

Exploring African Older Immigrants' Social Connectedness in a Digital Age in Canada

by

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Abstract

This capstone is a mock research grant proposal for the Social Sciences and Humanities Research Council Insight Grant because African Older Immigrants (AOIs) are at high risk of social disconnectedness. They do not have an ethnic enclave that would supply the kinship network and face-to-face interactions. Therefore, to cope with the challenges of being socially disconnected, information technology is a viable approach to bridge these gaps. The study's main aim will be to identify the experiences of social disconnectedness and opportunities for improving access to social connections through technology.

The study design will be Longitudinal Qualitative Research, which combines in-depth interviews and modified Delphi methods with AOIs and other stakeholders. The sample size will be 92 research participants, 76 AOIs, and 16 secondary stakeholders equally distributed across the four provinces. The research will develop an AOI social connectedness framework to improve the health and well-being of AOIs.

Keywords: social connectedness; African Older Adult; information technology; culture; longitudinal qualitative research; modified Delphi method

Dedication

I dedicate this piece to the *Sweet* and *Gentle* Holy Spirit, who has always been my *allos paracletos*.

And to the memory of my beloved **Father**, Matthew Ajadi Osuolale Adedeji, *Ph.D.* I know you are happy about this milestone, which is proof of your fatherly love, support, tenacity, and vision.

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Peace!

Table of Contents

Declaration of Committee	ii
Abstract	iii
Dedication	iv
Acknowledgements	v
Table of Contents	vii
List of Tables	ix
List of Figures	x
Chapter 1. Introduction	1
1.1. Background and Rationale	1
1.2. Purpose and Research Questions	4
Chapter 2. Theoretical Perspectives	6
Conceptual Framework	6
2.1 Integrative Model of Place Attachment in Later Life	6
2.2. Bronfenbrenner's Socioecological Model (SEM)	8
2.3. The Synthesis of the social connectedness dynamics framework for AOIs in Canada	9
2.4. Limitations	10
Chapter 3. Literature Review	12
3.1. Migration of Africans into Canada	12
3.2. Understanding Place Attachment, identity and aging	13
3.3. Social disconnectedness processes among migrants	16
3.3.1. Social disconnectedness and loneliness	16
3.3.2. Socio-economic Environment and social disconnectedness	17
3.3.3. Community and social connectedness	17
3.4. Technology use dynamics in Canada for improving social connectedness	18
3.4.1. Technologies that promote social connectedness	18
3.4.2. Challenges of social connectedness technologies	20
3.5. Challenges of Information Technology use among AOAs in Africa	21
3.6. Practice and Policy Implications	22
Chapter 4. Methodology	24
4.1. Study Design	24
4.1.1. Ethics Approval and Data Management Procedures	24
4.2. Data Collection	27
4.3. Research Setting	28
4.4. Sampling and Recruitment	28
4.5. Qualitative data analysis	30
4.6. Discussion of Relevance for Grant Proposal	31

Chapter 5. Social Sciences Health Research Council Grant Proposal – Insight Grant	33
5.1. Multi/Interdisciplinary Committee Justification.....	33
5.2. Summary of Proposal	34
5.3. Objectives.....	35
5.4. Context.....	36
5.5. Theoretical framework	37
5.6. Methodology.....	38
5.6.1. Data Collection.....	39
5.6.2. Data Analysis	43
5.7. Knowledge mobilization Plan	43
5.8. Academic outputs	44
5.8.1. Community outputs	44
5.8.2. Expected Outcomes	45
5.8.3. Expected Outcomes Summary.....	45
5.9. Research Team, Previous Output and Student Training.....	46
5.9.1. Research team.....	46
5.9.2. Previous Output	47
5.10. Student Training	47
5.11. Budget Justification	49
References.....	52
Appendix A. Informed Consent Form	59
Appendix B. In-depth Interview (IDI) Guide (FIRST TIME POINT)	61
Appendix C. In-depth Interview (IDI) Guide (SECOND TIME POINT).....	64
Appendix D. In-depth Interview (IDI) Guide (SECONDARY STAKEHOLDERS)	67

List of Tables

Table 4.1.	Sampling and Recruitment Analysis	30
Table 5.1.	AOIs' Sampling and Recruitment Analysis	39
Table 5.2.	Funds Requested from SSHRC	48

List of Figures

Figure 2.1.	Conceptual framework for the dynamics of social connectedness of AOs in a digital age.....	11
Figure 5.1.	Project Timeline	42

Chapter 1.

Introduction

1.1. Background and Rationale

As immigration increases the diversity of Canada's population (Tuey & Bastien, 2023), there are social implications, like social connectedness for all immigrant groups. African Older Immigrants (AOIs) are a rapidly growing population in Canada, made up of black immigrants aged 55 and older who are visiting family or have taken up family reunification as residents in Canada (Employment and Social Development Canada, 2022). The label 'visible minority' oversimplifies the diversity within this group, and research indicates distinct patterns of isolation and loneliness among older adults (OAs) based on their ethnic backgrounds (Salway et al., 2020; Victor et al., 2012). Specifically, AOIs experience lower social connection and support (Taylor & Nguyen, 2020). In Canada, like other racial groups, this evolving demographic process will lead to adverse social effects like poor social connectedness, leading to social isolation and loneliness (SI/L) among AOIs (Employment and Social Development Canada, 2022; Su et al., 2022; Koehn et al., 2022).

SI/L are distinct but interrelated social and psychological constructs embedded in social connectedness (Balki et al., 2022; Czaja et al., 2021; Wister & Kadowaki, 2021) and for this study, social connectedness is the focus. Social disconnectedness occurs due to the scarcity of personal relationships, community connections, and societal engagement (Waycott, Vetere & Ozanne, 2019). These are associated with bonding, companionship, and herd behavior as a basis for survival and reproduction (Cacioppo & Hawkley, 2009). SI refers to reductions in the quantity and quality of social interaction and network of support. In contrast, loneliness is a mental state that occurs due to the lack of quality social connections necessary to meet the social needs of a person (Wister & Kadowaki, 2021). So, the paradox of migration for OAs is that they feel a sense of disconnection when their children migrate, and these adults are also at risk of social isolation and loneliness when they travel to spend time visiting or living with their children. AOIs experience this because, in Africa, OAs rely heavily on kinship systems (Furstenberg, 2019; Adedeji et al., 2022). Substantively, social connectedness among AOIs is shaped by their complex interactions

with their children, extended family, social networks, and the environment – social and physical. Consequently, the impact of migration on the experience of social disconnection, social isolation, and loneliness has been documented (Employment and Social Development Canada, 2022; Stick et al., 2021; Lee et al., 2020). For AOIs, social connectedness is defined by the environmental process – including their relationships, social networks, and built environment.

Evidence from a scoping review of African Older Adults' (AOAs) COVID-19 experiences affirms that despite the social-cultural heterogeneity of Africa, there are commonalities in the interpretation and understanding of social connectedness. AOAs' kinship and communal systems are vital for maintaining social connectedness. Constant interaction with first and second-degree relatives, including fictive kin, bound by a sense of community, are the common denominators for AOAs' social connectedness across African societies (Adedeji, Wister, & Pickering, 2023).

Social disconnectedness occurs due to community-level factors like widowhood, poor health, less time in Canada, and lower neighborhood-level ethnic diversity and income (Lu et al., 2023). Additionally, studies have shown that immigrant OAs experience significant disconnection from social services and support due to a lack of language proficiency and an established community of racialized OAs (Employment and Social Development Canada, 2022). For example, immigrant OA Chinese (Su et al., 2022) and other racialized groups (Koehn et al., 2022) experience disproportionate social disconnectedness in Canada. And with the expansion of the immigrant community of young Africans, the same experience is anticipated for their AOI parents. When African older-immigrants (AOIs) migrate as visitors or permanent residents, anecdotal evidence shows they are exposed to significant social disconnectedness because of the disconnection from their culture and the physical and social environment they have lived for most of their lives.

Technology can facilitate social connectedness to OAs and reduce SI/L because of the potential to connect OAs with their social networks and physical environment (McCabe et al., 2021). In Canada, technology use among OAs increased during the pandemic and has been positively correlated with a reduction in SI/L (Sixsmith et al., 2022). Similarly, the role of technology in reducing SI/L among African OAs before and during the pandemic has been documented (Adedeji et al., 2023; Ojembe et al., 2022; and

Ojembe & Kalu, 2019). There are three major technology groups to reduce SI/L among OAs – computer and tablet-based competence training, health-oriented technical interventions, and video games and animatronic pets interventions (Wister, O’Dea, Fyffe & Cosco, 2021). The best result of social connectedness occurred through the use of Information and communication technology (ICT) (internet-based networks, mobile phones, computers, tablets, and any software requiring an internet connection), videoconferencing, and computer training (Balki et al., 2022). Consequently, technology uptake to reduce SI/L among OAs is negatively affected by accessibility, technology literacy, and complexity (Wister, O’Dea, Fyffe & Cosco, 2021). In addition to these general challenges, AOIs contend with context-specific challenges like the lack of old-age-friendly media programming (Ojembe & Kalu, 2019), potentially reflecting language barriers. Implicitly AOIs’ cultural (place) attachment and life course accentuate important considerations for technology adoption as they navigate their current environment (Nguyen et al., 2022; Koehn et al., 2022).

The interest in exploring the social connectedness of AOIs in a digital age is drawn from the fact that limited research has been done in this population. There is no research on using technology to address SI/L among AOAs in Canada. Specifically, technology-based social connectedness among AOIs is a new area of research that requires exploration (Ojembe et al., 2022) also because the pattern of immigration to Canada is a new experience. Consequently, because AOIs to Canada belong to a highly cultural group with linked lives drawn from kinship networks, using technology for social connectedness is not a culturally grounded approach to social life. So, it is research worthy to know how AOIs social connectedness through technology is socially constructed. The knowledge of the social construction of social connectedness in the digital age among AOIs has implications for technology design and policy making. So, the current engagement with AOIs will provide preliminary data for an ethical design of social connectedness technologies with AOIs in mind. Also, even when Canada’s government recognizes that SI/L is an important public health problem, this research will guide the technology development policies to address race-specific approaches to enhance the integration of AOIs.

1.2. Purpose and Research Questions

This capstone project is a grant funding proposal to the Social Sciences and Humanities Research Council's (SSHRC) Insight Grants Award. Insight Grants provide funding to promote research excellence in the social sciences and humanities. This support is accessible to both emerging and established scholars for two to five years of research projects. It empowers scholars to tackle intricate issues concerning individuals and societies, contributing to the deepening of our collective understanding. Chapter 1 introduces the focus of the research and addresses the main variables within the project. Chapter 2 discusses the theoretical perspectives that guide the research. In Chapter 3, the knowledge of the existing literature is demonstrated by describing the migration pattern of Africans, place attachment, patterns of technology use, limitations to technology use, and the opportunities for using technology to promote social connectedness. Chapter 4 provides a detailed presentation of the methods, procedures, and data analysis process. In Chapter 5, the SSHRC Insight Grant items are presented to align with the expectations for the Insight Grant application process.

This proposal is in response to the existing gaps in knowledge about AOIs' navigation of social connectedness in Canada as the population of AOIs keeps growing. There needs to be an established framework within Canada to support this emerging population group. Hence, we will develop a social connectedness framework to settle AOIs in Canada. So, this proposal is to undertake longitudinal qualitative research to explore the social connectedness experiences of AOIs in a digital age.

Specific aims will focus on –

(1) Exploring AOIs' use of technology for social connectedness.

The sub-objectives include:

(a) Identifying the **patterns of technology use** in supporting AOIs' social connectedness

(b) Highlighting AOIs' **technology preferences** for maintaining social connections, and (c) Describing the **challenges** associated with AOIs' use of technology for social connectedness

(2) Exploring AOs' immediate and long-term **opportunities** for using technology to achieve social connectedness.

(3) Designing an **AOs' social connectedness framework** to promote social connectedness.

(4) **Disseminating** the AOs' social connectedness framework among collaborating organizations across Canada.

Chapter 2.

Theoretical Perspectives

Conceptual Framework

This Chapter of the capstone project presents the theoretical foundations of the research. The research draws on a synthesis of the Integrative Model of Place Attachment in Later Life (Rubinstein & Parmelee, 1992) and Urie Bronfenbrenner's Socioecological Model (1979). These synthesized perspectives led to the development of the AOIs social connectedness dynamics framework. This framework argues that AOIs' current technological environment and life course experiences influences their social connectedness needs and adaptive strategies.

2.1 Integrative Model of Place Attachment in Later Life

With its embedded life course perspective, the Integrative Model of Place Attachment in Later Life (IMPALL) (Rubinstein & Parmelee, 1992) is relevant for explaining and understanding the rationale and process of AOIs maintenance of social connectedness when they travel or migrate. The research and theory of changing environment among older adults is not prominent in the literature, so inconsistent findings exist (Cunningham & Michael, 2004). Older adults give attention (monitor) and meaning to environmental cues. Essentially, residential moves and migration involve difficult choices that impact the self-identity of older adults. This exudes the need to understand the dynamics of self-monitoring, self-awareness, choice awareness, and triggers for changing their environment (Lawton and Nahemow, 1973).

The Integrative Model of Place Attachment in Later Life (IMPALL) posits that place attachment involves three key elements (geographic behavior, identity, and interdependence) influenced by two dimensions: collective (involving cultural meanings like social norms and mores) and individual (involving personal attitudes, beliefs, experiences, and meanings). Geographic behavior refers to how individuals' physical environment makes special emotional meanings to them or not, depending on the outcomes of their interaction with other people or their reflections. Afterward, identity

emerges based on the individual's image of themselves due to their experiences through the life course. The life course itself is cultural. So as people interact with a collective or think about themselves, they reflect on the cultural meanings they have made for themselves and others. Through the lens of interdependence, there is a reflection on how the individual is integrated within the social life space. At the collective and individual level, interdependence is context-specific and influences how individuals interact with the norms, values and conventions as well as their environment. The IMPALL, on the one hand, emphasizes the dialectic relationship between the community and the individual. On the second hand, is the value of personal identity in relation to attachment to place in later life. Personal identity is a product of the normative aspects of the life course (which in itself is cultural). So, the interaction between the community and the individual is mediated by personal identity as the 'insider perspective' to things, places and people.

AOIs' Life course experiences and roles shape the relationship between space and place in Canada, and an individual's geographic behavior is tied to their life course and role within a space. In effect, AOIs will define their stay in Canada as space or place based on social connectedness with the host family and their community in Africa. Interdependence, reflecting societal structures through roles and relationships, influences place attachment through shared values and beliefs. The concept of interdependence varies in the collective and personal contexts. The dynamic interaction between AOIs' community and the individual influences their personal identity, which forms the basis of place attachment. AOIs' personal identity acts as a mediator between geography, social interdependence, and geographic behavior. These interconnected elements help us understand specific preferences in place attachment, including how people define and identify their homes.

This model has been appraised on two grounds: its methodology and cultural value constitute a strength and a weakness because it validates qualitative research's exploratory and pioneering capabilities. The qualitative approach has enabled the model to fully explore the life course – subjective experiences of OAs. However, due to its use of case studies, the basis of the critique has been its inability to draw generalizations consistent with the erroneous shortcomings of qualitative research (Leung, 2015). Consequently, using case studies makes it challenging to explain the developmental process and, by implication, policy development (Morgan, 2010). Additionally, there has

been a debate regarding the cultural specificity of the model because it does not account for cultural variations (Hidalgo & Hernández, 2001).

2.2. Bronfenbrenner's Socioecological Model (SEM)

The SEM has a five-system model – the microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979; Bronfenbrenner, 2005; Eriksson, Ghazinour, and Hammarstrom, 2018). The SEM is a health promotion framework for assessing how the complex interactions within an individual's environment (technological) influences their health care decisions. The SEM is a great fit for this research because of its emphasis on the role of the individual-technological environmental factors for a health and wellness decision like social connectedness. The microsystem focuses on the individual factors like knowledge, attitudes, beliefs, and behaviours. The mesosystem examines the interpersonal attributes like family, peers, and medical environment. The exosystem considers the role of institutions through regulations, services, and programs. All three (micro-, meso-, and exo- systems) emphasize the community-level interactions. At the macro level, the community is the focus. Here, the value/belief system through social networks, norms and standards potentially influences health behaviour. Lastly, the influence of the policy structure and the time dimensions policies and events in the life of an individual is the focus of the chronosystem (SEM). The historical and cultural processes within an individual's environment influence their health behaviour.

These systems in relation to the technology environment in Canada influence AOIs technology use. They emphasize the role of socialization, community, value systems, and policy structure for technology use. This is the case because the model provides a holistic perspective on human development (health behaviour) and its relationship with the environment (other systems). Also, the SEM emphasized reciprocal development embedded in human-environment interaction, mainly because the interaction among the various systems influences human development and vice versa. Bronfenbrenner recognized the nested nature of the environment and how a change in one environment predicts changes in others. Furthermore, the model identified the biological contexts of the individual and how these influence the outcomes of their interaction with the system.

The central idea of the SEM is how individuals' health behaviour like technology use, interacts with policies, values, community, and socialization systems and vice-versa. In the study we assume that the technology environment is at the exosystem level (Navarro & Tudge, 2023), and it has reciprocal interaction with other environments. Also, it is an established fact, that AOs are coming from poor digital resource settings. And they require substantial technological awareness, knowledge, skill, and technology infrastructure management capacities, to interact effectively with the new technological environment in Canada. So, the study will align with the central idea of the SEM to identify pathways through which AOs rapidly evolve with their social realities and technological opportunities in the new environment. The social realities here refer to the poor digital settings in Africa, low knowledge of technology and the need for social connectedness. Therefore, the study will focus on how AOs are leveraging their new environment in their technology use for social connectedness. Findings from this study will be useful for identifying the social connectedness challenges AOs encounter in Canada.

In critiquing the SEM, although the model provides an understanding of the reciprocal human-environment interaction, it gives less attention to individual agency. The environmental systems are also oversimplified, and this makes it difficult to determine the level of influence each environment has on the individual.

2.3. The Synthesis of the social connectedness dynamics framework for AOs in Canada

The conceptual framework is important because both models provide this research with the concepts that connect the sundry considerations and actual need for social connectedness for AOs in Canada. Therefore, the hypothesis, is that AOs' current technological environment and life course experiences influences their social connectedness needs and adaptive strategies in Canada. And these are modified by a sense of identity, interaction with their physical and technological environment, and interdependence, through a collective and individual lens of their social life space. So, in the SEM the frameworks the focus is on the interactions between AOs and the systems and in the IMPALL, interest is AOs self identity, sense of place and space, and interdependence.

The migration environment is a predictor of the social connectedness of AOlS. Due to the influence of the life course, AOlS (in their collective or individual relationships) are subject to the interactions within their physical environment, self identity, and interdependence. Because all these factors define the place attachment in later life, they help older adults determine whether they are sufficiently socially connected. The understanding of how older adults think about their experience of social connectedness will determine the rate at which they use the available technological environment. The rate at which the AOlS utilize the technology environment for social connectedness will influence their experience of social connectedness.

2.4. Limitations

A few things that this model did not consider are the complexities associated with acknowledging and defining the extent of social connectedness to warrant a need to improve it. Another area that the model did not address is the probability and decision-making matrix for choosing a channel of technology enabled social connectedness. It is also important to understand the preferences and considerations that affect AOlS adoption and use of technology to address social connectedness. An area of interest in this model may also be the way in which previous knowledge of technology can predict the disposition to technology as continuity or fresh start. Continuity here refers to the desire for AOlS to sustain their engagement of technology from what it used to be before they migrated. A fresh-start approach will be for AOlS who have not been significantly using technology in the past. As a result of their migrations, they are showing willingness to learn and start to use technology to improve social connectedness.

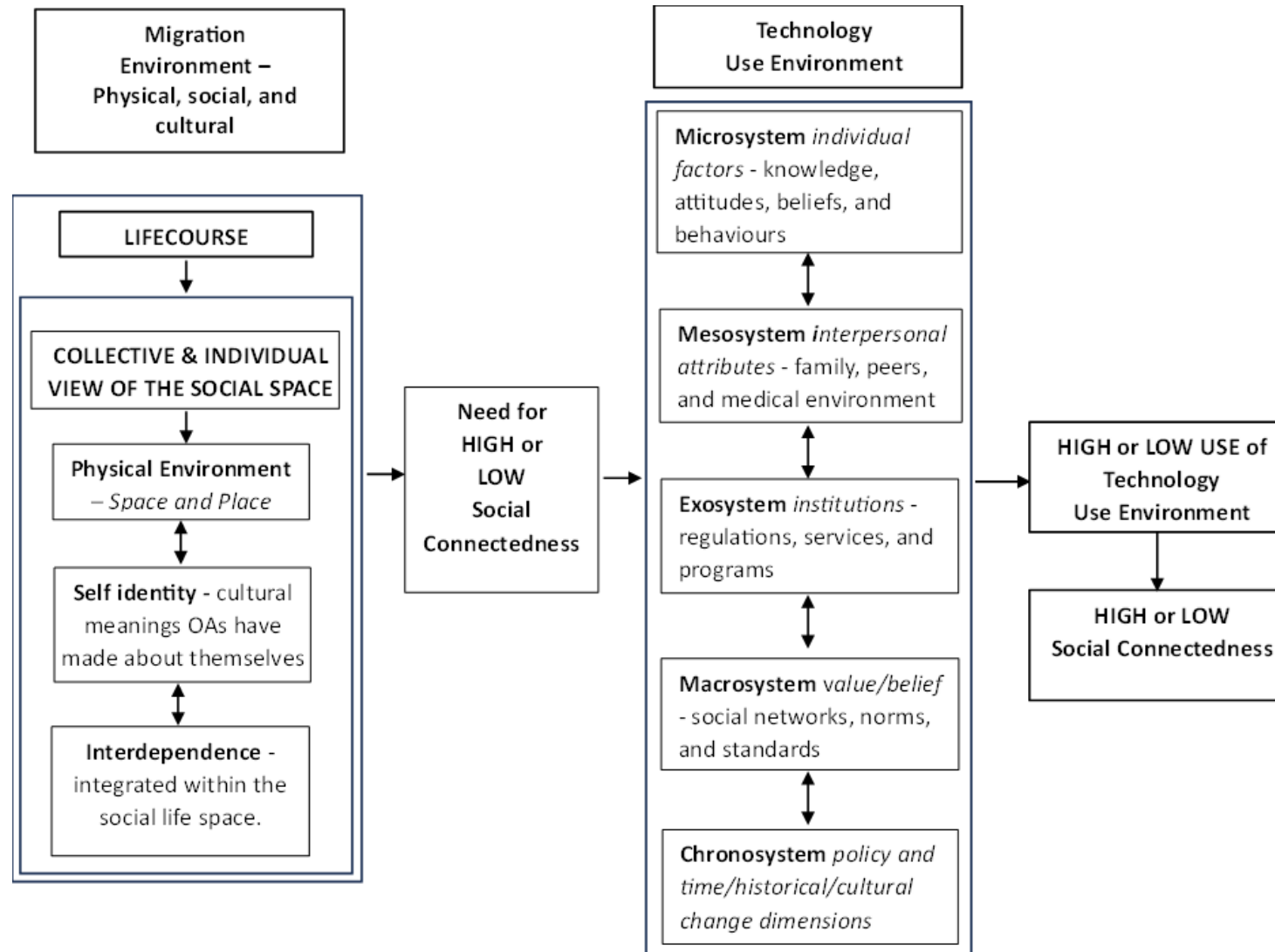


Figure 2.1. Conceptual framework for the dynamics of social connectedness of AOs in a digital age

Chapter 3.

Literature Review

The purpose of this Chapter on literature review is to provide an overview of what is currently known about the social connectedness of AOs in a digital environment like Canada. In this chapter we examine the migration of Africans into Canada, and the Place Attachment, identity and aging processes. Furthermore, the chapter delves into the discourse of social disconnectedness processes among migrants and the technology use dynamics in Canada for improving social connectedness. The chapter closes by identifying the challenges of Information Technology use among AOs in Africa.

3.1. Migration of Africans into Canada

Until the 1960s, only a handful of Africans (0.3%) immigrated to Canada (Naidoo, 2020). Subsequently, various immigration policies and refugee laws, including the 1966 White Paper on Immigration, 1976 Immigration Act, 1976 Green Paper on Immigration, laid the foundation for numerous other legislations promoting inclusivity in Canada's immigration process. As a result of these population policies, the 2016 Census Data reported significant demographic change regarding Canada's Black population. In the last decade, the black population has grown to at least 1.5 million, constituting 4.3% of Canada's population (Statistics Canada, 2023). Another interesting population dynamic within Canada's Black community is the emergence of a growing population of Africans, which now constitutes a large proportion of the Black ethnic grouping. Africans are a unique racial group within the black community because they share a common origin. Specifically, Africans include indigenous peoples of West, East, and Southern Africa, the Hamito-Semites of Ethiopia, and people of other ethnocultural origins who view Africa as home by several generations of settlement on the African continent (Naidoo, 2020).

As of 2024, 55% of Canada's Black population is of African descent, consisting of Nigeria (12%), Ethiopia (4.7%), and the Democratic Republic of Congo (4.1%) (Statistics Canada, 2024). This emergent population structure has displaced a long-established pattern of the Black community's population composition. Historically, most Black immigrants were from the Caribbean. However, in Canada, Africa is currently the second largest source

continent for recent immigrants in the Black community (Statistics Canada, 2022). A dynamic aspect of the African population in Canada since 2016 is that most (96%) African immigrants are young people below age 65, and 64% of this group are between ages 25 – 54 years (Statistics Canada, 2022). This population outcome is driven by the high number of immigrants (190,000) and non-permanent residents (110,000) from 2016 to 2024 (Statistics Canada, 2022).

Immigration among young adults creates social and emotional gaps for the immigrants and the social connections they left behind, of which parents are significantly affected. Young adult immigrants from non-western and communal cultures grow up in closely knitted familial and community settings. Especially among Africans, kinship systems constitute the core of identity formation (Furstenberg, 2019; Adedeji et al., 2022). Hence, immigration transition significantly strains the sense of identity, obligation, social connection, and family orientation (Mostoway, 2020) of immigrants. All these and more constitute the desire and potential pull among young immigrants to have their parents visit them or spend a significantly long time with the family system. Similarly, parents of immigrant young adults bear a disproportionate burden of self-reported physical and mental health challenges. Left-behind parents report high levels of depression symptoms and loneliness. They also experience lower life satisfaction, lower cognitive ability, and poorer psychological health (Thapa et al., 2018). So, both social and emotional needs constitute immigration push and pull for older African adults. Among other reasons why older adults migrate, a relevant push factor is a search for familial bonds and personal connections with the immigrant family member. At the same time, the pull is the promise of social support, social connectedness, and family life. So, Canada should anticipate a high influx of older adults because a significant reason for migration among older adults is the desire to reunite with their families, especially the young adults who had left their parents.

3.2. Understanding Place Attachment, identity and aging

The increasing mobility of older adults enunciates the challenges associated with attachment to place. Older adults are usually firmly attached to their proximate physical environment, and they develop attachments to specific places (Rowles, 1983). There is a sense of place and emotional attachment to certain places, and this emotional attachment

has intuitive validity. Older adults tend to have lower mobility and lifelong residence in a single setting. Growing old is most often considered to be connected to attachment to familiar places - especially their homes. Rowles' analysis of the Colton study provided background to the idea that Insideness is at the core of emotional attachment to places. Hence, older adults' experiences in Colton differentiated it from other places and instilled a feeling of attachment. So, there are three established types of insideness—physical, social, and psychological—and an autobiographical affinity with the Colton environment.

Physical Insideness/Physical Intimacy: This comes from body awareness of the physical configuration of the environment, such as the rhythm and routine of daily life. Familiarity with the environment leads to progressive sensory decrement. Older adults will operate within an environment that outsiders will ordinarily consider as BEYOND their level of physiological competence.

Social insideness: Integration with the social fabric of the community - social order - social credit (contributions to family and community throughout life). Social credit is accumulated (Accumulated Social Credit) and is like a reservoir to draw from when people grow old and vulnerable. Social credit is also the basis for accessing assistance from other persons in the community. The assistance provided is also a form of social credit to the provider. Membership of the Society of the Old is a membership in the helping network for people of the age group and advancing/pursuing the welfare of their members. The practical and social support emanates from this social network, and the social integration creates a sense of belongingness/self-worth. The idea of identity and belongingness have been advanced by Wahl and colleagues, 2012 and Chaudhury and Oswald, 2019.

So social insideness translates to the attachment to place through a sense of reassurance about their identity, their worth in the community, and recognition. Relationships have been built over a lifetime of residence in shared spaces that now assume the status of places. This lends credence to Wahl et al. (2012) discussion of the emotional binds to specific locations, such that people form affective, cognitive, behavioral, and social bonds to the environment. In Rowles, space means 'an aura of intimate social immersion by their mere existence.' Rowles noted that psychological insideness/Autobiographical insideness embraces both present and remembered places, creating a Mosaic of 'incident places.'

The *autobiographical insideness* is a pervasive theme and is the context of many other things - diversity of manifestations. The three dimensions of insideness are not mutually

exclusive. They are complementary aspects of the frame used to describe place attachment. The relationship between insideness and attachment to place is transactional. In the case of Colton, it is residential inertia, and it may have occurred rather than insecurity/fear of venturing outside/a sense of belonging. Although social and physical insideness are essential factors for place attachment, autobiographical processes provide a more robust connection or revelation about the interaction between place attachment and personal identity.

Rubinstein and Parmelee (1992) continued the idea of place attachment by explaining that attachment to place is a set of feelings about a geographic location that emotionally binds a person to given places. Generally, life course processes account for place attachment among older adults. This includes early life experiences. Phenomenology of a person's experience of physical space as a real and personally meaningful place. There are three dimensions to place attachment issues. First, space is a defined territory, but a place has personal significance through time spent with or in the space - social interaction promotes the attachment of meaning to defined spaces. The environment is an independent language of experience and significant periods of life. Second, defining, occupying, and possessing memories of a place does not signify attachment. Place attachment is an affectual state that links significant life events, personal development events, or identity processes with a particular environment. Individuals' unique experiences in the past and present influence the development of affective bonds, influencing how they interact with and interpret their physical environment. Place attachment is not just a function of the place; it connects with the personality, needs, life course concerns, and one's interpretations of one's life. The importance and valence of life experiences determine whether attachment will be weak/strong, positive/negative, narrow/wide/diffuse. Negative Place attachment occurs when painful memories are attached to a given place, like a spouse's death or another negative event. Third, the idea of place is synonymous with lifespan development. Place attachment is not a state but a process because it continues throughout life. So, one can form multiple place attachments. Place attachment is a socially constructed life course experience because it is generally/culturally defined. It is a personally experienced life course (one's unique experiences). It is a perceived relation of life course to place, which is highly fluid because the nature and strength of attachment to the environment keep changing throughout personal experiences and developmental processes.

3.3. Social disconnectedness processes among migrants

3.3.1. Social disconnectedness and loneliness

Generally, immigration is associated with significant social, psychological, and emotional distress. A primary manifestation of the distress associated with migration among OAs is loneliness, caused by a feeling of social disconnectedness. Social disconnectedness is marked by complex exchanges and multiple realities within the environment (Adedeji, Wister & Pickering, 2024). Social capital is the core of social connectedness, which determines the quality rather than quantity of social interaction (Nevez, Franz, Judges, Beermann & Baecker, 2019). Social capital, regards the family, friends, and associates as assets to be relied upon in a crisis, enjoyed and leveraged for material gain (Neves, 2013), is embedded with the OA's physical, cultural, policy, and economic elements. So, the three main dimensions of social connectedness for OAs are personal relationships, community connections, and societal engagement (Waycott, Vetere & Ozanne, 2019). Social disconnectedness occurs due to a 'scarcity' in any of the three domains. The complexities of scarcity manifest in the structure, size, and quality of interactions within the OAs social environment. Scarcity is characterized by having a small network, less frequent interaction with people, and a lack of participation in social interactions and exchanges (Santini, Jose, Cornwall, Koyanagi, Nielsen et al., 2020).

Social disconnectedness precedes loneliness because the former creates a mental framing of events, produces emotional outcomes, and manifests as behavioral problems. Social connectedness touches on neural, hormonal, and genetic mechanisms as a profoundly ingrained human characteristic. These are associated with bonding, companionship, and herd behavior as a basis for survival and reproduction (Cacioppo & Hawkley, 2009). Loneliness is the affective and mental health manifestation of social disconnectedness. Loneliness occurs among a significant (30.8%) proportion of OAs due to the social disconnectedness experienced from widowhood, poor health, less time in Canada, and lower neighborhood-level ethnic diversity and income (Lu et al., 2023).

3.3.2. Socio-economic Environment and social disconnectedness

Many social and emotional transactions occur in the socio-economic environment when older adults migrate to be with their children and social networks. These processes are outcomes of the environmental and personal factors surrounding the African older adult. African Older Immigrants contend with personal factors like language, gender, ageism, education, training, and previous work experience – Canadian experience. Environmental limiting factors like immigration rules, institutional processes, and social networks exist. A taken-for-granted environmental factor is that young immigrants spend limited time at home and must return to everyday life as they strive to balance work and family life – conscious of their parents' presence at home. Metaphorically, Western countries' social and economic realities constrain the practicalities of the non-Western concept of the family (Andruske & Connor, 2020). Hence, maintaining social connections within the family system is stressful in a country like Canada. In a family-centric culture, older parents from Africa will experience loneliness due to social disconnectedness when they stay home all day to perform caregiving duties (Nasir, Hand & Huot, 2022). They stay at home so that their immigrant young adults can provide the required social, financial, mental, and cultural needs for themselves and their parents. Sometimes, immigrant OAs struggle with employment due to structural barriers in the conditions of their immigration (Johnson, Bacsu, McIntosh, Jeffrey & Novik, 2021). For example, new refugee OAs extensively rely on government support and potentially have limited workplace options. Developing inclusive systems to provide an enabling socio-economic environment for immigrant OAs is essential.

3.3.3. Community and social connectedness

Migrant OAs confront the challenge of limited community and civic participation, influenced by numerous social and cultural factors. The living arrangement of immigrant OAs is mostly in multigenerational households (Andruske & Connor, 2020). OAs who come to Canada under the reunification policy can stay for at least 10 years (McDonald, 2011). Implicitly, OAs are restricted to the families they stay with and this constrains their community. However, recent data shows that in the post-pandemic era (2023 and 2024), the size of the African community grew by 23% (Statistics Canada, 2023b). This has not translated to tangible community orientation because the African community in Canada is scarcely able to form an ethnic enclave (Nasir, Hand & Huot, 2022) or ethnic community

(Guruge et al., 2019) that would help AOIs with settling and integration. And the opportunities for civic participation and volunteering are not available. Because only a few government-funded community programs and services provide support for social connectedness to immigrant OAs. For example, Canada has only 40 programs and services to promote the integration of immigrant and refugee OAs (Johnson, Bacsu, McIntosh, Jeffrey & Novik, 2021). The current number of programs and initiatives is insufficient to provide formal support to AOIs (Guruge, Sidani, Wang, Sethi, Spitzer et al., 2019). There is also very little collaboration between the organizations implementing these programs and organizations supporting immigrants and refugee seniors. An important way to effectively support OAs from culture-oriented regions, like Africa, is to develop and integrate culturally tailored activities into technologies to promote interdependence among family, friends, and community interdependence (Nasir, Hand & Huot, 2022). This is a useful direction in a post-pandemic era.

3.4. Technology use dynamics in Canada for improving social connectedness

The understanding of OAs technology adoption for social connectedness as a growing knowledge area recently experienced significant shifts in the last decade. The COVID-19 pandemic introduced complexity to understanding how OAs deployed technology and negotiated social connectedness. Now, the discourse considers the pre- and post-pandemic patterns and comparatively understands the changes, primarily because the same generation of OAs is affected. Specifically, more information is needed about immigrant OAs' access to and use of technology to promote social connectedness. So, we consider the range of technologies that promote social connectedness among OAs in Canada.

3.4.1. Technologies that promote social connectedness

OAs actively require technologies to promote their social connectedness because they bridge the gaps between the lack of face-to-face social interaction and human contact (Wister, O'Dea, Fyffe & Cosco, 2021). Information technology tools are designed for assessment and intervention (Fingerman et al., 2020). However, this study considers the intervention value of technologies for addressing social disconnectedness. So, OAs'

primarily have two main rationales for using technologies (as an intervention) for social connectedness. First, they complement communication with existing social networks or ties and second, they compensate for the lack of social ties (Fingerman, Birditt, and Umberson (2020). These rationales reflect that OAs lag behind the younger generation in using many technologies. As such, the use pattern interests researchers in understanding how to promote technologies for social connectedness among OAs. Studies have shown that various personal characteristics like age, marital status, gender, highest level of education, previous occupation, living arrangement, and family size influence technology use. So, there are at least three major types of technology – health, business, and social (Fingerman et al., 2020). Of these significant types, social technology directly affects the promotion of social connectedness. The social technology platform has seven possible sub-divisions, including social media, video messaging, text messaging, dating, video sharing, digital assistants, and transactions. Social technology also includes categorizations like – social media ‘virtual communities’; video conferencing software to facilitate ‘friendly visits’, videoconferencing and Internet-based (supported) video communication; conversational agents with artificial intelligence (AI) functions; gameplay – exergames, online gameplay, augmented reality (AR) or virtual reality (VR) systems (Gunnes, Løe & Kalseth, 2024).

The three-way approach to understanding social connectedness – personal relationships, community connections, and societal engagement demands specific technological designs (Waycott, Vetere & Ozanne, 2019). Social connectedness is enhanced through interactive online programs incorporating health information, support groups, chatrooms, and discussion boards. Other ways for ensuring social connectedness include social media “virtual communities”, virtual reality, social robots/conversational agents, and video-mediated ‘friendly visits’ (Morris, Adair, Ozanne, Kurowski, Miller et al., 2014; Fingerman et al., 2020). These information technology-based interventions help promote social connectedness across the three facets of social connection. First, to promote personal relationships, technological interventions should focus on creating a sense of presence and connection through the existing social media platforms that pool their social connections. Second, community connections can be facilitated through online communities. This should be made through social technologies, including popular platforms like Facebook, Instagram, and Snapchat. These can serve the purpose of geographically dispersed groups like AOIs. There may also be custom apps and

interactive displays within the community. These must be specifically designed to serve the purposes of a given community. These provide community-specific information like local information, reels, or video footage about community activities. Societal engagement can be fostered through social media. This is ensured through social media content that can provide OAs with content specific to their interests. Third, the opportunity for online gaming, dating, and friendships has the potential to promote societal engagements with OAs beyond their homes and immediate community.

3.4.2. Challenges of social connectedness technologies

Challenges are associated with the social connectedness intervention provided through social media “virtual communities”, virtual reality, social robots/conversational agents, and video-mediated ‘friendly visits’. There are instances where feelings of social exclusion may arise while using the social functions on portable technologies (Fingerman, Birditt, and Umberson, 2020). Also, social exclusion happens to older adults who come to interactive platforms and do not have their enclaves of social partners. Social partners are people with whom they have similar histories, education, and cultural backgrounds (McPherson, Smith-Lovin & Cook, 2001). So older adults who know that their social partners are not on the online platforms refrain from using them, and as a form of adaptation, they come on there to search for their social partners to reconnect with them. In other ways, passive engagement on these social media virtual communities (social network sites) also leads to the feeling of loneliness (Gunnes, Løe & Kalseth, 2024). The use of conversational agents with artificial intelligence (AI) functions, and social robots, has been reported to cause sadness when removed from OAs (Gasteiger, Loveys, Law, & Broadbent, 2021).

It has been observed that although community organizations have evolved by introducing outreach programs that are focused on ensuring social connectedness, visible minority OAs are mostly excluded (Johnson, Bacsu, McIntosh, Jeffrey & Novik, 2021). AI-based complex technologies, operated through highly technical interfaces, are mostly inaccessible to the average community-dwelling OAs because they require a higher level of competence and cost (Wister, O’Dea, Fyffe & Cosco, 2021). Similarly, in low-resource settings, the lack of digital infrastructure, cost of devices and internet coverage, low digital skills and digital infrastructure, and engineering complexity constitute significant challenges (Adedeji, Wister & Pickering, 2023).

3.5. Challenges of Information Technology use among AOAs in Africa

We examine the challenges of information technology use in Africa because this is the context in which AOIs originated and migrated to Canada. The realities of the digital divide in Africa, specifically the 'gray' divide among AOIs, are a notable context for understanding the patterns of behavior and level of information technology for social connectedness among AOIs. The role of the African technology environment is a predictor of information technology use behavior when AOAs migrate to foreign countries. The challenge of the grey divide is multifaceted, and numerous factors account for the poor adoption of information technology in Africa. These are premised on the lack of digital infrastructure such as internet connectivity, cost of data and devices, and access to energy supply. These factors among others contribute to Africa's gray digital divide (Adedeji, Wister & Pickering, 2023). There is a need for improved access to digital infrastructure, accurate training in digital skills, and relevant social support, including peers and social capital, to enhance OAs motivation to use technology (Mubarak & Suomi, 2022). An aspect of accurate training is to ensure that the curriculum is entirely hands-on and that trainers are properly trained to disseminate training as well. Technology use among OAs has a pervasive generational and cohort undertone (Hoffman and Ross, 2022). Cellphone use is predominant among AOAs, although it is sub-optimally used, and there is digital dependency. However, AOAs primarily use their cell phones to maintain and manage relationships and are keen to learn how to use the functions by leveraging intergenerativity. In essential ways, poor digital literacy or education is a significant setback. This is coupled with the willingness to adopt or use information technology. These factors amplify the 'gray' digital divide in Africa and have significantly contributed to the lack of fixation of AOAs to the straightforward, traditional platforms like television and radio, while some minimally Facebook, Twitter, WhatsApp, video games, and video calls as means of staying connected. These approaches may not be sufficient in Canada because the social networks are far-flung, and environmental factors like time differences may exacerbate social disconnectedness.

3.6. Practice and Policy Implications

Canada does not currently have a policy to promote the social connectedness of AOIs, and this has great implications for the quality of life of older adults. The effect of a lack of policy is reflected in a weak system of support through programs and services. Therefore, while it is a fact that the population of AOIs is growing in Canada, why this population group is not receiving sufficient attention is unclear. Due to the lack of policy, in practice, Canada's 40+ organizations targeted at settling and supporting immigrants and refugees operate in a limited scope (Johnson, Bacsu, McIntosh, Jeffrey & Novik, 2021). None of these services is focused explicitly on addressing the needs of older adults, and AOIs are conspicuously left out. The implication of this is that immigrant older adults are unprotected, and AOIs are disproportionately exposed to the negative social impact of immigration. In an increasingly globalized world, using technology as a means of health promotion cannot be overstated.

The use of technology to ensure the social connectedness of AOIs is necessary even when the role of community services and support programs cannot be overemphasized. AOIs confront a significant challenge in Canada because the growing population is scattered across the country. There is no established AOI ethnic enclave, which makes the effectiveness of community services for AOIs unlikely. This is not the same for OAs of Indian, Chinese, and Iranian origin. In metropolitan areas like Vancouver, seniors' centers located around specific ethnic enclaves primarily serve those groups. For example, South Granville Seniors' Centre, Downtown Eastside Seniors' Centre and 411 Seniors Centre Society are well established Seniors' Centres that attract OAs from Spanish, Asian (Chinese) and Latino communities respectively and none serves specifically the African community. This is essentially because these racial groups have been long settled in the communities and they gradually developed support structures over the years. Therefore, technology will be leverage to connect AOAs who are dispersed across the country and as such promote the health and well-being of AOIs.

This research implicitly explores how technology can be adapted to promote community interactions for a sparsely spread group around an ample geographic space. So, in practice, this research will provide a clear understanding of how AOIs can stay connected through technology beyond traditional social media. The study potentially

considers the value of focused platforms and online communities for AOs' social connection.

Another practice-related challenge to society is that the cultural structure of the African kinship system is based on fluid intergenerational and highly physical interactions, and the use of information technology to bridge these gaps is insufficient (Ojembe et al., 2022). Therefore, as a form of renegotiated practice, this research is interested in identifying the culture-sensitive and environmentally compatible strategies to help AOs efficiently leverage technology to support their social connectedness in Canada.

Ultimately, an overarching AOI social connectedness policy and action plan is necessary because a policy to promote the social connectedness of AOs will incorporate the practice and infrastructure needs. Therefore, this study will emerge with an AOI social connectedness framework. The rationale for the projected framework is to promote the activities within the community of practice and provide valuable insight for policy framing for AOs in Canada.

Chapter 4.

Methodology

This Chapter fully describes the methods and procedures of data collection, management, analysis, and presentation. The study design, ethical approval process, data collection, sampling and recruitment process, and data analysis process have been put together in this Chapter.

4.1. Study Design

The design of this study is longitudinal qualitative research (LQR). LQR is an innovative qualitative research paradigm that captures the abstract, natural history of human behavior changes over time (Tuthill et al., 2020). This research examines the experiences of social disconnectedness and adoption of health promotion activities like technology adoption among immigrant older adults. The goal is to generate evidence to support community programs, policies, and interventions to promote social connectedness among AOs.

The LQR approach will help measure AOs' experiences, shifts, and degrees of change in social disconnectedness in a digital environment like Canada across time. In this study, qualitative data collection will be implemented through semi-structured interviews with primary and secondary stakeholders. Specifically, the semi-structured interview with primary stakeholders (AOs) will be conducted across two time-points to capture the variations in the level of social connectedness in a new digital environment. And those with secondary stakeholders (organizations and groups) will be done cross-sectionally.

4.1.1. Ethics Approval and Data Management Procedures

Ethics approval will be sought from the Simon Fraser University Research Ethics Board. All participants will be required to sign a written consent form. The consent form will describe the study's purpose and participation and detail participant confidentiality. The form will also explain the participant's ability to withdraw from the study anytime. The informed consent forms are in Appendix A.

Confidentiality of Data: Data collected through all the instruments will be confidentially handled. All forms of identification will be removed. The informed consent form will not reflect personal data. Transcripts and audio files will be locked up in a safe and destroyed after three years. Characteristics will be discarded, and pseudonyms will be adopted to publish and present the study outcomes.

Beneficence to participants: Following the principle of doing good to respondents, Gift cards will be provided to the research participants as an honorarium for their time. Participants will benefit from the knowledge and policy outcomes of the research. This constitutes the indirect benefit of the study.

Non-maleficence to participants: Participants will not be subjected to any form of force or coercion (subtle or direct). There will be no mental or physical coercion. Participants are free to disengage from the study without fear or intimidation.

Justice/Fairness: The researcher will be fair in disseminating knowledge. To ensure fairness, the researcher will make the study's findings available to the participants, account for their inputs and contributions, and ensure that their views are properly articulated in the research.

Within the consent form, participants will be given the option to permit researchers to video record interviews. Audio recordings will further be offered as an alternative option. Detailed notes will be taken during the interviews concerning the participant's body language and non-verbal cues to capture the nuances of their responses to the interview questions.

Feedback and support principles encourage key stakeholders' involvement and feedback if issues or concerns arise in the field and during the interviews. The research assistants will first notify the lead researcher of any concerns. I will then solicit feedback and other necessary involvement of my project supervisor for guidance. Additionally, research participants will be given contact information (phone number or email address) to inform the research team if any situation arises.

Data management procedures will conform to SFU's Responsible Conduct of Research (R60.01) and best practice guidelines for data collection, analysis, documentation, storage and backup, preservation, management responsibility, and data access. The DMP will also be scrutinized by the institutional SFU Research Ethics Board. Voice recordings of interviews will be transcribed for textual analysis. Only the data processed (transcriptions and field notes), suitably anonymized, if necessary, will be shared between the project researchers. Anonymized data sets, generated from all data collected in the project, together with its metadata (description, characteristics, and provenance) will be made open access following regulations.

4.2. Data Collection

Data will be collected through semi-structured interview guides and a modified Delphi method. The semi-structured interview is necessary to capture the experiences of people who have directly experienced the phenomenon of interest; that is, they have “lived experience”. The modified Delphi method is an evidence development process that uses the consensus method, including the measurement and development of the consensus.

Two interview guides will be designed to elicit data from the primary and secondary stakeholders. There will be two time dimensions to data collection. Preliminary data will be collected from the primary research participants to establish their experience of social disconnectedness and use of technology (Appendix B). The second data collection stage will be a follow-up interview with primary research participants (Appendix C) and an in-depth interview with secondary stakeholders (Appendix D). The later stage of the research is to build consensus about the AOI social connectedness framework. The modified Delphi meeting will be based on the findings from the in-depth interviews with primary and secondary stakeholders.

The semi-structured interview guides will align with the study’s objectives. They will be open-ended questions, using a discovery-oriented method to obtain detailed information about AOIs’ use of technology for social connectedness in a digital age. The interview guides will have two main parts. A general part will document the research participants’ basic socio-economic and demographic characteristics. The second part will explore the specific objectives of the research. The in-depth interview guide will consist of six sections. The first section will explore AOIs’ thoughts about using technology for social connectedness. The second section will document how AOIs living in Canada use technology to stay socially connected. The third section will capture data to describe the role of technology in supporting AOIs’ social connectedness. The fourth section will guide the identification of the challenges associated with AOIs’ use of technology for social connectedness. The fifth section will focus on providing data to highlight AOIs’ technology preferences for maintaining social connections. The sixth section will explore AOIs’ perspectives about opportunities for using technology to achieve social connectedness.

4.3. Research Setting

The research will be conducted among AOIs and secondary stakeholders in Canada. Specific interest is in the black older adult population resident in Ontario (67065), Quebec (27315), Alberta (5345), and British Columbia (2845). These provinces have the highest population of black immigrant OAs in Canada. AOIs are a subset of the black immigrant OAs group in Canada. So, the recruitment process will be on participants and groups who are of African origin and focus.

4.4. Sampling and Recruitment

A multi-prong sampling and recruitment process will be adopted to maximize the sample's diversity. We adopt a mixed purposeful sampling technique (Benoot, Hannes & Bilsen, 2016; Nyimbili & Nyimbili, 2024) consisting of snowballing and criterion strategies. This technique will reduce the likelihood that the participants are drawn from the same socio-demographic, cultural, and religious contexts. The sampling and requirement process will not be straightforward because AOIs do not have an enclave where they are most dominant in Canada.

The total sample size will be 92 research participants, consisting of 76 AOIs and 16 secondary stakeholders equally distributed across the four provinces. The sample size of AOIs was determined based on the summation of purposive criteria through theoretical categorization of basic socio-demographic characteristics. The criterion of purposive selection will include age, gender, length of stay in Canada, living arrangement (alone, within single or multiple-generation households), and membership/attendance of a community seniors' center or religious group (See Table 1). Although the actual theoretical sample is 52 AOAs, 24 more AOAs were added to provide for attrition since the group will be followed up after four months. One stakeholder will be purposively selected as a key informant from Africa-oriented advocacy groups, social groups, organizations that settle immigrants, and churches with large populations of AOAs (See Table 1).

AOAs are the primary stakeholders – AOIs, and secondary stakeholders – advocacy groups, social groups, **organizations that settle immigrants** in Canada, and churches with large populations of African Older Immigrants across three cities. AOIs will be recruited through a process of snowballing, and purposive sampling. Purposive sampling

will be done through contact groups like advocacy, social, cultural, churches, and immigrant-settling organizations across Canada.

Inclusion criteria will include whether an AOI is age of African origin, 65 years and more, has lived in Canada for at least one month, acknowledges and self-reports (to the interviewer or other household members) a feeling of social disconnectedness and related social and psychological conditions like SI/L, is not receiving treatment for a mental or neurological condition, and is willing to participate in the study. Stakeholders will be included on the basis that they have been identified as the appropriate staff member to speak with on the subject.

The 4 trained research assistants will have semi-structured interviews with AOIs. The research team will ensure confidentiality by having interviews in allocated private spaces that ensure privacy (e.g., conference rooms). The interview session will last 45 – 90 minutes, guided by a moderator/notetaker. Interviews will be voice-recorded for later transcription.

Table 4.1. Sampling and Recruitment Analysis

S/N	Theoretical Criterion	Sample size	
1.	Age		19 participants X 4 provinces
	- 65 – 74 years	1	
	- 75 - above	1	
	Gender		
	- Male	1	
	- Female	1	
	Length of Stay		
	- Less than six months	1	
	- More than six months	1	
	Living arrangement		
	- Living alone	1	
	- Single generation household	1	
	- Multiple generation households	1	
	Member/attends the community center		
	- Yes		
	- No		
Church attendance	1		
- Yes	1		
- No			
		1	
		1	
	Total	13 participants + 6 (attrition) = 19	76 participants
2.	Advocacy group	1	
	Social group	1	
	An organization that settles immigrants	1	
	Church with large AOA population	1	
	Total	4 participants	16 participants
			92 participants

4.5. Qualitative data analysis

We will adopt the Framework analysis method (Ritchie & Lewis, 2003; Gale, Heath, Cameron, Rashid, Redwood, 2013), because primary participants' data will be collected across two-time points. The analytic framework is instrumental for identifying commonalities, differences, and relationships between different parts of the data and building the explanations around themes. Data will be analyzed and interpreted through thematic schemes based on inductively developed codes, enabling the researchers to see all possible meanings (Geertz, 1973). The analytic framework will be developed through four basic steps: (1) Transcription, familiarization, and validation. The transcripts and

audio files will be reviewed. Validation will be done at this stage through researcher triangulation (George & Apter, 2004), respondent validation (Leung, 2015), (2) Coding and Analysis Preparation: After a thorough reading and re-reading of 20% of the transcripts, inductive and deductive coding structures will be created. The team will meet to compare, group, define, and categorize the codes to form a tree diagram which is the building block of the analytic framework. The transcripts and the framework are imported into Nvivo 14 to facilitate the analytic process by applying the codes. (3) Charting: The analytic framework matrices will be generated with Nvivo. Charting involves summarizing (reducing the data without losing the 'original meaning') the data by category from each transcript. (4) Data Interpretation: Analytic memos (the data's impressions, ideas, and early interpretations) are vital. The process involves identifying and analyzing the distinct characteristics and differences within the data. This may create typologies or categories where theoretical concepts are examined—either existing or new ones arising from the data. Additionally, this process includes mapping out connections between these categories to investigate relationships and potential causality.

4.6. Discussion of Relevance for Grant Proposal

Interest in the social connectedness of AOs) in a digital age arises because little research has focused on this group. No research exists on how technology can address social isolation and loneliness (SI/L) among AOs in Canada. This gap is significant, especially since technology-based social connectedness is an emerging field needing exploration, as noted by Ojembe et al., 2022. The changing immigration patterns to Canada and the strong cultural ties within AOI communities based on kinship networks suggest that using technology for social connectedness might not align with traditional social practices. However, the use of technology has redefined social connectedness in the post-pandemic era. Therefore, it is crucial to understand how AOs' social connectedness through technology is socially constructed. Understanding this can influence technology design and policy making, helping to ensure that technologies are ethically tailored to AOs' needs. Moreover, recognizing SI/L as a significant public health issue, this research could shape policies on technology development that consider race-specific strategies to improve AOs' integration. This engagement with AOs will provide preliminary data crucial for designing appropriate social connectedness frameworks in Canada.

This research precisely aligns with the SSHRC area of focus and is therefore eligible for funding by the organization. First, the research is primarily based on social science and humanities. Social connectedness is a social issue occurring within a socially recognized reference group – older adults exposed to a specific social condition – immigration and belonging to a race category - Africans. From an intersectionality viewpoint, age, race, and immigration status are critical lenses for thinking about a social problem like social disconnectedness (Wister & Kadowaki, 2021). Intersectionality recognizes that overlapping or intersecting social identities like race, age, and immigration status occur within an interconnected system of oppression, domination, or discrimination. Against the background of the interconnected realities, this research will frame a social connectedness framework to mitigate the existing exclusion system (Johnson, Bacsu, McIntosh, Jeffrey & Novik, 2021).

Chapter 5.

Social Sciences Health Research Council Grant Proposal – Insight Grant

This chapter provides the framing for the SSHRC Insight Grants application process. This section does not have certain administrative pieces of the grant application. The exempted elements include the identification, participants, research activity, curriculum vitae, description of the research team, co-applicants, collaborators, description of Previous and Ongoing Research Results

5.1. Multi/Interdisciplinary Committee Justification

I am requesting that the proposal be evaluated by the social science multi/interdisciplinary committee because of the spread of the research team and the various perspectives they bring to the research. The research's theoretical and methodological approach links the technological environment's influence with the research participants' subjective and social network contexts. Specifically, the research will combine the expertise of co-researchers and collaborators from the public health, gerontology, sociology, anthropology and demography fields. The research's theoretical orientation and synthesis of environmental and public health theories highlight the robust social and physical environment interaction in health promotion. So, the study will examine the individual, community, and policy-level interactions that influence health behavior within the high-resource technological contexts that migration to North America provides.

The methodological framing of the events in the research is unique in that the longitudinal qualitative research approach allows the team to explore the socio-psychological and environmental aspects of health seeking. We also emphasize the space and time dimensions of behavioral changes. Also, the co-creation capacity of the modified Delphi approach introduces a decision-making process for the framing of the research product. As a result of the closely-knit methodological framing of the research, the review process for this study will immensely benefit from the expertise of reviewers from a wide spectrum of fields including psychology, sociology, anthropology, public health, and public policy.

In addition, our knowledge mobilization plan is interdisciplinary because it consists of engagement with community organizations, research scientists, and African cultural heritage groups. The research products will potentially influence Canada's social services framing, and the design of programs and other interventions will be impacted. Finally, this study is the first to address the subject of social connectedness through the lenses of technology for diversity, equality, and inclusiveness. More importantly, this is a timely exploration for a growing African population in Canada's most recent history. Thus, our study will benefit from a multi/interdisciplinary assessment which will further amplify the value of the research.

5.2. Summary of Proposal

AOIs constitute a growing population of black immigrants aged 55 and above, visiting or residing in Canada for family reunification. AOAs face lower social connection and support compared to other groups. Racial groups like the Chinese, Indians, and Iranians have a long history of settlement in a city like Vancouver. So, they have established ethnic enclaves and support social services in such locations to promote their OAs' social connectedness. AOAs' lack of ethnic enclaves exacerbates AOIs social disconnectedness when they migrate to Canada. Pandemic data has shown that technology enhances social connectedness regardless of challenges like accessibility, technology literacy, and complexity. The lack of old-age-friendly media programming and language barriers are global and surmountable.

Based on these challenges, the research aims to generate preliminary data that can contribute to the ethical design of social connectedness technologies tailored specifically for AOIs. By addressing race-specific approaches to enhancing AOIs' integration and well-being, this research can inform government policies and technology development initiatives to mitigate the public health issues associated with SI/L. This research explores the social connectedness experiences of immigrant AOIs in a digital age. To actualize this research goal, we synthesized the socio-ecological and Integrative Model of Place Attachment in Later Life and adopted the longitudinal qualitative research (LQR) method. The LQR includes semi-structured interviews and a modified Delphi meeting. Primary data from the first time-point will be collected three weeks after arriving

in the country. After eight weeks, the second time point data will be collected with primary research participants. At this time, in-depth interviews with secondary stakeholders will be conducted. After which, the modified Delphi meeting consisting of both primary and secondary stakeholders will be conducted.

The knowledge mobilization plan includes exhibitions, community workshops, policy discussions with federal agencies, and dissemination through media platforms, conferences, and high-impact journals. This approach promotes social connectedness and support for immigrant AOIs by engaging communities, influencing policy, and sharing research findings widely. The anticipated result of this research is to identify the challenges and opportunities for improving the social connections of AOIs in Canada. This will lead us to designing a prescriptive AOI social connectedness framework on the policy front to help community organizations understand the phenomenon and identify approaches to promote positive behaviors.

5.3. Objectives

This research explores the social connectedness experiences of immigrant AOIs in a digital age.

Specific aims will focus on –

(1) Exploring AOIs' use of technology for social connectedness.

The sub-objectives include:

(a) Identifying the **patterns of technology use** in supporting AOIs' social connectedness

(b) Highlighting AOIs' **technology preferences** for maintaining social connections, and

(c) Describing the **challenges** associated with AOIs' use of technology for social connectedness

(2) Exploring AOIs' immediate and long-term **opportunities** for using technology to achieve social connectedness.

(3) Designing an **AOIs' social connectedness framework** to promote social connectedness.

(4) **Disseminating** the AOIs' social connectedness framework among collaborating organizations across Canada..

5.4. Context

African Older Immigrants (AOIs) aged 55 and older are a rapidly growing demographic (Employment and Social Development Canada, 2022) and experience distinct patterns of isolation and loneliness due to poor social connection and support compared to other groups (Taylor & Nguyen, 2020). Social disconnectedness occurs due to the scarcity of personal relationships, community connections, and societal engagement (Waycott, Vetere & Ozanne, 2019). Social connectedness precedes loneliness and social isolation. SI is marked by reduced quantity and quality of social interaction and network of support Loneliness is an emotional response and an affective and mental health manifestation of feeling alone Studies reveal significant loneliness (30.8%) among immigrant older adults due to factors like widowhood, poor health, and limited social support networks (Lu et al., 2023). Immigrant OAs, including AOIs, often face disconnection from social services and support, exacerbated by language barriers and lack of established racialized OA communities (Employment and Social Development Canada, 2022). Despite the social-cultural heterogeneity of Africa, the kinship and communal system is a major driver of social connectedness, maintained through constant interaction (Adedeji, Wister, & Pickering, 2023). The proposal emphasizes social disconnectedness, not loneliness or social isolation, because these are extended manifestations of scarce personal relationships, connection and engagement, which are the focal points of this study.

Technology facilitates social connectedness (Adedeji, Wister, & Pickering, 2023) through interventions like computer training and health-oriented technologies (McCabe et al., 2021; Wister, O'Dea, Fyffe & Cosco, 2021). However, technology uptake is hindered by accessibility, literacy, and complexity challenges (Wister, O'Dea, Fyffe & Cosco, 2021). Exploring technology-based social connectedness among AOIs is essential due to limited research in this area and the lack of an established ethnic community of AOIs in Canada (Ojembe et al., 2022). So we seek to understand how AOIs' social connectedness through technology is socially constructed vis-à-vis technology design.

We also aim to develop a framing for a social connection policy to support AOIs (Nguyen et al., 2022; Koehn et al., 2022).

5.5. Theoretical framework

The AOI social connectedness theoretical framework for this research is based on synthesizing the core ideas of the Integrative Model of Place Attachment in Later Life (Rubinstein & Parmelee, 1992) and the Socio-ecological model (Bronfenbrenner, 1979; 2005). The Integrative Model of Place Attachment emphasizes that OAs' view of their physical environment, self-identity, and interdependence along the life course influences the attachment to place. And Bronfenbrenner believes that the microsystem, mesosystem, exosystem, macrosystem, and chronosystem of the OA is vital for health promotion behaviour. The place attachment and the ecological realities of immigrants sustains the thesis that both are required for quality social connectedness as an health outcome. The theoretical framework is crucial as both models provide concepts linking personal considerations and the need for social connectedness among AOIs in Canada. We hypothesize that AOIs' current technological environment and life course experiences influence their social connectedness needs and adaptive strategies. These factors are shaped by identity, interaction with the physical and technological environment, and interdependence, viewed collectively and individually within their social life space.

The destination environment predicts AOIs' social connectedness, which is influenced by life course interactions within their physical environment, self-identity, and interdependence. These define place attachment in later life and help determine their level of social connectedness. Understanding how older adults perceive social connectedness influences their use of available technology. The rate of AOIs' technology use for social connectedness impacts their overall experience of social connectedness. We acknowledge that the current theoretical framework does not sufficiently address the psychological complexity of social connectedness. The decision-making process is not considered, including preferences and considerations for selecting technology-enabled social connectedness. Another area requiring engagement is how digital skills predict the AOIs' discontinuities regarding technology use in Canada.

5.6. Methodology

This study's design is longitudinal qualitative research (LQR), and we will adopt two time-points of semi-structured interviews data collection and a modified Delphi approach, at different stages of the four-phases of the four-year project. The research will be implemented among AOIs and secondary stakeholders in Canada. Qualitative data will be collected in Ontario (67065), Quebec (27315), Alberta (5345), and British Columbia (2845), provinces with the highest population of black immigrant OAs in Canada (Statistics Canada, 2023). A multi-prong sampling and recruitment process will be adopted to maximize the sample's diversity. We adopted a mixed purposeful sampling technique (Nyimbili & Nyimbili, 2024), consisting of snowballing and criterion strategies. This technique will reduce the likelihood that the participants are drawn from the same socio-demographic, cultural, and religious contexts. To make the recruitment a dynamic one, eligible and consenting participants will be drawn from various sites like religious centers, social events, and social media groups/pages will be utilized.

These approaches will be adopted because they are vital for maximizing the efficiency and validity of the data (Morse & Niehaus, 2009). This design is necessary for studying AOIs because we need to maximize recruitment and active participation (Njie-Carr, Sabri, Messing, Ward-Lasher, Johnson-Agbakwu et al., 2021) The total sample size will be 92 research participants, consisting of 76 AOIs and 16 secondary stakeholders equally distributed across the four provinces. AOIs are the primary stakeholders and secondary stakeholders include – advocacy groups, social groups, immigrants settlement organizations, and religious groups. The criterion of purposive selection will include age, gender, length of stay in Canada, living arrangement (alone, within single or multiple-generation households), and membership/attendance of a community seniors' center or religious group (See Table 2). At least one AOI will be purposively sampled against each category. The purposive sampling will also prioritize participants to be as representative as possible across the range of criteria. An additional 6 participants will be recruited to allow for attrition between research phases. One stakeholder will be purposively selected as a key informant from Africa-oriented advocacy groups, social groups, organizations that settle immigrants, and churches with large populations of AOIs (See Table 2). Inclusion criteria will include whether an AOI is age of African origin, 65 years and more, has lived in Canada for at least one month, acknowledges and self-reports (to the

interviewer or other household members) a feeling of social disconnectedness and related social and psychological conditions like SI/L, is not receiving treatment for a mental or neurological condition, and is willing to participate in the study. Stakeholders will be included because they have been identified as the appropriate staff member to speak with on the subject.

Table 5.1. AOs’ Sampling and Recruitment Analysis

S/N	Theoretical Criterion	Sample size	
1.	Age		19 participants X 4 provinces
	- 65 – 74 years	1	
	- 75 - above	1	
	Gender		
	- Male	1	
	- Female	1	
	Length of Stay		
	- Less than six months	1	
	- More than six months	1	
	Living arrangement		
	- Living alone	1	
	- Single generation household	1	
	- Multiple generation households	1	
	Member/attends the community center		
	- Yes	1	
	- No	1	
Church attendance			
- Yes	1		
- No	1		
	Total	13 participants + 6 (attrition) = 19	76 participants
2.	Advocacy group	1	4 participants X 4 provinces
	Social group	1	
	An organization that settles immigrants	1	
	Church with large AOA population	1	
	Total	4 participants	
			92 participants

5.6.1. Data Collection

Phase One (April 2024 – December 2024)

Phase One will be focused on addressing **Objective 1** of the research, which is to explore AOs’ use of technology for social connectedness. This Phase will last for 9 months. We will write scoping reviews and literature reviews and implement consultation/co-creation of the research design and methodology with Africa-focused organizations in the four

sites. This approach will be helpful to for designing robust community-entry strategies and interview guides for the study. We will examine the shared knowledge about **patterns, preferences, and challenges** associated with AOIs' use of technology for social connectedness.

Phase Two (January 2025 – July 2026)

Phase Two will explore **Objective 2**, to gather primary data about the immediate and long-term opportunities for improving social connectedness among AOIs. In practice, there will be two parts to this phase. The first 10 months are for data collection, and the remaining 7 months are for data analysis to identify the areas of convergence and divergence among the stakeholders. We will also prepare the notes for framing important areas for the modified Delphi meeting. With the assistance of 4 trained research assistants, we will conduct the semi-structured interviews with AOIs. The research team will ensure confidentiality by having interviews in allocated private spaces that ensure privacy (e.g., conference rooms). The interview sessions will typically last 45 – 90 minutes, guided by a moderator/notetaker. Interviews will be voice-recorded for later transcription.

The semi-structured interview guides will align with the study's objectives. They will be open-ended questions, using a discovery-oriented method to obtain detailed information about AOIs' use of technology for social connectedness in a digital age. Also, the in-depth interview guide will consist of six sections. The first section will explore AOIs' thoughts about using technology for social connectedness. The second section will document how AOIs living in Canada use technology to stay socially connected. The third section will capture data to describe the role of technology in supporting AOIs' social connectedness. The fourth section will guide in identifying the challenges associated with AOIs' use of technology for social connectedness. The fifth section will focus on providing data to highlight AOIs technology preferences for maintaining social connections. The sixth section will explore AOIs perspective about opportunities for using technology to achieve social connectedness.

Phase Three (July 2026 – March 2027)

Phase Three is focused on **Objective 3**. The eight-month period will be dedicated to implementing the modified Delphi meeting (first three months) and subsequently writing up and validating the AOI social connectedness framework (five months) with the

participants. We will circulate the summary of the in-depth interview report and highlight the talking points from the findings. The AOI social connectedness framework will be designed and finalized.

Phase Four (April 2027 – April 2028)

In Phase Four, the AOI social connected framework will be disseminated within and outside Canada. The team will present the findings at partner organizations' meetings, conferences, and Black History Month events and have exhibition stands to showcase the documentary.

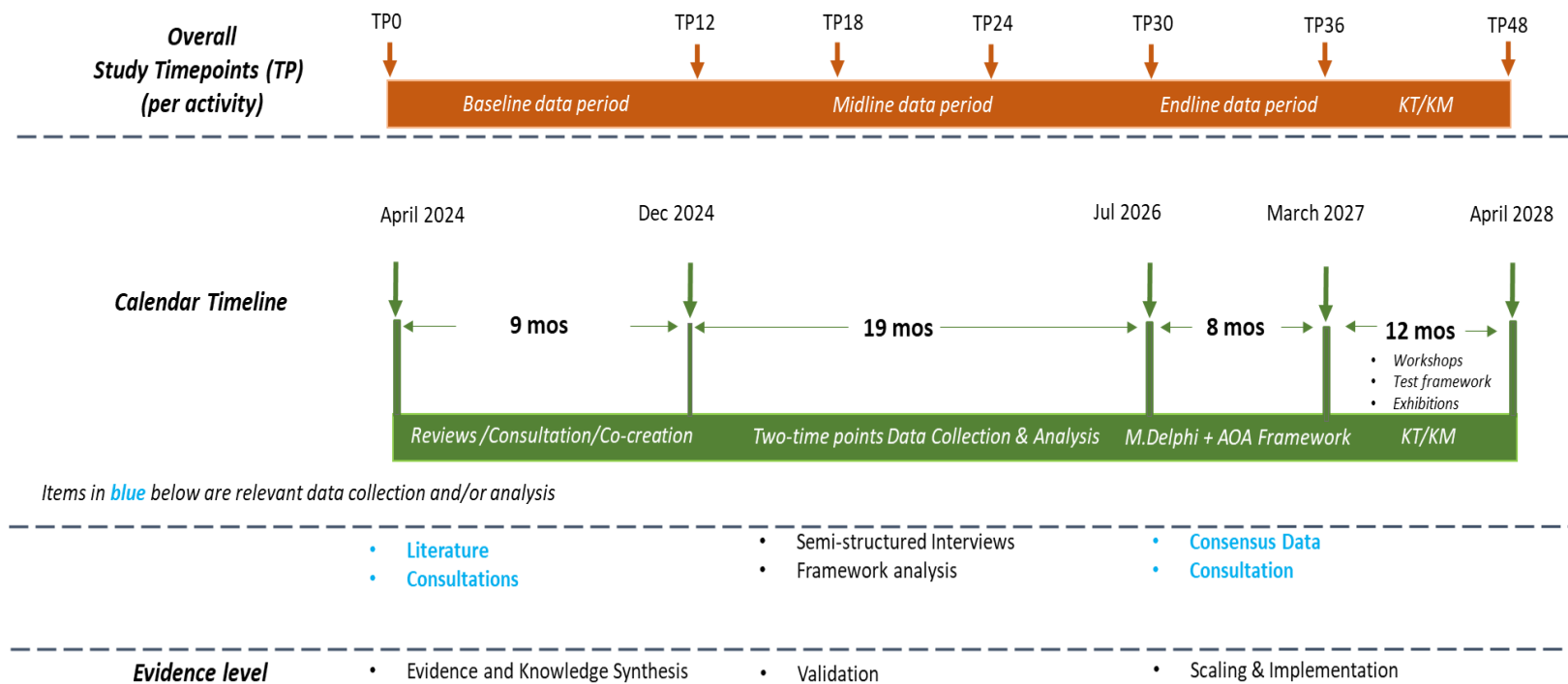


Figure 5.1. Project Timeline

5.6.2. Data Analysis

We will adopt the Framework analysis method (Ritchie & Lewis, 2003; Gale, Heath, Cameron, Rashid, Redwood, 2013), because primary participants' data will be collected across two-time points. The analytic framework is instrumental for identifying commonalities, differences, and relationships between different parts of the data and building the explanations around themes. Data will be analyzed and interpreted through thematic schemes based on inductively developed codes, enabling the researchers to see all possible meanings (Geertz, 1973). The analytic framework will be developed through four basic steps: (1) Transcription, familiarization, and validation. The transcripts and audio files will be reviewed. Validation will be done at this stage through researcher triangulation (George & Apter, 2004), respondent validation (Leung, 2015), (2) Coding and Analysis Preparation: After a thorough reading and re-reading of 20% of the transcripts, inductive and deductive coding structures will be created. The team will meet to compare, group, define, and categorize the codes to form a tree diagram which is the building block of the analytic framework. The transcripts and the framework are imported into Nvivo 14 to facilitate the analytic process by applying the codes. (3) Charting: The analytic framework matrices will be generated with Nvivo. Charting involves summarizing (reducing the data without losing the 'original meaning') the data by category from each transcript. (4) Data Interpretation: Analytic memos (the data's impressions, ideas, and early interpretations) are vital. The process involves identifying and analyzing the distinct characteristics and differences within the data. This may lead to creating typologies or categories, where theoretical concepts are examined—either existing or new ones arising from the data. Additionally, this process includes mapping out connections between these categories to investigate relationships and potential causality.

5.7. Knowledge mobilization Plan

Although there are established knowledge mobilization (KM) approaches for this research, the KM components will evolve as the data collection process progresses. Considering this is a new research area in Canada, I anticipate emergent issues so I will take a dynamic approach to KM. To develop the strategy of this research, the input of senior centers, advocacy groups, support organizations, and policy-level stakeholders will be sought by discussing the abridged layman version of the research objectives, design,

and methodology. This is the first step to ensure the study design and methodology will be co-designed and well-targeted. **There are three layers of KM** for this research. At the **community level**, a workshop will be held at senior centers and advocacy and support organizations focused on immigrants, Black (African) communities, and the press. The findings will be presented to encourage a moderated participatory engagement post-presentation. This participatory session offers the opportunity to gather feedback for producing communication materials (short documentary and infographic). We will publish a **framework for promoting the social connectedness of AOs**. The findings and framework will be exhibited as KM during Black History Month. This enables focused organizations to identify approaches to promote social connectedness for AOs. At the **policy level**, I will connect with jurisdictional stakeholders and Federal agencies like the Immigration, Refugees and Citizenship Canada and the Ministry of Seniors. The focus is to start the conversation about higher-level policies supporting AOs. The documentary and report published by Conversation Canada will help me connect with lay members of the community. **We will present the findings in the research community** and have **exhibition stands** at the Canadian Gerontological Association, AGE-WELL, and International Federation on Aging organizers to feature the documentary at their conferences. I will recommend and partner as a panelist on specialized sessions for marginalized groups. We will publish the research findings in six open-access high-impact journals (the Gerontologist and Journals of Gerontology - Series B Psychological Sciences and Social Sciences).

5.8. Academic outputs

Year 2: One scoping review on AOs and technology adoption for social connectedness

Year 3 and 4: Six articles in open-access high-impact journals (the Gerontologist, The Gerontechnologist, and Journals of Gerontology - Series B Psychological Sciences and Social Sciences, Canadian Journal of Aging, Ageing, and Society).

5.8.1. Community outputs

At the community level, we will hold workshops to promote social connectedness among AOs. We will disseminate the AOs Social Connectedness Framework. There will

be publications in The Conversation alongside Media engagements on television and radio, including podcasts and vlogs, which will be deployed to circulate the study findings.

5.8.2. Expected Outcomes

At the end of the research, I would have a comprehensive report to send to the SSHRC. We will design **a prescriptive AOIs social connectedness framework** to help community organizations understand the phenomenon and identify approaches to promote positive behaviors. We will produce a **short video documentary** to capture the experiences of social disconnection and opportunities for improving it among AOIs. We will publish **six scientific articles** and **disseminate the research product – the AOI social connected framework at the community, jurisdictional, and federal policy** and practice levels in Canada.

5.8.3. Expected Outcomes Summary

The scholarly benefit of this research is that it will contribute to the scanty literature of immigrant OAs. Specifically, it will start the conversation about the social disconnectedness experienced by AOIs living in Canada. The methodological implication of this research is that we will be introducing the use of LQR and the framework analysis process to the OAs migration discourse. The multi-prong sampling and recruitment approaches we introduced in this research are rarely used. The mixed purposeful sampling technique, which uses both criterion and snowballing approaches across multiple online and physical research sites, is not commonplace in the field. These approaches demonstrate the extent of methodological robustness of this research and increase the efficiency and validity of the data.

The social benefit of the study will include the opportunity to empower community organizations and groups to understand the role of technology in promoting social connectedness among AOIs. Through the workshops, we expect the AOIs' social connectedness framework to provide organizations and groups with the requisite skill to interact with immigrant OAs. The project also provides the platform for collaboration and the development of more tools to respond to the needs of AOIs, thereby creating a resilient support system for OAs from other culture-oriented groups across Canada. We anticipate

that the findings of the study will stir the need for focused organizations to address the social connection needs of AOlS in Canada.

5.9. Research Team, Previous Output and Student Training

5.9.1. Research team

The research team is comprised of interdisciplinary researchers from gerontology, demographics, public health, sociology, anthropology, and social work. The team members possess significant publications and extensive research experience in interconnected domains, including substantive knowledge in social isolation and resilience, scoping review research, longitudinal data analysis, and pandemic-related research.

Isaac Adedeji: Principal Investigator, Research Fellow, STAR Institute, Simon Fraser University. He master's degree in Gerontology.

Andrew Sixsmith: Co-Investigator, Director, STAR Institute, Simon Fraser University. As the Director of the STAR Institute and a Professor in the Department of Gerontology at Simon Fraser University, he was the founding Scientific Director of the AGE-WELL Network of Centres of Excellence from 2015 to 2020. Engaging in leadership roles across numerous national and international research projects, he collaborates with community, government, and industry partners.

Andrew Wister: Co-Investigator, Director, Gerontology Research Centre, Simon Fraser University. Dr. Wister specializes in analyzing population data, focusing on aging, social isolation, resilience, and health promotion.

Mei Fang: Co-Investigator, Professor of Gerontology, Simon Fraser University. She is a professor at SFU in Gerontology and Urban Studies. With a Master's in Public Health and a Ph.D. in Urban Studies, Mei focuses on community-based participatory research and age-friendly environment design.

Julia Smith: Co-Investigator, Assistant Professor, Health Science, Simon Fraser University. Dr. Smith, an Assistant Professor at Simon Fraser University's Faculty of Health Sciences, is a Michael Smith BC Scholar and faculty member at the Center for Gender and Sexual Health Equity. She specializes in gender analysis, global health, healthcare workforce, and public policy, leading the Health and Social Inequities Theme at the Pacific Institute on Pandemics, Pathogens, and Society.

Collaborators

Clemencia Gomez: Advocate, Community Developer, 411 Seniors Centre Society. She has community entry and trust-building experience spanning 20 years in the community services space for older adults. She was the former Executive Director at South Granville Seniors Centre and currently the community developer at the 411 Senior Centre Society.

1 Doctoral Student/Research Assistant & Trainee: Department of Gerontology, Simon Fraser University. Has a background in Psychology, and has Research Coordinator experience and will interface with the PI to develop the data collection procedure.

4 MA Student/Research Assistant & Trainee: Department of Gerontology, Simon Fraser University. With a background in Social Work, they are highly skilled in qualitative data collection, has facilitation skills, and is proficient in transcribing and organizing qualitative data.

5.9.2. Previous Output

Isaac has published aging research in high-impact journals. He has published a scoping review to document the experiences of social isolation among African Older Immigrants during COVID-19. He has also published Canada-focused policy reports about helping older adults living with dementia age in the community and a jurisdictional scan of aging policies in Canada. As a research fellow at the STAR Institute, he will be utilizing data resources at the Gerontology Research Centre. The Gerontology Research Centre, in partnership with the CLSA Data Platform, has tailored research analyses on social isolation among older adults. The qualitative data will leverage CLSA's comprehensive dataset to identify trends and predictors of social disconnectedness, particularly among marginalized groups. Findings will inform targeted strategies to enhance social connectedness and resilience within these populations.

5.10. Student Training

The project has a significant training component to increase the interest in the research area and encourage more evidence. There will be one PhD student and four MA students; their training will take 88% of the requested funding.

The PhD student is the Research Coordinator with expertise in community-based research, given the range of responsibilities they will handle. The RC will work for 10 hours

per week for four years. The Doctoral student’s training will include research coordination, community research and qualitative data design. The RC will organize and coordinate meetings and develop reports and communication materials. Through the PI and Co-PI, the RC will also help oversee MA students, assisting them in the literature and scoping reviews. They will also collaborate on writing manuscripts and potentially serve as lead authors on publications suitable for inclusion in their dissertation proposals. RCs will gain experience in knowledge mobilization and designing an AOI social connectedness framework, including the final reports from the study.

Four MA students will work and collaborate within each site, dedicating 10 hours per week for 1-2 semesters per year. The MA students will undergo training to conduct literature reviews on topics specified by organizations, assist with scoping reviews. They will also participate in meetings and contribute as co-authors to enhance their academic competencies. Throughout these tasks, the MA students will receive guidance from the RC and the PI, fostering the development of essential research skills crucial for graduate and post-graduate studies, including publication and report writing for both academic and non-academic audiences. This hands-on experience will provide our MA trainees with valuable insights and academic training in innovative methodologies for conducting and evaluating community-based research projects. Such preparation will equip students for future endeavors in doctoral programs or professional roles.

Table 5.2. Funds Requested from SSHRC

Personnel cost	Year 1	Year 2	Year 3	Year 4
<i>Student salaries and benefits/stipends</i>				
• <i>Masters (4)</i>	24,000	24,000	24,000	24,000
• <i>Doctorate (1)</i>	45,000	45,000	45,000	45,000
Travel and subsistence costs				
<i>Applicant/Team member(s)</i>				
• <i>Canadian travel</i>	3,900	4,500	3,900	4,500
• <i>Foreign travel</i>				3,300
<i>Students</i>				
• <i>Canadian travel</i>		3,900	4,500	3,900
• <i>Foreign travel</i>				2,250

Other expenses				
Professional/Technical Services		600		1,800
Supplies	100	100	100	300
<i>Non-disposable equipment</i>				
Computer hardware	1,400			

5.11. Budget Justification

Student Salaries and benefits/Stipends (\$276,000; 88% of the requested funding is for MA and PhD)

Four MA students will be trained during the project. They will work 10 hours per week for two terms per year, and each RA will earn \$6000 annually for four years (\$96,000). Each student will work from the study sites and meet online to provide regular updates. They will also write a scoping review about African Older Immigrants' experiences of social disconnectedness.

The doctoral trainee will be paid \$15,000 per term for four years (\$180,000). The doctoral trainee will be the Research Coordinator and coordinate things remotely. The RC will undertake various responsibilities, including organizing meetings, taking notes, developing bi-annual newsletters, and creating communication materials for participating organizations. Additionally, they will supervise MA student RAs, aiding in literature review and conducting scoping reviews. Throughout the study, they will also contribute to organizing knowledge mobilization and social connectedness strategies. Additionally, they will assist in drafting the prescriptive AOIs social connectedness framework and final report.

Travel and Subsistence Communication Costs (\$34,650)

All expenses are stated in Canadian dollars and are derived from economy seat prices sourced from the Air Canada website and the standard rates meeting rooms to support knowledge mobilization meetings.

Applicant/Research Team Communication Travel (\$20,100)

Canadian

Four research team members in years 1 and 3 will showcase our research at a focused Black History Month (BHM) event in each study site. These meetings will provide networking and knowledge mobilization opportunities for the study. The networking and KM component will ensure a more comprehensive reach for disseminating research results and the AOIs social connectedness prescriptive framework. We will have exhibition stands at the events so that there can be opportunities for one-on-one engagement with event attendees. 4 trips @ \$800 each BHM event: Airfare at \$150, hotel at \$175/night x 2, per diem meals at \$75/day x 2 (SFU rate), taxis at \$100, and registration for exhibition (approx. \$150 per event). Subtotal: \$850 x 4 persons X 2 years = **\$7,800**.

In years 2 and 4, two research team members will attend the Canadian Association of Gerontology and AGE-WELL conferences to disseminate the research findings. We will have exhibition stands so that conference attendees can connect with the goals of the research. 2 trips @ \$2250 each conference: Airfare at \$1000, hotel at \$175/night x 3, per diem meals at \$75/day x 3 (SFU rate), taxis at \$100, and registration (approx. \$400 per event). Subtotal: \$2250 x 2 persons X 2 years = **\$9,000**.

Foreign

In year 4, one research team member will attend the International Federation on Aging global conference as a panelist and have an exhibition stand for the research outcomes. 1 trips @ \$2250 each conference: Airfare at \$1800, hotel at \$175/night x 4, per diem meals at \$75/day x 4 (SFU rate), taxis at \$100, and registration (approx. \$400 per event). Subtotal: \$2250 x 2 persons X 2 years = **\$3,300**.

Trainees Team Communication Travel (\$14,550)

Canadian

- In Years 2 and 4, four trainees will showcase our research at each study site's focused Black History Month (BHM) event. 4 trips @ \$800 each BHM event: Airfare at \$150, hotel at \$175/night x 2, per diem meals at \$75/day x 2 (SFU rate), taxis at \$100, and registration for exhibition (approx. \$150 per event). Subtotal: \$850 x 4 persons X 2 years = **\$7,800**.

- In year 3, two research team members will attend the Canadian Association of Gerontology and AGE-WELL conferences to disseminate the research findings. We will have exhibition stands so that conference attendees can connect with the goals of the research. 2 trips @ \$2250 each conference: Airfare at \$1000, hotel at \$175/night x 3, per diem meals at \$75/day x 3 (SFU rate), taxis at \$100, and registration (approx. \$400 per event). Subtotal: \$2250 x 2 persons X 1 year = **\$4,500**.

Foreign

- In year 4, one research team member will attend the International Gerontological Society of America conference to have an exhibition stand for the research outcomes. 1 trip @ \$2250 each conference: Airfare at \$1800, hotel at \$175/night x 4, per diem meals at \$75/day x 4 (SFU rate), taxis at \$100, and registration (approx. \$400 per event). Subtotal: \$2250 = **\$2,250**.

Other expenses

Professional or Technical services

Translation (\$2700): French translation is required in Years 2 and 4. The research instruments (approximately 2000 words), implementation reports (approximately 3000 words), and social connectedness framework design (4,000 words) will be translated into the French language. The services of LingoStar Language Services, Vancouver, Canada, will be requested at the rate of .30 per word.

Supplies (\$600): Each project year, communication materials and other stationeries will be printed for the exhibitions and official communication.

Non-disposable Equipment (\$1,400): One Lenovo Thinkbook Dell Inspiron to coordinate the daily administrative activities of the project like secure online meetings, literature searches, reports drafting and designing and disseminating communication materials.

TOTAL FUNDS REQUESTED = \$ 315,350

References

- Adedeji, I. A., Ogunniyi, A., Henderson, D. C., & Sam-Agudu, N. A. (2022). Experiences and practices of caregiving for older persons living with dementia in African countries: A qualitative scoping review. *Dementia*, 21(3), 995-1011.
- Adedeji, I. A., Wister, A., & Pickering, J. (2023). COVID-19 experiences of social isolation and loneliness among older adults in Africa: A scoping review. *Frontiers in Public Health*, 11, 1158716. <https://doi.org/10.3389/fpubh.2023.1158716>
- Andruske, C. L., & O'Connor, D. (2020). Family care across diverse cultures: Re-envisioning using a transnational lens. *Journal of Aging Studies*, 55, 100892. <https://doi.org/10.1016/j.jaging.2020.100892>
- Balki, E., Hayes, N., & Holland, C. (2022). Effectiveness of Technology Interventions in Addressing Social Isolation, Connectedness, and Loneliness in Older Adults: Systematic Umbrella Review. *JMIR aging*, 5(4), e40125. <https://doi.org/10.2196/40125>
- Barbosa Neves, B., Franz, R., Judges, R., Beermann, C., & Baecker, R. (2019). Can Digital Technology Enhance Social Connectedness Among Older Adults? A Feasibility Study. *Journal of Applied Gerontology*, 38(1), 49-72. <https://doi.org/10.1177/0733464817741369>
- Beauchamp, T. L., & Childress, J. F. (2001). *Principles of biomedical ethics*. Oxford University Press, USA.
- Benoot, C., Hannes, K., & Bilsen, J. (2016). The use of purposeful sampling in a qualitative evidence synthesis: A worked example on sexual adjustment to a cancer trajectory. *BMC Medical Research Methodology*, 16, 21. <https://doi.org/10.1186/s12874-016-0114-6>
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Bronfenbrenner, U. (Ed.). (2005). *Making human beings human: Bioecological perspectives on human development*. Sage Publications Ltd.
- Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447-454.
- Chaudhury, H., & Oswald, F. (2019). Advancing understanding of person-environment interaction in later life: One step further. *Journal of Aging Studies*, 51, 100821. <https://doi.org/10.1016/j.jaging.2019.100821>

- Cunningham, G. O., & Michael, Y. L. (2004). Concepts guiding the study of the impact of the built environment on physical activity for older adults: A review of the literature. *American Journal of Health Promotion*, 18, 435–443.
- Czaja, S. J., Moxley, J. H., & Rogers, W. A. (2021). Social Support, Isolation, Loneliness, and Health Among Older Adults in the PRISM Randomized Controlled Trial [Original Research]. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.728658>
- Employment and Social Development Canada, E. (2022). Social isolation of seniors: A Focus on New Immigrant and Refugee Seniors in Canada. Retrieved from: <https://www.canada.ca/en/employment-social-development/corporate/seniors/forum/social-isolation-immigrant-refugee.html#h2.5>
- Eriksson, M., Ghazinour, M., & Hammarström, A. (2018). Different uses of Bronfenbrenner's ecological theory in public mental health research: what is their value for guiding public mental health policy and practice?. *Social Theory & Health*, 16, 414-433.
- Fingerman, K. L., Birditt, K. S., & Umberson, D. J. (Eds.). (2020). Use of Technologies for Social Connectedness and Well-Being and as a Tool for Research Data Collection in Older Adults. In *Mobile Technology for Adaptive Aging: Proceedings of a Workshop* (pp. 4). National Academies Press. <https://www.ncbi.nlm.nih.gov/books/NBK563112/>
- Furstenberg, F. F. (2019). Family change in global perspective: How and why family systems change. In (Vol. 68, pp. 326-341): Wiley Online Library.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13, 117. <https://doi.org/10.1186/1471-2288-13-117>
- Gasteiger, N., Loveys, K., Law, M., & Broadbent, E. (2021). Friends from the future: A scoping review of research into robots and computer agents to combat loneliness in older people. *CIA*, 16, 941–71.
- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. *The interpretation of cultures: Selected essays*. Retrieved from the World Wide Web: June 9, 2010. In.
- George, M., & Apter, A. J. (2004). Gaining insight into patients' beliefs using qualitative research methodologies. *Curr Opin Allergy Clin Immunol*, 4(3), 185-189. <https://doi.org/10.1097/00130832-200406000-00008>

- Gunnes, M., Løe, I. C., & Kalseth, J. (2024). Exploring the impact of information and communication technologies on loneliness and social isolation in community-dwelling older adults: A scoping review of reviews. *BMC Geriatrics*, 24, 215. <https://doi.org/10.1186/s12877-024-04837-1>
- Guruge, S., Sidani, S., Wang, L., Sethi, B., Spitzer, D., Walton-Roberts, M., & Hyman, I. (2019). Understanding Social Network and Support for Older Immigrants in Ontario, Canada: Protocol for a Mixed-Methods Study. *JMIR Aging*, 2(1), e12616. <https://doi.org/10.2196/12616>
- Hawe, P. & Hall, J. & Degeling, D.E. (1990). *Evaluating health promotion : a health worker's guide / Penelope Hawe, Deirdre Degeling, Jane Hall ; with the assistance of Alison Brierley.* Sydney : MacLennan & Petty
- Hidalgo, M. C., & Hernández, B. (2001). Place Attachment: Conceptual and Empirical Questions. *Journal of Environmental Psychology*, 21(3), 273-281. <https://doi.org/10.1006/jevp.2001.0221>
- Hoffman, J., & Roos, V. (2022). Digital Divide and Digital Inclusion: Juxtaposed Realities and eInclusive Prospects for Older Persons. In V. Roos & J. Hoffman (Eds.), *Age-Inclusive ICT Innovation for Service Delivery in South Africa* (pp. 10). Springer. https://doi.org/10.1007/978-3-030-94606-7_10
- Immigration, Refugees and Citizenship Canada (IRCC) (2022). 2022 Annual Report to Parliament on Immigration. Retrieved from: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/annual-report-parliament-immigration-2022.html#tr>
- Johnson, S., Bacsu, J., McIntosh, T., Jeffery, B., & Novik, N. (2021). Competing challenges for immigrant seniors: Social isolation and the pandemic. *Healthcare Management Forum*, 34(5), 266-271. doi:10.1177/08404704211009233
- Koehn, S., Ferrer, I., & Brotman, S. (2022). Between loneliness and belonging: narratives of social isolation among immigrant older adults in Canada. *Ageing & Society*, 42(5), 1117-1137. <https://doi.org/10.1017/S0144686X20001348>.
- Lawton, M. P., & Nahemow, L. (1973). Ecology and the aging process. In C. Eisdorfer & M. P. Lawton (Eds.), *The psychology of adult development and aging* (pp. 619–674). American Psychological Association. <https://doi.org/10.1037/10044-020>
- Lee, J., Hong, J., Zhou, Y., & Robles, G. (2020). The Relationships between Loneliness, Social Support, and Resilience among Latinx Immigrants in the United States. *Clinical social work journal*, 48(1), 99–109. <https://doi.org/10.1007/s10615-019-00728-w>
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *J Family Med Prim Care*, 4(3), 324-327. <https://doi.org/10.4103/2249-4863.161306>

- Lu, M., Bronskill, S. E., Strauss, R., Boblitz, A., Guan, J., Im, J. H. B., Rochon, P. A., Gruneir, A., & Savage, R. D. (2023). Factors associated with loneliness in immigrant and Canadian-born older adults in Ontario, Canada: a population-based study. *BMC Geriatrics*, 23(1), 380. <https://doi.org/10.1186/s12877-023-04092-w>
- McCabe, L., Dawson, A., Douglas, E., & Barry, N. (2021). Using Technology the Right Way to Support Social Connectedness for Older People in the Era of COVID-19. *International journal of environmental research and public health*, 18(16), 8725. <https://doi.org/10.3390/ijerph18168725>
- McDonald, L. (2011). Theorising about ageing, family and immigration. *Ageing & Society*, 31(7), 1180-1201.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444. <https://doi.org/10.1146/annurev.soc.27.1.415>
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology*, 30(1), 11-22. <https://doi.org/https://doi.org/10.1016/j.jenvp.2009.07.001>
- Morris, M. E., Adair, B., Ozanne, E., Kurowski, W., Miller, K. J., Pearce, A. J., Santamaria, N., Long, M., Ventura, C., & Said, C. M. (2014). Smart technologies to enhance social connectedness in older people who live at home. *Australasian Journal on Ageing*, 33(3), 142–152. <https://doi.org/10.1111/ajag.12154>
- Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Left Coast Press.
- Mostoway, K. (2020). The effects of immigration on families. *Canadian Journal of Family and Youth/Le Journal Canadien de Famille et de la Jeunesse*, 12(2), 60-68.
- Mubarak, F., & Suomi, R. (2022). Elderly Forgotten? Digital Exclusion in the Information Age and the Rising Grey Digital Divide. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 59. doi:10.1177/00469580221096272
- Nasir, N., Hand, C., & Huot, S. (2022). Examining social relationships among older Muslim immigrants living in Canada: A narrative inquiry. *Societies*, 12(3), 74. <https://doi.org/10.3390/soc12030074>
- Navarro, J. L., & Tudge, J. R. (2023). Technologizing Bronfenbrenner: neo-ecological theory. *Current Psychology*, 42(22), 19338-19354.
- Neves, B. B. (2013). Social capital and Internet use: The irrelevant, the bad, and the good. *Sociology Compass*, 7, 599-611. <https://doi-org.proxy.lib.sfu.ca/10.1111/soc4.12059>

- Neves, B. B., Franz, R., Judges, R., Beermann, C., & Baecker, R. (2019). Can Digital Technology Enhance Social Connectedness Among Older Adults? A Feasibility Study. *Journal of Applied Gerontology*, 38(1), 49-72. <https://doi.org/10.1177/0733464817741369>
- Nguyen, H. T., Baldassar, L., & Wilding, R. (2022). Lifecourse transitions: How ICTS support older migrants' adaptation to transnational lives.
- Njie-Carr, V. P. S., Sabri, B., Messing, J. T., Ward-Lasher, A., Johnson-Agbakwu, C. E., McKinley, C., Campion, N., Childress, S., Arscott, J., & Campbell, J. (2021). Methodological and ethical considerations in research with immigrant and refugee survivors of intimate partner violence. *Journal of Interpersonal Violence*, 36(19-20), NP10790–NP10808. <https://doi.org/10.1177/0886260519877951>
- Nyimbili, F., & Nyimbili, L. (2024). Types of purposive sampling techniques with their examples and application in qualitative research studies. *British Journal of Multidisciplinary and Advanced Studies*, 5(1), 90–99. <https://doi.org/10.37745/bjmas.2022.0419>
- Ojembe, U.B., & Ebe Kalu, M. (2019). Television, radio, and telephone: Tools for reducing loneliness among older adults in Nigeria. *Gerontechnology*, 18(1).
- Ojembe, B. U., Kalu, M. E., Donatus Ezulike, C., Iwuagwu, A. O., Ekoh, P. C., Oyinlola, O., Osifeso, T., Makanjuola, J. O., & Kafiriri, L. (2022). Understanding social and emotional loneliness among Black older adults: A scoping review. *Journal of Applied Gerontology*, 41(12), 2594-2608. <https://doi.org/10.1177/07334648221118357>
- Ritchie, J., & Lewis, J. (2003). *Qualitative research practice: A guide for social science students and researchers*. Sage.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage.
- Rowles, G. D. (1983). Place and personal identity in old age: Observations from Appalachia. *Journal of environmental psychology*, 3(4), 299-313.
- Rubinstein, R. I., & Parmelee, P. A. (1992). Attachment to Place and the Representation of the Life Course by the Elderly. In I. Altman & S. M. Low (Eds.), *Place Attachment* (pp. 139-163). Springer US. https://doi.org/10.1007/978-1-4684-8753-4_7
- Salway, S., Such, E., Preston, L., Booth, A., Zubair, M., Victor, C., & Raghavan, R. (2020). Reducing loneliness among migrant and ethnic minority people: a participatory evidence synthesis. *Public Health Research*, 8(10), 1-246.
- Santini, Z. I., Jose, P. E., Cornwell, E. Y., Koyanagi, A., Nielsen, L., Hinrichsen, C., ... & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): A longitudinal mediation analysis. *The Lancet Public Health*, 5(1), e62-e70.

- Sixsmith, A., Horst, B. R., Simeonov, D., & Mihailidis, A. (2022). Older People's Use of Digital Technology During the COVID-19 Pandemic. *Bulletin of Science, Technology & Society*, 42(1-2), 19–24. <https://doi.org/10.1177/02704676221094731>
- Statistics Canada. (2022). The Canadian census: A rich portrait of the country's religious and ethnocultural diversity. Retrieved from: <https://www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026b-eng.htm>
- Statistics Canada. (2023). Black History Month 2023... by the numbers. Retrieved from: https://www.statcan.gc.ca/en/dai/smr08/2023/smr08_270
- Statistics Canada. (2023). Table 98-10-0308-01 Visible minority by immigrant status and period of immigration: Canada, provinces and territories, census metropolitan areas and census agglomerations with parts. DOI: <https://doi.org/10.25318/9810030801-eng>
- Statistics Canada. (2024). Black History Month 2024... by the numbers. Retrieved from: https://www.statcan.gc.ca/en/dai/smr08/2024/smr08_278
- Stick, M., Hou, F., & Kaida, L. (2021). Self-reported loneliness among recent immigrants, long-term immigrants, and Canadian-born individuals. *Economic and Social Reports*. <https://doi.org/10.25318/36280001202100700001-eng>
- Su, C., Yang, L., Dong, L., & Zhang, W. (2022). The Psychological Well-Being of Older Chinese Immigrants in Canada amidst COVID-19: The Role of Loneliness, Social Support, and Acculturation. *Int J Environ Res Public Health*, 19(14). <https://doi.org/10.3390/ijerph19148612>
- Taylor, H. O., & Nguyen, A. W. (2020). Depressive symptoms and loneliness among Black and White older adults: The moderating effects of race. *Innovation in Aging*, 4(5). <https://doi.org/10.1093/geroni/igaa048>
- Thapa, D. K., Visentin, D., Kornhaber, R., & Cleary, M. (2018). Migration of adult children and mental health of older parents 'left behind': An integrative review. *PloS One*, 13(10), e0205665. <https://doi.org/10.1371/journal.pone.0205665>
- Tuey, C. & Bastien, N. (2023). Insights on Canadian Society: Non-permanent residents in Canada: Portrait of a growing population from the 2021 Census. Retrieved from: <https://www150.statcan.gc.ca/n1/pub/75-006-x/2023001/article/00006-eng.htm>
- Tuthill, E. L., Maltby, A. E., DiClemente, K., & Pellowski, J. A. (2020). Longitudinal qualitative methods in health behavior and nursing research: Assumptions, design, analysis and lessons learned. *International Journal of Qualitative Methods*, 19, Article 1609406920965799. <https://doi.org/10.1177/1609406920965799>
- Victor, C. R., Burholt, V., & Martin, W. (2012). Loneliness and ethnic minority elders in Great Britain: an exploratory study. *Journal of cross-cultural gerontology*, 27, 65-78.

- Wahl, H. W., Iwarsson, S., & Oswald, F. (2012). Aging well and the environment: Toward an integrative model and research agenda for the future. *The Gerontologist*, 52(3), 306-316.
- Waycott, J., Vetere, F., & Ozanne, E. (2019). Building social connections: A framework for enriching older adults' social connectedness through information and communication technologies. In B. Neves & F. Vetere (Eds.), *Ageing and Digital Technology* (pp. 65-82). Springer, Singapore. https://doi.org/10.1007/978-981-13-3693-5_5
- Wister, A., & Kadowaki, L. (2021). Social isolation among older adults during the pandemic. Employment and Social Development Canada. Retrieved from: <https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/covid-19-social-isolation/covid-19-social-isolation-en.pdf>
- Wister, A., O'Dea, E., Fyffe, I., & Cosco, T. D. (2021). Technological interventions to reduce loneliness and social isolation among community-living older adults: A scoping review. *Gerontechnology*, 20(2), 1-16. <https://doi.org/10.4017/gt.2021.20.2.30-471.11>

Appendix A.

Informed Consent Form

Informed Consent Form

Exploring African Older Immigrants' Social Connectedness in a Digital Age in Canada

Study Introduction

There are significant dimensions of social connectedness when African Older Immigrants (AOIs) migrate to Canada. Canada's information technology environment supports social connectedness. However, how AOIs leverage the available technology to promote social connectedness is poorly understood. So, this research helps us to explore AOI's use of technology for social connectedness. We will identify the opportunities for using technologies to promote social connectedness and develop a framing for promoting AOI's social connectedness.

You were invited to participate in this study because you are a stakeholder in facilitating an understanding of AOIs' patterns of information technology use and creating opportunities for promoting social connectedness.

Participant Responses and Confidentiality: This in-depth interview is all about you, and only you, individually, will decide what you say and what you do not wish to share. There is no wrong or correct answer because we want to understand your unique and specific perspectives. All you share with us and that we discuss here will not be shared with anyone who is not part of our research team or legally authorized to access the data. We will also not use your names during our discussions or on our research documents. We will use the audio recording to ensure we do not miss important aspects of the discussion. The researcher will destroy recorded materials upon completing all required for the study.

Risk(s): This research has a minimal risk status. There is a slight risk that you may be identified from the audio recordings that we will make. During the study, you may experience minor psychological discomfort from the audio recording of your responses. Also, you may not feel comfortable with some questions because they are personal. We will try as much as possible to make all questions comfortable for you and protect you. We will debrief you as in our post-interview comments, which we hope, at the minimum, will return participants to a balanced physical and mental state.

Costs to the participants, if any:

There is no material cost for your participation in this interview. However, if we ask that you travel from your home to a location where we will conduct the interview, we will reimburse you your transportation cost.

Benefit(s): Your participation does not directly benefit you but it is for a good cause. We will collect information for research and policy purposes.

Voluntariness:

Your participation is entirely voluntary. You can choose to stop participating at any time during the interview. If you decide not to participate, this will not affect your rights to health care or any other rights.

Consequences of participants' decision to withdraw from participation:

You can also choose to withdraw at any time. The investigators promise to make a reasonable effort to comply with your wishes as much as is practicable.

Statement of the person obtaining informed consent:

You are not required to sign any document to indicate you have consented to partake in this interview. By reading this script, we expect you to continue taking part in the interview. Remaining as a participant in this interview will be considered as consent. You will be offered a copy of this consent script.

In depth Interviewer

Please indicate here the choice of the participant to participate in the interview

Participant agreed to participate in interview Yes No

Detailed contact information::

Isaac Adedeji	Researcher		
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Appendix B.

In-depth Interview (IDI) Guide (FIRST TIME POINT)

In-depth Interview (IDI) Guide (FIRST TIME POINT)

Exploring African Older Immigrants' Social Connectedness in a Digital Age in Canada

I am Isaac A. Adedeji. I am a graduate student of the Department of Gerontology at Simon Fraser University, Vancouver Campus. This research aims to explore African Older Immigrants' Social Connectedness in a Digital Age in Canada.

This interview is strictly for academic purposes and will not be used beyond the classroom.

The interview will take about 45 – 60 minutes. I will appreciate your cooperation.

Thank you.

Isaac Adedeji

Preliminary Questions

Participant Study ID (Based on Inclusion criterion: _____ (IDI-Male)

KII Venue: _____

Date of Survey/Interview (eg 01 January, 2022): _____

Facilitator: _____

SOCIO-DEMOGRAPHIC INFORMATION

1. Sex Male Female

2. Age as at last birthday _____ Declined to respond

3. Highest level of education completed: No formal education Primary school Junior Secondary Senior school Tertiary/university/polytechnic/first-degree Medical degree Graduate school (Masters'/PhD level) Other (specify): _____

5. Marital status Married; If married: Monogamous OR Polygamous union

- Single, not married Cohabiting with a partner(s)
 Separated/divorced Widower

7. What work do you do Specify: _____ Or Retired Currently unemployed
income?

Main Questions

1. Exploring AOl's' use of technology for social connectedness

- A. The patterns of technology use in supporting AOl's' social connectedness
 Probe for:
- i. Types of technologies
 - ii. Frequency of use
 - iii. Motivations for use
 - iv. Quality of interactions
- B. AOl's' technology preferences for maintaining social connections.
 Probe for:
- i. Finding community
 - ii. Device preferences
 - iii. Interface designs – layout, features that enhance or detract, font size, color
 - iv. Input methods – touchscreens, physical keyboards, voice commands
 - v. Accessibility features – screen readers, magnification tools, voice control
 - vi. Learning curve/familiarity
 - vii. Complexity – simple, specialized apps, complex, multi-functional
 - viii. Support and training required
 - ix. Social, Peers or family influence
 - x. Future/advances in technology – age-friendly interface
- C. Challenges associated with AOl's' use of technology for social connectedness
 Probe for:
- i. Finding community
 - ii. Access and connectivity
 - iii. Device familiarity and usability
 - iv. Software updates and maintenance
 - v. Privacy and security concerns
 - vi. Digital literacy and skills
 - vii. Physical and cognitive limitations
 - viii. Cost and affordability
 - ix. Ageism
 - x. Required support and resources to use technology – family, organizations

2. Opportunities for using technology to achieve social connectedness

- A. Immediate opportunities for using technology to achieve social connectedness
 Probe for:

- i. Connecting with community/family back home
 - ii. Joining online communities/groups
 - iii. Participation in virtual events
 - iv. Accessing information
 - v. Intergenerational connections
- B. Long-term opportunities for using technology to achieve social connectedness.
Probe for:
- i. Exploring new communication channels/platforms
 - ii. Lifelong learning and skill development opportunities

1. Considerations for an AOI social connectedness framework

Probe for:

- i. Promoting community engagement
- ii. Cultural identity and community integration
- iii. Intergenerational programs - Storytelling and culture preservation
- iv. Health monitoring
- v. Employment and economic stability
- vi. Online learning and skill development
- vii. Local language content
- viii. Digital literacy/skills training
- ix. Video-based activities – video-calling, VR
- x. Social media engagement

4. Appreciations and Closing

I thank you for participating in this interview. I appreciate your answers and perspectives. I may be in touch if I require further clarification in any part of the interview.

Appendix C.

In-depth Interview (IDI) Guide (SECOND TIME POINT)

In-depth Interview (IDI) Guide (SECOND TIME POINT)

Exploring African Older Immigrants' Social Connectedness in a Digital Age in Canada

I am Isaac A. Adedeji. I am a graduate student of the Department of Gerontology at Simon Fraser University, Vancouver Campus. This research aims to explore African Older Immigrants' Social Connectedness in a Digital Age in Canada.

This interview is strictly for academic purposes and will not be used beyond the classroom.

The interview will take about 45 – 60 minutes. I will appreciate your cooperation.

Thank you.

Isaac Adedeji

Preliminary Questions

Participant Study ID (Based on Inclusion criterion: _____ (IDI-Male)

KII Venue: _____

Date of Survey/Interview (eg 01 January, 2022): _____

Facilitator: _____

SOCIO-DEMOGRAPHIC INFORMATION

1. Sex Male Female

2. Age as at last birthday _____ Declined to respond

3. Highest level of education completed: No formal education Primary school Junior Secondary Senior school Tertiary/university/polytechnic/first-degree Medical degree Graduate school (Masters'/PhD level) Other (specify): _____

5. Marital status Married; If married: Monogamous OR Polygamous union

- Single, not married Cohabiting with a partner(s)
 Separated/divorced Widower

7. What work do you do 1 Specify: _____ Or Retired Currently unemployed
income?

Main Questions

1. Exploring AOIs' use of technology for social connectedness

A. Changes in the patterns of technology use in supporting AOIs' social connectedness.

Probe for:

- i. Types of technologies
- ii. Frequency of use
- iii. Motivations for use
- iv. Quality of interactions

B. Changes in technology preference for maintaining social connections

Probe for:

- i. Finding community
- ii. Device preferences
- iii. Interface designs – layout, features that enhance or detract, font size, color
- iv. Input methods – touchscreens, physical keyboards, voice commands
- v. Accessibility features – screen readers, magnification tools, voice control
- vi. Learning curve/familiarity
- vii. Complexity – simple, specialized apps, complex, multi-functional
- viii. Support and training required
- ix. Social, Peers or family influence
- x. Future/advances in technology – age-friendly interface

C. Current challenges associated with AOIs' use of technology for social connectedness.

Probe for:

- i. Finding community
- ii. Access and connectivity
- iii. Device familiarity and usability
- iv. Software updates and maintenance
- v. Privacy and security concerns
- vi. Digital literacy and skills
- vii. Physical and cognitive limitations
- viii. Cost and affordability
- ix. Ageism
- x. Required support and resources to use technology – family, organizations.

2. Opportunities for using technology to achieve social connectedness

A. Immediate opportunities for using technology to achieve social connectedness.

Probe for:

- i. Connecting with community/family back home
 - ii. Joining online communities/groups
 - iii. Participation in virtual events
 - iv. Accessing information
 - v. Intergenerational connections
- B. Long-term opportunities for using technology to achieve social connectedness.
Probe for:
- i. Exploring new communication channels/platforms
 - ii. Lifelong learning and skill development opportunities

3. New considerations for an AOI social connectedness framework

Probe for:

- i. Promoting community engagement
- ii. Cultural identity and community integration
- iii. Intergenerational programs - Storytelling and culture preservation
- iv. Health monitoring
- v. Employment and economic stability
- vi. Online learning and skill development
- vii. Local language content
- viii. Digital literacy/skills training
- ix. Video-based activities – video-calling, VR
- x. Social media engagement

4. Appreciations and Closing

Thank you for participating in this interview. I appreciate your answers and perspectives. I may be in touch if I require further clarification in any part of the interview.

Appendix D.

In-depth Interview (IDI) Guide (SECONDARY STAKEHOLDERS)

In-depth Interview (IDI) Guide (SECONDARY STAKEHOLDERS)

Exploring African Older Immigrants' Social Connectedness in a Digital Age in Canada

I am Isaac A. Adedeji. I am a graduate student of the Department of Gerontology at Simon Fraser University, Vancouver Campus. This research aims to explore African Older Immigrants' Social Connectedness in a Digital Age in Canada.

This interview is strictly for academic purposes and will not be used beyond the classroom.

The interview will take about 45 – 60 minutes. I will appreciate your cooperation. Thank you.

Isaac Adedeji

Preliminary Questions

Participant Study ID (Based on Inclusion criterion: _____ (IDI-Male)

KII Venue: _____

Date of Survey/Interview (eg 01 January, 2022): _____

Facilitator: _____

SOCIO-DEMOGRAPHIC INFORMATION

1. Sex Male Female

2. Age as at last birthday _____ Declined to respond

3. Highest level of education completed: No formal education Primary school Junior Secondary Senior school Tertiary/university/polytechnic/first-degree Medical degree Graduate school (Masters'/PhD level) Other (specify): _____

- 5. Marital status** Married; If married: Monogamous OR Polygamous union
- Single, not married Cohabiting with a partner(s)
- Separated/divorced Widower

7. What work do you do Specify: _____ Or Retired Currently unemployed
income?

Main Questions

1. What has your role been in improving social connecteness among older adults?
2. How will you descbe the experiences of social disconnectedness among African Older Immigrants?
3. Are there ways the social connectedness of African Older Immigrants be improved?

4. Exploring AOIs' use of technology for social connectedness

A. Changes in the patterns of technology use in supporting AOIs' social connectedness.

Probe for:

- i. Types of technologies
- ii. Frequency of use
- iii. Motivations for use
- iv. Quality of interactions

B. Changes in technology preference for maintaining social connections

Probe for:

- i. Finding community
- ii. Device preferences
- iii. Interface designs – layout, features that enhance or detract, font size, color
- iv. Input methods – touchscreens, physical keyboards, voice commands
- v. Accessibility features – screen readers, magnification tools, voice control
- vi. Learning curve/familiarity
- vii. Complexity – simple, specialized apps, complex, multi-functional
- viii. Support and training required
- ix. Social, Peers or family influence
- x. Future/advances in technology – age-friendly interface

C. Current challenges associated with AOIs' use of technology for social connectedness.

Probe for:

- i. Finding community
- ii. Access and connectivity
- iii. Device familiarity and usability
- iv. Software updates and maintenance
- v. Privacy and security concerns
- vi. Digital literacy and skills
- vii. Physical and cognitive limitations
- viii. Cost and affordability
- ix. Ageism
- x. Required support and resources to use technology – family, organizations.

5. Opportunities for using technology to achieve social connectedness

A. Immediate opportunities for using technology to achieve social connectedness.

Probe for:

- i. Connecting with community/family back home
- ii. Joining online communities/groups
- iii. Participation in virtual events
- iv. Accessing information
- v. Intergenerational connections

B. Long-term opportunities for using technology to achieve social connectedness.

Probe for:

- i. Exploring new communication channels/platforms
- ii. Lifelong learning and skill development opportunities

6. Considerations for an AOI social connectedness framework

Probe for:

- i. Promoting community engagement
- ii. Cultural identity and community integration
- iii. Intergenerational programs - Storytelling and culture preservation
- iv. Health monitoring
- v. Employment and economic stability
- vi. Online learning and skill development
- vii. Local language content
- viii. Digital literacy/skills training
- ix. Video-based activities – video-calling, VR
- x. Social media engagement

7. Appreciations and Closing

Thank you for participating in this interview. I appreciate your answers and perspectives. I may contact you if I require further clarification on any part of the interview.