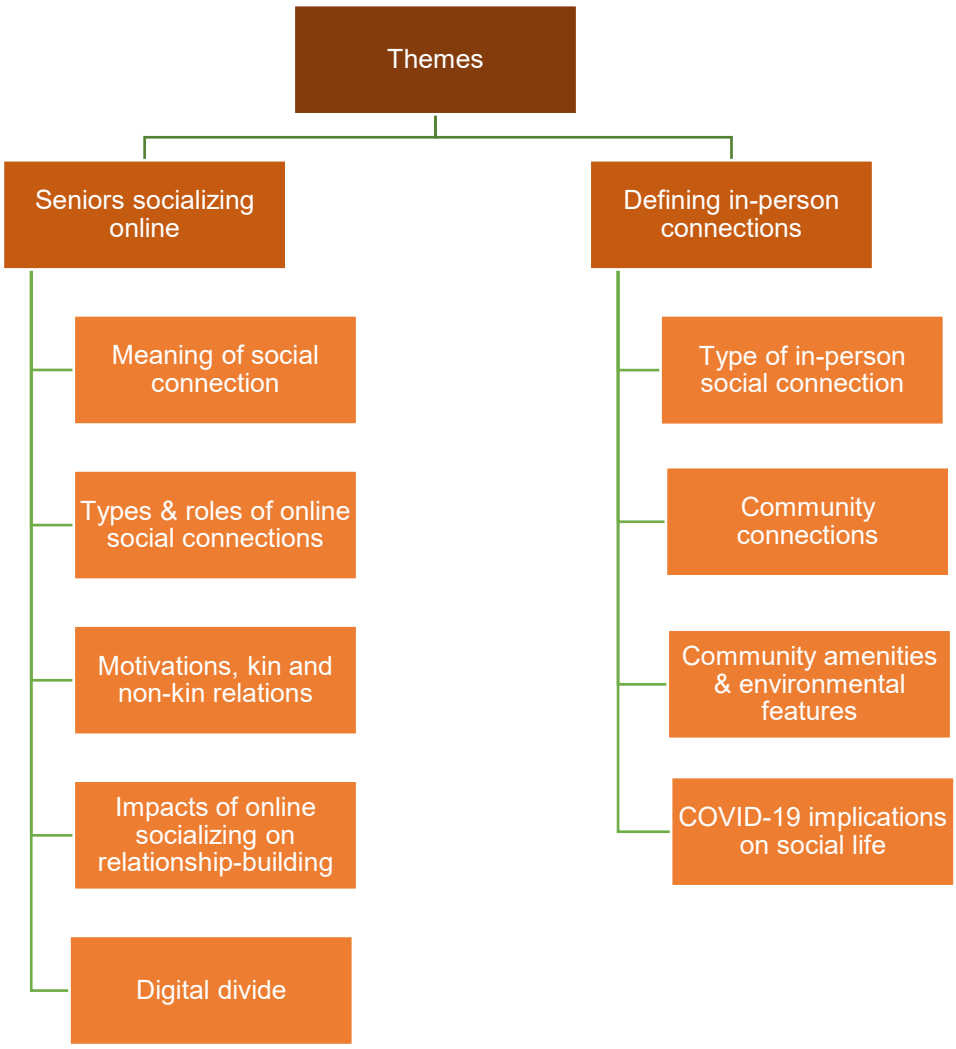

Figure 5 - Qualitative focus group and interview summary findings

4.2. What does online socializing look like for seniors?

This theme aims to answer my first sub-question regarding the ways older adults use digital communication platforms for being socially connected. Additionally, this theme explores how seniors use various digital platforms and applications to communicate, socialize, and access information and services. Some of the types of platforms and applications that are discussed in this study include Email, instant messaging apps (such as WhatsApp and Telegram), video conferencing tools (such as Zoom and Skype), social media networks (such as Facebook and Twitter), and online forums and communities (such as Reddit). This section analyzes how the scholarship organizes these types of platforms and applications into passive and active categories, based on the level of engagement and participation they require from the users. Then, I

discuss how this categorization affects the experiences and perceptions of the participants about online socializing.

4.2.1. Defining connections: Meaning of social connection

It is important to have a clear understanding of social connection for older adults and the elements they attach to its definition to better understand their social needs and further their digital social needs. To do this I asked participants about the definition of social connectedness. Themes such as natural instinct, trust, respect, care, love, appreciation, reciprocity and mutual care, and acknowledgement emerged from their discussions. The following quotes describe some elements of social connections and show how older adults define and perceive social connection. They also provide insights into how older adults navigate their social spheres. Participant D, for example, explored the inherent human desire for social connections, and compared tribal systems, highlighting that in such systems, everyone's role contributes to the well-being of the tribe. This participant underscored the idea that social connection is a fundamental human need.

> We humans do all need to be connected somehow. I mean, that's just in the tribal system. It was important that everybody did what they were supposed to do in the tribe. So that the tribe was to thrive. And that's why we need to connect, because it's our natural instinct to do that, to feel that we're contributing to the tribe, right.

Yet, feeling a part of the tribe requires safety, as Participant B highlighted. He emphasized the need to feel safe and comfortable in order to be authentic in social interactions, which can impact both online and offline relationships. This participant's contribution underlines the importance of trust and openness in forming meaningful connections.

> I always feel like if I can just be myself, I can be funny, if I'm allowed to be free. But I have to feel safe to be able to do that. So you just want to and sometimes I don't feel safe. …And then everyone seems to have solid impressions or opinions about things. So, I have to let that go as well. There's a lot of underlying friction that's never addressed. And that's what drives me away from wanting to talk to people. It doesn't make any difference whether I'm seeing them in-person or online.

For Participant B, social connection is impeded when his sense of safety is in question. He noted this is shaped by unspoken tensions, which can lead to him to pull away from making contact with people.

The work of social connection thus requires safety, as well as comfort and respect, as mentioned by Participant A. This participant recounted what it's like when they feel connected to, "where I can say what I want. Where it's just very comfortable. It's very easy." This type of deep connection, where individuals can comfortably share personal information, underscores the importance of mutual respect and trust in forming close connections where one can freely express themselves.

Participant B preferred this form of deep connection: his view of in-person social connectedness was based on having a few close friends who were reliable and supportive, rather than having many acquaintances. B valued quality over quantity in his social relationships. In particular, he expressed a strong attachment to participant C, who had a vision disability and depended on his help. C was his main source of care and companionship. He stated:

> There are people I do rely on, I don't have a lot of friends. There are people that I consider good friends. And those people I rely on when I need them. And they're always there. [For instance,] I talked to "C" twice a day. And we always start the day and end the day, and then we may meet during the day. …People need to care about someone in life, and it's not enough just to have people in your life, because you need to care it for one person at least. I care about "C". So that's important for me in my life.

In other words, for Participant B, caring for somebody in life is a way of fulfilling one's emotional and social needs. B suggested that caring for someone else gave meaning and purpose to his life and enhanced his well-being and happiness. Caring for somebody also implies a reciprocal relationship, where both parties are invested and involved in each other's lives.

Like these connections, Participant E shared how he valued the social interactions with his friend and his friend's dog. He commented on the mutual support they provided to one another: when his friend was working, E would walk the dog at least once a week. In turn, E would share some of the grocery delivery he received from a Jewish community support service with his friend. He recalled, "I really enjoyed seeing

this friend, he has a dog who's getting quite old… So when he comes to pick up the groceries, he brings the dog. And I really enjoy that. I look forward to that."

Participant D shared this emphasis on valuing one another, suggesting that social bonds gain meaning when individuals convey their importance to one another. He pointed out that there is value of expressing love and appreciation in social connections. This reinforces the idea that genuine connections go beyond simple interactions and involve acknowledging the significance of each person in one's life.

> Whenever [family members] say goodbye to each other, we say, we love you, I love you, or they love me. Because you never know, [when it's] going to be the last time you talked to the person. I mean, especially today's age, so many things can happen now. [It's important] To let people know that they are valued, that they're important.
>
> I have a friend who I see on a regular basis, we often go for walks a couple of times a week. And I know for him, he's a teacher, and he loves to teach because he gets this wonderful feedback from his students. And for him, that's important. It's not so much whether they actually learned. He knows how to connect with the students. So for him, it's important that they are actually acknowledging that he's important to them. So yeah, [social] connection is a value to know that your life has meaning.

Participant A distinguished between close, tight connections, which she termed relationship connections, and broader, social connections. She suggested that tight connections involve a select few who can be relied upon in times of need, while social connections extend beyond one's immediate circle and might include casual acquaintances. From A's perspective, being socially connected means engaging with these broader social connections. Potentially including casual acquaintances, neighbours, or even strangers. These connections are more expansive and encompass interactions with a wider range of people.

> But socially connected to me is outside your circle, like, this is my social connection here, where my relationship connection is my four friends and my son. But socially connected, I talk to everybody. I talk to everybody and smile. So that's sort of my social connection. But value to me is a little bit more than [that]. Like I do value friendships, especially my close tight friendships.

Participant B also expanded the concept of social connectedness. In his view it's not solely about physically being around people all the time. Social connectedness can also manifest through shared activities or interests. He used the example of doing

something in a shared space, like enjoying a movie together, which is a form of imagined community (Anderson, 1983; Morgan et al., 2021). This form of connectedness, facilitated by sharing interests, is particularly important in the face of the challenge of making new connections as one gets older and forms stronger opinions. Holding deeply held beliefs can hinder forming new connections, particularly in online interactions. As a result, seniors' perceived meaning of social connectedness may be informed by a belief that new relationships may be an unproductive experiment. Participant B explained this perception:

> I think one of the things that I've noticed, as I age, with all the experiences I've had, the interests that I have today, and the opinions and attitudes and everything seems to be first from experience, you begin to develop pretty strong ideas about the world. And it makes it difficult to get to connect with people other than at a superficial level.
>
> It's hard to express that with someone who may not be the same, may not follow the same beliefs as you, but may actually oppose them. And it's difficult to build a relationship, when you might bring up a topic that's really quite sensitive, could be anything…
>
> So that's why I guess it's getting harder for older people to make new friendships, because we're too fractured in our worlds and where it's when you're younger, much of the world is still ahead of you. And you still have a lot of challenges that you can, everyone can see the same uncertainties. And they agree with that, because everything's uncertain for everyone. Right? You're all pursuing the same streams whatever they are. But in the case of an older person, they've settled into a life that they've accepted. And they recognize that this is the immutable life that I've got, it's not going to change. I don't care who I meet, they're not going to change me.

Participant B described the aging process as a gradual acceptance of one's life circumstances and a reduced desire for change or transformation. He implied that older people have fewer opportunities and challenges than younger people, and that they had already fought their battles and made their choices. He also suggested that older people are more resistant to being influenced or changed by others, as they have a strong sense of self and identity. Overall, this makes it harder for them to build new relationships. These ideas serve as a baseline for the discussion of online connectedness.

Loneliness and social isolation

The absence of social interactions highlights their significance, especially during challenging times or periods of isolation. Many seniors expressed that although they spend most of their time alone, they did not feel lonely. However, an important theme related to the perceived meaning of social connectedness was feeling of loneliness versus being alone, and how critical social connectedness became in periods of loneliness. As Participant B stated, “you don’t realize you really need it till you don’t have it.”

As discussed in Chapter 2, being alone is different than feeling lonely. Being alone refers to the physical state of not being with another person, while feeling lonely refers to the psychological state of experiencing distress due to a lack of social connection or satisfaction (Gilmour et al., 2020). In this section, followings are the quotes from three participants, A, B, and E, who shared their perspectives on the differences of being alone and loneliness.

I'm not lonely, although I spend much my time alone. (Participant A)

Participant A spent much of her time alone but did not feel lonely. She attributed this to her upbringing, where she learned to be independent and to have imaginary friends. She acknowledged the difference between being alone and feeling lonely and said that she only felt lonely for her mom sometimes. She distinguished between loneliness and being lonely by saying that loneliness is a feeling of isolation or emptiness, while being lonely is a feeling of sadness or longing for someone specific. She implied that being alone could be a positive or neutral state, as long as one had a sense of purpose and connection with oneself or others, even if they were not physically present. Commenting on how she was raised, Participant A noted how she felt different from other people in her independence and attributed that to having been brought up “in private school with nuns” where she did not see her mum that often. Her mum taught her to “have imaginary friends and just have conversations.” And she said, “You will never be lonely.” Participant A reflected on feeling lonely for her mother on occasion, but argued that “there’s a big difference between lonely and alone.”

Participant B concurred with this description, stating that he spent much of his time alone but did not feel lonely. He explained that he spent a lot of time on the Internet,

where he satisfied his curiosity and thirst for knowledge. He suggested that being alone could be rewarding, as long as one had access to information and resources that interest them. He also implied that being alone did not mean being disconnected from others, as he could still interact with people online or offline, depending on his preferences and needs. He commented that he typically spends a lot of time alone but doesn't feel lonely. B stated:

> I'm not lonely, although I spend much my time alone. Because I spend a lot of time on the Internet. I've always been intrigued with information and knowledge and stuff.

Likewise, Participant E called himself a loner, but also said that he always had friends. He described himself as someone who did not seek out social interactions, but who attracted people who wanted to be friends with him. He indicated that being a loner could be a choice or a personality trait, rather than a sign of isolation or dissatisfaction. He also implied that being a loner did not mean being friendless, as he may still maintained meaningful relationships with certain individuals who shared his values or interests.

These stories illustrate the diversity and complexity of older adults' experiences and perceptions of being alone and feeling lonely. They also challenge some of the stereotypes and assumptions that associate aging with loneliness and isolation, such as false notion that all older adults are lonely, unhappy or depressed. In fact, some studies have shown that older adults have been more resilient and less affected by the COVID-19 pandemic than younger adults, in terms of their mental well-being and social connectedness. This may be due to their coping skills, life experiences, and adaptive behaviors that enable them to overcome adversities and maintain a sense of purpose and gratitude (Karmann et al., 2023). Therefore, it is important to recognize and appreciate the strengths and resources that older adults have, and to support them in enhancing their resilience and quality of life.

Participant A shared her perspective on how aging can lead to social isolation and loneliness, which in turn can affect mental health and quality of life. She felt that older adults, especially those who are 70 and over, faced a shrinking social network, particularly when they have no family and limited social support. As she witnessed some of her friends developing dementia, which reduced their ability to communicate and

interact with others, she felt concerned that her own social network was shrinking and she anticipated that she would soon be alone.

Participant A's concerns reflect the challenges and concerns that many older adults face as they age, such as losing their social network, feeling lonely and depressed, and coping with health issues. As discussed in Chapter 2, older adults tend to have smaller social networks than younger adults, due to factors such as retirement, relocation, death of friends or family, and reduced mobility. This shrinking social network can have negative effects on their mental and physical health, such as increased risk of depression, suicide, dementia, heart disease, and mortality (ONPHA, 2016). This is echoed by Participant A, who said, "I think people are gonna get really depressed as they get older because they don't have anybody. As we get older, we lose connection with friends, we lose all that."

Participant A highlighted the importance of connections for older adults as a critical mechanism to help them cope with the difficulties of aging. For herself, she expressed the importance of maintaining and creating social connections, and especially valued the connections she made in her building, such as neighbours or building residents. Noting that "it's something to have if you need to talk to somebody," A identified that having connections with people who live nearby is essential.

These connections especially with neighbours, can provide older adults with a sense of belonging, support, and comfort, as well as opportunities to socialize and engage in meaningful activities with others living close by.

In summary, the exploration of social connectedness meaning and the distinction between solitude and loneliness among older adults sets the stage for the upcoming discussion on online socializing. The narratives and insights shared by the participants have helped establish baseline definitions of social connections and highlight concerns about loneliness in the well-being of seniors. The next section delves into how digital platforms can serve as a channel for maintaining and fostering these essential connections, offering new avenues for interaction and community engagement in an increasingly connected world.

4.2.2. Types of online social activities

Digital socializing platforms have emerged as a cornerstone for fostering social connections, particularly for seniors who have been disproportionately impacted by the COVID-19 pandemic. This section will explore the transformative potential of digital connectivity in mitigating the barriers encountered by seniors, especially those with disabilities and marginalized demographics, such as low-income or those living alone.

The literature is divided regarding the impacts of digital socializing platforms on social connection and digital bonds. Some studies provide evidence of the positive outcomes associated with active engagement on digital socializing platforms and illustrate that these platforms can help reduce feelings of loneliness (Elmer, 2018). On the other hand, passive activities like merely viewing photos and clicking “likes,” often referred to as “lurking,” have been linked to increased feelings of loneliness (Elmer, 2018; Valkenburg et al., 2021). Many argue, however, that these platforms serve as vital channels for emotional support and community building (Quan-Haase et al., 2017).

In this chapter, I categorized the findings into distinct themes to better understand the nuances of digital socializing among seniors. This thematic division is partly a function of the amount of data collected and a deliberate choice to highlight different aspects of digital engagement. The themes include: 1- types and roles of online social activities. My findings highlight the multi-layered roles that digital platforms can play in enhancing social relationships of seniors, including providing support during crises, enabling independent living, facilitating international connections, or serving as platforms for recognition and acknowledgment. This analysis will delve into each of these roles, illustrating their significance in enhancing the social well-being of seniors, especially those who are marginalized and with disabilities. 2- Motivation for online socializing is the second theme, with a distinction made between interactions with kin and non-kin relations. This theme explores how non-kin relationships are often the main motivation in digital bonds. 3- Impacts of online socializing on relationship-building: which highlights three key aspects of relationship development for participants: developing connections, fostering or re-establishing bonds, and maintaining relationships.

Different formats of online social platforms

In the realm of digital socialization, seniors have access to multiple platforms that allow for video and voice calls, messaging, and the sharing of multimedia content. The choice of application often reflects the intended purpose of communication. The diverse formats of these digital platforms include:

- **Email and Messaging Apps**: Such as Email and WhatsApp, which facilitate the exchange of messages, photos, and videos.
- **Video Conferencing Tools**: Like Zoom and Skype, which support video calls, group sessions, and live streaming events.
- **Interactive Online Games**: Offering entertainment and social interaction.
- **Dating Applications**: Providing opportunities for romantic connections.
- **Discussion Forums**: Platforms like Reddit for community discussions on a myriad of topics.
- **Social Networking Sites**: Including Facebook, Instagram, and Twitter, which allow for broader social engagement and content discovery.

Each of these platforms contains distinct interfaces and functionalities. To comprehend how older adults utilize these platforms for social engagement, and to foster meaningful digital interactions, it is crucial to explore the variety of online social activities in which they participate. .

Digital social activities can be divided into two categories of active and passive use. Active use involves two-way interactions such as video calls, voice calls, chat, and sharing text, photos, and videos. Older adults use various applications for these activities based on the purpose of their interactions and the time of day. For example, they might send emails and chat messages in the morning to connect with friends and engage in more interactive activities such as playing games and browsing social media in the evening. Email and WhatsApp are two of the most used platforms among the participants in this study. Seniors described different ways in which they go online to communicate and socialize with others using these platforms.

For instance, Participant C, who had limited vision, used verbal commands to send and receive messages via email and WhatsApp. She connected with her friends from different locations around the world. She considered these platforms as convenient

and accessible ways to stay in touch and express herself. Similarly, other participants also used email and WhatsApp to exchange text, photos, and videos with their friends and family, creating a sense of connection and belonging.

The act of sending photos via email and other online platforms to friends illustrates a common practice of sharing personal experiences. These photos serve as visual updates on an individual's life, including the places they've visited and the activities they've engaged in. As Participant D shared, receiving videos of his nephews' and nieces' travels is an important way for him to maintain connection with them. This form of sharing allows friends and family to feel connected to the person's life even when they are physically distant. Sharing photos can be seen as a form of visual storytelling. By sending images of their adventures, individuals not only convey where they've been but also offer a glimpse into their daily life. This helps friends feel more engaged and connected to the individual's experiences.

Participant A identified the variety of ways she used digital communications for social connection by explaining how these activities are a structured part of her day. She relayed:

> So in the evening, my social connection is the Internet. I have a certain time a couple hours at night. I always do email in the morning. And that's how I connect with the girlfriend, hello, have a great day or whatever. But the evening, my two hours is like my social [time], where I do all, play my games, to Facebook, look, do searches, that kind of thing. I find it really helpful. So it's like the yellow pages. Other than that I'm out every day on the bus, I do get out on the bus a lot and go to a lot of places. But online is sort of in the evening.

Participant A also distinguished between her landline and cell phone usage, highlighting the adaptation of communication methods to different needs. While the landline served various communication purposes, the cell phone was primarily reserved for emergencies and nighttime use, reflecting how individuals adapt to different communication devices and socializing platforms in their social lives.

> I go out a lot. And when I'm out and about, I do send a lot of photos over email of places I've been. That just seems how I send what I'm doing to my friends is taking photos and sending them through email […] And at you we're talking about texting. I have a landline and a cell phone. My landline is for everything. My cell phone is for me for emergency, or at night time when I get home. But texting, I will call, I will text the girlfriend and say, Can

> we talk now? rather than calling. So I do send [a lot of text messages] but it's just like one or two lines. [But] my son will send jokes and things across.

Substantive use of digital social applications: Active use

There are many ways that the seniors in this study rely upon digital social platforms in their everyday lives. From interacting with a global community to reducing barriers that may arise from in-person activities, participants described how utilizing these platforms enhance their social lives and provide them with a sense of belonging in a wider social network. **Facilitating social connections regardless of geographical distances** emerged as one key feature of participants' comments. For instance, Participant C emphasized the use of WhatsApp to stay connected with classmates from high school who were scattered across the world, despite her vision disability. For her, WhatsApp fostered her ability to maintain friendships with individuals from various geographical locations, noting that she has participated in a chat group for many years.

> I could talk to every member in the chat group. And some of them may be in Australia, in Hong Kong, in the US, or here in Vancouver. And at the same time, too, because I moved from Ottawa to Vancouver not too long ago, and I still have, the Ottawa phone number with the area code 613. So for those local phone users, they may have to incur long distance call rates to call me [while WhatsApp gives free option to call globally].

Digital tools can play different roles for seniors and thus bridge geographical gaps and facilitate meaningful connections with family members and friends living far away. According to Quan-Haase et al. (2017), digital media can assist in mobilizing social support and also in maintaining and reinforcing relationships with both nearby and distant contacts, and this is particularly crucial for those with restricted mobility and their acquaintances. In addition, the experience of being part of a social network or group through the use of online social platforms can enhance users' sense of connection (Yu et al., 2016). Participant E's comments about his online interactions with his goddaughter in Abu Dhabi and a cousin in St. Paul, Minnesota illustrated this point. Despite not having met his goddaughter in-person, they connected through Zoom, and E valued the interactions. Likewise, E's ongoing relationships with the mother and new husband of his late best friend were mainly sustained through phone calls and emails. These connections emphasize the significance of maintaining relationships with loved ones, even when physical proximity is not possible. Digital socializing tools play a vital role in preserving these connections.

> [My main social contacts] would be my goddaughter in Abu Dhabi. And that's a gift. And my cousin, in St. Paul, Minnesota. I really look forward to both of those. With my goddaughter, she was originally from here, but she's kind of adventurous, we've never met in-person. But, I Zoom in with the three of them, [including a] little girl who is 8, yes, she contributes a little bit. So that's really meaningful to me. That just gives me so much pleasure.
>
> [Also, about my goddaughter] Her father was my best friend. He died in 1996. He was 49 years old. Her mother remarried a few years later and then moved to Nova Scotia. So with them, I still maintain a very close relationship, with the mother and her new husband. And with them it's been mainly phone calls and emails are extremely good. Even if she's only in her 60s. She now has terrible arthritis. And her husband had some health problems too.

Participant D described similar experiences, such as using video calls to keep in touch with his distant relatives, such as his brother, nephews, nieces, and mother who has health concerns. He stated:

> Because of some of my nephews and nieces have, auto-immune system problems. And so now we communicate more so on the Internet, through Zoom, and online video stuff. Even my mom has [long] term care, she's 89 and she lives in Langley. My sister, she lives nearby so often she will go and send a video of my mom. So for me that's very important to know that she's alive and that she's cheerful because she was always a social person… So the online stuff has been important in that respect.

Despite the geographical dispersion of his relatives and their health concerns, Participant D leveraged digital platforms to maintain these relationships. This highlights the adaptive nature of communication in the digital age, where physical distances and health issues are mitigated through online platforms, echoing the global nature of online social connections as previously illustrated by Participant C.

In fact, Participant C's experience added a further dimension to connecting across the globe. She called it “free consultation”, **access to expertise and services** that may not be available otherwise (medical information, learning opportunities, etc.). This highlights how online connections can provide access to other information, particularly where medical practices and prescriptions may vary between regions.

Convenience for seniors in having advice through digital social platforms is another important topic. More than one participant mentioned sharing pictures of prescriptions and specific brand recommendations, which underscores the use of visual communication in online interactions. Sharing images of medical information can

enhance the clarity of advice and recommendations, making it easier for the recipient to understand and follow the guidance. This becomes more important for older adults who may have limited mobility, as it expands their access to healthcare expertise.

Participant E, who was an advertisements actor, also expressed the same feeling for having access to free and easy consultations and services through online socializing platforms with his contacts. He shared a story about how he reconnected with a second cousin as a result of his advertisement work, noting how grateful he was for the health-related support he received from this re-established connection. He said his family member “was really supportive through email. [Especially] just explaining things to me that I had some difficulty understanding.”

Digital communications are also crucial for seniors with a disability or limited mobility, offering them an **alternative way to connect**. Participant C, for example, uses Zoom as a learning platform and a type of online socializing that helps her cope with her blindness and enables her to learn new skills. She attends Zoom sessions offered by CNIB, a non-profit organization that provides support and services for people who are blind or partially sighted. She said that she is new to this condition and that she needs assistance with simple tasks that she used to do by herself.

> All of these Zoom sessions, they are very helpful to me to learn how to cope with blindness. It is [as if] the instructor was there [in the same room]. And we had five or six of us blind people who are trying to cope with the different stages or degrees of blindness. And then in a way, it's very helpful because of these Zoom sessions, we have some participants coming from North Van, and Victoria and me from the west end of Vancouver, so we all could learn something all at once. And we didn't have to go to the place to the site where the instructor was. And that's very helpful. And I learned quite a bit from through all these Zoom sessions.

She appreciated that Zoom allowed her to access these sessions from her home, without having to travel to another location. She also mentioned that she had a helper, Participant B, who set up the Zoom sessions for her on her iPad. She said that she was still learning how to cope with blindness and that Zoom helped her to improve her quality of life. She implied that Zoom provided her with some social interaction and connection with other people who shared her condition or interests.

> Well, I think Internet service should be more available to seniors or to those marginalized people. Because I do admit, I have to take this Zoom session.

> About my blindness, I am new to this condition. And in the past, I could do all kinds of things myself. But now I have to rely on something or someone else to help me. Especially the simple things. In the past, I could pour hot water into a cup. But now I have water spilling out of my cup without realizing oh, it's full, I have poured too much water into my cup. So I am using this Zoom session to learn all these tricks from CNIB.
>
> I mean, I'm glad I don't have to go to New Westminster to attend the classes or the sessions physically, because now I can learn all this from the Zoom session. And I am still learning. And luckily, “B” can help me by having the Zoom sessions set up in his computer or on my iPad. And having the Internet service, more of that service to seeing on marginalized people [is] quite important, and very helpful.

Participant C emphasized the importance of Internet service for seniors and marginalized people. She mentioned that Internet service was quite important and very helpful for her, as it allowed her to access Zoom and other online resources and services. She suggested that Internet service should be more available and accessible for people like her, who may face barriers or challenges in the offline world.

In addition to creating physical barriers in social lives of disabled seniors, having a disability may affect older adults negatively in terms of engaging in certain online activities, such as playing computer games, reading texts or looking at pictures. This highlights the potential challenges that individuals with disabilities may face when interacting in digital spaces. C mentioned spending a significant amount of time reading emails from friends. Despite limitations in responding or replying via email, she valued the role of digital communication methods in facilitating the consumption of online content.

> I don't play games on the Internet or with the computer at all. But I spent a lot of time reading emails from friends. But I couldn't respond, or reply via email. I just call them if I have something to say, with WhatsApp. It is true email or the Internet or WhatsApp has been very helpful to keep us connected… And it's through that WhatsApp group chat that we still could connect after all these years. I appreciate that verbal component of that program [WhatsApp], because with one message, verbal message, I could talk to every member in the chat group.

C's preferred method of communication was making phone calls or using platforms like WhatsApp. These methods provide more accessible and convenient ways for her to stay connected with friends. Yet, she also suggested that she appreciated being introduced to helpful technology as a way to “connect to things” even if getting around town had

become more challenging. This highlights how individuals with disabilities often adapt to alternative socializing channels that better suit their needs and abilities.

Still, even as she acknowledged the value of email, the Internet, and platforms like WhatsApp, C suggested that these methods may still lack something.

Thus, socializing through digital avenues offers unprecedented opportunities for seniors to maintain enduring relationships, despite physical distances or mobility constraints. The persistent engagement facilitated by these platforms can lead to a continuity of social bonds that might otherwise diminish over time through different phases of life like moving to other cities, and neighbourhoods, changing jobs or retirement.

In the previous quote, the mention of a WhatsApp group chat that has allowed continued connection over the years reflects the enduring nature of online relationships. This is particularly important for individuals with disabilities who may rely on digital spaces to maintain and nurture long-term friendships. Online platforms like WhatsApp can also facilitate the rediscovery of old friendships and connections after an extended period of time. This demonstrates the role of technology in reigniting connections from the past and expanding seniors' social network.

E discussed his involvement in a pre-pandemic reading group, which used to meet in-person. When the pandemic hit, the group shifted to using Zoom for their meetings. He shared, "Just before the pandemic, I joined a group that was like a reading group. And we used to meet about once a week, and it certainly was like a communal read…[And] with the pandemic, they went on to Zoom." Digital tools became crucial in maintaining social connections and activities during a time of physical distancing.

The mention of participating in an online exercise class, **virtual recreation**, illustrates another pivotal point: digital tools that enable the expansion of access to health, wellness, and social resources. While physical distancing measures limited in-person interactions during and after the pandemic, digital platforms have emerged as invaluable tools for maintaining physical health, mental well-being, and social connections. E described this as a "Zoom exercise class", lasting for 45 minutes and led by a physiotherapist from St. Paul's elder care.

Beyond the necessities of social connection and access to services, digital platforms also provide a space for **virtual entertainment**, and some older adults shared their experience in terms of playing online games as a type of socializing. D's experience with online gaming shows how it can be a fun and interactive way to connect with family members who live far away. By playing games with his brother, nephews, and nieces, D was able to maintain a close bond with them and enjoy some quality time together. Online gaming can also foster communication, collaboration, and friendly competition among players, which can enhance their social skills and relationships. According to a study done by the University of Oxford, online gaming can have positive effects on well-being, especially when players feel a sense of autonomy, competence, and relatedness (Hausknecht et al., 2015). D noted, "I [play online games] mostly with my brother who's in Victoria. And I play with some of my nephews and nieces. So, it's a way of talking to each other while we're playing."

On the other hand, A's experience with online gaming reveals a different preference and perspective. A preferred to play games where she did not see the other players, such as poker, or other games. She explained, "I do [connect with people online] if I don't see them. I do like I play backgammon, or I play poker, or I play other games, where I don't see them."

While A did not explore her sentiments about online games, research has shown that barriers preventing older adults from playing online games include lack of interest, lack of time, lack of skills, or lack of trust (Brittne, 2019). In A's case, privacy or anonymity may be as important as social interaction. For some, seeing other people in online games could be a negative or distracting aspect, as it could interfere with her concentration, or enjoyment of the game. Likewise, concerns about the safety and security of online gaming also make people cautious of interacting with strangers or revealing her identity.

Finally, another type of online socializing noted by older adults was using **dating apps**. A recounted her experience with online dating, emphasizing its role in meeting people and forming connections rather than establishing romantic relationships. She shared:

> I did online dating in 2011 for maybe two and a half years. You have to be really careful. I think that's where a lot of people that are very, very lonely go. [They go] to those types of places to get that connection.
>
> For me, I didn't want a relationship. I just wanted to meet people to hang out with you. I met a guy, I met two guys that had Harleys [motorcycles]. I just wanted to go out for a ride and they didn't want to have a commitment. So that was a connection I did.

A's experience underscores a preference for non-committal interactions. She was not seeking a relationship but rather opportunities to socialize and engage in shared activities, such as riding Harley motorcycles. She expressed need for caution while navigating online dating platforms, indicating potential risks or challenges that older adults might face in these virtual spaces. Specifically, she argued that online platforms become avenues where lonely people can seek and find companionship, and that this is an important feature of dating apps.

Taken together, senior participants shared many digital social platforms and connections that are part of their everyday lives, which they rely on to stay in touch with family and friends, depend on for health and well-being, and use for leisure and entertainment. Participants also shared their perspectives on the roles of online socializing platforms, particularly as **facilitators for social relations**, **independent living** for seniors, and **social support**, as well as a **complimentary resource during emergencies** that can augment existing in-person resources, providing additional support and connectivity when traditional methods are limited.

Drawing from participants' perspectives, it becomes evident that online socializing platforms can serve as a catalyst for social connection among older adults. These platforms provide an accessible and affordable means for seniors to connect with family, friends, and communities without the need for physical mobility or transportation. Despite the concerns and negative aspects of online socializing expressed by older adults in this study, these platforms have become a fundamental part of their lives helping them to stay connected.

Additionally, these platforms support independent living for older adults. Participant C reflected on the different experiences of seniors living alone in community housing units compared to those living in seniors' residences. Seniors in residences have the advantage of proximity to neighbours and organized activities, reducing their

reliance on digital platforms for social connections. However, for seniors living independently, online socializing platforms become more crucial for maintaining social contacts. She also added that seniors living alone need support in various aspects of their daily lives, and the Internet plays a significant role in providing that support.

> Since all four of us here are living by ourselves in our apartment, I presume. For those seniors who are living in the Seniors Residence, they may have a completely different experience. Because they have neighbours to living close by and they have activities planned for them, they may not rely so much on social media, they can meet the next door neighbour right in the common room and have the meals together, all taken care of. **And for me, I find that for seniors who are living by themselves, they do need a lot of support in their daily lives, including also contacts with friends.** So their social contacts they may have a completely different experience with social media. And for me, I do realize I do need help from friends or people I hire to do my house cleaning and all that. But also, I do rely on the social Internet thing to learn my songs and to use Email to communicate with friends or use my WhatsApp to connect with my alumni members.

Moreover, online socializing platforms have emerged as a critical support system for older adults, particularly in times of emergency. These platforms provide immediate access to help and information, enabling older adults to reach out to their social networks, community resources, or emergency services at the click of a button. In situations where physical mobility might be limited, such as during a health crisis or extreme weather conditions, the ability to connect virtually becomes invaluable. Moreover, these platforms can serve as a lifeline for those living alone, ensuring they are never truly isolated. However, it is crucial that older adults are equipped with the necessary digital literacy skills to navigate these platforms effectively and safely.

Participant D expressed the idea that online socializing platforms were valuable in the time of emergency. However, he stated that he did not want to rely on them exclusively for communication. He emphasized the importance of in-person interactions and notes that online platforms should be a supplementary means of connection, especially in emergencies. D's perspective underscores the need to maintain a balance between online and offline interactions for robust social support systems.

> I don't want to have to rely on it always, to me, it's more important to be able to see people in-person, because you never know. And, as far as I'm concerned, it should always be there, just in case we have another emergency. So that we can connect if we need to that way. But I don't want to have to rely on it, always, you never know? I'm fortunate that most of my

> family and my siblings live close by. So, I don't have to always rely on the Internet to connect.

Lastly, online socializing platforms can play a significant role in **providing recognition or acknowledgement** for older adults, particularly those who may experience feelings of loneliness. These individuals often turn to online platforms to seek acknowledgement and validation from others, a need that is fundamental to human well-being. The scope of this recognition often extends beyond immediate family, friends and neighbours (kin) and non-kin relations, to include broader social networks. Participant D described it: “Especially people that are lonely. They reach out, and they think that this does have some sincerity there. But it's not, people go online, because they just want to vent or something, say something, because they're hoping that someone will say, like, recommend or recognize them, acknowledge them, right?” However, it is crucial to ensure that these platforms are designed and moderated in a way that promotes positive interactions and prevents potential misuse or harm.

Online platforms have opened up opportunities for seniors to engage in a variety of activities from the comfort of their homes. They have facilitated access to a wider range of social groups, educational resources, recreation and entertainment options, and healthcare services than would be possible through traditional means.

Having explored the multifaceted roles that online social platforms can serve in the lives of low-income older adults, the next section turns to the primary motivations behind their online social interactions, connecting with kin and non-kin relations.

4.2.3. Non-kin relationships are the main motivation in digital bonds

The motivation for online socializing varies among the participants, with a common distinction made between interactions with kin and non-kin relations. A person can receive support from kin and non-kin relationships, and each relation can serve different functions. Kin relationships (such as family members) are usually obligatory, but non-kin relationships (such as friends) are voluntary and reciprocal. For older adults, non-kin relationships are often important sources of enjoyment and autonomy because they offer a sense of belonging and independence. A diverse network that can provide support from multiple sources provides greater mental health benefits for older adults than a more restricted network (Waycott et al., 2019; Yu et al., 2016).

Some older adults categorize their online interactions based on the people who they interact with. In the context of online socializing, kin relationships refer to the online communication that seniors have with their family members and close friends, who are part of their inner circle. These interactions are usually more intimate, personal, and emotional, as seniors share their life stories, feelings, and memories with their loved ones. Non-kin relationships, on the other hand, involve the online contact that seniors have with acquaintances and even strangers, who are outside their immediate network. These interactions are typically more formal, impersonal, and reserved, as seniors discuss general topics, common interests, or casual matters with their online contacts. Depending on their preferences, seniors may choose to engage in different online activities with their kin and non-kin relationships, such as video calls, emails, social media, or online games.

These interactions contribute to the understanding of how older adults use digital communication platforms, which is the subject of debate in the literature. According to Ahn and Shin (2013), using the Internet to communicate with others (e.g., posting comments and messaging on social platforms) was associated with increased feelings of connectedness. Additionally older adults may experience increased feelings of connectedness associated with their use of social technology, since such tools can connect them with non-kin ties, like existing and new friends (Yu et al., 2016). Maintaining social networks for older adults is often done by becoming friends with new people (often with weak ties) and it is associated with better health outcomes (Cornwell & Laumann, 2015). Based on the study done by Yu et al. (2016), seniors use social

technologies to connect with old friends and to make new friends, as they may already have different ways to interact with close family members, such as in-person family gatherings.

In contrast, some studies indicate that older adults prefer to maintain their current networks rather than expanding them. As a result, they cut off their weak ties, due to the fact that they perceive a shorter time horizon as they grow older (Yu et al., 2016). Based on this perspective, the main motivation for using the Internet in later life is the desire to increase social connections with close family members-particularly grandchildren (Cotten et al., 2013; Waycott et al., 2019; Yu et al., 2016).

For the seniors in this research, while some did use online platforms to connect with kin, non-kin connections were a primary motivation, which they identified as important to maintain social networks and improve health outcomes. In what follows, these categories and the diversity of online experiences among older adults are illustrated. For A, online social connections mainly pivoted around her relationships with friends and neighbours. She said, “I don’t have a lot of people I get together with. I’m really sort of just me and just, some people around [who are] not family.” She explained: “that’s why I do a lot of searching on the Internet for me.” The exception for A is texting with her son. She added, “my son will send jokes and things across”, which underscores the role of online communication in maintaining emotional connections and sharing humor within family relationships. She described that she has few tight connections, whom she identified as people she could call upon for any urgent needs. She included Participant B, her neighbour, in this category, as well as a friend who lives elsewhere in Metro Vancouver. But for A, “other people are acquaintances. They’re just people that I talked to all the time” or maybe even meet for a coffee. In A’s definition, it’s these people, who are outside of her social circle, that demonstrate her social connectedness. Online communication for A, then, is a critical link for non-kin relations, acquaintances and friends versus family members, especially when one of these groups are less close with seniors, and physical gatherings are infrequent.

Another participant, D, mentioned that his nephews and nieces frequently sent him videos of their travels and experiences. This form of digital socializing allowed him to virtually share in their adventures and life moments. It highlights how videos can bridge physical distances and create a sense of connection and togetherness among family

members, even when they are apart. The reference to some family members practicing social discipline due to health issues underscores the challenges of physical separation, which has become more pronounced in times like the COVID-19 pandemic. Videos enable family members to stay connected and engaged with each other, even if safety measures require them to be physically apart.

> Yeah, my nephews and nieces, they send me a lot of videos of things are where they've been, because they travel a lot. So that's nice to be able to see. [With] some of them, we've practiced social discipline, like some of my nephews and nieces because of their health issues. So it's nice to be able to see them that way. As far as I'm concerned, at least that we have that now. I mean, if we hadn't had that [video connection], it would have been pretty hard for us, so that has been a blessing. (Participant D)

"D" expressed gratitude for the ability to share videos and maintain connections during challenging times. This quote shows that how digital socializing technologies can be seen as a blessing, as they enable social connection for individuals and families to remain connected when circumstances prevent physical interactions. It's important to remember that the people who took part in this study lived alone, and the social isolation effects might be more pronounced in their lives. Yet, "D" also mentioned that his family are working on getting together again and expressed hope for future in-person meetings. This demonstrates the complementary nature of digital socializing to maintain connections, alongside the desire for physical gatherings and face-to-face interactions. It emphasizes the importance of both digital and in-person connections in sustaining relationships.

The activities older adults undertake with kin and non-kin groups tend to differ: playing games is an activity that occurs with weaker ties versus having regular Zoom calls with close family members and grandchildren. A: “So for me, [online socializing] is connection to family, I get to see what my son and my grandkids are doing. I play games [with people where I don’t see them]. I do email my friends that I associate with at my age.” By contrast, Participant C used online communication to maintain non-kin relationships, particularly those that are far afield. She relied on WhatsApp to connect with friends “because they may be all over the world.”

4.2.4. Impacts of using online social platforms on relation-building

Participants' reflections provide valuable insights into the complex impact of online social platforms on relationship building. Focus group discussions highlighted three key aspects of relationship development for participants: developing connections, fostering or re-establishing bonds, and maintaining relationships. While acknowledging the advantages of digital socializing, the most pronounced influence is observed in maintaining relationships. One participant noted the utility of email, the Internet, and WhatsApp in keeping connections intact, underlining their role in sustaining social lives. Participant C, too, noted, “It is true email or the Internet … or WhatsApp has been very helpful to keep us connected.” Similarly, online socializing applications, particularly Zoom, were appreciated by Participant E, helping him maintain his connections:

> So on those Zooms, I feel very comfortable. And you just feel very happy, that there is such a thing as human, I can have this interaction with them.

Yet, the element of trust and the preference for face-to-face interaction were notably emphasized when it came to fostering and maintaining relationships. These results highlight the importance of in-person interaction in developing trust and strengthening connections. The focus group data thus shows that while online platforms can be helpful, they cannot replace the interpersonal, face-to-face interactions that are necessary for stronger bonds. In the following section on maintaining and fostering relationships, the complex interplay between offline and online interactions is emphasized.

Developing a relationship

Participants commonly expressed that the development of strong bonds typically necessitates face-to-face interaction. This implies that online communication alone may not be sufficient or satisfying for some people who seek deeper connections. Participant E offered an example of how he met people through an online reading group, but did not feel a strong attachment or interest in them. He mentioned that one woman approached him online, but this was not of interest to him. He shared, “[Of] the people that I met through the reading group, there was one woman who I was friendly with for a while. And then there was another woman who somehow sort of approached me. And that was definitely online. And then I decided, I just didn't want to pursue that connection.” However, he also suggested that he might go back to the online reading group,

indicating that he was not completely opposed to online interactions, but perhaps he needed more time or motivation to engage with them.

Participant D voiced a clear preference for meeting people in-person and talking to them. He said, “I haven't really met anybody online… I mean, I certainly tried. But it just wasn't there because you can't really get the feel for the person.” This suggests that D valued the physical and emotional aspects of human interaction that are often missing or reduced in online settings. He may also have difficulty trusting or relating to people unless he is able to see or hear them in-person.

Participant A felt similarly. Despite having a few experiences in meeting people on dating apps, Participant A emphasized the necessity of in-person interactions. Claiming she “just wanted to meet people [on dating apps] to hang out with”, she argued she needed to meet people in-person at least a few times to be able to build a relationship with them. A said, “You have to be able to talk to people and it takes more than just one time. So, you meet someone 20 times fine.” Her general perspective is that forming relationship online is impossible without the aid of in-person meetings.

Fostering/ re-establishing/ strengthening a relationship

Participant C described her active participation in chat groups through WhatsApp. These chat groups have allowed her to reconnect with alumni members from her high school. This highlights that online platforms can serve as a channel for reconnecting and nurturing ties with others who may have faded into the periphery. Such platforms serve as a means to re-establish contact and learn more about their current lives and circumstances. She mentioned that many of her friends had entered the stage of being grandparents, and she was aware of significant life events, such as one member's recent loss of a spouse. This deeper insight into their lives and experiences contributes to a more profound and meaningful relationship.

> I do take part in chat groups through WhatsApp… And I found out more about them. And in that sense, I have a deeper understanding about the alumni members. ... They have become mostly grandparents and one of them, her husband has just passed away. There's a deeper understanding, or a deeper relationship. (Participant C)

Maintaining a relationship

Internet usage works in synergy with other forms of interaction, effectively assisting in the maintenance and organization of contacts in between, or sometimes in lieu of, face-to-face interactions. This suggests that while in-person relationships are highly valued, online communication plays a complementary role in preserving and managing connections, ensuring that relationships remain active and intact, even during periods when direct physical contact is not possible (Veenhof et al., 2008).

This sentiment was reflected by participants in this study, who identified online social platforms as a tool for sustaining and maintaining existing relationships. For instance, Participant B expressed that online socializing could be useful for keeping in touch with people he already knew and cared about, but not for developing deeper or more meaningful connections with strangers or acquaintances. He argued:

> I don't trust [that it's possible] to build relationships online. I need to build a relationship, like you were saying, "D", you have to have that face to face first. You develop it by knowing a person over a period of time. And then I would say maintaining you could [use Internet connection], but I wouldn't say I'd want to foster [a relationship this way]. I think maybe a connection once in a while would be good. [For instance,] between the times when you see each other? I think yes, you still need that personal interpersonal thing. [Online socializing] is just to help you maintain that contact till you see each other again.

Participant B emphasized the importance of face-to-face interaction as the basis for relationship building. He believed that physical presence and interpersonal communication over time are essential for getting to know a person and forming a bond. He also implied that face-to-face interaction is more enjoyable and satisfying than online communication, as he said he still need that "personal interpersonal thing."

Passive use of online social applications

One additional category of online socializing was raised by participants, but with much less frequency than other content. This category, titled passive use, refers to browsing and consuming information on social media platforms, such as reading friends' statuses or staying updated on current events. Participants used these platforms primarily to maintain a digital presence. For instance, Participant B noted that he has a Facebook account mainly "to have a presence online… sometimes you sign into a site, they say use your Facebook account. So I do that. Same thing with Twitter…I guess

you'd say passive [is the way] I'm mostly doing it. I spend a lot of time just catching up on current events in the world and stuff like that.". However, passive use often lacks direct engagement with the platform and the community. While social networking sites and forums can be both active and passive, participants' use of social networking sites in this study fell into the category of passive.

An example of this is Participant A and her description of the way she used Facebook to learn about her "… acquaintances on the Internet, I just look to see what my family is doing. But I don't socialize with them. I just browse." Or to learn about her friend's politics and activities. Rather than use Facebook to interact with her friend, A explained that she relied on the site to look through her page to see what causes she supports. In the process, she found that her friend's life has become unrecognizable to her: she stated, "I don't know the person that she's come to because it seems like she's brainwashed."

Likewise, Participant E revealed his reservations about Facebook and Instagram, where he found some content to be meaningless. He mentioned that he rarely left comments and never posted anything himself on these platforms. He contrasted that with an appreciation of Zoom and its ability to provide a sense of human interaction. Whereas E underscored the challenge of maintaining meaningful connections on social media, he emphasized that Zoom allowed him to engage with others in a more personal and interactive manner. He said, "[On Zoom] that there is such a thing as human, I can have this interaction with them. I am on Facebook and Instagram. I never post. I do kind of read. I find them a bit of a nuisance in some ways. I find people post such meaningless things."

Still, E's interest in opera led him to the Metropolitan Opera's website, where he could listen to operas once a week and engage in a chatroom or blog. This setting demonstrated a form of online interaction where individuals with shared interests came together. While he made "the odd comment there", he also noted that many participants used pseudonyms instead of real names, which raises questions about the authenticity and depth of these interactions. E's experiences on various online platforms reflect the diverse nature of online social connections. Zoom is viewed as a platform for genuine human interaction, while social media and chatrooms present mixed experiences. Some

interactions may be considered superficial or lacking a sense of authenticity due to the use of pseudonyms.

Passive online social connection is thus a weaker type of online connection in terms of relation building. The stories in this section suggest that participants were not actively seeking out relationships or building connections through these platforms. Their hesitancy relates in part to the superficial interactions that participants want to avoid. However, lack of trust to online socializing platforms or lack of digital literacy can be reasons why older adults are more hesitant to participate in such platforms.

4.3. Digital divide

The disparities in technology access and utilization among older adults are particularly notable. Anderson and Perrin (2017), find that a significant portion of older adults, particularly those with low incomes, do not use the internet. Even internet-using seniors may have limited digital literacy. Likewise the findings of a study on residents of affordable senior housing in the United States, indicate a requirement to increase Internet accessibility, availability of technical devices, and technology education for older adults residing in affordable housing (Ellison-Barnes et al., 2021).

Digital literacy

Brightside key informant was asked about her perspective on digital divide among their tenants and whether Brightside offers any literacy programs. She acknowledged that attitudes toward digital technology among residents may be evolving, especially with the increasing integration of technology into daily life.

> We know a lot of people don't have computers or access to the Internet or know how to use it or want to use it. Now, that may change or is changing because, it's now a bigger part of everyone's world. So that could be changing.
>
> I know, one elderly man in one of the buildings, the Senior Services, I was in the building one day and he asked me to help him because somehow, he'd done something to the iPad, and he couldn't, wasn't working and asked me to help him fix it, I couldn't fix it. So, I reached out back out to that group [Senior Services staff] and asked if somebody can touch base with him again. So, things like that.

Moreover, she noted that Brightside collaborates with community organizations like neighbourhood houses and Senior Services Societies to provide digital literacy support, including pilot programs with one-to-one coaching.

> Most of the groups that we affiliate with most regularly that would be our neighbourhood houses and the different communities. It would be places like the West End Seniors Network, it would be Senior Services Society of BC, they all offer digital literacy support. We have referred people or advertised those for our tenants or residents. The Senior Services Society of BC did a pilot program at one of our building complexes that just ended in March of this year. So, it was a two-year pilot. And in part of that offering, it was called Integrated Services Program, was some digital literacy with one-to-one coaching by volunteers. And I know a couple of people did access that. For privacy reasons we as a landlord don't always know the outcomes of things. But in general, I know that our people accessed it, and it was successful for them.

In other words, Brightside understands their role as informing residents of existing services or specific programming being conducted by senior-serving agencies. The organization does not take an active role in addressing the digital divide that may exist among seniors in their buildings.

For the study participants, the digital divide meant that adapting and learning new technologies was perceived as a negative aspect of online socializing. Participant C, for instance, highlighted the learning curve associated with using various social media platforms and artificial intelligence, particularly for seniors. She found it challenging to keep up with the rapid technological advancements, which resulted in feelings of frustration and exclusion.

> So it's a lot to learn. I mean, for me to be familiar with all these different social media, and we have all those virtual AI, artificial intelligence things coming on. I have to learn a lot. (Participant C)

Additionally, Participant A shared the difficulty older individuals face when adapting to new technology, expressing concern for seniors who lack access to the Internet or smart devices. She noted that the absence of these modern communication tools could lead to loneliness and depression, especially as friends and connections become increasingly scarce with age (Veenhof et al., 2008).

> But when I started doing email, I think at the [university] in 80 is when we first got connected to email. And we've really come a long way. I mean, I'm just flabbergasted at all these things that have come up and I find it really

> difficult for seniors who happen [to have] no access. I have a couple of girlfriends that don't even [have access to devices]. I tell them to get a cell phone for $25. So we connect and just to do a little text. “How are you today?” Nothing big. And they don't know how to use the phone. I'm 75. And people my age haven't really got into that. And I know in my building some people are really lost. They're really alone.”
>
> I think some people are going to get a lot more depressed as they get a little bit older. And they don't have any of this. They don't have a computer. They don't have a cell phone. They just have a landline. My girlfriend came down for 10 days. She doesn't have a cell phone. She has basic TV, she doesn't have Internet and she listens to cassette tapes. And there's somebody there, I said to her, just get a cell phone so we could connect every once in a while on the telephone and say hi. (Participant A)

Participant D recognized the existence of a digital divide that affects older adults who might not have had the same access, skills, or confidence to use the Internet as younger generations. He suggested that older adults need to be more aware and educate themselves about the online world and its challenges. He implied that online information could be misleading, biased, or false, and that older adults needed to be able to discern the truth from the lies. Participant D also touched on the issue of online trust, which is the degree of confidence and willingness to engage with online information and services. He said that older adults need to acknowledge the limitations and risks of online communication, and to be careful of who they trust online. He noted, “But we all just have to be more aware, educate ourselves and make sure that we know when we go online, okay, we have to take this [information] with a grain of salt. We have to be able to find out okay, is this really what's true? And have other sources to figure out, to verify what [we read].”

Participant B described the limitations of online interactions, noting the hardship of digital divide by explaining how it affected his ability to make online social connections. He said that it was harder for older people to learn Zoom. He described his experience this way:

> Was never the same though. You really noticed it didn't have the same energy. It's everyone's struggling as well. We were all trying to learn Zoom at the same time. And it was difficult too. It’s hard to see on the nine pictures of faces. It wasn't something I enjoyed.

Generally, many older adults recognized the importance of seeking help and support when dealing with online socializing challenges and the digital divide. Participant C

emphasized the need for support in adapting to the ever-evolving world of the Internet and high-tech tools. She highlighted how individuals, even those with computers at home, can easily become lost without the necessary guidance and assistance.

> So supports, even support for those who have computers at home, to help them with the new changes to the Internet. And all those high-tech things they have to get support to. If not, they can get lost easily. (Participant C)

E's experience with transitioning to online social groups during the pandemic is a reflection of the broader challenges and opportunities faced by many seniors. The discomfort E felt in using Zoom for his reading group is indicative of the technological barriers that can impede seniors' participation in online social activities. The unfamiliarity with digital platforms, privacy concerns, and the impersonal nature of virtual interactions can exacerbate feelings of isolation.

He admitted to initial discomfort with using Zoom but expressed a willingness to give it another try. This highlights the learning curve and the adaptation process that many individuals experienced when transitioning to online platforms for social interaction. It also underscores the importance of persistence and adaptability in maintaining connections. E's willingness to re-engage with Zoom underscores a resilience and adaptability that is crucial for overcoming these initial hurdles. It highlights the resiliency of older adults compared to other age groups, and the potential for continuous learning and adaptation among seniors, even in the face of new and unfamiliar challenges. An increasing number of data-driven research indicates that older adults have typically managed the pandemic more effectively than the younger generations, and they have reported less adverse mental health effects (Karmann et al., 2023).

Participant E also shared his personal experience in overcoming technical challenges related to self-taping auditions as an actor, which became more prominent during the COVID-19 pandemic. He emphasized the importance of having a network of friends and resources to seek help. This included having a "computer guy" who could provide remote assistance, and taking advantage of computer tutorials offered by West End Seniors Network, where knowledgeable individuals helped him navigate and troubleshoot various issues.

> I really have been challenged by it. The problem is like, before the pandemic, if there was an audition, I would go into a studio. And then pandemic, it's they started doing this called self-taping. And I really had difficulty with that.
>
> Luckily, starting this year, my agent found a very nice woman where I can go to her place, and she can take the audition for me. … But the real difficulty for me was transmitting the file. And I had no idea. But the file was always a different size. So, I had to get help with that.
>
> So, but on basic things on terms, I have a friend who I call “my computer guy”, and he's not much younger than me. But I can give them remote access to my computer, and he can help me. And then I also go to West End Seniors Network, and they have like, computer tutorials.

Non-inclusive design and affordability

Digital tools and platforms are frequently developed without adequately addressing the specific needs and capabilities of marginalized groups. This oversight exacerbates existing barriers to these groups’ active participation in online social platforms. For example, individuals with hearing impairments face challenges in participating in voice calls, necessitating alternative communication methods or accommodations to ensure inclusivity. Similarly, those unable to speak require tailored solutions to engage in such interactions. The same applies to low-income older individuals who do not have access to affordable devices or Internet connections, which ultimately reduces their online participation in social platforms, further marginalizing them. Thus, it is crucial for the design of digital tools and platforms to consider the diverse needs and circumstances of all potential users to promote inclusivity and equal opportunity.

One participant expressed her concerns about non-inclusive design of online socializing platforms. Participant C highlighted that not all apps are designed with disabled users in mind, making it challenging for them to fully engage in platforms like Instagram, Twitter, and Facebook. She mentioned the inability to see images and artwork shared by friends through WhatsApp, which resulted in a lack of accessibility and understanding, leaving her feeling disconnected.

> I did have some difficulty with the operation of the app. And I don't take part in Instagram, or Twitter or Facebook and all that. No, I don't take part in that, because I can't see even photos that my friends sent me through their WhatsApp application. They sent pictures of the flowers they have grown,

> I know that I can't see them. And they have paintings that they have drawn. May be nice, but I can't see them. It's all to me blur and bait.

These quotes collectively illustrate the obstacles that seniors face when trying to navigate new technologies, as well as the limitations and lack of access to support and literacy classes related to digital tools. Moreover, these examples underscore the significance of having a support system in place to address the complexities and challenges that can arise when engaging with online socializing and digital technology. These examples illustrate how having a reliable and accessible support system can make a difference in the experiences and outcomes of older adults who engage with online socializing and digital technology. A support system can consist of family, friends, peers, professionals, or organizations that can provide assistance, guidance, feedback, or encouragement to older adults who face difficulties or uncertainties in the online world. A support system can help older adults overcome the barriers and challenges that they may encounter, such as technical issues, privacy concerns, misinformation, or social isolation, and enhance their confidence and competence in using online platforms and services.

Additionally, some participants reported that they benefited from the resources and support provided by Seniors Networks, which are groups or organizations that cater to the needs and interests of older adults. Senior Networks offer tutorials and staff members who can teach, train, or mentor older adults on how to use online tools and applications, and how to access online information and services. These tutorials and staff members can help older adults bridge the digital gap, which is the disparity in access, skills, or usage of digital technology between older and younger generations. By closing the digital gap, older adults can improve their digital literacy, social connectivity, and quality of life.

Negative aspects and missing features of online socializing

Talking about online socializing, participants missed several features of in-person socializing. Collectively they felt that online communication was sometimes impersonal and lacked a personal touch and empathy, which made it difficult to feel a sense of closeness with others. For instance, C mentioned: “it lacks the personal touch” and similarly another participant noted the contrast between the dynamic social environment of a family gathering and the more isolated nature of online conversations, where

interactions are typically limited to one person at a time. This difference, D felt, contributed to a sense of distance and a lack of empathy in virtual settings.

> I find, sometimes, it's difficult, [and] it's not quite the same as being with somebody, because, a family get together, you can socialize, you talk to one person, then you go to the next one, and that kind of thing. But whereas on the Internet, you usually just talk to one person, because, they're by themselves usually. So, it's a little bit different.
>
> Lack of empathy, because you're not really connected, you can't really, get the feel for the person.

They also mentioned that texting was too impersonal and did not convey real feelings, which made it difficult to understand what the other person was thinking. Additionally, they missed the physical contact and the ability to see people's expressions in-person, which made it easier to read their feelings.

The impersonal nature of texting was another concern raised by participants. They felt that text messages fail to capture the full spectrum of human emotions, making it challenging to gauge the sender's true feelings. The absence of physical presence and facial expressions, which are crucial cues for understanding emotions, was deeply missed. As Participant D put it, while video calls like Zoom offer a visual component, they still fall short of the tangible connection experienced during face-to-face interaction:

> I don't like texting, because it's just too impersonal to me. You can't really see, what does that person really think? Because when you're talking to someone, you can start to read them, right. But Zoom is not too bad. I do miss the physical contact, like, actually seeing a person. People who are more expressive when they're talking to you in-person—well, in a text, you just say hi, and you press like, or whatever [to respond], but it doesn't really convey what they're really feeling.

Furthermore, one participant reflected on the emotional disconnect that can arise from online interactions, and mentioned that he did not feel a sense of closeness just because someone had an image on their screen. He felt that there had to be something more than that to establish a connection. B explained, "But I find that there's not much that being online actually gives me. I don't feel a sense of closeness just because someone has an image on my screen. There has to be something more than that, some kind of connection there."

B went on, mentioning that online socializing did not have the same energy as in-person socializing: “[It] was never the same though”, and it was difficult to see everyone’s faces on the screen. He said: “It wasn't something I enjoyed. It is just sitting here, four people interacting with each other, four people, four presences… The thing is, if you’re online, you’re never going to get past that, because it’s always an image… You never have like your security, you need that emotional contact and some kind of connection, which you only get in a real world.”

Addressing the topic of information overload, Participant D empathized with the younger generation’s struggle to cope with the relentless stream of news and global events accessible online. He observed that this constant exposure can heighten anxiety and introversion, particularly among older individuals who may find the digital life overwhelming. Expressing concern for the mental well-being of youth burdened by online worries, he suggested that sometimes the Internet can have a detrimental impact on mental well-being: “So sometimes the Internet can be a bad thing, when it comes to that? Because I don't feel we need to know everything?”

This observation underscores that while digital communication plays a crucial role in maintaining connections, they may not fully replace the nuances of in-person interaction, and some elements of human connection might be missing in virtual conversations.

Trust and safety

Another recurring theme across the focus group and interview was the issue of trust on digital socializing platforms. Participants raised concerns about trust and safety in the context of online socializing. They highlighted various aspects related to trust and safety, including the risk of scams, political mistrust, and the difficulty of distinguishing truth from falsehood online.

Literature discovered that a number of elderly persons were unable to fully benefit from digital media due to their significant privacy concerns (Quan-Haase & Ho, 2020). Similarly, study participants were concerned about their privacy during video calls. They felt uncomfortable with strangers being able to see their place, especially when their space was small, and they didn’t have enough room to move around. This concern was more pronounced in this focus group as participants mostly live in small

units of community housing. For instance, Participant E noted that he really liked to join the online group sessions and enjoyed it but he was not comfortable with other strangers seeing his place through video calls. He shared that he felt comfortable letting his cousin or goddaughter into his home via Zoom, but it was not the same with members of his reading group. He stated, “I feel like when I'm going on to a group session, there's people that I don't know who are coming into my home. So, I tell myself, I've got to get over that. Because I did enjoy the reading group.” He continued, saying “I do have one Zoom exercise class, And I'm able to situate my cues the scene in the way you're seeing me now, I managed to change things. First of all, I have to be moving. So that I somehow feel that people aren't intruding in my space.”

Moreover, Participant E shared his concerns about online interactions and the anonymity of online connections. He expressed unease about inviting unknown individuals into his personal space and not knowing their true identities, indicating that such uncertainty makes it challenging to establish trust and feel comfortable in online socializing.

> I'm sure they're all fine. And they're not going to come and rob me. But yeah, there's just something about, like having someone into your own [home]. You're not knowing who they are. Yeah, I'm having trouble dealing with that. (Participant E)

Participant B expressed a discomfort for online video calls, such as Zoom, compared to traditional voice calls. He said that online video calls are more “intimidating” than phone calls, and that he did not use them to speak to his family members. This could indicate a lack of familiarity or confidence with the technology, or a preference for more privacy or intimacy in his conversations.

Participant B further expressed a strong desire to seek alternative sources of information online, as he felt politicians frequently lied to the public. He valued the opportunity to hear alternative narratives but also acknowledged the challenge of verifying information on the Internet. Further he explained how this mistrust can be found in each social interaction online. In the quote, Participant B mentioned that in face-to-face interactions (e.g., when talking to someone in-person), he felt he can gauge the truthfulness of what is being said by observing the person's body language, tone of voice, and other non-verbal cues. This ability to "read people" in a physical setting

allowed him to form a more reliable judgment about whether someone is telling the truth or lying.

> Because we're here, we're talking, and we know we can see the person and realize that what they're speaking is truth or a lie. You can generally read people, alright, you generally know. But online, you don't know. But [the online platform] does not make it any easier that's for sure.

Fraud

Participant C mentioned concerns about scams and the potential for people to be lured into financial schemes or deceptive relationships on the Internet. Given her vision impairment, she voiced particular worry about her vulnerability to such situations, saying, “I cannot text because I have got the wrong letters. When I kind of touch the keyboard… I have trouble with them. Now with all those scams going on… I do not touch anything on my screen.”

Another participant, D, emphasized the difficulty of assessing the trustworthiness of online interactions, as individuals can easily misrepresent themselves and evade accountability. He noted that some people have experienced negative consequences due to excessive trust in strangers online.

> I think, to me, the best way to get social contact is through physical contact, because like “C” said, her friend got lured into something that was terrible. And she thought everything was fine until she headed back home. So, there needs to be more guardrails say, in social networking. Facebook and Twitter and, all those, they need to be a little bit more diligent. I mean, it's impossible, really, because you never know, a person can say anything they want online. And then they log off. And that's it. There's no response. There's no responsibility or consequences, unless you get really involved. And then you might have some of these people who have had terrible consequences, because they'd let them expose themselves too much to someone, to a stranger online.

Likewise, Participant A expressed her concern about online privacy and the ease with which personal information can be found on the Internet. She emphasized that while she did not actively share a lot of personal information online, she still felt vulnerable. This quote highlights the growing awareness of the ease with which personal information can be accessed online and the associated fears of privacy invasion.

> when you were saying that, I can look up myself on the Internet, I can find out my name, my address, my telephone number, Google Map and where

> my apartment is in. And I can even get the world map and look to see who's in my backyard and front yard? That's really scary to me, too. (Participant A)

One participant discussed his approach to safeguarding his personal information, specifically on social media platforms like Facebook. He explained that he did not share sensitive details such as his birthday or place of birth on his profile. He justified this decision by mentioning that such information could potentially be used by malicious actors to commit identity theft or fraud. He made a connection between sharing personal details on social media and the risk of unauthorized access to sensitive financial information, such as a social insurance number or credit card. Participant D's statement underscores the cautious approach some older individuals take when it comes to sharing personal information on social media, recognizing the potential risks associated with oversharing. This cautious approach might limit their broader social engagement on digital socializing platforms, a situation that could be mitigated through comprehensive workshop sessions and learning classes.

Participant A shared her reflections on the privacy concerns associated with online engagement. She expressed a sense of vulnerability, acknowledging that engaging with the Internet exposes one to a global audience. She stated, "Once you open yourself to the Internet, you essentially open yourself to the entire world." Despite recognizing the potential consequences, she admitted to continuing her online activities, although with a degree of apprehension. She justified her actions by saying, "Sometimes you have to think, do I want to take the consequence for that? And you still do it anyway… And it's scary a little bit, but then, it's my social [profile], right?"

In sum, these focus group's excerpts underscore the multi-layered challenges related to trust and safety in online socializing, including the dangers of scams, mistrust, the difficulty in verifying information, and the potential for misrepresentation in online relationships.

Challenges such as limited digital literacy, non-inclusive design and unaffordability of digital tools, fear of fraud, and lack of trust to online platforms further exacerbate the digital divide among older adults and play significant roles in shaping seniors' experiences with online socializing. Next chapter explores seniors' perspectives

on in-person social connectedness aiming to provide more comprehensive understanding of their social needs and preferences in both online and offline contexts.

Chapter 5.

Seniors' Perspectives on In-person Social Connectedness

In order to consider how digital communication platforms intersect with traditional means of providing social connectedness, this section focuses on the question of in-person social connectedness for older adults. How do seniors experience in-person social connection in their everyday lives? By exploring in-person social connection with family, friends, neighbours, and aging in-place supports, I aim to better understand the role and impact of in-person socializing. I also want to examine how digital social needs and perceptions complement or stand in for in-person social connectedness.

5.1. Type of in-person socializing

There is wide variability in the quality and quantity of in-person social connectedness that older adults seek among family, friends, and neighbours. Participants described their familial support, friendships and neighbourly relationships and they discussed how these relationships affect their sense of connectedness.

Family

Although it is commonly believed that family provides essential social support and well-being for older adults, the data from the study participants reveals a different reality. The nature and quality of family connections may vary depending on various factors, such as geographic distance, life events, personal preferences, and communication styles. When participants were asked about their in-person interactions with family members, many indicated not having close and regular connections with their family members, except one participant. For this group, there is a diversity of family dynamics, both simple and complex.

One participant shared his past experience of frequent family gatherings, and he had a strong emphasis on social interactions within his family. Participant D described a

close-knit family with a tradition of frequent gatherings and an inviting approach to socializing. The family's social connections had been an integral part of his life.

> Before that [COVID-19], we used to get together quite often. Mum and dad are very social people. I hate COVID because I have not been able to see my family and friends in person and this is most important for me. Even my mom has [long] term care, she's 89 and she lives in Langley. So, I had been able to actually go out there and visit her a couple of times. I guess four times I've seen her.

On the other hand, Participant B expressed a sense of disconnection from his family and acknowledged that he was not actively involved in his family's social life. B felt estranged from his family; he highlighted a lack of communication and effort to repair these relationships, which had resulted in a sense of isolation within the family unit.

> I'm not part of [my family's socializing]. It's like, we've kind of drifted apart. Maybe they have a very active social life together. But I'm not part of it. And then I think they do communicate a lot to each other. I get that once in a while. But for many years, I was estranged from my family. And we've never really broached the issue or talked about it, or tried to repair it. So, it's always there. And it's just easier to let it sit there and don't disturb it. (Participant B)

Participant A explained her detached attitude towards her family connections, except for her son. She used to live in the building with her mother before her mother was passed away. She only mentioned her middle-aged son as her source of family connection; she commented, "My son calls me every three days…to say hi, mom, love you. So those are just to me, they're just regular connections.". She did not refer to any other relatives or family events, suggesting that she had weak and distant relationships with them.

Participant A also pointed to the way that physical affection can be a disconnect in relationships even among family. A commented that although her son was not a hugger and avoided physical contact, she enjoyed expressing her love and affection through hugging. She noted that her son will say "Love you" while on the phone but will avoid hugging when in person. She, on the other hand, feels that hugging "is sometimes more of a friendly thing" when greeting someone. Such differences in comfort levels with physical expressions of love and affection may be an important indicator for what social connectedness looks like for seniors as they get older and their social circle becomes more limited.

With the exception of Participant D, then, none of the participants had a lot of connections with their family members. Mentions of a cousin reaching out, or a son calling or texting, are examples of the limited social support these seniors relied upon from their family members. For living-alone seniors, these descriptions suggest a fragile familial support network that is insufficient to support their mental health and well-being.

Friends

In contrast to responses about in-person connectedness to family, participants represented friends as a somewhat more straightforward source of social support and well-being. Several participants shared that friendship could take different shapes, but all of its forms were important. One participant, for instance, noted that he maintained a close connection with his best friend by phone calls on each other's birthdays. B shared, "I phone him once a year, he phones me once a year. So, we find each other on birthdays." While B's best friend is reached by semi-annual phone call, his good friends are those whom he knows in his building. Likewise, Participant E emphasized a diversity of connections: weekly phone conversations, coffee meetings every few weeks, and more face-to-face meetups. Even as he considered himself somewhat of a loner, he had a diverse network of friends and acquaintances. These relationships encompass a wide range of ages and backgrounds, showcasing his ability to connect with people from different walks of life.

Another participant, D, revealed his high need for social interaction and communication with his friends. He demonstrated his willingness to give people a chance and to respect their opinions, even if they did not align with his own. He also showed his ability to form and sustain deep and meaningful bonds with others, which he identified as being based on mutual respect and integrity.

> Me and my friend met, Ray. He wanted me to be his boyfriend. And I said no. I learned not to patronize people to be straightforward. And he respected me for that. He said, 'Well, I'm so glad you just said it upfront, because now it's out of the way.' And so, I said, 'Well, how about we go for coffee, and we'll talk.' And that's what I've learned… is that you never know what's going to happen after the first meeting, so I never give up on people. That's 10 years ago. And I couldn't see my life without him. (Participant D)

Participant A also shared the significance of friendships as forms of social connection, but her self-described approach to friendship is opposite D's, where she expressed her

low need for social interaction and communication with her friends. Although she claimed that she was connected to everybody, her close network was three very close and loyal friends. She commented, “I don’t get together with people. We don’t go to restaurants. I don’t go to their house for dinner. I might meet them if they’re coming to town to go for coffee.” While A’s responses suggest that she is more reliant on her friendships than family connections, she did not seem to value frequent contact with her friends, as long as she felt they were still connected in some way. Her comments suggest a high sense of self-reliance and independence; yet, her reluctance to engage in typical social activities like dining out or visiting friends' homes suggests a different understanding of friendship compared to normative expectations. A’s feedback indicates that her social connections are maintained through occasional and fewer personal encounters rather than regular, reciprocal engagement.

Participant E acknowledged the impact of life events on his social interactions. Friends’ travels, personal challenges, and the passing of a loved one have led to temporary changes in the frequency of his interactions. This demonstrates the dynamic nature of social relationships and how it gets more challenging to maintain social contact as people age.

He underscored the importance of the purposeful and meaningful social interactions in his life, particularly enjoying the time spent with friends and valuing even the minimal social connections they had. He stated “I look forward to that” about these interactions, which suggests that he derives value from them and finds these relationships meaningful and fulfilling.

In sum, while some older adults’ attitudes may act as a barrier to form close and broad friendship connections, they find comfort in having adequate number of friends in their life.

Neighbours

Neighbours are often the first point of contact and the most accessible source of social support and well-being for older adultsresiding solo. However, neighbourly interactions are often perceived as nuisances and conflicts, especially when they involve noise, privacy, boundary, or lifestyle issues (Nouri et al., 2022). In contrast, this section

explores how older adults interact and communicate with their neighbours in positive and constructive ways. They were asked about the kind of support or assistance they offer or receive from their neighbours. Thus, although the scholarly literature emphasizes the negative or problematic aspects of these relations, participants in this study painted a picture of community and belonging through neighbourly relations.

Participant A revealed her perspective on social interactions with neighbours, which were best when there was a clear boundary in these relationships. She appreciated a polite and friendly interaction but was not interested in deepening these relationships into friendships. In response to a question in HNC resident surveys about whether respondents wanted to get to know neighbours more closely, A replied “no”, clarifying that she preferred casual interactions without the expectation of developing close friendships. Preferring to maintain a respectful yet reserved approach to neighbourly interactions, A stated, “I wasn't being disrespectful [when replying that I didn’t want to get to know my neighbour]. I don't want them as my friends. I want them as people that I can say hello, or good morning to.”

At the same time, Participant A demonstrated much care about bringing isolated older individuals in her building out of their unit and help them socialize with the rest of the tenants. She identified that there are newer residents who wanted to get to know their neighbours; she said, “So, we're going to set something up where we're going to do that and help people to try to come out.” For A, this is social connection unmediated by Internet interactions.

Participant E shared similar views. While his starting point is being a loner, he noted that this was a personality trait or a choice, rather than a sign of isolation or dissatisfaction. Still, he made time to connect with neighbours. He said, “whatever little interaction I have, with the two neighbours, I’ve had coffee with the older men.” He continued by explaining that with his other neighbour, the young single mother, “It’s more that we chat when we meet.”

Finally, Participant B shared a different view: that his neighbour counts as a good friend. This serves as a reminder that not all older adults seek or require the same level or type of social interaction, and that aging in place can be influenced by individual preferences and needs. While aging in place may be associated with loneliness and

isolation, some studies have shown that older adults have different definitions and expectations of neighbourliness, and that they may prefer to maintain a balance between privacy and sociability (Nouri et al., 2022). Therefore, it is important to recognize and appreciate the strengths and resources that older adults have, and to support them in enhancing their social connectedness and quality of life.

5.2. Community connections and aging in place

Aging in place is defined as “remaining living in the community, with some level of independence, rather than in residential care” (Davey et al., 2004; Lau, 2021). It implies that older adults can choose to stay in their own homes and communities, as long as they have the health and social supports and services they need. Aging in place also recognizes the importance of the social and physical environments that enable older adults to live safely and comfortably, and to maintain their quality of life and dignity (S. M. Golant, 2020). In this section, participants share their insights on community connections that support their independent living.

Participant E, for example, perceived the **community support** he receives through Jewish Family Services to be an important component of his in-person connections. E valued these interactions and maintained relationships with the volunteers who deliver his groceries. He shared, “There was one man who did most of the delivery. Whenever he comes, we always had a bit of a chat.” He went on to say that he enjoys “all the minimal social interactions” he has.

These exchanges, also called “civic socializing”, have a big effect on the mental health of isolated and marginalized seniors. Such encounters, including interactions with store personnel during grocery shopping or volunteers dropping off home deliveries, These encounters are crucial to allowing elderly people to assert their autonomy and feel valued in their community. The absence of such connections can lead to a diminished sense of belonging (Waycott et al., 2019).

Participant D shared similar reflections, indicating that having small social relations with the people in the community or neighbourhood was important to him. He liked to go out for coffee to socialize with friends, and he made a point of talking to the

staff or the server and telling them jokes or stories. He said that he liked to acknowledge that they were worthy of talking to and connect to them on a human level. He noted:

> My friend Ray [and I], we go for coffee. And we always make a point of talking to the server. Maybe we'll tell them a joke or just to sort of, acknowledge that they are worthy of talking to, entertain them. We really enjoy it because now wherever we go, they say hi [and call us by name]. We will talk about …their family and I mean, just letting people know that [we see] they're real, that they're human.

D and his friend were well-known and liked by the staff, and his story implies that he values making others feel good and entertained. This enhances D's sense of belonging and contribution.

Physical autonomy is also a critical factor to aging in place and engaging in in-person social connections. Participant E's situation illustrated how seniors manage independent living. E acknowledged that he was on his own and responsible for various aspects of his life. He emphasized his self-sufficiency, noting "I have to do all my grocery shopping myself and food preparation myself. I go grocery shopping at least three times a week. I can't use the cart though; it bothers my back." He further described his routine, which primarily revolved around managing groceries, cooking, and maintaining the cleanliness of his living space: "Dishes are always washed. I mop the floor, I'll Swiffer the floor." E's daily routine was centered on self-care and maintaining his living environment. In addition, once a month he received support from the Better at Home service, which provides three hours of assistance with specific tasks. He relied on external assistance to complement his independent living. Notably, this support allows seniors to maintain their independence and socialize with caregivers or volunteers who help with tasks they find challenging. This type of external support is critical to independent living and aging in place.

Another component of physical autonomy is the ability to engage in **community activities,** like social programs and volunteering. For instance, Participant E was actively engaged in community activities, attending weekly group classes at the YMCA, such as the "Happy Hearts" program. These activities not only provided him with opportunities for physical exercise but also served as platforms for social interaction and camaraderie. He described looking forward to these gatherings and forming connections

with fellow participants, indicating the importance of routine social engagements in maintaining mental well-being and a sense of belonging. He commented:

> Before the pandemic, I went to the YMCA three times a week, and talked in a group, which was called Happy hearts… I look forward to that. There was an aspect of socializing to it because it was virtually the same people all the time. With a few exceptions, I didn't really have any communication other than that. At the YMCA, there was one fellow who I wouldn't plan to meet, but I would quite often see.. and we'd have coffee together. And there was another woman…she created a little more communication with me. She was Jewish. And I'm originally from Winnipeg, and relatives of hers, live four houses away from where I grew up in Winnipeg.

The mention of specific individuals with whom Participant E interacted further illustrates the significance of community classes as catalysts for social connections. Despite primarily interacting within the structured environment of the YMCA, he developed informal relationships with fellow attendees, such as sharing coffee with a fellow participant and engaging in conversations with a woman who shared a common background. These interactions demonstrate how community settings can foster the development of interpersonal connections and friendships, transcending the boundaries of the organized activities themselves.

Participant B discussed **his volunteer work** at the Gathering Place, which is a community center serving vulnerable communities in the Downtown South area of Vancouver. He described volunteering in the weight room, which he said is a “double benefit because I go in there to volunteer, but I actually do my weight training.” B shared, “That's a big part of where my social connection comes from: volunteering and being a part of the Gathering Place." The benefits to volunteering, then, extend beyond recreation: rather, this volunteer work was a significant source of his in-person social connection.

B explained that he was also active at the senior centre adjacent to the Gathering Place. Along with Participant A, he volunteered and was a member and participated in activities: for example, he recalled, “I learned to play ukulele, I spent more than a year studying [with neighbours there].” Likewise, he had volunteered at The Cinematheque, a film institute and theatre. Although B said he didn’t have a lot of money, he could participate in social activities like seeing a film. This, he shared, allowed him to do an activity he enjoys by himself alongside others. He stated, “Being socially connected

doesn't necessarily mean being around people all the time; it could be doing things that you enjoy, say going to a movie, and [feeling] socially connected with other people in there."

Participant A added to B's narrative by discussing their joint volunteering experience at the Senior Centre. She highlighted the social connections they formed while working at the front desk, interacting with residents who came down for activities and meals. A found it fulfilling to provide companionship and conversation to those who might not have had anyone to talk to. She remembered: "I really enjoyed that part of it, where I was there to, [well,] some of them didn't have anybody to say hello to. [So] you get to know their name and who they are. And we did that with a lot of people. That's a social connection. I really liked that connection." A's perspective underscores the importance of simple human interactions in fostering social connections and combating loneliness.

The insights from the study participants highlight the **vital role of social infrastructure** in supporting and enriching seniors' social well-being: in-person connection is fostered through interactions with support network volunteers as well as "supporting players" like café staff or fellow YMCA-goers with whom study participants had regular interactions. These interactions, although limited in frequency, are important for seniors' well-being and independence. Their independent living and self-sufficiency, underscored by activities like grocery shopping, cooking, and maintaining their living space, form the foundation of their daily routine. Yet, some recognized the necessity of external assistance, such as the support provided by non-profit services, to bridge the gap between self-sufficiency and the challenges they face due to physical limitations. At the same time, community engagement like volunteerism and participation in community centres also play a key role for providing seniors with opportunities to develop their skills, contribute to society, and interact with others. These activities give them a sense of belonging and purpose.

5.3. Community amenities and other environmental features

Physical infrastructure like amenities work hand-in-hand with social supports to influence in-person social connections and aging in place. These features include the

way connectedness is facilitated by the building's location and its surrounding amenities, as well as elements within the physical building in which participants reside. Participant A, for instance, emphasized that the **building's location** and access to public transport and public spaces enabled her sense of in-person social connectedness. She described how she socialized mostly within her bubble but liked to go out on her own, not to see people, but to venture out and explore new places. She shared that as a senior, "even if you're living in subsidized housing, you get so many benefits to get out and around. Our bus pass is only $48 a year. I just went over to have coffee on Victoria, because it's free Monday to Thursday." She identified various services and amenities like Barclay Manor, the West End seniors' centre, as a place she goes to "connect with their computer", and, in general, is "always out doing things." She attributed her mobility and independence to her location.

For Participant D, moving to a neighbourhood and a community with amenities and social gatherings had a huge positive impact on his life. He shared that the social connections that can come with the neighbourhood, building and its **community space** can foster the development of interpersonal connections and friendships, and can have a transformative effect on residents.

> Oh, my God, [the building and the neighbourhood] made a big difference in my life when I moved there. Because I was living in Downtown Eastside before that, and I avoided people. But here, I ran into someone [in the building] and he was a social butterfly, he knew everybody. So he introduced me to everybody. Now everybody knows me. Like for me, when we had parties [in the building], I would make stuff…That's how I was raised…
>
> In our building, we would always put up a Christmas tree in the lobby. And in the coffee room, we would decorate it. But while we're doing and we're talking to each other.

D credited his own social transformation to the influence of the social butterfly who introduced him to everybody and helped him integrate into the community. This process was made easier by the shared space of the amenity room.

Participant B also articulated the significance of the **design of common rooms** and the availability of amenities for socializing. The design and layout of these spaces can greatly influence the social dynamics within the community. He stated, "How much care is taken [makes a big difference], in like developing the common room and

designing it so that makes [people feel] welcome." He went on to describe the common room in his building, which is attached to the laundry facility: "It has a small table, but not it's not for socializing, really. You can have a meeting there, but it's not a common room where you sit down and look at a large screen TV." Even though the laundry room is a reason for tenants to visit the common room, the design of the physical space discourages social interaction.

Indeed, many participants mentioned the significance of having a space where residents can interact and build connections. They acknowledged that not everyone wants close friendships but believe that having the opportunity to greet and interact with neighbours is essential. Having shared spaces offers residents a place to come together for various events and discussions, as Participant B noted. "The common room can be a focal point for communal activities, fostering a sense of belonging." Yet, Participant D also raised the idea that having a facilitator or organized events to help residents connect with one another may benefit the community. He shared that he sees some neighbours use the common room by working on their individual computers, so while people are using the space, there's still a "need to have some way for everybody to get together."

Participants even discussed taking initiative to organize **social events**, or to request Wi-Fi in their amenity rooms. At Gordon Fahrni House, social events are organized, and this model was admired by participants who lived in other Brightside buildings. Participant A felt that residents at Gordon Fahrni are fortunate to have this type of event and wanted to replicate it. She said, "We're going to try and do that to, like you guys, have a potluck, or once a month tea or a game night." A also shared her efforts to advocate for Wi-Fi in a common space. Again, Gordon Fahrni House has Wi-Fi in the amenity room whereas other Brightside buildings do not. She argued, "I think it's difficult for some people [to access Wi-Fi on their own]. [In our building], we had a meeting and talked about having a local Wi-Fi [connection] so people could actually leave their apartments and come down." A noted that she would volunteer to [help others get online] but this idea did not take off, despite the shared sense that residents would have appreciated this approach. She commented, "My mom was in that building for 20 years, I've been in the building for six…I know quite a few people in the building. And I think a lot of them really just don't want to come out. And I think it would be really helpful to have something like that."

Amenities thus play an important role in fostering in-person social connection for seniors. It is fitting that the final example, shared space for residents to use Wi-Fi, brings together in-person and Internet-facilitated interactions, because participants recognize both as important in promoting a sense of community and reducing social isolation. Having Internet connectivity in shared spaces can serve as a catalyst for social interactions among senior residents. Ultimately, they identified Internet access combined with well-designed shared spaces and organized activities as a formula to facilitate social connections among low-income senior residents.

In addition to the amenities in the community housing, key informant's mention of the **resident advisory committee's initiative**, specifically the "Welcome Wagon idea," reflects an innovative approach to fostering community and belonging within the housing environment. This idea aims to provide new residents with essential information about the building and neighbourhood, creating a sense of inclusion and familiarity from the beginning. By introducing such initiatives, she acknowledged the importance of proactive measures in cultivating social interactions and support networks among seniors.

> We have our resident advisory committee, it's just piloting, we're just starting to get out, not all the residents know, […] but one of their ideas to trial was some sort of […] Welcome Wagon idea. I don't know that term, but like, when new people come to a building some sort of information about the building or, or in the area that the buildings in the neighbourhood, things like that.

She also highlighted the use of email and virtual communication tools as means to facilitate building-wide communication and engagement. Although she recognized the potential for online participation, she noted the preference among residents for in-person interactions, as observed during the rollout of the resident advisor program. This insight underscores the importance of understanding seniors' preferences and adapting strategies accordingly to promote meaningful social connections.

> Email is certainly an option. We all have an email address. We definitely email with residence for sure. It's just as a tool for like I said more building wide or mass communication that is a tool we use I think that there are always options for online virtual participation and things. So, as an example, when we were setting out the resident advisor, we knew that people wanted it to be in person. But we also wanted to throw out there the option of virtual, if people wanted it needed it. If we had to go there, collectively, most of the people, if not all, didn't really want to participate, virtually. They want it to come together in person.

In summary, participants described a spectrum of in-person social experiences: from close-knit familial bonds and regular gatherings to instances of estrangement and limited connections, influenced by factors such as geographic distance and communication preferences. Friendships vary widely, ranging from occasional coffee meetups to deep bonds based on personal differences. Neighbours are viewed as convenient sources of social interaction, with preferences leaning towards casual interactions rather than deeper friendships. The presence of community amenities and physical infrastructure emerges as crucial in facilitating these social connections, fostering residents' sense of community and belonging. The significance of such interactions in promoting social well-being and mitigating isolation among older adults in community settings is evident from their conversations. In the next chapter, I describe how COVID-19 disrupted participants’ main sources of social connectedness and social support system.

Chapter 6.

Lessons from COVID-19

The COVID-19 pandemic posed unprecedented challenges for older adults, who are at higher risk of severe illness and death from the virus. As a result, many seniors have been advised to stay at home and limit their physical contact with others, which may have negative consequences for their social connectedness and mental health. However, the pandemic also created opportunities for seniors to use digital socializing platforms, such as video calls, online games, and social media, to maintain and enhance their social relationships with family, friends, and neighbours. In this section, I address the second part of my research question: Can social interaction via virtual means minimize loneliness and promote mental well-being among low-income seniors when physical proximity cannot be maintained, as recommended during the COVID-19 pandemic? Drawing on the experiences of older adults living in Brightside's multi-unit buildings, I explore how they adapted to the COVID-19 safety restrictions and measures, and what the implications of COVID-19 were on their social lives. Ultimately, I aim to gather lessons we can learn from COVID-19 to support aging in place for marginalized older adults living in community housing.

Prolonged social isolation during COVID-19

As the pandemic unfolded, people across various age groups began to develop habits of isolation, largely influenced by social distancing measures and fear of infection. This isolation went beyond temporary restrictions and started to shape how individuals perceived social interactions. Anxiety and isolation formed deep roots in many seniors' life (Finlay et al., 2022).The fear of contracting COVID-19 has led to prolonged social isolation by some seniors, a more at-risk group, shaping their social behaviors and interactions.

Participants followed this pattern, expressing concerns about in-person gatherings, public transportation and crowded events. This reflects a pervasive sense of vulnerability and caution. These seniors remained cautious of the virus's impact on their

social lives, despite efforts to adapt to online socializing. This highlights the enduring challenges of maintaining social connections during and after a public health crisis.

The fear of contracting COVID-19 impressed a sense of vulnerability and hesitation among participants. Anxiety about the virus affected their willingness to engage in social activities, especially those involving in-person interactions. Participant B shared, “I [have been afraid] of catching COVID because I have autoimmune disorders. I have high blood pressure, I have diabetes, all of this stuff…This makes me very susceptible to it being serious… And I think a lot of seniors may be in the same boat.”

Social well-being

The sense of loneliness and isolation was heightened for many older individuals, which had an impact on their social well-being. One participant mentioned having a sense of loneliness when missing in-person interactions. Another participant emphasized the importance of arranging personal in-person reunions after the pandemic, especially given the challenges some friends faced during social distancing and isolation, such as loss of loved ones and being isolated. C shared how her network is coming together from Hong Kong, the US, and elsewhere “to talk about different things that happen during the COVID-19.” She highlighted the value of face-to-face interactions and sharing experiences with friends who had gone through difficult times during the pandemic. “Some have had their husbands passed away. And some others they have gone through quite a bit during this isolation time or social distancing time,” C commented that her friends are keen to be able to meet in person “to catch up with news.”

Social gatherings

Traditional social gatherings during holidays and special occasions also saw changes after four years into the pandemic. People became less likely to invite friends and family over for gatherings or to share simple moments like having coffee together, due to the fear of spreading the virus. Participant A talked about how this fear of virus changed her Thanksgiving and Christmas routine for in-person social gatherings. Prior to COVID-19, she had friends and family over for holidays, but said that now she does not have them over anymore, and she no longer invites friends over for coffee. Another

participant shared his concern and hesitation to go out for a dinner with his cousin, before getting his booster shot.

Participant D observed that his neighbours' behavior and sense of safety has changed, with more pronounced anxiety and fear among seniors. He commented, "Some of my neighbours, they're a little bit more hesitant about getting together than before… A lot of them have become a little more introverted, because they're afraid." He noted that COVID-19 is not the only factor influencing this change: war in Ukraine and weather (such as the 2021 heat dome) contributed to people's increased fear.

He acknowledged that COVID-19 disrupted family gatherings and highlighted how social technology, like Facebook and video calls, became essential for maintaining connections, especially with family members who have health issues. He appreciated the ability to see videos and referred to the ability to interact online as a blessing during the pandemic. Still, D expressed a strong desire to get back to in-person gatherings.

There was diminished frequency of going out and gatherings for seniors since the pandemic. Friends and acquaintances hesitated to dine out as frequently as they did before the pandemic, so restaurant visits declined. The physical setup of restaurants with COVID modifications also influenced these behaviors. Participant C shared this experience:

> Before COVID, I usually went with friends once a month or so to different restaurants for dim sum. But once the pandemic has started, my friends did not come out to the restaurants anymore. And even when I went with other friends, the restaurants look so different. They have plastic sheets separating the different sections. And it just I didn't feel like eating in that kind of environment anyway. Now gradually, we are going out to some restaurants, but still not as frequent as before. So in that sense, the COVID-19 has really impacted on my social life…I am relatively new to town, so I wanted to try many restaurants and I couldn't.

Community engagement and social programs

The pandemic exacerbated the challenges faced by underprivileged urban seniors, which is particularly evidenced by a decline in social infrastructure (Buffel et al., 2021). Participant C provided insight into the role of social infrastructure, such as community classes and organizations, which previously facilitated social connections among older adults. She noted that there were activities held at the West End Senior

Centre that were canceled. These had been particularly important meeting places for C because that is where she met other participants in the group.

Participant E articulated the profound impact of the COVID-19 pandemic on his routine and lifestyle, particularly his engagement in in-person activities at the YMCA. Prior to the pandemic, he was a regular visitor, attending three times a week. However, the advent of the pandemic brought about a significant disruption, leading to a pause to his visits. The implementation of mask mandates provided a brief period of reassurance, enabling him to resume his visits. Yet, the relaxation of these mandates, made him reluctant to participate in communal activities again. “Now there are no controls there,” E stated. This narrative underscores the pervasive influence of the pandemic, especially on seniors who are at a higher risk, and highlights the ongoing struggle to balance the need for social interaction and physical activity with personal safety concerns. It also reflects the broader societal challenge of maintaining public health measures in a manner that is both effective and respectful of individual comfort levels.

The lifting of mask and vaccine restrictions has presented challenges for seniors seeking to resume their normal social lives and engage in social infrastructure programs. Many seniors have fears of contracting illness, which decreases their willingness to participate in community activities. The remaining anxiety surrounding potential health risks associated with social interactions has led to reluctance among seniors to fully reintegrate into social gatherings and programs. As a result, the return to pre-pandemic levels of social engagement among seniors has been hindered, emphasizing the need for continued support and reassurance within the community.

For example, the pandemic disruptions, including the closure of community centers and concerns about COVID-19 transmission, had affected E's ability to engage in social activities. He expressed hesitancy about returning to in-person gatherings, citing concerns about age and vulnerability to COVID-19. This hesitation reflects the broader challenges faced by older adults in accessing social infrastructure and maintaining social connections amidst and after public health crises. Community classes and organizations like the YMCA play a vital role in providing opportunities for social engagement, especially for individuals who may otherwise experience barriers to participation. However, the pandemic has highlighted the need for flexible and adaptable

approaches to delivering these services, taking into account the evolving public health landscape and the diverse needs and concerns of older adults.

The closure of senior centres due to COVID-19 restrictions also had profound implications for volunteer activities and programs offered by social infrastructure. Participants reflected on the challenges of transitioning to online social activities, noting the diminished energy and experience compared to in-person interactions. The absence of communal spaces like senior centers has left a void in social engagement opportunities for older adults, highlighting the importance of physical social infrastructure in supporting aging communities. The absence of strategic preparation and a comprehensive plan for digital support of social activities resulted in insufficient service offerings. These offerings were unable to meet the unique social requirements of the elderly population during the lockdown period.

When asked about the closure of physical social infrastructure during the COVID-19 pandemic, Participant A illustrated the complex effects of online socializing on seniors' well-being, mentioning the loss of support groups. While she had been able to use technology to maintain some forms of social connection and engagement, such as yoga, meditation, and support groups, she expressed a sense of loss and depression due to the lack of physical access to social infrastructure and loss of interaction.

> I've missed out on a couple of support groups, as well not being able to go to my yoga class or go out to my meditation class. So having to do those at home, can't go to exercise . But by the same token, I still have access to the Internet. So I do those things on my own now, and I do a lot of that stuff from the Internet, like from YouTube, to do classes and things. I'm happy about that. But it's not the same, for whatever reason. I'm happy with that, but I still get depressed.

Likewise, Participant B discussed the impact of the pandemic on the closure of the senior center and how they attempted to maintain activities through Zoom. He also reflected on the challenges of transitioning to online social activities and how it didn't provide the same energy and experience as in-person interactions.

> When COVID came along, they closed the Senior Center. But the first year they tried to maintain some of the activities, one of which was a Christmas get-together. They would sort of organize things on Zoom, and everybody who tried to get together and participate in something, maybe we play games online or something…

> [The Christmas party] was organized by a Second Mile Society, which also ran the Senior Center. They sent out an email to all of us just letting us know they wanted to get together during COVID. They said we're going to try to organize something online. So “C” and I both went, and you could create a background [on Zoom] when you [join]. So I put a fireplace to make it look like [I] just came from outside…
>
> It was never the same though. You really noticed it didn't have the same energy. It's everyone's struggling as well. We were all trying to learn Zoom at the same time. And it was difficult too, it was hard.

His remark about the loss of social contact due to the shutdown of the Senior Center emphasizes the vital role that such facilities play in facilitating social interactions and community engagement among seniors. The closure not only disrupted established routines but also deprived older adults of a crucial avenue for socialization, potentially exacerbating feelings of loneliness and isolation. B noted, “We were volunteering at the Senior Center, yeah, that’s shut down. And we lost that social contact.”

He further emphasized that the absence of the Senior Centre's in-person activities led to a sense of loss, as these interactions provided a unique energy and companionship that online interactions couldn't fully replace.

> Well, with the volunteering, we would have to be at a certain time we had certain duties to do. And then we would be greeting people and who'd be coming in-person. Everyone would bring their own energy, their own item of interest, whatever it might be. Some people would just, like A [mentioned], come in pull a chair up and sit and talk to her all afternoon. Which is kind of difficult too, she had work to do, but people enjoyed that.

His experience underscores the irreplaceable role of physical social infrastructure in facilitating social engagement and volunteerism among older adults. The closure of senior centers not only disrupted established social networks but also diminished the quality of social interactions.

In response to the lockdowns during the COVID-19 pandemic, Brightside Community Homes Foundation suspended all community development activities and instead initiated new forms of engagement with tenants. They began sending weekly newsletters, including COVID-19 briefs and updates on supports and activities available during the pandemic. These newsletters aimed to keep tenants informed about safety measures and news relevant to their community. Additionally, Brightside introduced online games such as Sudoku and shared cooking recipes to provide tenants with

enjoyable and interactive content during a challenging period of physical distancing (Brightside, 2022). To date, the effectiveness of these conservative approach is yet to be explored.

When questioned about Brightside's previous endeavors in digital socialization, the key informant noted that Brightside had made efforts during the COVID-19 pandemic. These efforts included plans to develop an app for digital communication with residents and to create a newsletter with potential digital features. However, neither the housing provider nor residents prioritized digital solutions during that period.

The absence of accessible community resources left older adults restricted within their homes, and this had particular impact on those without ample outdoor spaces like large yards or balconies mostly single housing, exacerbating feelings of confinement and limited mobility during the COVID-19 pandemic. These inequalities highlight the disparities between low-income and more affluent seniors, with the latter often having greater access to private outdoor spaces and resources that facilitate social interaction and well-being (Finlay et al., 2022). As A noted, some seniors were "all blocked in… they have nowhere to go, nothing to do."

These findings underscore the importance of recognizing and addressing the systemic barriers that restrict older adults' access to social infrastructure and community resources. Moreover, they align with existing literature emphasizing the significance of physical spaces in promoting social engagement and well-being among older adults (J. M. Finlay et al., 2022; Klinenberg, 2019). Furthermore, the impact of the pandemic on community resources, such as senior centres, underscores broader systemic issues in resource allocation and funding priorities.

Public transportation

The impacts of COVID-19 on seniors' utilization of public transportation were profound, with many participants citing safety concerns as a significant barrier. Low-income seniors, who rely heavily on public transit, face heightened challenges due to these safety concerns, exacerbating their social isolation. The apprehension surrounding safety issues acts as a barrier, further preventing their engagement in social activities. As B shared, "Living with the fear of possibly contacting COVID is pretty serious fear to

live with all the time. [It means taking care] wearing the gloves on the bus or wearing a mask. And if someone starts coughing on the bus, you immediately assume they have COVID."

Participant A mentioned that she had some barriers for socializing, such as her mask, which she attributed to her OCD and anxiety. She shared, "I don't go to restaurants because it's my mask thing… But I am nervous even at farmer's markets." As a result, she said, she "stay[s] close in my little bubble. I don't venture out very far." She expressed nervousness and awareness of other people's coughing, suggesting that she had some fear of the virus. These factors made A reluctant or uncomfortable to engage in socializing in-person and participating in social programs, especially after COVID-19. This also altered her attitude towards public transportation. She commented:

> I'm wearing the masks actually on the sky train, and on the bus. Now that the sky train has people coming from the airport, I'm really nervous about that. And I very quietly put three masks on. When I'm coming along that way, I am still scared and nervous. And even I live in Yaletown by the sky train station, people with their luggage all the time. I'm still nervous about getting on the bus. I will wait for the next bus. So, it has affected me somehow. I get off. I have actually gotten off the bus and I'm very particular now where I sit on the bus now. I make a point of a seat where I want to be where I feel safe.

Participant E shared this feeling, which he described "just hav[ing] this fear." He noted that he uses public transportation regularly but has noticed the shift away from mask wearing. He said, "It was one time a lot of people were masked. Now, there's very few. I just have [to put up with that] risk, I guess." He commented that his own mask wearing depends on the location, but he remains aware of how people continue to get sick "even though we're past the worst of the pandemic."

Fear of crowds and wearing masks on public spaces and in stores became habitual practices, making individuals like A hesitant to attend crowded events, such as concerts or social gatherings. Even with protective measures, fear persisted. A reflected on how she would like to attend some concerts but will not go because of the crowd. While she shared that she does not stay away from groups, she masks on the bus and in stores. "It's still affecting me," A said.

Participant A's perspective on coping with the virus also highlights the digital divide that exists among seniors. She considered those who have Internet access to be fortunate and predicted that those who do not will suffer more. She argued,

> It's a virus and it's going to be here forever. I think we have to teach ourselves how to cope with it, and how to live with it, and how to get the support for the different places that we need. I think for the people that have access to the Internet are very lucky. And for the people that don't, I think their depression is going to get worse, and they're going to get more lonely.

This suggests that Internet access is a vital determinant of seniors' resilience and quality of life during the pandemic (Statistics Canada, 2022b; Wallinheimo & Evans, 2021), and that efforts should be made to enhance the accessibility and affordability of Internet services for seniors, as well as to equip them with the necessary skills and devices to use online socializing platforms effectively.

In response to the social implications of COVID-19 for low-income seniors residing in community housing, a consensus emerged among participants regarding the pivotal role of Internet access in maintaining seniors' well-being during and after the pandemic. They advocated for initiatives to enhance the accessibility and affordability of Internet services for seniors, coupled with the provision of necessary technological skills and devices. Despite recognizing the value of online socializing platforms in mitigating loneliness, participants noted that such platforms alone are insufficient to fully address the well-being needs of older adults living alone in community housing.

Seniors, in particular, experienced heightened vulnerability to COVID-19 due to underlying health conditions and risks. This contributed to the habit of isolation, with many seniors opting to minimize social interactions to reduce the risk of infection. With the fear of COVID-19, the attitude towards online socializing shifted. People turned to digital platforms to connect with friends and loved ones. However, the significance and quality of these interactions differed from in-person experiences.

The habitual isolation not only affected participants' daily routines but also had far-reaching consequences on their overall social life and wellness. The fear of COVID-19, changing policies and mandates for public safety, and changes in social behavior, were all contributors to this impact. Addressing these challenges requires targeted interventions that promote safety, trust, and social connectedness, while acknowledging

the enduring psychological effects of the pandemic on older adults such as social anxiety.

While isolation became a habit, it is essential to highlight the importance of maintaining at least one close connection as Participant B suggested. These connections provide an opportunity to break free from the isolation pattern. According to his opinion even a single face-to-face meeting in a restaurant or similar settings could offer a way to combat the fear and isolation.

> I think you made a good argument, though, for why people need to keep in touch. We can't block all communication, all interpersonal, in-person to just go online, because that's a mistake, because you're going to draw back, you're gonna think the world is threatening. Yeah, you're gonna be behind the safe wall, and you'll want to stay there, do not reach out again. But if you maintain even just one connection of some kind, where you actually go out and meet someone, take a risk and sit in a restaurant or something, then it's good, then you've got a way to get out of that little trap you build. This is a problem with that COVID response, isolating people became a habit. Fear, ingrained fear.

The analysis of COVID-19 socializing among seniors provides valuable insights into the complexities of aging in place during a global health crisis. Key lessons include the need for balancing digital connectivity with in-person engagement, preserving physical social infrastructure, and addressing underlying fears and vulnerabilities. Holistic approaches are essential to support older adults' social well-being and promote age-in-place initiatives in the post-pandemic era.

Chapter 7.

Conclusion and Recommendations

In this study, I employed multiple methods in order to examine the *impacts of using digital socializing platforms on social connectedness, among older adults aged 65 years or older living in Brightside multi-unit buildings*. This chapter summarizes and synthesizes my findings in connection with the broader context of social connectedness among older adults. This includes the role and impact of digital platforms in fostering a sense of connectivity, the barriers and facilitators to their use, and the implications for policy and practice in the field of community housing.

Social isolation, which the National Seniors Council describes as “a situation [that] involves few social contacts and few social roles, as well as the absence of mutually-rewarding relationships,” is a significant concern for older adults residing in social housing. Seniors in these settings often experience lower incomes, live alone, and face chronic health issues, all of which increase their risk of social isolation. Many also report feeling unsafe and insecure in their social housing environment, which can deter socialization and impact mental health. Effective strategies to address social isolation among seniors are essential for social housing providers (ONPHA, 2016).

7.1. Key findings

Digital socializing platforms play a vital role in combating **social isolation** among older adults. Online platforms such as email, Facebook, instant messaging, and video chat enable seniors to maintain touch regardless of geographical barriers or time constraints, with fewer limitations. Elderly individuals may enter a phase of their lives characterized by feelings of isolation and loneliness as a result of changes in their physical, social, and financial circumstances. However, these platforms are particularly valuable for elderly individuals with limited mobility, allowing them to stay connected with friends and relatives (Quan-Haase et al., 2017).

This study addresses a gap in the literature by exploring older adults' preferences and aspirations for the future of online socializing, particularly within the context of

community housing. Additionally, it amplifies the voices of older adults in shaping the discourse on virtual socializing for aging populations.

To address the first sub-question on *how digital communication platforms intersect with traditional means of providing social connectedness; a*ll study participants lived alone and relied on the in-person presence and connection offered by their acquaintances, engaging in activities such as sharing meals, similar hobbies, or participating in volunteer work. Despite this reliance, they frequently coordinated these gatherings using email or phone communication. Notably, unlike the frequent friendship's connections for some of the participants, social interactions with relatives were typically reserved for holidays, birthdays, and other festive occasions.

Among participants living in close proximity, mutual reliance for small favours, such as borrowing equipment, providing assistance, and monitoring each other's well-being was evident. However, some observed a decline in social interaction within their local community due to COVID-19 pandemic.

Participants indicated that the Internet facilitated socializing by providing them with an opportunity to connect with others, maintain existing relationships, enhance the quantity of their interactions, very few examples of establishing new connections, and foster a sense of connection with their social circle especially in the time of crisis, when physical proximity is not available.

The issue of mobility, particularly for those with disabilities, underscores the crucial role of digital platforms as supplements or alternatives to face-to-face interactions, though not all participants showed a high level of technological proficiency.

The pandemic prompted a shift towards digital platforms for social interaction, with many seniors utilizing video calls and instant messages to stay connected with family and friends, with online platforms occasionally replacing face-to-face interactions during lockdowns. However, limited contact persisted due to COVID-related safety regulations.

The fear of contracting COVID-19 significantly altered social behaviours, leading to habitual isolation among seniors and reshaping how they perceive social interactions. This anxiety underscored the vulnerability felt by many older adults, affecting their

willingness to engage in in-person gatherings and public activities. Despite challenges, participants emphasized the importance of maintaining at least one close connection to mitigate feelings of fear and loneliness.

Even after the COVID-19 pandemic, the disrupted social gatherings reflect the enduring changes in traditional social norms, as participants described changes in their routines and decreased frequency of inviting friends and family over for gatherings. These experiences highlight the enduring need for meaningful social connections among older adults and emphasize the value of community engagement in fostering social connectedness and combatting feelings of isolation.

The experiences of participants underscore the interconnected nature of digital connectivity and traditional social interactions among seniors. While technology offers a lifeline for maintaining social connections during the pandemic, it may not fully address the emotional needs associated with in-person interactions. This highlights the importance of balancing virtual and face-to-face interactions in age-in-place initiatives, taking into account individual preferences and needs.

Addressing the second sub-question on how older adults use digital communication platforms to be socially connected, the insights gathered from participants show that socializing platforms have the potential to be catalysts for social connection. They also serve as facilitators for global reach, critical support systems in emergencies, tools for independent living, sources of entertainment, and avenues for recognition and accessing essential services.

For low-income seniors living alone and independently, online platforms play a pivotal role in combating social isolation, providing essential support in daily life, and fostering social contacts that may otherwise be limited. These platforms not only connect seniors to their social networks and empower them to lead independent lives, but also provide avenues for recognition and acknowledgment, fulfilling fundamental human needs for validation and connection, especially among lonely individuals seeking sincere interactions and validation beyond immediate kin relations.

Online social platforms were especially beneficial for fostering connection with those who are geographically distant from their close family ties and friends as well as re-establishing old relationships that have been lost for a long time. As an illustration, for

Participant C, the convenience of WhatsApp enabled her to maintain connections with people whose ties would likely have deteriorated if she still had to depend on sending handwritten letters by mail especially with her vision disability. Digital socializing platforms has enhanced the frequency of connection and created new opportunities for social connections that did not previously exist, showing that these practices have become integral in modern social life.

Almost all the participants had a long-distant social ties, two of individuals reported having relatives who lived far away, while three individuals had long-distant friends. Out of all participants, four of them maintained frequent communication with their friends and family members using email, WhatsApp, or Zoom. Consistent with the findings of Quan-Haase et al. (2017) about email usage to connect with acquaintances, both email and WhatsApp were mainly used within kin circles of the same generation and primarily for communication with friends rather than relatives. However, Zoom was frequently utilized to maintain close kin relations and intergenerational communication, particularly between older individuals and younger family members.

Finally, this study explains the significant role of volunteering and social activities in fostering social connections and enhancing the overall well-being of low-income older adults, underscoring the importance of social infrastructure, such as community and senior centers, in facilitating these experiences. Participant B's engagement at the Gathering Place exemplifies the dual benefits of volunteering, combining physical activity with community contribution. His involvement not only enhanced his social connections but also extends beyond recreational and financial considerations. The narratives collectively illustrate how volunteer work and social activities contribute to seniors' social well-being by providing opportunities for skill development, societal contribution, and interpersonal interaction.

The pandemic presented challenges for older adults seeking to engage in community activities and social programs, with closures of community centers and disruptions to regular routines. Participants expressed a sense of loss and depression due to the lack of physical access to social infrastructure, such as yoga classes and support groups, underscoring the critical role of community organizations in supporting seniors' social well-being.

While efforts were made to provide online community engagement opportunities during the pandemic such as online Christmas party, participants emphasized that these do not convey the same feeling and energy, and could not fully replace in-person interactions, particularly for community engagement and volunteering, which are integral to the social lives of low-income older adults.

The hesitancy to return to in-person gatherings post-pandemic reflects ongoing concerns about health risks and underscores the need for flexible approaches to delivering social services that accommodate diverse needs and comfort levels among older adults. Moving forward, it is essential to invest in supporting a wide range of physical and digital social infrastructure to combat social isolation and promote social connectedness among older populations, acknowledging the ongoing impact of the pandemic on seniors' social lives and the importance of adapting social programs to meet evolving needs and preferences.

Volunteers highlighted the unique energy and companionship derived from in-person interactions at senior centers, which online interactions couldn't fully replace. The impacts extended beyond social infrastructure to public transportation, with safety concerns acting as a significant barrier for low-income seniors reliant on public transit. Fear of infection altered attitudes towards public transportation even after four years into the pandemic, further isolating individuals from social encounters.

Building on these findings, the study illuminates the nuanced interplay between online and offline interactions in the realm of relationship building. While online platforms offer unique opportunities for initiation and maintenance of relationships, they are most effective as complements, not substitutes, for the personal and interpersonal connections that are integral to building and nurturing profound bonds. Online social platforms, thus, impact the lives of the participants by enhancing the convenience and accessibility of their social networks, particularly in the crisis and post-crisis context.

7.2. Contributions of findings

While the number of interviewees was a small fraction of the low-income seniors who reside in Brightside buildings and is thus not intended to be a representative sample of respondents, the interview data provides important insight into their experiences with

virtual socializing platforms. This research emphasized the lived experiences and perspectives of older adults residing in community housing, focusing on their engagement with virtual socializing platforms to support connectivity and independence as they age. It captured seniors' envisioned roles for future social technologies and integrated their voices into the discourse of technological innovations for aging populations.

The findings of this study challenge conventional approaches to understanding social quality of life for low-income seniors, underscoring the importance of prioritizing their voices and experiences in developing effective social and digital strategies. Firstly, the study uncovers that family ties are not the primary source of social support for these seniors; instead, friends and neighbours play a more pivotal role for most of them. Secondly, it challenges the common belief that these seniors are lonely, revealing that they do not perceive themselves as such. Lastly, it highlights that conventional views often neglect the role of digital social platforms as a means of social support and interaction for this demographic. By centering the experiences of older adults themselves, this research contributes to a better understanding of the impacts of socializing technology on seniors' social connectedness and well-being.

As a reflection on the lessons learnt through out this research process, I would like to highlighting both the strengths and limitations of the study. It is important to acknowledge that those who responded to the call for participation may represent a subset of the community who are more inclined to have positive experiences with online socializing. A greater diversity of backgrounds and perspectives might have enriched the data and offered a broader range of insights. However, the small sample size allowed for in-depth engagement with participants, generating rich qualitative data that captured the nuances and complexities of their experiences.

The voices of these low-income seniors, often marginalized in research and policy discussions, provide valuable insights into the impact of digital technologies on their social lives. The partnership with Brightside and the Hey Neighbour Collective was instrumental in facilitating access to the community and ensuring the research was grounded in the real-world needs and concerns of older adults in community housing. This collaborative approach not only enhanced the relevance and impact of the research

but also fostered a sense of trust and reciprocity between the researcher and the community.

7.3. Practical implications

The practical implications of study findings extend to policy responses that prioritize digital accessibility and inclusion in community housing and age-in-place strategies in Vancouver, Canada. Leveraging support from community housing operators and sharing research findings with stakeholders will facilitate knowledge transfer and capacity building, ultimately reducing social isolation and enhancing mental well-being for seniors in community housing. By providing valuable feedback and insights on seniors' virtual socializing experiences, this research can assist community housing providers in better understanding the role of technology in the lives of their residents, so they can better serve seniors and foster social interaction.

How should the future look like for community housing older adult tenants?

During the semi-structured interview, the key informant was prompted to outline the subsequent actions their organization would undertake to improve online socialization among their tenants, if given the opportunity. The key informant identified several steps:

1- “I think what would be good to know if we could, would be to have a better idea of who needs it [Internet] now and who doesn't? Or who has the Internet and who doesn't? Organizationally we are careful about asking questions we can't provide. So there's always the chance that we asked, Hey, do you have access to the Internet? And then that question leads someone to think we're going to pay for their Internet, which we could never afford to do.

2- I think as much as possible, having those buildings where there is some Wi-Fi available in a common area, I know there are a few people that will come down to a lobby if it's around there, you know, we're starting to look at the subpar medical spaces, sometimes the Wi-Fi is available there.

3- So if we can continue to advocate for lower cost, Internet options for people to pay for the stuff monthly would be great. And then as I said it, and also getting the devices that would help them with that. I think I would add when possible.

4- Looking at what options are in community around Internet safety as well for people, because I think a barrier for a lot of older folks is the safety component that they're worried about. And I know, there's lots of older folks that use the Internet, I don't mean to make it sound like it's all the older folks that don't, it's just seems to be more of the people that aren't as comfortable right with it, but doesn't mean that people from all ages have barriers with it."

Community housing can serve as a basis for activities aimed at enhancing technology availability to promote social connectedness and well-being. To overcome these obstacles, it is necessary to implement policies that promote the expansion of Internet access, as well as provide training and support to facilitate the use of online services (Ellison-Barnes et al., 2021). As echoed by one study participant: "The Internet could be considered to be a public service rather than something private. It's important when you're alone. Really important."

Overall, study results suggest that online socializing interventions for older adults in the context of community housing setting should consider the following aspects:

1- **Tailor interventions** to older adult's preferences, recognizing that not all older adults desire increased social contacts. Some seniors may be satisfied with their existing social network, or may prefer quality over quantity of interactions.

2- **Address barriers** and enablers to online socializing, including mental health, safety concerns, and technological skills.

3- Provide a **variety of online socializing options and programs**, such as games, chats, forums, or video calls, that cater to the older adults' diverse needs and preferences.

Addressing social isolation requires not only the provision of physical spaces for socialization but also the implementation of comprehensive support systems that address seniors' online socializing needs. Future research should continue to explore ways to enhance digital accessibility and empower seniors through technology, fostering inclusive environments that support healthy aging and social connectedness.

7.4. Policy implications

Current policies predominantly prioritize physical infrastructure and health technology measures in community housing, neglecting digital inclusion and innovation. New initiatives like "Expanding Free Public Wi-Fi in the Downtown Eastside and

Adjacent Neighbourhoods”[5] project, in Vancouver introduced by Councillor Boyle in March 2024, demonstrate progress. This project is a step towards reducing the digital divide. As part of its plan, the CoV has proposed collaborating with social housing partners and BC Housing. The goal is to explore the possibility of installing Wi-Fi access points in BC Housing, non-profit, and city-owned social housing.

Given the new policy initiatives by CoV aimed at improving Internet accessibility and affordability in social housing context, and the growing demand for digital inclusion among low-income older adults — especially post-pandemic— it is crucial to develop a clear strategy. The COVID-19 pandemic dramatically altered neighborhood life, leading to the temporary or permanent closure of many local resources critical for socialization, support, and activity for older adults. Avoiding crowded places, isolating at home, and transitioning to online services have had profound consequences on older adults’ everyday behaviors and well-being. These changes have exacerbated isolation and increased the pressure on seniors to access social connections digitally. Therefore, this strategy should have defined goals and timelines to enhance digital accessibility, potentially including initiatives like providing free Wi-Fi in the common areas of community housing buildings. Additionally, establishing digital inclusion networks can foster information exchange and best practices, enhancing social connectivity and independence among older adults living alone in the community housing buildings. These networks should offer programming and support for virtual socializing and online activities, enhancing social connectivity and independence.

In conclusion, the integration of digital inclusion strategies within community housing policies represents a forward-thinking approach to social equity. By prioritizing connectivity and access to social technology, we can bridge the digital divide, and foster a more inclusive and empowered community. It is essential that these initiatives receive the necessary support and resources to ensure their successful implementation.

[5] https://council.vancouver.ca/20240313/documents/cfscA2.pdf

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Appendix A.

Recruitment Flyer

Appendix B.

Focus Group Guides and Prompts

Focus Group Guide: Community Housing Residents

Try to cover all of the numbered questions in the conversation. The bulleted sub questions are listed as prompts only. (6 main questions and 2-3 time permitting questions)

Questions about online socializing platforms

1. Canada did a survey recently all over the country (CIUS) and found that about two fifths of seniors (65+) (38.7%) socialize with their family and friends online, at least a few times per week.

    - What do you think makes some people want to socialize with family and friends online?

2. Social needs are defined as having meaningful relationships with others such as talking, interacting, and sharing information (text, picture, video or voice) to someone you can rely on, you can turn to, or you feel close to.

    - Can you give an example of what social activity you do online? (Please explain what kind of platform you use, who you interact with, and what is the purpose of your interaction, why what and where, who)

3. Can you give an example of a time that socializing online helped you develop [/find/maintain] a meaningful relationship?

4. What kind of help do you usually need with OSPs? (Set up, use, borrow devices, Internet connection, trouble reading the monitor, etc.) and who usually helps you?

    - Can you talk about any specific times you needed help with using digital communication platforms and you received it from your neighbours?

    - Did online socializing platforms alter your relationship with your neighbours? (Positive and negative). In other words, have OSPs helped you have more meaningful interactions with your neighbours?

Questions about in-person/physical social connections

5. How often do you go out of the house and how much of it is for social activities?

    - Do those physical spaces that you visit (social infrastructure) satisfy your social needs?

Covid-19 Question

6. Do you feel like it is harder or easier to be physically socially connected and visit parks and public spaces (social infrastructure, and community/senior centers) since the pandemic, compared to your life before the pandemic? What are the things that have changed the most in terms of your own social connections, meaning your attendance at classes, events, volunteering as well as gathering with friends and neighbours?

    - Have your attitudes towards using OSPs changed during the pandemic? How about after the pandemic?

    - How has using digital communication platforms affected your sense of social connectivity or isolation during/since the pandemic?

[TIME PERMITTING] questions:

7. What is missing in online socializing applications in terms of a virtual place for satisfying your social needs?

    - Why would OSP be important to you?

8. What are the specific things you would like to change about your daily social life? (online/in-person)

9. Are there any other topics that are on your mind that you would like to raise?

At the end of the conversation, participants will be encouraged to write down any further thoughts they would like to contribute that they did not speak to, on a final thoughts form, distributed to each participant. Forms to be collected before participants leave.

Appendix C.

Semi-Structured Interview Guides and Prompts

1. Could you please tell me about your work related to improving access to the Internet and digital literacy programs for residents?

2. Does the building offer free Wi-Fi and computers in the amenity room? What kind of programs and applications did you provide related to online communication during and after the pandemic and what was the result of those programs and services in terms of social connections?

3. Do you consider online socializing helped residents to be more connected during the pandemic?

4. What kinds of online social considerations are you able to take into account in your work? What kinds of factors have you not been able to take into account? (Mention: affordable Wi-Fi, affordable devices, digital literacy programs, helping set up Internet and devices, etc.)

5. Does the building offer free Wi-Fi and computers in the amenity room? What kind of programs and applications did you provide related to online communication during and after the pandemic and what was the result of those programs and services in terms of social connections?

6. What are the next few things you would do related to enhancing online communication among residents if you could? What are the key factors preventing you now from taking these next steps?

7. What else would you like to add to our understanding of tenants' online socializing?

Appendix D.

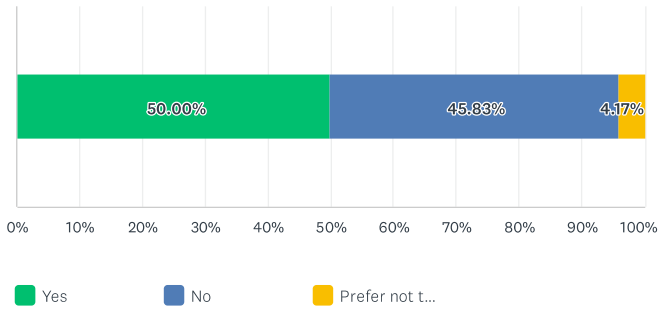
HNC Resident Surveys

These figures show some of the results of Bridgeview Place older adults' participation in the 2020 and 2021Surveys.

Brightside Resident Survey

Q9 9. Would you like to have regular communications with Brightside by email?

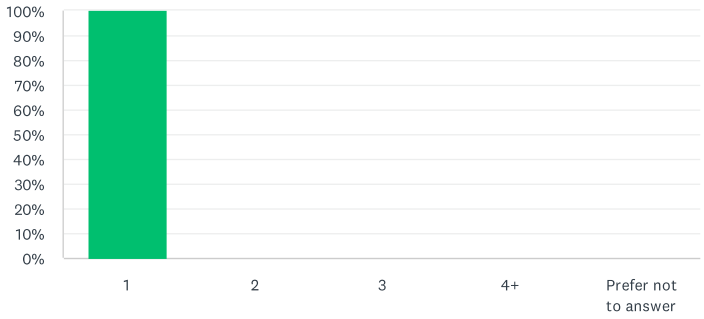
Answered: 24 Skipped: 0



Brightside Resident Survey

Q35 29. How many people (including you) live in your household?

Answered: 21 Skipped: 0



Q3 2. Since the beginning of the COVID-19 pandemic in early 2020, how has your access to the following changed:

Answered: 21 Skipped: 0

	IMPROVED	NO CHANGE	GOTTEN WORSE	NOT APPLICABLE/DO NOT USE	TOTAL	WEIGHTED AVERAGE
Indoor amenity space	5.00% 1	50.00% 10	25.00% 5	20.00% 4	20	2.60
Outdoor amenity space	0.00% 0	70.00% 14	10.00% 2	20.00% 4	20	2.50
Laundry room	5.00% 1	75.00% 15	15.00% 3	5.00% 1	20	2.20
Parks & plazas	0.00% 0	65.00% 13	20.00% 4	15.00% 3	20	2.50
Community centre or Neighbourhood house	0.00% 0	28.57% 6	57.14% 12	14.29% 3	21	2.86
Library	4.76% 1	33.33% 7	47.62% 10	14.29% 3	21	2.71
Restaurants & cafés	0.00% 0	36.84% 7	57.89% 11	5.26% 1	19	2.68
Shopping centre (eg. grocery store, the mall)	0.00% 0	71.43% 15	28.57% 6	0.00% 0	21	2.29
Church or place of worship	4.76% 1	33.33% 7	14.29% 3	47.62% 10	21	3.05
Health clinic	0.00% 0	52.38% 11	38.10% 8	9.52% 2	21	2.57
Other:	0.00% 0	14.29% 1	57.14% 4	28.57% 2	7	3.14

Q43 36. Are you doing any volunteer work currently?

Answered: 19 Skipped: 2