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# Carving out a place for “pets” within the age-friendly agenda: A case study exploring the public health implications of companion animal relationships for older adults who are aging-in-place

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Carving out a place for “pets” within the age-friendly agenda:

A case study exploring the public health implications of companion animal relationships for  
older adults who are aging-in-place

by

Ann Madeline Toohey

A THESIS

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## **Abstract**

Growing numbers of people surpass the age of 65 each year, and a widely adopted response has been to work towards making communities more “age-friendly,” as per the World Health Organization’s age-friendly policy framework. Within this framework, there is no explicit reference to older adults’ relationships with companion animals (“pets”), even as pet-ownership is prevalent among older adults in many countries worldwide. Thus my research aimed to explore, from a socio-ecological perspective, the extent to which growing efforts to promote aging-in-place by adopting an age-friendly policy framework may also be influencing the health-promoting potential of relationships between older adults and their companion animals. To achieve this aim, I conducted an ethnographic multiple case study set in Calgary, Alberta, between November 2014 and October 2016. This approach allowed me to explore these influences at both the national and local population levels. My case study entailed three methodologically distinct, yet conceptually linked, research components: (i) a statistical analysis of associations between social participation and life satisfaction for older pet owners and non-owners participating in the Canadian Longitudinal Study on Aging (CLSA); (ii) a thematic content analysis of local community-based social support and animal welfare agencies’ experiences of serving older adults with companion animals; and (iii) a dialogical narrative analysis of the housing transition challenges described by lower income older adults who were aging-in-place with a companion animal. In synthesizing the findings of each component, my thesis concludes that companion animal relationships may, in some circumstances, confound efforts to promote age-friendly communities in ways that are equitable. Consideration for companion animals is merited across several domains of age-friendliness. The negative consequences of omitting consideration for older adults’ relationships with companion animals

from age-friendly efforts may be unfairly borne by those who are experiencing socio-economic disadvantages and social isolation as they age-in-place. This omission may unintentionally serve to impede the health-promoting benefits of animal companionship later in life. A reversal of this situation could help to contribute to health equity and social justice for the growing numbers of older adults who are aging-in-place, and for their companion animals.

*Keywords:* age-friendly cities, companion animals, pets, aging-in-place, older adults, socio-economic factors, health promotion

## **Preface**

### **Explanation of a manuscript-based thesis**

My dissertation is written as a manuscript-based thesis, which has a distinct format that varies somewhat from a traditional doctoral dissertation. In my home department of Community Health Sciences, a manuscript-based thesis comprises three co-authored manuscripts that, taken together, create a cohesive report of my overarching program of research (Department of Community Health Sciences, 2014). The stand-alone manuscripts each constitute a single chapter that either has been or is in the process of being peer-reviewed. These analytic chapters are woven together via Introductory and Methods chapters, as well as a final Discussion chapter.

### **Contribution of authors**

As doctoral student, I am the first author of all of the co-authored manuscripts that appear within this thesis, as well as sole author of the Introduction and Methodology chapters, and the final Discussion chapter (i.e., Chapters 1, 2, and 6). I conducted all literature reviews and was responsible for all aspects of data collection for this project. I also led the data analysis process for each manuscript, seeking input from my co-authors as a means of ensuring objectivity and rigor. Finally, I led the development of all manuscripts, seeking co-author input on subsequent drafts and, eventually, permission to submit manuscripts for peer review. I managed all stages of peer-review submissions and rounds of revisions for each manuscript, including attaining final sign-off from all co-authors and maintaining appropriate correspondence with journal editors.

Each of my co-authors contributed particular disciplinary orientations and areas of expertise to my research program, and each has been a valued mentor. Dr. Melanie Rock, as my immediate supervisor, was successful in attaining Canadian Institutes of Health Research (CHIR)

operating grant funding for an over-arching research project titled “Social Justice and Pet Ownership” (MOP-130569) that encompassed my research project. Dr. Rock’s operating grant also released funds for expenses that were beyond the scope of my own scholarship funding, as listed in the Acknowledgements section of my thesis. Dr. Rock also offered both methodological and content-area expertise in One Health and ethnographic human-animal studies, as well as structural health promotion, population health intervention research, critical social theory, and public health ethics. She provided expert methodological guidance around ethnographic case study methodology and the various qualitative methods that I employed in carrying out my dissertation.

Dr. Cindy Adams, a member of my supervisory committee, offered content-area expertise in relation to animal welfare considerations, from a veterinary practice perspective, and also in relation to her extensive experience in social work practice. Dr. Adams also provided methodological expertise around the quantitative portions of my analysis. Dr. Jennifer Hewson, as the third member of my supervisory committee, rounded out my mentorship team with her substantial expertise in the field of gerontology, including her specialized, in-depth knowledge of the age-friendly movement, and of the priority domain of social participation in particular. Dr. Hewson also offered methodological input into my mixed methods design, and contributed substantively to both the qualitative and quantitative components of my dissertation. Additionally, Dr. Hewson’s meticulous copyediting skills helped to polish final drafts of all manuscripts and of this write-up as a whole, although I am ultimately responsible for any minor typographical errors that have defied my many read-throughs.

My supervisor and committee members, who are also recognized as co-authors for the stand-alone manuscripts, have all fulfilled the requirements of co-authorship that are detailed by

the International Committee of Medical Journal Editors (2017), i.e., Chapters 3 and 4 for Drs. Adams and Hewson; Chapters 3, 4, and 5 for Dr. Rock. The ICMJE recommends that authorship be based on meeting four criteria: (i) substantial contributions to the conception or design of the work or the acquisition, analysis, or interpretation of data for the work; (ii) drafting the work or revising it critically for important intellectual content; (iii) final approval of the version to be published; and (iv) agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Lastly, I wish to acknowledge Timothy Krahn, a senior research associate with Novel Tech Ethics at Dalhousie University, as my co-author for a commentary that we prepared to highlight the unjust nature of the shortage of affordable, pet-friendly housing available to older adults. Our commentary (Toohey & Krahn, 2017) was published in the Perspectives section of the Journal of Public Health, and is reproduced in Appendix A of this dissertation. Krahn and I became acquainted when I presented an early iteration of Chapter 5 of this thesis to the Impact Ethics research group at Dalhousie University during my stay in Halifax to present at the 2016 Canadian Anthropology Society & Society for the Anthropology of North America (CASCA/SANA) Solidarit(i)es Conference. My presentation captivated his own interest in bridging public health and justice arguments to build a case for improving protections for companion animal relationships within affordable housing policies and practices. I led the development of our commentary, and Krahn's expertise was instrumental in building the ethics-based argument that we propose in our piece. Krahn also assisted with unraveling complexities around housing rules and practices across Canada and beyond. As with the other co-authored chapters of this thesis, I led all peer-review submission and revision processes, and corresponded

with journal editors. Krahn also complied with the four ICMJE criteria for co-authorship discussed above.

### **Status of thesis manuscripts at the time of writing**

Chapter 3: The manuscript is titled “Is pet ownership relevant to social participation and life satisfaction for older adults who are aging-in-place in Canada? Findings from the Canadian Longitudinal Study on Aging (CLSA)” was accepted in September 2017 and will be published in March 2018 in the *Canadian Journal on Aging* (Toohey, Hewson, Adams, & Rock, 2018). Permission for reproduction has been granted by the publisher, Cambridge University Press (Appendix B).

Chapter 4: The manuscript is titled “When 'places' include pets: Broadening the scope of relational approaches to promoting aging-in-place” and was accepted in April 2017 and was published in September 2017 in the *Journal of Sociology and Social Welfare* (Toohey, Hewson, Adams, & Rock, 2017), with permission for reproduction granted by the editor, Dr. Robert Leighninger (Appendix B).

Chapter 5: The manuscript is titled “Disruptive solidarity or solidarity disrupted? A dialogical narrative analysis of economically vulnerable older adults' efforts to age in place with pets” was submitted to *Public Health Ethics* for peer review in September 2017, and received a revise and resubmit decision in January 2018, following my oral defense of this dissertation. Thus the revised and resubmitted version of the manuscript is included within my thesis. This contribution was co-authored with my supervisor, Dr. Melanie Rock.

Appendix A: The commentary titled “‘Simply to be let in’: Opening the doors to lower-income older adults and their companion animals” was accepted for publication in September



2017 and is available online ahead of print in the Perspectives section of the Journal of Public Health (Toohey & Krahn, 2017). Permission for reproduction has been granted by the publisher, Oxford University Press (Appendix B).

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- International Committee of Medical Journal Editors. (2017). Defining the Role of Authors and Contributors. Retrieved July 22, 2017, from <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>
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First and foremost, I wish to acknowledge and thank my doctoral supervisor, Dr. Melanie Rock. It has been such a privilege for me to have had the opportunity to learn so much from an extraordinary scholar and visionary thinker. Melanie has been a true pioneer in evolving the theoretical underpinnings of public and population health in ways that are both novel and highly relevant to contemporary society. Without Melanie's guidance, encouragement, collaboration, and the occasional gentle push, my academic trajectory would surely have flattened years ago.

I would also like to acknowledge and thank my two committee members, Dr. Cindy Adams and Dr. Jennifer Hewson. Cindy has, over the course of both my Master's and PhD training, substantially reoriented my thinking around the complex issues that must be addressed when working towards optimal situations for both older adults and their companion animals. Jennifer, on the other hand, has continually challenged me to frame my thinking around social justice for both older adults and their companion animals. Along the way, Jennifer has also graciously opened, for me, invaluable doors into local and national gerontology communities.

I would like to express my thanks to two additional mentors: Dr. James Gillett, for the important insights and advice he has consistently offered as my studies progressed; and Dr. Heather Hanson, whose sage counsel helped me to remain focused and balanced as my studies progressed and intensified. I am also grateful to Timothy Krahn, for taking such an ardent interest in my research area that we ultimately co-authored the published commentary that appears as Appendix A of this thesis. It was a privilege to work closely with Tim, as a thoughtful and innovative scholar in the field of public health ethics.

My academic journey has been enriched by the camaraderie I have experienced with my three closest doctoral colleagues, Dawn Rault, Taryn Graham, and Kelsey Lucyk: each an

inspiring scholar in her own right! I must also express my heartfelt thanks to Lydia Vaz, for all that she has done behind the scenes, over the years, to support my progress.

My research and training were funded by several sources, including a Canadian Institutes of Health Research (CIHR) operating grant (#MOP-130569) held by Dr. Melanie Rock; a University of Calgary – Achievers in Medical Sciences Recruitment Scholarship; a CIHR-Population Health Intervention Research Network (PHIRNET) Doctoral Studentship; a Terry and Sue White Doctoral Scholarship; and an Alberta Innovates Graduate Studentship (#201504). I am also most grateful to the Canadian Longitudinal Study on Aging (CLSA), funded by the Government of Canada through the Canadian Institutes of Health Research (CIHR) under grant reference LSA 9447 and the Canada Foundation for Innovation, for granting me access to the CLSA dataset Baseline Tracking version 3.0, under Application Number 141206. The CLSA is led by Drs. Parminder Raina, Christina Wolfson and Susan Kirkland.

On a personal level, I received immeasurable encouragement from many family members and friends as I navigated my way through my graduate studies. Among this group, there are a handful of people whom I must single out in appreciation for all that they have done to help propel me. These include my husband Tyler and daughter Kali, to whom this work is dedicated; my parents, Eric and Janice Dahlberg; my parents-in-law, Claudia and Harold Toohey; my sister, Margaret Dahlberg; my brothers, Anders and Eric Dahlberg; and my dear friend, Kelly Stauffer.

Lastly, I would like to express my heartfelt thanks to my friend and “closet sociologist” Saskia Houwen. Over the course of innumerable dog walks, Saskia listened – and responded – to countless accounts of my scholarly progress and evolution of thought. Beyond this, she somehow knew exactly what I needed, and when I needed it, and handily proffered it each step of the way.

## **Dedication**

For Tyler and Kali, with inexpressible gratitude for the endless supply of confidence, encouragement, and love, and for the perpetual promise of adventures yet to come.

For my four-legged faction: the lovely (blue) lady Lucy, the spirited Abby Tango,  
and the late, hairy Oscar.

And for older adults and their animal companions everywhere,  
who merit our compassionate consideration.

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## List of Symbols, Abbreviations and Nomenclature

Abbreviation	Definition
ADLs	Activities of Daily Living
ASPCA	American Society for the Prevention of Cruelty to Animals
CAG	Canadian Association on Gerontology
CASCA/SANA	Canadian Anthropology Society & Society for the Anthropology of North America
CCHS	Canadian Community Health Survey
CHREB	Conjoint Health Research Ethics Board
CI	Confidence Interval
CIHR	Canadian Institutes of Health Research
CLSA	Canadian Longitudinal Study on Aging
CSRS	Calgary Seniors Resource Society
IADLs	Instrumental Activities of Daily Living
ICMJE	International Committee of Medical Journal Editors
LGBTQ	Lesbian, Gay, Bisexual, Transgender, Queer
MSW	Master of Social Work
OR	Odds Ratio
p	p-value
PHIRNET	Population Health Intervention Research Network
SES	Socio-economic status
SLS	Satisfaction with Life Scale
USA	United States of America
WHO	World Health Organization
Yr	Years

## **Chapter 1: Introduction**

Growing numbers of people are surpassing the age of 65 each year, and communities around the globe have begun to take steps to adapt. As the “aging population” phenomenon has begun to unfold, it has become increasingly apparent that our communities and neighbourhoods, services and supports, have been neither appropriately arranged nor adequately supplied in ways that will enable all older adults (generally defined as those over the age of 65 years) to live independently in their own homes for as long as possible. Yet this goal of supporting “aging-in-place” is important, as it encapsulates both individual and policy-level preferences (Menec, Means, Keating, Parkhurst, & Eales, 2011; Michael & Yen, 2014; Plouffe et al., 2012). For individuals, having options to remain in homes of their choosing contributes to retaining a sense of control and autonomy (Leibing, Guberman, & Wiles, 2016; Wiles, Leibing, Guberman, Reeve, & Allen, 2011). For policymakers, aging-in-place attends to the political will of the constituents, and proffers opportunities for both fiscal and operational efficiencies. As a policy orientation, aging-in-place also offers opportunities for governments to take action towards promoting and protecting the health and well-being of older adults, which is important for both ethical and practical reasons (Menec et al., 2011; Michael & Yen, 2014).

Responding to the burgeoning interest in both opportunities and challenges arising from the aging population, in 2005 the World Health Organization initiated an important process of exploring which sorts of steps and initiatives would be needed to create conditions to support optimal aging for heterogeneous older populations living in urban settings. This process involved compiling published evidence, while also garnering older adults’ and other stakeholders’ perspectives around the practicalities of optimizing aging in communities. The findings of this extensive, global effort were synthesized into a formative guiding document called “Global Age

Friendly Cities: A Guide” (World Health Organization, 2007). The comprehensive report compiles best practices, and identifies eight priority areas that, with adequate effort and attention, may contribute to enabling inclusive and health-promoting experiences of aging for all older adults. At the centre of the Age-Friendly Cities approach lies a commitment to the value of active aging, which the WHO conceives as “... a lifelong process shaped by several factors that, alone and acting together, favour health, participation and security in older adult life.” (World Health Organization, 2007, p. 1) “In practical terms,” the guide continues, “an age-friendly city adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities.” (World Health Organization, 2007, p. 1)

While the WHO’s Global Age-Friendly Cities Guide is both comprehensive and influential as a starting point for adapting policy and practices in ways that benefit older adults as well as the communities in which they live, it is not without its shortcomings. The guide has, for instance, entered ideologically contested territory for its “active aging” framework. The underlying active aging framework emphasizes the “... process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.” (World Health Organization, 2007, p. 5) Indeed, the active aging framework has been understood by some critical gerontology scholars to perpetuate individual responsabilization for attaining normative conceptions of aging, which Katz and Calasanti (2014, p. 26) point out are equated with terms like “healthy,” “positive,” “productive,” “effective,” “independent”, and, ultimately, “successful” aging. Critiques of active aging tend to coalesce around an implicit assumption that non-participation in social life reflects the shortcomings of individuals, regardless of physical abilities and social circumstances, and without exploring structurally-perpetuated societal

barriers and stigmatization of persons who do not fit into normative conceptions (Katz, 2000; Katz & Calasanti, 2014; Rozanova, 2010; Rozanova, Keating, & Eales, 2012).

With this in mind, gerontologists and practitioners increasingly orient towards the concept of “aging well.” Chapman (2005, p. 10) describes aging well as “a process in which individuals in context make positive meaning through an on-going, open-ended negotiation of multiple selves amid later-life change.” Thus aging well can be understood as a non-prescriptive, constructivist conception of aging experiences, and one that accounts for and accommodates the growing diversity and heterogeneity of the aging population. To age “well” might thus be viewed as an endeavour that can be enhanced and supported at the population-level, via the age-friendly efforts detailed within the WHO (2007) guide.

Despite the various scholarly critiques of active aging, age-friendly priority areas and checklists were built upon the engagement of older adults themselves, and aspire to achieve inclusivity. These priorities are valuable, as well, in that they tend to appeal to policy makers, to social service organizations, and to many older adults themselves. Yet, the guide is limited in its application, since the areas of focus are broad and decontextualized to the point that most communities must take on extensive processes of their own in order to make practical strides towards promoting aging-in-place. Such efforts are indeed taking place at an international scale (Plouffe & Kalache, 2011; Steels, 2015), and the process of tailoring policy development to meet the needs of individual communities bodes well for the potential of the resultant plans and strategies to also promote population health (Hawe & Potvin, 2009). Many of the age-friendly priority areas that cities are now actively considering in fact reflect the broad health promotion interests in designing “healthy cities” (Hancock, 1993). Even as direct links between policies on companion animals and healthy, or health-promoting, cities have been identified (Rock et al.,



2014), very few age-friendly policies have been attentive to the health-promoting potential of companion animals (or “pets”) to support active aging, or to enhance experiences of aging well.

From my own perspective, as a population health researcher who has been exploring the intricacies of human-animal relationships in relation to aging experiences, this omission should not be trivialized for two particular reasons. First, people with companion animals constitute over one-third of all older adults, generally defined as being 65 years and older, in Western countries (Bennett, Trigg, Godber, & Brown, 2015; Himsworth & Rock, 2013; McNicholas, 2014; Peak, Ascione, & Doney, 2012), a trend that is also growing in Asian countries (Hansen, 2013; Headey, Na, & Zheng, 2007). The individual characteristics of pet-owners also reflect the socio-demographic and socio-economic diversity of the aging population (Himsworth & Rock, 2013; McNicholas et al., 2005; McNicholas, 2014; Poresky & Daniels, 1998). Second, there is a growing, and increasingly complex, literature that suggests the potential for measurable public health benefits of pet-ownership amongst older adults (Anderson, Lord, Hill, & McCune, 2015; Baun & Johnson, 2010; Cherniack & Cherniack, 2014; McNicholas et al., 2005; McNicholas, 2014). These benefits may plausibly have positive implications for some older non-pet owners as well (Mahalski, Jones, & Maxwell, 1988; Peel, Douglas, Parry, & Lawton, 2010; Toohey & Rock, 2011; Wood, Giles-Corti, Bulsara, & Bosch, 2007). Thus paying attention to companion animals within the age-friendly agenda could also contribute to the overarching interest in promoting physical, mental and social health and well-being via aging-in-place.

In the sections that follow, I begin by considering the current state of the scholarly literature on companion animals (“pets”) and aging. Whereas the notion that companion animals are “good” for older adults prevails within the popular thinking, the evidence itself is mixed and at times contradictory. This literature is also rife with both methodological and ontological

variation (Chur-Hansen, Stern, & Winefield, 2010; Franklin, Emmison, Haraway, & Travers, 2007). One overarching gap that transcends this literature is the dearth of explicit attention paid to the experiences of older pet-owners living in more disadvantaged or vulnerable circumstances, primarily in relation to socio-economic status and social isolation, although some exceptions to this do exist (e.g., Dembicki & Anderson, 1996; e.g., Mahalski et al., 1988; Morley & Fook, 2005; Poresky & Daniels, 1998; Wells & Rodi, 2000). Another gap is the inattention that has been paid to ways that structural factors, versus individual characteristics, may be shaping older adults' experiences with companion animals.

Along these lines, the WHO (2007) age-friendly policy framework offers a relevant approach to operationalizing policy-level factors that have been identified as enablers for aging-in-place. Therefore, following the literature review, I move on to offer an overview of the WHO's age-friendly policy framework introduced above. Concerns around the non-critical conceptions of social inclusion, as highlighted above, converge in relation to my interest in health equity within the aging population, as per Margaret Whitehead's (1991, p. 220) contention that "Equity is...concerned with creating equal opportunities for health and with bringing health differentials down to the lowest level possible." In terms of the role of age-friendly policy in doing this, I draw upon Hilary Graham's (2004) helpful distinction between the social factors that underlie determinants of health, and the social processes (e.g., policy development and implementation) that lead to their unequal distribution. To an extent, older age is itself a determinant of health, given its physiological underpinnings and the likelihood that morbidity and co-morbidities will increase as people age. And yet, while current thinking suggests that health declines associated with aging are not inevitable (Rowe & Kahn, 1997), it appears that socially-patterned health inequities are perpetuated across the life course (Jivraj & Nazroo, 2014;

McGovern & Nazroo, 2015; Pavalko & Caputo, 2013). Thus within the aging population, policies and practices may either ameliorate or exacerbate inequalities (H. Graham, 2004), in relation to the extent to which they address inclusion, autonomy, and access to material resources.

Socially contingent patterns of health and well-being may also be linked with considerations of social justice, since they appear to mirror socially patterned, unfair restrictions and constraints around choices in life. While some of these choices may be linked directly to health (e.g., choices around promoted healthy lifestyles such as diet and exercise that are available to some and not others), the relational nature of autonomy itself may serve to perpetuate health inequity across the population (Baylis, Kenny, & Sherwin, 2008). More specifically, Baylis et al. (2008, p. 202) contend that autonomy is “a product of social relations” and that “the choices individual persons can make depend fundamentally on the options available to them.” In viewing autonomy as being experienced relationally, the authors highlight the extent to which policy decisions may either constrain or enable options and choices for individuals, depending upon their circumstances and contexts.

Next, I move on to provide a conceptual link between the literature on companion animals and aging and the age-friendly policy framework by proposing a novel framework for understanding ways that companion animal relationships are experienced by older adults. My proposed framework makes overt reference to various socio-ecological factors, which underlie policy-level approaches to promoting aging-in-place. Environmental or ecological theories of aging are concerned with ways that people interact with their environments as they age. Such understandings have long underpinned advances in aging research and practice, including conceptions of age-friendliness at the community level (Wahl & Weisman, 2003). Socio-

ecological theoretical frameworks are also increasingly common within public health and population health literatures (McLaren & Hawe, 2005; Richard, Gauvin, & Raine, 2011). Yet, socio-ecological perspectives are rarely found within studies focused on companion animals and aging. Instead, much attention has been focused upon the individual attributes of singular relationships between “an” older or elderly adult and “a” companion animal (or animals). This approach, however, disregards the plausible influences of an array of factors that also may shape both experiences of and practices relating to relationships with companion animals. These relationships are, after all, experienced within particular physical, social, cultural, and political contexts. As discussed in detail below, my proposed framework seeks to redress this situation by weaving together socio-ecological theory and recognized tenets of health promotion that are relevant to aging-in-place with companion animals.

Following the introduction of my theoretical framework, I state my research objectives and provide a roadmap for the structure of this dissertation. Throughout, I provide explicit links between the different theoretical approaches I have adopted and the WHO (2007) age-friendly framework. Importantly, this framework underscores the relatively nascent implementation of an age-friendly strategy for Calgary by City administration, which was launched officially in 2015 and continues to unfold (City of Calgary, 2015; Tunstall & Eaton, 2016). I move on to offer an overview of this strategy, as well as other relevant policy considerations, in the section that follows.

### **1.1 Aging-in-place with “pets” in Calgary: My research context**

Shoveller and colleagues (2015) argue for the pressing need for population health intervention researchers to better account for the social (versus physical) influences on ways that

phenomena are experienced *in situ*, and the resultant ways that outcomes unfold. This type of attention, they argue, will advance understandings of the prospective roles played by theoretically-relevant factors that shape health outcomes at both individual and population levels. As the primary setting for my thesis research, the Canadian city of Calgary offered a valuable opportunity to delve further into the concept of “context” (i.e., the “context” of aging-in-place for older Calgarians with companion animals) in relation to interacting policy-level considerations. I view municipal policy implementation as an important and wide-reaching form of population health intervention, as per Hawe and Potvin (2009). Specifically, in relation to my interest in aging-in-place with companion animals, there are three notable policy-oriented contextual influences that factored into my evolving understanding. These were (i) Calgary’s progressive and world-renowned policies around responsible pet-ownership (i.e., the Responsible Pet Ownership Policy and related bylaw); (ii) Calgary’s recent implementation of a municipally-driven age-friendly strategy; and (iii) Calgary’s relative shortage of affordable rental housing, as is closely tied to “boom and bust” economic fluctuations in the province’s oil and gas industry. Each of these is summarized below.

### **1.1.1 Calgary’s Responsible Pet Ownership Policy**

The importance of municipal efforts to acknowledge and manage pets in relation to “healthy cities” has been explored by Rock and colleagues (2014). The conceptual framework proposed by these authors brings to the fore the pertinence of local governments’ strategies relating to five key aspects of pet-ownership: (i) preventing threats and nuisances from pets; (ii) providing veterinary services for pets; (iii) procuring pets ethically; (iv) meeting emotional and physical needs of pets; and (v) licensing and identifying pets. In addressing these five key areas, local policies are positioned to influence the potential of urban companion animals to act as

vehicles for physical and mental health promotion and for social cohesion at the population level, while also attending to the welfare of the animals themselves.

In 2006, the City of Calgary adopted its Responsible Pet Ownership Policy, to “(set) appropriate standards for responsible pet ownership, to manage domestic animal ownership in the community and to ensure that these animals do not become a nuisance or danger” (City of Calgary, 2006). Calgary’s policy approach has been recognized around the world for being both progressive and effective in its efforts to balance the rights of pet owners and non-pet owners, as well as animal welfare (see, as examples, Rock, 2012 and Economy and Infrastructure Committee, 2016). The City of Calgary has been lauded for initiatives such as funding its animal-related municipal services (e.g., complaint investigations, animal seizures, sheltering, and reunification) with dog and cat licensing fees (Rock, 2012); managing and reducing aggressive dog incidents via bylaw compliance and education rather than adopting breed-specific legislation; and designating an extensive amount of public open space for use by off-leash dogs and their owners (City of Calgary, 2010; Toohey & Rock, 2015). As a result, Calgary has garnered an international reputation as a “pet-friendly” city.

### **1.1.2 Calgary’s Seniors Age-friendly Strategy**

In 2015, the City of Calgary launched its Seniors Age-friendly Strategy (City of Calgary, 2015), joining a small but growing collection of Canadian municipalities that have formally developed and adopted strategies to optimize cities and neighbourhoods to better support the aging population (Toohey, 2012). Calgary’s strategy was influenced by the World Health Organization’s age-friendly guidelines (World Health Organization, 2007), but was also tailored to local needs and preferences via an extensive, two-year consultation process that included stakeholders representing a wide range of aging-focused services, including healthcare, as well

as the perspectives of a representation of older adults themselves. Following this process, the final priority areas for Calgary's age-friendly efforts were identified as (i) access to information and services; (ii) community support and health; (iii) housing; (iv) participation and inclusion; (v) prevention and response to elder abuse; and (vi) transportation and mobility. While some of these identified dimensions of age-friendliness will inevitably focus on physical settings (e.g., ensuring that public facilities are physically accessible and equipped with supportive amenities like benches, water fountains, and restrooms), many others offer insights into the social contexts in which Calgarians will experience the process of aging, as per Shoveller et al. (2015). Furthermore, the social value placed upon meeting the needs of older adults will inevitably shape the extent to which these six discrete priority areas can be addressed in effective and measurable ways, given the complex competing priorities that must be balanced by the municipality. As such, the efforts to evaluate the effectiveness of the wide range of age-friendly action items identified within the age-friendly strategy has also been prioritized by the City (Tunstall & Eaton, 2016).

Like most other cities, there are no overt or explicit references to older adults' relationships with companion animals that can be found within Calgary's age-friendly strategy. Even so, the City of Calgary recognizes the value of animal companionship for older adults via its "Seniors for Seniors" pet adoption strategy, which offers subsidized adoption fees to people over the age of 60 years who adopt an older animal from the City's shelter (Toohey, 2012). Furthermore, through my contribution to the age-friendly evaluation plan as a stakeholder-reviewer, pet-ownership has been identified as a variable of interest that may be assessed on a longitudinal basis, prospectively offering an opportunity to link more closely the presence of

companion animals within the aging population to measures of age-friendliness, in a way that could also be emulated by municipalities elsewhere in Canada and beyond.

### **1.1.3 Calgary's rental housing market**

A recently published report highlights concerning deficiencies in Calgary's affordable housing supply, particularly when compared with several other major Canadian urban centres (Kneebone & Wilkins, 2016). According to this report, Calgary's rents are also increasing more rapidly than are incomes provided or supplemented by social assistance. Graham & Rock (in press) have also described the complex ways that Calgary's rental housing availability has been influenced by economic trends in the oil and gas sector. While vacancy rates are low during the "boom" portion of the cycle, they may ease somewhat during the "bust". However, housing affordability has not consistently followed this trend. In the past, increases in vacancy rates have not led to improved affordability (Graham & Rock, in press). Taken together, the affordability of housing in Calgary, which is an age-friendly priority, may be a challenge for older adults living on fixed incomes, as will be the situation of many Calgarians post-retirement. Furthermore, in spite of the progressiveness of its responsible pet ownership policy approach, Calgary's rental housing legislation falls under provincial jurisdiction. While some Canadian provinces (e.g., Ontario) include non-discrimination rules in relation to renting to tenants with pets, Alberta's legislation leaves decisions around pets, including extra fees and deposits when pets are allowed at all, to the discretion of property owners (Toohey & Krahn, 2017).

### **1.1.4 Summary of pertinent contextual considerations**

As a research setting for exploring aging-in-place with companion animals, I have highlighted the extent to which Calgary is progressive in its approach to managing and supporting the right for citizens to reside with companion animals, while balancing the rights of



others and considering the well-being of pet animals themselves. Our municipality is also committed to evolving its efforts to create an age-friendly social and physical environment in order to promote aging-in-place. Yet Calgary is also one of the most challenging Canadian cities in which to attain affordable housing, even as housing is a pervasive age-friendly priority, and even as older adults will likely face reduced and fixed incomes as they retire from the workforce. Furthermore, there are no legislative protections for pet-owners who are also renters, which has corresponded with a shortage in the availability of pet-friendly rental housing (Graham & Rock, in press; Toohey & Krahn, 2017). These different factors offer a theoretically-rich context in which to better understand the complicated web of sociocultural factors that shape ways that older adults may experience their relationships with pets as they age-in-place in this city. Yet, I also suggest that insights that can be gained from research set in the Calgary context may proffer relevant understandings elsewhere, given that societies around the globe are experiencing aging populations alongside a likelihood that substantial proportions of older adults will aspire to cultivate relationships with pets later in life.

## **1.2 About my terminology**

The language that we as researchers employ is not always straightforward, and non-critical use of terminology may unintentionally perpetuate biases. To this point, and throughout the rest of my thesis, there are times when I interchange the terms “pet” and “companion animal”. Current academic literature includes ontologically motivated divisions when it comes to the use of both terms. In my own writing, I tend to give preference to the term “companion animal,” for being more descriptive of current socio-cultural leanings around the experiential qualities of and reciprocity bound into the human-animal relationship. Many scholars in the field

of human-animal studies avoid using the label “pet” for its implication that a non-human animal is of a lower moral status than a human being. Yet it appears that the word “pet” may have originated from the mid-1400s Scottish-Gaelic term “peata,” which means “tame animal” (Cross, 2010).

Regardless, the terms “pet” and “companion animal” are both commonly used within the wider public health literature, depending upon the disciplinary and ontological stances from which different studies are produced. Because of the inter-disciplinary nature of my research approach, I draw upon both terms at times. For instance, the analysis I offer in Chapter 3 considers data that explicitly references “pets” versus companion animals, and thus my language follows suit. When I conducted interviews with older adults and both service providers and animal welfare agencies, I also referenced “pets” throughout the ethnographic interviews that I conducted. I made this decision in order to avoid confusion, as “pet” remains the dominant, colloquial label for companion animals used by most people located outside of academic and animal rights circles. Thus when I prepared these manuscripts, I continued to refer most often to “pet” rather than to “companion animal” based upon both the data I collected, and the anticipated readership for these studies. Similarly, I orient to the terminology of “pet owner,” versus “guardian” as increasingly used in human-animal studies, for its salience to municipal policies and regulations (e.g., the City of Calgary’s “Responsible Pet Ownership Bylaw”) that strive to balance the rights of those with companion animals, those without companion animals, and the animals themselves (Rock & Degeling, 2013).

At the same time, throughout my dissertation I tend to avoid the term “seniors” when describing members of the older adult cohort. For demographic purposes, older adults are generally defined as being 65 years or older, which corresponds with the traditional age of

retirement from the workplace and eligibility for national pension payments in many countries. The term “older adult” is also a relational term. We know, for instance, that persons who have lived in chronically vulnerable conditions like homelessness may present health conditions typically linked with aging at a significantly younger age than those who have had socio-economic advantages. At the same time, the word “senior” may label older adults in particular ways that do not resonate with their own self-conceptions. Thus, throughout my dissertation, I consistently use “older adults” to describe my population of interest, which also subsumes the variety of age-defined categories used in the published literature.

### **1.3 Companion animals and aging: an overview of relevant literature**

Interest in ways that companion animal relationships may influence aging outcomes is not new. As a number of literature reviews indicate, many different health-promoting dimensions of animal companionship for older adults have been studied (Anderson et al., 2015; Baun & Johnson, 2010; Cherniack & Cherniack, 2014; McNicholas, 2014). As I consolidate the literature that creates a conceptual evidence base upon which my own investigation has been built, it is important to highlight some considerations. In particular, because I am interested in aging-in-place as a population-level phenomenon, I have excluded extensive literature that focuses on the prospective benefits of animal-assisted therapy (AAT) and animal-assisted activities (AAA). AAT refers to an intervention with specific treatments goals, where the involvement of the trained animal is integral to achieving these treatment goals, and where the intervention is delivered by a health or human services professional (Kruger & Serpell, 2011). AAA refers to activities that are intended to produce a range of benefits that improve quality of life, and that are delivered in a variety of settings, by various professionals or volunteers in association with

trained animals, but with no specific treatment goal (Kruger & Serpell, 2011). I have also excluded literature exploring health promotion considerations of service animals, defined as any animal that has been trained to support and assist an individual with a disability (Kruger & Serpell, 2011). While most of the literature I have cited within my literature review focuses on pet-ownership, I have also included a small number of studies that consider older adults living in the community who do not “own” a companion animal, but who nonetheless experience benefits of companion animals by, for instance, walking with a neighbour and their dog (e.g., Peel et al., 2010), or visiting a public setting where they are recognized for having an affinity for and expertise around dogs (e.g., Gardner, 2014).

My knowledge of the literature on aging-in-place with companion animals is built upon research that I conducted during my Master’s degree, which explored the population health implications of dog-walking in local neighbourhoods for older adults who were aging-in-place. This project included a critical realist scoping review of dog-walking and physical activity for both non-dog-owners and owners (Toohey & Rock, 2011; see Appendix C for a copy of the abstract). This review served to highlight ways that dogs in urban neighbourhoods may either enhance or undermine health promoting potential of neighbourhood environments as settings for physical activity, social cohesion, and sense of community. The review also highlighted the extent to which evidence relevant to better understanding the health-promoting potential of relationships with companion animals may be present within study data, yet is often ignored by researchers when analyzing their data. This phenomenon has also been observed by Ryan & Ziebland (2015), in the context of conducting qualitative interviews with older adults in their homes.

During my Master's training, I was also able to explore the health-promoting potential of dog-walking for a sub-sample of older adults participating in a cohort study. My study found that older adults ( $\geq 50$  yrs) who walked their dogs frequently (4 times per week or more) were significantly more likely to achieve recommended levels of physical activity, and were also more likely to report a positive sense of community (Toohey, McCormack, Doyle-Baker, Adams, & Rock, 2013; see Appendix D for a copy of the abstract). The sample of older adults that we considered, however, was relatively well-off, and lacked both socio-demographic and ethnic diversity. Thus it was unclear, the extent to which our study findings hold true for older adults living in more disadvantaged neighbourhoods. This uncertainty was also underscored by our scoping review findings, which highlighted ways that the health-promoting potential of dogs was experienced differentially by older adults, depending upon socio-economic characteristics of their neighbourhoods.

In developing the research proposal for my doctoral dissertation, I expanded my familiarity with research on aging-in-place and companion animals to include pets of different species, and the few studies that help to shed light on the experiences of older adults with pets living in a range of socio-economic circumstances. I then synthesized my understanding of this literature with concepts of social and critical gerontology, as well as health promotion and social theory, as I prepared for my candidacy examination. Drawing upon a reading list that was approved by my supervisor and committee members, my candidacy exam involved preparing three critical papers to situate my expertise in three overarching topic areas (i.e., population health intervention research and health inequity, healthy aging and aging-in-place, and the roles of human-animal relationships vis-à-vis healthy aging/aging-in-place). Within each topic area, I was expected to master three competency areas (i.e., underlying theories and conceptual

frameworks, methodology and methods, and the research context). My approved reading list for this examination can be found in Appendix E. In completing the requirements of my candidacy examination, I was asked to critically appraise the history and methodology of research on older adults' relationships with companion animals, and to discuss ways of integrating scholarship on healthy aging and critical gerontology into the design and interpretation of future studies on aging and companion animals. In doing this, I argued for the need to move away from positivist approaches that lack grounding in social theory, and proposed conceptual links with critical gerontological understandings of aging-in-place.

While proposal development and candidacy provided a solid foundation of evidence upon which my thesis was built, these scholarly activities took place in the years leading up to 2014, when I completed my candidacy requirements. Naturally, there have been more recent contributions to the literature on companion animals and aging in the years that have passed since that time. I have maintained currency with this literature using several means, including receiving regular journal alerts from gerontology and human-animal studies journals, receiving publication and citation alerts for leading authors in fields of human-animal studies and social and critical gerontology, and reviewing, as a peer-reviewer, original research submissions to high impact journals, including *Preventive Medicine*, the *British Medical Journal*, the *Journal of Epidemiology and Community Health*, *Social Science & Medicine – Population Health*, *Health and Place*, and several others. Hand-searching the citation lists of newer studies has also helped me to remain abreast of current studies that further our understandings of the physical, mental, and social health implications of aging-in-place with companion animals. These different strategies have ensured that the literature included in the review that follows has been rigorously selected for its currency and for its relevance to efforts to promote aging-in-place.

Based upon the knowledge that I have acquired over my years of study in this area, for the purposes of my doctoral dissertation, I have organized my review of relevant literature around insights on roles companion animals may play in terms of facilitating independence and social inclusion, both of which are priorities of age-friendly strategies and are foundational to aging-in-place (Menec et al., 2011; Plouffe & Kalache, 2011; Scharlach & Lehning, 2013; Wiles et al., 2011). To do this, I draw broadly upon conventional understandings of “successful aging” as proposed by Rowe and Kahn (1997). These include attention to physical health, mental and emotional health and well-being, and social engagement. While these categories are useful for the purposes of organizing a diverse literature, my own views align philosophically with the idea of “aging well” (Chapman, 2005), as a more inclusive and constructivist understanding of ways that aging may be experienced. “Aging well” also highlights the adaptive capacities of individuals to negotiate the realities of aging in ways that allow for an intrinsic sense of autonomy and self-determination. “Successful aging”, on the other hand, tends to create binary divisions around success and failure, which can lead to assigning blame to those whose efforts to achieve success are judged to be inadequate.

Usefully, however, Rowe and Kahn’s “successful aging” model brings to the fore physical, cognitive, and social dimensions of aging, and also dovetails with the World Health Organization’s conception of health as a complete state of physical, mental and social well-being and a resource for daily living (World Health Organization, 1986). Even in parsing out these different categories of outcomes, I acknowledge that they all tend to be intertwined and experienced in relation to one another, and also in relation to external physical and socially contingent environments. Along these lines, I have further broadened my review to consider the sparse literature that offers insight into the socio-spatial dimensions of aging-in-place with

companion animals, by also considering housing and neighbourhood context as potentially enabling versus impeding positive experiences with companion animals (Scharlach, 2016). Once again, I note that my organization is heuristic, and simplifies the complex ways that companion animals both fit into and influence older adults' lives and well-being as they grow older in community settings, as will be further explored in my own research approach.

### **1.3.1 Companion animals and physical functioning in later life**

There is mounting evidence that having a companion animal may support physical functioning and independence in a range of different ways. Based on my knowledge of the current literature, I begin by exploring companion animals in relation to physical activity, as a proxy for mobility. In this section I focus on the metabolic implications of being physically active, such as meeting recommended guidelines for physical activity (Warburton, Charlesworth, Ivey, Nettlefold, & Bredin, 2010), while the social implications of being physically active with a companion animal, and particularly a dog, are addressed later. Following this overview of physical activity and companion animals, I move on to consider functional independence.

#### ***Physical activity***

Physical activity and dog-walking has been one of the most extensively explored dimensions of companion animals' health-promoting potential (Christian et al., 2013, 2016; Westgarth, Christley, & Christian, 2014). Several studies have now demonstrated that older adults with dogs are more likely to attain recommended levels of moderate physical activity (i.e., 150 minutes of walking per week) (Curl, Bibbo, & Johnson, 2016; Dall et al., 2017; Feng et al., 2014; Garcia et al., 2015; Gretebeck et al., 2013; Thorpe et al., 2006; Toohey et al., 2013). While many of these studies are limited by both cross-sectional designs and self-report of physical activity or walking, there are exceptions. Two different longitudinal studies have found that dog-



walking helps older adults to maintain physical activity over time (Dall et al., 2017; Thorpe et al., 2006). Recent studies have also used accelerometer data to confirm that dog-walking can indeed fulfil the criteria for being considered a source of moderate physical activity (Dall et al., 2017; Feng et al., 2014; Garcia et al., 2015), and have suggested that older dog-owners may be less sedentary than their non-dog-owning counterparts (Dall et al., 2017; Garcia et al., 2015). Older dog-owners regularly overcome both personal and environmental barriers that, without the motivation of a dog, might otherwise reduce their levels of daily physical activity (Curl et al., 2016; Johnson & Meadows, 2010; Knight & Edwards, 2008; Wells & Rodi, 2000). While few studies have focused upon other types of companion animals, cat-owners have been found to be less physically active, and generally less healthy, than both dog-owners and non-pet owners (Enmarker, Hellzén, Ekker, & Berg, 2012; Rijken & van Beek, 2011). Overall, it appears that while dogs may motivate regular and sustained physical activity later in life for a portion of older dog-owners, this effect may not hold true for other types of companion animals.

### *Functional independence*

Activities of daily living (ADLs) and Instrumental Activities of Daily Living (IADLs) are widely used to assess functional independence (Fillenbaum & Smyer, 1981). A small number of studies have suggested an association between pet-ownership and functional independence (Branson, Boss, Cron, & Kang, 2016; Curl et al., 2016; Raina, Waltner-Toews, Bonnett, Woodward, & Abernathy, 1999), including the possibility that older adults with companion animals may be more likely to maintain higher levels of ADLs over time (Raina et al., 1999). Raina et al. (1999) proposed that the physical tasks involved in caring for a companion animal, regardless of species, might have a positive influence on maintained physical function, as well as mental health, as discussed further below. Thus, while still mixed, there appears to be growing

evidence that regardless of species type, having a companion animal may positively influence older adults' likelihood of maintaining functional independence as they age-in-place. It is also important to highlight, however, that a 9-year longitudinal study of older adults ( $\geq 60$  years) found no association between having a pet and all-cause mortality over time (Simons, Simons, McCallum, & Friedlander, 2000). As well, epidemiological results on the physiological mechanisms by which pets may influence health are mixed (Schreiner, 2016). Even so, some studies have also suggested that pet-owners may be better positioned to survive following adverse cardiovascular events (Chowdhury et al., 2017; Friedmann, Katcher, Lynch, & Thomas, 1980).

### **1.3.2 Companion animals, mental health, and emotional well-being in later life**

In considering ways that relationships with companion animals may influence mental health and emotional well-being, I first consider the intrinsic nature of companionship as having mental health implications. Next, I focus on caring for pets as a form of meaningful occupation for older adults. Occupation merits attention for its potential contribution to mental health and emotional well-being via providing a sense of purpose and social integration (Zimolag & Krupa, 2009).

#### ***Companionship***

Older adults may spend substantial amounts of time – up to 80% of their day, often throughout a majority of their daily activities – in the company of their pets (McNicholas, 2014). Older adults who spend more time in the presence of their pets during activities of daily living may also experience psychological well-being and positive mood to a greater extent than those who spend less time with pets (Bennett et al., 2015). Importantly, these authors did not limit their measure of time spent with a companion animal to pet-specific activities. This study is one of the

few quantitative contributions to the literature that captures the subtle influence that a companion animal may have by simply being a consistent companion throughout the mundane routines of daily living.

In terms of companionship and social support, companion animals appear to buffer older adults from the negative effects of social isolation and loss (Garrity, Stallones, Marx, & Johnson, 1989; Knight & Edwards, 2008; Raina et al., 1999). It is also important to consider, however, that the eventual loss of a pet may be a source of extreme grief for some (Adams, Bonnett, & Meek, 2000; Morley & Fook, 2005). The loss of a pet may also disrupt routines of walking and other care-giving activities that otherwise support aging and health (Degeling & Rock, 2012). While there are prospective benefits of companion animals for socially isolated older adults, these same people may also face an increased need for community-based support if pet loss is experienced, particularly in light of having tenuous social networks to draw upon for support when grieving pet loss. Considered together, these findings highlight complexities of trying to reconcile a direction of influence on health and well-being that animal companionship may assert later in life.

Companion animals have also piqued the interest of researchers for their potential to reduce loneliness (Gilbey & Tani, 2015). As a subjective feeling or experience, loneliness is conceptually distinct from social isolation, which generally is a measurement of access to social relationships (Newall & Menec, 2015). Evidence of a direct link between having a companion animal and being lonely is varied. Some studies suggest that having a pet reduces the likelihood of experiencing loneliness (Mahalski et al., 1988; Stanley, Conwell, Bowen, & Van Orden, 2013). Other studies have found that older pet-owners are lonelier than non-owners (Krause-Parello, 2012; Pikhartova, Bowling, & Victor, 2014), but that a pet may mediate the negative

effects of loneliness on other mental health outcomes, such as experiencing depression (Krause-Parello, 2012). These findings may reflect the increased likelihood that lonelier older adults will seek out animal companionship (Krause-Parello, 2012). However, a recent, longitudinal study exploring pets and loneliness highlighted the complexities of associations between pets and loneliness (Pikhartova et al., 2014). This study suggested that over time, pets were predictive of reduced loneliness, but that being lonely was also predictive of acquiring a pet, particularly for older women (Pikhartova et al., 2014).

As a broad measure of emotional well-being, life satisfaction has also been considered as a plausible outcome of pet-ownership. For instance, some studies have found that older women who are divorced and live alone may be the most likely to experience a positive association between pet ownership and higher life satisfaction (Himsworth & Rock, 2013; Ory & Goldberg, 1983), while no such association has been found for men, or for women who are married or are living in different household arrangements. In considering these findings alongside the inconclusive literature on companion animals and loneliness, the influence of pet-companionship on older adults' mental health and emotional well-being appears to reflect complex, rather than simplistic, processes that are mitigated by both intrinsic and extrinsic factors that cannot easily be controlled for via study design.

Resilience, when understood as an ability to adapt to various challenges in life, and an attribute that stems from both vulnerability and strength (Wiles, Wild, Kerse, & Allen, 2012), is increasingly viewed as a key to aging well and aging-in-place (Wiles et al. 2012). Resilience is often linked directly to mental health as well. Few studies have explicitly explored ways that companion animals may contribute to resilience as life circumstances change later in life, although many findings might be interpreted as supporting this premise. For instance, members

of a cohort of elderly men directly attributed having a companion animal to their own “successful” aging (Swift & Tate, 2013). Older lesbian women’s felt attachments to companion animals also appeared to contribute to their resilience as they grew older (Putney, 2013). Findings that older dog-owners were able to remain both physically active and socially engaged in spite of minor physical ailments, lethargy, depression, and even bereavement (Knight & Edwards, 2008) also point towards companion animals’ contributions to resilience in aging. Further investigations into ways that companion animals may influence resilience for older adults in various circumstances is merited, especially as understandings of resilience in aging continue to evolve (Wiles et al., 2012).

### ***Meaningful occupation***

The meaningfulness and sense of purpose that older adults may derive from companion animal relationships is highlighted in several reviews (Anderson et al., 2015; Baun & Johnson, 2010; Callahan & Brotherton, 2014; McNicholas, 2014). Pet-care has been framed as a source of meaningful everyday occupation (Zimolag & Krupa, 2009), contributing to sense of both public and private identity, individual and social transformation, and health and well-being (Zimolag, 2011). The occupational benefits of having a companion animal may also extend to members of vulnerable populations, including homeless individuals (Lem, Coe, Haley, Stone, & O’Grady, 2013; Slatter, Lloyd, & King, 2012), socially isolated older adults (Morley & Fook, 2005; Wells & Rodi, 2000), people living with chronic physical illness (Brooks et al., 2012), and those managing serious and long term mental illness (Brooks, Rushton, Walker, Lovell, & Rogers, 2016; Zimolag & Krupa, 2009). Caring for a companion animal was also linked to facilitating stroke-recovery in a sample of community-dwelling older adults (Johansson, Ahlström, & Jönsson, 2014). These studies highlight the possibility that the routines and responsibilities of

having a companion animal may be especially pertinent for older adults, as other sources of meaningful occupation such as paid work and parenting dwindle or cease altogether.

### **1.3.3 Companion animals and social engagement of older adults**

When considering pet-ownership in relation to social engagement, researchers tend to focus upon dogs for the likelihood that dog-walking will facilitate time spent in public spaces, and will generate informal social interactions. For instance, my own MSc research found that dog-walking contributed to a sense of community in neighbourhoods for older adults (Toohey et al., 2013), as well as with neighbourhood-based walking for both dog-owners and non-owners (Toohey & Rock, 2011). I have since been struck by the instrumental roles that relationships with dogs appear to play for some frail community-dwelling older adults, in fostering opportunities to overcome significant environmental and personal barriers in order to remain mobile, to maintain a sense of identity, and to remain socially engaged (Gardner, 2014). Dogs may also catalyze more frequent casual conversations between older adults and their neighbors (Rogers, Hart, & Boltz, 1993; Wood et al., 2007), and may support regular outings for older adults via dog-walking, as discussed above, including non-pet-owners (Toohey & Rock, 2011). Thus dog-walking may provide opportunities for both social engagement as well as physical activity in ways that benefit both individuals and communities of people, as found in neighbourhoods or apartment-style living situations (Power, 2013; Toohey et al., 2013; Wood et al., 2017; Wood, Giles-Corti, & Bulsara, 2005).

Interestingly, while far less studied than dog owners, cat owners have also reported that having a cat both got them out of the house and facilitated opportunities to socialize (Mahalski et al., 1988; Smith, Seibert, Jackson, & Snell, 1992). Cats were viewed favourably by both older women cat-owners and non-owners for their propensity to incite neighbourly conversation in

subsidized housing (Mahalski et al., 1988). Building upon the premise that companion animals may be catalysts of positive social relationships, a small number of studies have demonstrated that the roles pets often play in catalyzing social interactions between individuals (neighbours, but also strangers) may in fact contribute to a wider sense of trust and a sense of community (Wood et al., 2017; Wood, Giles-Corti & Bulsara, 2005; Wood et al., 2007). These findings suggest that the presence of pets in urban communities may benefit entire collectivities of neighborhood residents, young and old, pet-owners and non-owners. Together, these different studies point to a meaningful social role for companion animals, in facilitating social engagement for older adults at both individual and collective levels. This contribution may help to underscore the ability of older adults to age well as they age in place.

#### **1.3.4 Companion animals and the “places” where aging-in-place occurs**

The term “aging-in-place” is relatively nascent within the gerontological literature, even as interest in the settings where aging occurs has prevailed for decades. Surprisingly, however, very few studies have considered how settings may contribute positively or negatively to the quality of relationships people have with their companion animals. In the following section, I consider both the immediate home and the broader neighbourhood as settings that are salient to pet-ownership, and that are also recognized priorities within organized efforts to promote aging-in-place.

In keeping with my socio-ecological paradigm, I consider both physical and social qualities of these different domains. I am interested in the ecological factors that may shape both choices and decisions, as has also been put forward by others (Anderson et al., 2015; Dembicki & Anderson, 1996; Morley & Fook, 2005). In reviewing these scholarly contributions, I suggest that there are insights to be gleaned about the underlying ethical principles that pertain to (i) non-

human animals (Rock & Degeling, 2013, 2015) and (ii) public health more broadly (Baylis et al., 2008). I view the age-friendly movement as falling within an overarching population and public health agenda, as age-friendly efforts exemplify the extent to which policies that lie outside of health care may substantially shape population-level health and influence health equity (Hawe & Potvin, 2009).

### *Housing*

As overarching priorities of the age-friendly policy framework, independence and social inclusion both depend upon the availability of appropriate and affordable housing that can support aging-in-place (Lehning, 2011; Leibing et al., 2016; Menec et al., 2011; Scharlach, 2016; Scharlach & Lehning, 2013). Companion animals are also considerations for older adults, as their housing needs change (Morley & Fook, 2005; Smith et al., 1992; Stewart, Crockett, Gritton, Stubbs, & Pascoe, 2014). Housing has been identified as a barrier to having a companion animal (Chur-Hansen, Winefield, & Beckwith, 2008; Mahalski et al., 1988; Netting, Wilson, & Fruge, 1988), and several studies have suggested that there is a shortage of rental housing, including affordable and social housing options, that allows older adults to have companion animals (Huss, 2014; Morley & Fook, 2005; Ormerod, 2012; Power, 2017b). At the same time, a small number of studies have highlighted the distress that some older adults may experience when they are forced to relinquish a companion animal due to housing rules (McCracken, 1987; McNicholas, 2014; Morley & Fook, 2005; Ormerod, 2012). Concerns about conflict and animal welfare may underlie no-pets policies within apartment-style housing, and yet in practice, these concerns may be exaggerated or even unwarranted (Freeze, 2010; Huss, 2014; Mahalski et al., 1988). While there is relatively scant literature exploring pet-related housing issues faced by older adults, this research focus merits further attention within the realm of supporting aging-in-place.



### *Neighbourhoods*

As the proportion of older adults in the population increases, neighbourhoods will play increasingly fundamental roles as settings that are key to promoting health and well-being via aging-in-place. Consideration for the interests of both pet-owners and companion animals themselves may have important implications in relation to optimizing neighbourhoods for aging-in-place. For example, companion animals are thought to contribute to neighborhood social capital (as per Putnam's (1996; 1995) conception of social capital as reflecting trust, networks, and norms of civic participation that strengthen collective efficacy) among both pet-owners and non-owners (Wood et al., 2017, 2005, 2007). Some studies have also found that both cat- and dog-owners are more likely to form relationships with neighbours (Mahalski et al., 1988; Power, 2013; Wood et al., 2015), and to both give and receive support that includes but also extends beyond pet-related assistance (Wood et al., 2005, 2007). While these findings orient with a particular conception of social capital (for instance, Bourdieu's (1986) conception of social capital discusses perpetuation of social hierarchies that maintain entrenched inequalities, rather than qualities of trust and civic engagement), they nonetheless highlight the extent to which non-human entities may influence the social qualities of neighbourhoods in ways that are relevant to health promotion and public health (Rock, 2017).

Because of its public nature, dog-walking in particular appears to be salient to neighbourhood-level considerations. In a study exploring the experiences of women living in a disadvantaged neighborhood, dog-walking allowed older neighbourhood residents to discretely keep an eye on one another, and particularly on neighbours who lived alone (Boneham & Sixsmith, 2006). As discussed above, having places to walk dogs and places where older, and even former, dog-owners can remain integrated with other dog-owning community members

may motivate efforts for older adults to remain socially-engaged, despite environmental barriers (Gardner, 2014; Toohey & Rock, 2011). A study focusing on older women found that walking with a dog instilled a sense of security around walking alone in the neighbourhood that otherwise would not be experienced (Knight & Edwards, 2008). Overall, in neighbourhoods where dog-walking amenities and responsible dog-walking practices abound, older adults with and without dogs may benefit from improved sense of safety and security, and may have improved opportunities for social integration rather than isolation (Toohey & Rock, 2011). Thus public spaces that serve the needs of dog-walkers, but do so in balance with the requirements that dog-owners practice “responsible” pet ownership (Rock, 2013; Toohey & Rock, 2015), may optimize the potential for older adults to benefit from dog-walking in ways that are linked to health, via physical activity, sense of community, and social engagement (Richards, McDonough, Edwards, Lyle, & Troped, 2013; Toohey et al., 2013; Toohey & Rock, 2011).

These different ways that companion animals appear to make positive contributions to the quality of neighbourhoods may be increasingly valuable in relation to facilitating opportunities for aging well, given that neighbourhoods become increasingly salient as salutogenic (i.e., health-promoting) environments as people age (Lawton, 1983, 1998; Michael & Yen, 2014). It is also important, however, to take note of a handful of studies that have explored the potential of pets to generate social conflict (Bjerke & Ostdahl, 2004; Booth, 2017; T. M. Graham & Glover, 2014; Instone & Sweeney, 2014a, 2014b; Power, 2013; Rock et al., 2016; Toohey & Rock, 2011, 2015). Findings around conflict must also be taken seriously in relation to aging-in-place, given the possibility that such situations can lead to increased social isolation, should older adults perceive others’ pets as a source of nuisance or even as a threat. Studies that have explored pets from this perspective identify the implementation of appropriate and reasonable regulations, or

bylaws, as playing a key role in mitigating this potential while also respecting the rights of both non-owners and pet-owners (Rock, 2013; Toohey & Rock, 2015).

Broader policies and practices around urban development that consider both social and physical attributes of communities may also contribute to the interactions between people and companion animals that take place in public spaces. Because an age-friendly framework is increasingly being adopted by municipalities world-wide, in the next section I propose a detailed theoretical framework that more fully frames pet-related influences within a socio-ecological understanding of aging-in-place.

#### **1.4 Theoretical orientation**

The WHO age-friendly cities guide (World Health Organization, 2007) has become a seminal influence on global approaches to both planning for and adapting to a rapidly aging population (Plouffe & Kalache, 2011; Plouffe, Kalache, & Voelcker, 2015; Steels, 2015). Built upon the platform of an extensive and global process of engaging older adults and a range of stakeholders, this guide prioritizes the following as key domains that shape age-friendliness: housing, outdoor spaces and buildings, transportation, social participation, civic participation and employment; community support and health services; communication and access to information; and respect and social inclusion (World Health Organization, 2007). While these identified domains offer a starting point, many municipalities ultimately initiate their own processes to tailor age-friendliness to their particular context (Plouffe & Kalache, 2011).

Scharlach (2016) highlights the combination of compensatory and enabling functions that characterize age-friendly communities. Compensatory approaches aspire to support older adults to navigate safely and comfortably their physical surrounds, even as they experience age-related

declines in physical and cognitive health. Meanwhile, enabling approaches tend to focus on providing opportunities for older adults to participate in socially-meaningful activities. Both functions are operationalized via development of policies, programs and practices devised to optimize age-friendliness and to promote aging-in-place (Glicksman, Clark, Kleban, Ring, & Hoffman, 2014; Lehning, 2011; Plouffe & Kalache, 2011).

While the evidence around pet-ownership, as summarized above, suggests that companion animals might be considered in relation to both compensatory and enabling efforts, and that the influence of companion animals may transcend many of the domains of age-friendliness, there are very few efforts that overtly acknowledge and engage with older adults' relationships with companion animals. In spite of repeated and growing indications of the extent to which people value companion animals and view them as a type of kin (Fox, 2006; Franklin, 2006; Hansen, 2013; Power, 2008; Rock & Degeling, 2013), age-friendly efforts have largely ignored the extent to which aging-in-place involves companion animals. As an over-looked phenomenon within lived experiences of aging, the lack of attention to companion animals within age-friendly efforts may represent a missed, if complex, opportunity to promote health and well-being via aging-in-place.

#### **1.4.1 Underlying mechanisms linking companion animals with human health and well-being**

Age-friendly communities might well be understood to embody a socio-ecological approach, in that multiple spheres of influence (i.e., both individual-level and environmental factors, including organizations, communities, and public policy) impact opportunities to achieve health and well-being (McLaren & Hawe, 2005; Richard et al., 2011). The socio-ecological paradigm reinforces the need to understand phenomena of interest as occurring within

complicated systems where multiple influences are at play. Scholars may glean insights into phenomena by isolating specific pathways of interest, yet many social phenomena simply cannot be thoroughly interrogated when other contextual factors are removed.

Historically, the study of companion animals and aging has done just this, by trying to isolate theoretically germane influences, like quality of attachment to a companion animal (Crawford, Worsham, & Swinehart, 2006), for their explanatory potential. In recent years, however, socio-ecological models have grown increasingly robust. I draw upon two such models, (i) McNicholas et al.'s (2005) mechanistic model for linking companion animals and health and (ii) Putney's (2013) relational ecology model for understanding human-animal bonds, to create the foundation for my own proposed conceptual framework, which I describe in further detail below. At the same time, the study of companion animals and aging-in-place fits well within a "One Health" approach, which is a paradigm that views human, non-human animal, and ecological health and well-being as interconnected (Rock, Buntain, Hatfield, & Hallgrímsson, 2009; Zinsstag, Schelling, Waltner-Toews, & Tanner, 2011). In relation to my own health promotion orientation, One Health serves as a reminder that non-human animals merit consideration when exploring human health using a socio-ecological approach.

### ***Pets and human health: Three mechanistic pathways***

McNicholas and colleagues (2005) have proposed a useful theoretical model that accounts for three different mechanisms by which pet ownership may be associated with human health. The first of these is a non-causal association that arises from various common factors that may facilitate pet ownership, but that also have independent associations with improved health. An example could include owning one's own home, which may be associated with better health while also increasing the likelihood of having a companion animal. The second proposed

mechanism is the direct effect. This pathway suggests that different aspects of pet ownership—i.e., “exposure” to a pet—may lead directly to specified health benefits. Examples could include improved survival following adverse myocardial events among pet owners (Friedmann et al., 1980; Friedmann, Thomas, & Son, 2011), or reduced levels of cortisol that may occur as a result of petting a familiar or an unfamiliar dog (Handlin et al., 2011; Polheber & Matchock, 2014). The third mechanism that the authors put forward is the indirect effect, whereby having a pet may facilitate contact with people, which in turn may contribute to health. Examples of this mechanism are most prevalent within research on dog-walking, for its likelihood of leading to social encounters (McNicholas & Collis, 2000; Rogers et al., 1993) and to enhancing sense of community (Toohey et al., 2013). Even so, different species of pets may help to facilitate social interactions (Mahalski et al., 1988; Wood et al., 2007) and contribute to neighborhood-level social capital (Wood et al., 2017, 2005), at least in relation to Putnam’s conception of social capital (i.e., norms of trust and civic involvement that empower the collectivity, as described above). Each of these pathways suggests different avenues by which attention *or* inattention to companion animals, in relation to organized efforts to promote aging-in-place, may shed light on policy priorities and societal values (Richard et al., 2011).

***Relational ecology: Understanding the human-animal bond***

As a relatively new model, the relational ecology framework proposed by Putney (2013) highlights ways that relational contexts may shape human-animal bonds and contribute to psychological well-being for older people. Putney’s framework weaves together concepts derived from developmental theory, relational theory, anthropology, and ecology in order to highlight contextually-contingent interdependencies between people and companion animals. More specifically, Putney’s (2013) theory of relational ecology is built upon five overarching

theoretical premises around ways that human-animal relationships may (i) enable older adults (and others throughout the life course) to adapt to aging through a continual evolution of identity as a result of productive activity and interdependence; (ii) influence definitions of self, including self-efficacy, self-confidence, and self-acceptance; (iii) assist with developing and maintaining feelings of stability, security, and safety, in addition to sense of self; (iv) provide continuity throughout transitions that occur throughout life, and with increasing frequency later in life; and (v) mirror ecological interdependencies that manifest in both similarities and differences, but without placing lesser value on things that are considered to be “other,” such as non-human animals. These theoretical underpinnings, however, tend to rest upon interpersonal experiences with the creation and maintenance of a particular social identity. In its initial iteration, the relational ecology theory stops short of applying a socio-ecological understanding to factors that contribute to these different dimensions of experience.

Moreover, social identity may become challenging to maintain later in life. Social roles are often altered through events like retirement from the workplace, and through the eroding impact that age-related illnesses and the deaths of friends and peers may have upon social support networks. Amidst these changes, a relationship with a companion animal may be a source of both intrinsic and extrinsic continuity, in terms of the meaning derived from the relationship itself and the efforts that must be made to maintain routines and practices of care. Because caring for a companion animal may include considerations like providing shelter (e.g., having pet-friendly housing available for those who wish to have a companion animal), accessing services required to provide care (e.g., grooming and veterinary, as well as pet food and supplies), and in some situations, maintaining appropriate levels of exercise and socialization (e.g., dog-walking in neighbourhoods and other public spaces, like parks and pathways), the

relational ecology framework has potential for extension via its application within a broader socio-ecological understanding of aging-in-place.

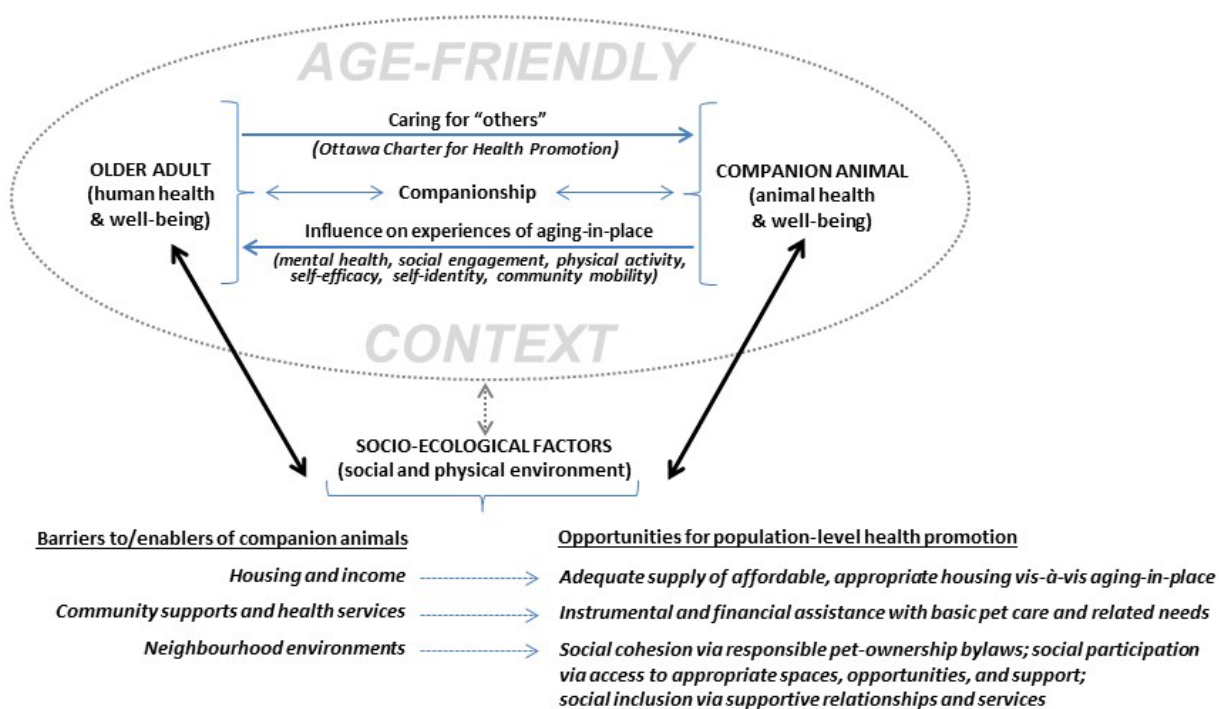
#### **1.4.2 Companion animals and aging-in-place: A proposed conceptual framework**

As discussed throughout this chapter, the overarching aims of my dissertation are to explore the intersecting ways that both individual factors and social-ecological factors shape experiences of human-animal relationships as older adults age in their communities, and to consider the extent to which policies that promote aging-in-place may enable or disrupt the health-promoting benefits of companion animals. As a means of illustrating my underlying theoretical orientation, I thus required a model that was able to capture these research aims.

In developing such a conceptual framework (Figure 1.1), I have applied the One Health perspective within an urban context (Rock, 2017). In doing this, I have accounted for both socio-ecological components of urban environments and the particular nature of socio-cultural practices that are specific to having companion animals in urban settings. As such, my proposed framework highlights (i) a reciprocal relationship between older adults and their companion animals, in terms of companionship; (ii) a cyclical relationship that arises from the provision of care for a companion animal, as per the Ottawa Charter for Health Promotion (World Health Organization, 1986); and (iii) the effects, whether direct or indirect, that caring for a companion animal may have upon factors that are linked with healthy aging. These factors include physical activity, mental health, and social engagement (Rowe & Kahn, 1997), as well as other dimensions that pertain to health promotion, such as self-efficacy and community mobility.



At the same time, my proposed framework accounts for ways that the social and physical context within which older adults and companion animals co-exist may be shaped in relation to the roles companion animals play on both individual and collective levels, and the socio-cultural value assigned to companion animals in society. This latter consideration offers insights into broader social values (Frohlich, Corin, & Potvin, 2001). Arguably, the age-friendly agenda itself can be understood to ascribe social value to the older members of society, thereby attempting to counter the underlying “ageist” discourse (i.e., stigmatization based on age-related stereotypes) that positions the growing population of older adults as a pending burden on scarce human and economic resources, and as a threat to economic viability.



**Figure 1.1: Conceptual framework for promotion of aging-in-place at the population level via companion animals**

Many of the factors encompassed within my theoretical framework are also prospective sites for population-level interventions related to policy, practice, and other social changes. This

is an idea that I return to in my Discussion chapter, when I reconsider this framework in relation to my research findings. At the outset, however, my proposed framework is informed by the general socio-ecological tenet that multiple levels of intervention are required in order to achieve population-level change (Richard et al., 2011). My proposed framework is also robust to (i) accommodating heterogeneity within older adult populations, as per Bourdieu's (2005) habitus concept describing how patterned individual dispositions may be linked to socio-economic position, and as also has been advised by Pachana et al. (2005) in their study of links between health and socio-demographics of pet-owners versus non-owners; (ii) adopting a population health approach for addressing the "causes of the causes" of the distribution of health inequalities (Rose, 1992); and (iii) accommodating for the complexities that may mediate the human health-related contributions of relationships between human and non-human animals.

Also implicit in my theoretical proposition is the developmental perspective that companion animals "...may fulfill various roles and functions across the life span" (Pachana et al., 2005, p. 108). For older adults, particularly post-retirement, relationships with companion animals may contribute to a wide range of factors that are relevant to health and well-being in later life, including companionship, social engagement, physical activity, mental and emotional health, self-efficacy, and community mobility. For older adults, these relationships may thus take a more central role, as they experience shifting social roles post-retirement, and reduced social networks that result in diminished levels of social support.

This framework thus reflects my overarching proposition that providing care for a companion animal may be particularly beneficial for older adults, who are often framed as the recipients of, rather than prospective providers of, social support (Brown, Nesse, Vinokur, & Smith, 2003; Pachana et al., 2005; Stanley et al., 2013). Providing instrumental support to other

people has been found to reduce the risk of mortality for older adults, while receiving social support from others may increase this risk (Brown et al., 2003). As an extension of this logic, providing care to, and thus helping, companion animals may also have a beneficial effect on an older adult's health and well-being. Certainly, as explored in the preceding literature review, there is evidence that providing pet-care may help older adults to maintain activities of daily living (Raina et al., 1999; Saito, Okada, Ueji, Kikuchi, & Kano, 2001). Similarly, caring for dogs in particular can facilitate physical activity and social integration for older adults (Knight & Edwards, 2008; Rogers et al., 1993; Thorpe et al., 2006; Toohey et al., 2013), and even for non-dog-owners (Johnson & Meadows, 2010; Peel et al., 2010; Toohey & Rock, 2011) who may in fact perceive that the dogs with whom they are walking are depending upon them for this important shared activity (Johnson & Meadows, 2010).

### **1.5 Research Objectives**

When conceiving this study, my overall research aims were to explore the intersecting ways that both individual factors and social-ecological factors shape experiences of human-animal relationships as older adults age in communities, and to consider the extent to which policies that promote aging-in-place enable or disrupt the health-promoting benefits of companion animals. Specifically, I was interested in exploring relationships between older adults and companion animals as set in the contemporary context of a rapidly aging population, and where aging-in-place is being actively promoted by governments, albeit with implicit expectations that individuals themselves may ultimately be responsible for making their own arrangements to do so (as per discourses of responsibility and discipline discussed by Katz (2000) and Power (2017a)). I argue that prevailing views and practices surrounding companion

animals may be evolving more quickly than relevant social structures that reflect socio-cultural views around companion animals as a type of family member (Fox, 2006; Hansen, 2013; Power, 2008). This disconnection between individual and institutionalized practices serves to create a situation where choices around animal companionship are contingent upon availability of both economic resources and social support. Given the health-promoting potential of animal companionship as people age, this situation also may contribute to the perpetuation of socially-patterned health inequities throughout older age (Jivraj & Nazroo, 2014; McGovern & Nazroo, 2015; Pavalko & Caputo, 2013).

These propositions also have implications for social justice. Relationships with companion animals, like relationships with other people, are generally chosen by people for the contributions they make to one's quality of life. Including one or more companion animal within one's home is a long-standing cultural practice that is repeatedly chosen by a majority of people in Western populations. The extent to which this choice is available to those who desire such a relationship increasingly speaks to basic rights and freedoms. Systemic challenges that constrain this choice for older adults living in socio-economically and socially vulnerable circumstances, such as the shortage of affordable housing that allows tenants to have companion animals, may be viewed as unjust. Not only do these particular constraints disrupt the potentially health-promoting benefits of the human-animal bond, but denying this choice highlights the constrained autonomy that disadvantaged populations experience on a daily basis, a situation which may further contribute to health inequity across the life course.

Because little attention has been paid to ways that companion animal relationships are experienced in the daily, lived contexts that people navigate while aging-in-place, my research objectives are exploratory (Yin, 2009), as I aim to understand the different facets of aging-in-

place with companion animals. In doing this, I seek to gain valuable insights into both (i) individual-level factors, by identifying novel understandings of ways that animal companionship may be linked with physical and mental health and social well-being (as per the World Health Organization (2012) definition of health), and (ii) structural factors, by considering ways that current policies, practices and programs (or an absence of these) may disrupt or support maintained human-animal relationships into old age, and the extent to which inattention to companion animals may inadvertently perpetuate health inequalities and erode social justice. My analysis is framed within several aging-in-place priorities that are identified and described within the WHO (2007) age-friendly framework, which have shaped policy-level efforts to plan for an aging population across Canada (Public Health Agency of Canada, 2016), and in Calgary (City of Calgary, 2015).

As described in greater depth in Chapter 2, I have adopted an ethnographic case study methodology to achieve these research objectives (Stewart, 1998; Yin, 2009). I justify this methodological decision by observing that experiences of human animal relationships, as knowable phenomena, are contingent upon the individual, cultural, political, and historic context in which they are experienced. Furthermore, I adopt a critical realist ontological stance by suggesting that within a knowable material reality, experiences are constructed and co-constructed by both individuals and their circumstances, and by the physical and social environments that shape those circumstances (Pawson, 2006; Willig, 1999). This ontological orientation also lends itself to the socio-ecological perspective by which I seek to explore interactions between individuals (and their companion animals) and their environments (McLaren & Hawe, 2005; Richard et al., 2011).

## **1.6 Thesis organization and structure**

Because this dissertation is written following the Department of Community Health Sciences guidelines for a manuscript-based doctoral thesis, it is important for the reader to understand what this entails. The Preface has already hinted at the structure of my dissertation, in describing author contributions and providing the publication status of each manuscript. Within this first chapter, I have presented the literature and theoretical foundation for my dissertation research. In Chapter 2, I expand upon this foundation by offering an in-depth description of my overarching ethnographic case study methodology (Stewart, 1998; Yin, 2009), and by justifying my multiple case study design as appropriate for this study. Following these introductory chapters, the inner chapters of my thesis (i.e., Chapters 3, 4, and 5) report on findings from each case study component via manuscript-based chapters. The final Discussion chapter (i.e., Chapter 6) draws these findings together in relation to my overarching research objectives. While data collection and analysis for all components of my dissertation overlapped, I have mindfully imposed an order on the presentation of these manuscripts that I feel represents a chronology of thought and understanding. For the sake of analytic continuity, each manuscript maintains an overt analytical connection to the WHO (2007) Age-Friendly Cities policy framework, which I also return to in the Discussion chapter.

Thus Chapter 3 begins my case study by exploring the likelihood that companion animals may be facilitators versus inhibitors of human social contact via social participation, while also exploring associated implications for overall satisfaction with life. I draw upon the nationally-representative Canadian Longitudinal Study on Aging data set (described more fully in Chapters 2 and 3) and present the manuscript titled “Is pet ownership relevant to social participation and life satisfaction for older adults who are aging-in-place in Canada? Findings from the Canadian

Longitudinal Study on Aging (CLSA)” (Toohey, Hewson, Adams, & Rock, 2018). The concept of social participation, while still under conceptual development (Levasseur, Richard, Gauvin, & Raymond, 2010), is a ubiquitous interest that underlies the age-friendly goals around inclusion of older adults in civic and social life (World Health Organization, 2007).

Chapter 4 continues my exploration of companion animals and aging-in-place by shifting the focus from a relatively generalizable, national context to evidence generated within our local setting. Specifically, I report on the perspectives of social service and animal welfare agency representatives on benefits and challenges of companion animals for lower income older adults who are aging-in-place, and how their clients’ relationships with pets might have an impact on the delivery of critical social support services. The manuscript is titled “When 'places' include pets: Broadening the scope of relational approaches to promoting aging-in-place” (Toohey, Hewson, Adams, & Rock, 2017) and was published in the September 2017 issue of the *Journal of Sociology and Social Welfare*. This manuscript squarely addresses some of the implications of pet-ownership for the community support and health services age-friendly priority area identified within the World Health Organization’s (2007) *Age-Friendly Cities Guide*.

Within this second manuscript, the shortage of affordable, independent living housing opportunities for lower income and socially isolated older adults was a recurrent theme that was distal to, and yet had implications for, disadvantaged older adults’ experiences of pet-ownership as they charted a course for aging-in-place. A lack of housing options available to clients also impeded efforts to deliver social services to those older adults with pets who required support in relation to aging-in-place. Housing shortages also came up in relation to animal welfare, both in terms of relinquishments to shelters and appropriate placements of companion animals in need of homes. Therefore in Chapter 5 of my thesis, I present a final manuscript titled “Disruptive

solidarity or solidarity disrupted? A dialogical narrative analysis of economically vulnerable older adults' efforts to age in place with pets,” which I co-authored with my supervisor, Dr. Melanie Rock. This contribution was submitted to *Public Health Ethics* for peer review in September 2017, and an editorial decision of revise and resubmit was received in January 2018. Reviewer suggestions are incorporated into the version contained within this dissertation. The manuscript offers in-depth and rather intimate descriptions of three economically- and socially-vulnerable older adults’ experiences of housing challenges during transitional points in their aging-in-place trajectories, as described in light of their deeply-held commitments to their companion animals. Housing is a ubiquitous concern within the age-friendly agenda (World Health Organization, 2007), given its centrality to enabling older adults to age in place.

Related to this submission, but outside the scope of my dissertation chapters, is a commentary that I have included in Appendix A, titled “‘Simply to be let in’: Opening the doors to lower-income older adults and their companion animals.” This contribution was co-authored with Timothy Krahn (Novel Tech Ethics, Dalhousie University), as described in the preface. Our submission was accepted in August 2017 for publication in the Perspectives section of the *Journal of Public Health* (Toohey & Krahn, 2017). Our collaborative effort to advocate for legislative protections for older adult renters’ relationships with companion animals resulted from my presentation to Dalhousie’s Impact Ethics research group in May 2016, during a stay in Halifax to present an early iteration of my findings at the 2016 Canadian Anthropology Society & Society for the Anthropology of North America (CASCA/SANA) Solidarit(i)es Conference.

Finally, Chapter 6 synthesizes the findings from the three stand-alone manuscripts in a way that aligns with my overarching ethnographic case study methodology. Within the Discussion chapter, I consider the implications of people’s relationships with companion animals



for future age-friendly policy development and organized efforts to promote aging-in-place. I also reflect upon future directions for research on aging-in-place with companion animals. Lastly, I offer concluding remarks that reflect both the personal and scholarly insights I have garnered throughout my study, which pertain to my views on and growing understandings of the complexities of companion animals for aging people, and within an aging society.

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## Chapter 2: Research Methodology

An overarching objective of my dissertation research was to evolve current understandings of relationships with companion animals as having plausible influence upon the health and well-being of older adults as they age-in-place. Much of the literature on companion animals and aging has prioritized consideration of the quality of the relationship itself, for instance by considering levels of attachment to a particular companion animal (Crawford, Worsham, & Swinehart, 2006), or by considering relational attributes that are anchored to individual psychological traits and a sense of personal identity (Putney, 2013). When designing my research project, however, I proposed that exploring the phenomenon of aging-in-place with companion animals must be able to capture both ways that companion animals are experienced by older adults within their contexts of daily living and the complex relational dimensions that continually influence the extent to which relationships with companion animals are beneficial or challenging (or both simultaneously). I also suggested that these experiences cannot be understood without also accounting for the socio-ecological factors that shape the contexts of daily life. My stance thus points to the necessity of exploring human-animal relationships from a socio-ecological perspective that is attentive to the contextual elements discussed in Chapter 1, as a means of capturing various levels of influence that shape lived experiences of both companion animals and aging-in-place. Therefore I approached my dissertation research as a case study (Yin, 2009), that was also informed by ethnographic methodology (Stewart, 1998).

In the rest of this chapter, I begin by stating my rationale for the methodological decisions I have made regarding case study design, and I further justify the ethnographic leanings of my approach. While my research setting is noted in passing within this justification, I move on to provide a more detailed discussion of the settings and contexts that I considered.

Next, I move into my research plan, so as to illustrate the timeline I followed for collecting and analyzing the different data that I considered. Following that, I offer insights into the particular methods I used for each case study component, and justify my decisions in relation to case study and ethnographic methodologies. Finally, I conclude with a discussion of rigor in ethnographic case study research, and I highlight the efforts that I made to address rigor in my own study.

My doctoral study, as detailed throughout this chapter, was initially approved by the University of Calgary's Conjoint Health Research Ethics Board (CHREB) in November 2014 (REB14-1445), with renewals granted in November 2015, 2016 and 2017 (REB14-1445\_REN1, REB14-1445\_REN2, and REB14-1445\_REN3). My study also includes elements that are described within Dr. Melanie Rock's study titled "Social Justice and Pet Ownership: A qualitative inquiry to improve population health and to advance public health ethics." Dr. Rock's study was funded by a Canadian Institutes of Health Research operating grant (#MOP-130569) and was approved by the CHREB in November 2014, then renewed in November of 2015, 2016, and 2017 respectively (REB14-1347, REB14-1347\_REN1, REB14-1347\_REN2, and REB14-1347\_REN2).

## **2.1 Rationale for adopting an ethnography-informed case study approach**

Case study methodologies are generally employed to observe and understand phenomena that are occurring within particular contexts, and where there are no obvious delineations between a given phenomenon and the context in which it unfolds (Yin, 2009). Many case study methodologies, and particularly those aligned with social science research, are also concerned with generating holistic understandings of phenomena (Stewart, 1998; Thomas, 2011).

Relationships between people and their companion animals are highly situated within the

particular circumstances that people live, and are shaped by the intersecting influences of individual characteristics, socio-cultural qualities, and policy-level factors. Thus exploring the complexities of aging-in-place as experienced by older adults living with companion animals lends itself to an overarching case study design, and I have oriented to the multiple case study approach described by Yin (2009). Yet in recognizing prospective ontological limitations of Yin's case study methodology, I have concurrently drawn upon ethnographic methodology to help frame my interpretation of the various data I have considered, as described more fully below.

Yin's approach to case study research has been criticized by some social science scholars for being "neo-positivist" (Thomas, 2011). This is because according to Yin (2009), case selection and analysis may pay attention to particular "variables" of interest, rather than remaining consummate with an interpretative, holistic framing of the phenomena of interest (Thomas, 2011). Even so, there is general agreement that a common feature of *all* case study research is the goal of shedding light on the complex array of factors that will inevitably shape the ways that different realities unfold. Importantly, Yin's methodological guidance offers a highly practical research strategy that is able to "...*enlighten* those situations in which the intervention being evaluated has no clear, single set of outcomes" (p. 20). While my study does not explicitly evaluate a particular intervention, the utility of Yin's case study approach is highly applicable as I consider ways that aging-in-place with companion animals may be linked to efforts to support age-friendliness within a contemporary urban context.

Yin's methodology also allows for consideration of multiple data sources, multiple units of analysis, and mixed methods approaches in order to construct a more sophisticated understanding of complicated phenomena. My decision to temper my case study approach by



drawing closely upon tenets of ethnography thus helped to ensure that I did not err on the side of succumbing to simplistic (i.e., positivist, reductionist) understandings of factors that shape experiences of aging-in-place with companion animals. Particularly in relation to the qualitative components of my research, I aligned with a methodological approach described by Stewart (1998). Stewart's ethnographic approach allowed me to consider experiences of aging-in-place with companion animals in a more holistic way, yet without losing sight of the prospective roles of both individual-level and collective-level factors in shaping these experiences. At the same time, it is within the scope of ethnographic methodology for a researcher to consider quantitative data, as well as data describing multiple yet linked contexts (e.g., local as well as national data), as part of a methodologically-sound exploration and explanation-building process (LeCompte & Schensul, 1999; Schensul, Schensul, and LeCompet, 1999), in ways that I describe more fully below. Thus, even as I have used a mixed methods approach, my alignment with ethnographic methodology thus allowed me to maintain a conceptual focus upon the socio-cultural influences that shape ways that people experience both aging and relationships with companion animals. I more fully describe how my approach combined both methodologies in the following sections.

### **2.1.1 Multiple case study methodology**

Yin (2009, p. 27) suggests that case study methods are likely to be appropriate in seeking to answer “how” and “why” questions. Thus when I considered “how” companion animals may influence the health and well-being of older adults vis-à-vis aging-in-place, I was attentive to highly individualized experiences of relationships with companion animals. Yet, in seeking to understand “why” companion animals may be experienced in both beneficial and challenging ways, I paid particular attention to external realms of influence that might be understood as barriers and enablers of having companion animals (see Figure 1.1).

Orienting to these “how” and “why” questions led me to adopt, more specifically, a multiple case study design with embedded units of analysis (see Figure 2.1). I envisioned this overarching design so that I might both understand different barriers and enablers of pet ownership in their own right, but also make meaningful comparisons across the different domains of the age-friendly policy framework. Thus I explored data on companion animals and aging-in-place that represented both our national and local contexts. I describe each context more fully in the next section of this chapter. Broadly speaking, however, quantitative data representing our national context was valuable for me to consider in that it offered a statistically generalizable baseline, within which the insights generated through interpretation of my local (qualitative) data could be situated. At the same time, our local context was valuable to explore for both its active implementation of its own, tailored age-friendly strategy (a process that is occurring in several Canadian and international cities (Plouffe & Kalache, 2011)), and for its reputable policy framework around responsible pet ownership (see Chapter 1 for a more detailed discussion of both of these points).

In delineating the different components of my case study, the two embedded units of analysis that I considered were older adults themselves, and representatives of community service agencies that serve older adults or their pets in ways that help to promote aging-in-place. In terms of the former, the interplay between findings around aging-in-place with companion animals at both national and local contexts strengthened the applicability of my local findings to other geographic and sociocultural contexts, and helped to shed light on “how” questions, through exploring statistical associations, and “why” questions, through attention to structural considerations that underlie those associations. At the same time, drawing upon a second unit of analysis – i.e., the perspectives of service providers – served an explanatory role in coming to

understand “why” individuals may experience relationships with companion animals as both beneficial and challenging, and how these experiences might also shape broader experiences of aging-in-place in particular ways. Taken together, these considerations led to my adopting a multiple case study design that included two different contexts (i.e., national and local), as well as two different embedded units of analysis (i.e., older adults and service providers), as illustrated in Figure 2.1 below.

### **2.1.2 Methodological contributions of an ethnographic approach**

While the case study is the overarching methodology for my project, my approach also drew substantially upon ethnographic methodology. In particular, my qualitative research components were grounded in several tenets of ethnographic research that are described by methodologist Stewart (1998). In aligning with Stewart’s methodological guidance, I was attentive to gaining a contextualized understanding of my phenomenon of interest, i.e., aging-in-place with a companion animals. I was also attuned to identifying socio-cultural perspectives on both the values placed upon relationships with companion animals later in life, and issues that also arise from efforts to keep companion animals later in life. I felt that attention to the socio-cultural dimensions of companion animal relationships would help me to reflect upon the extent to which they merit a more prominent place within an overarching age-friendly policy context.

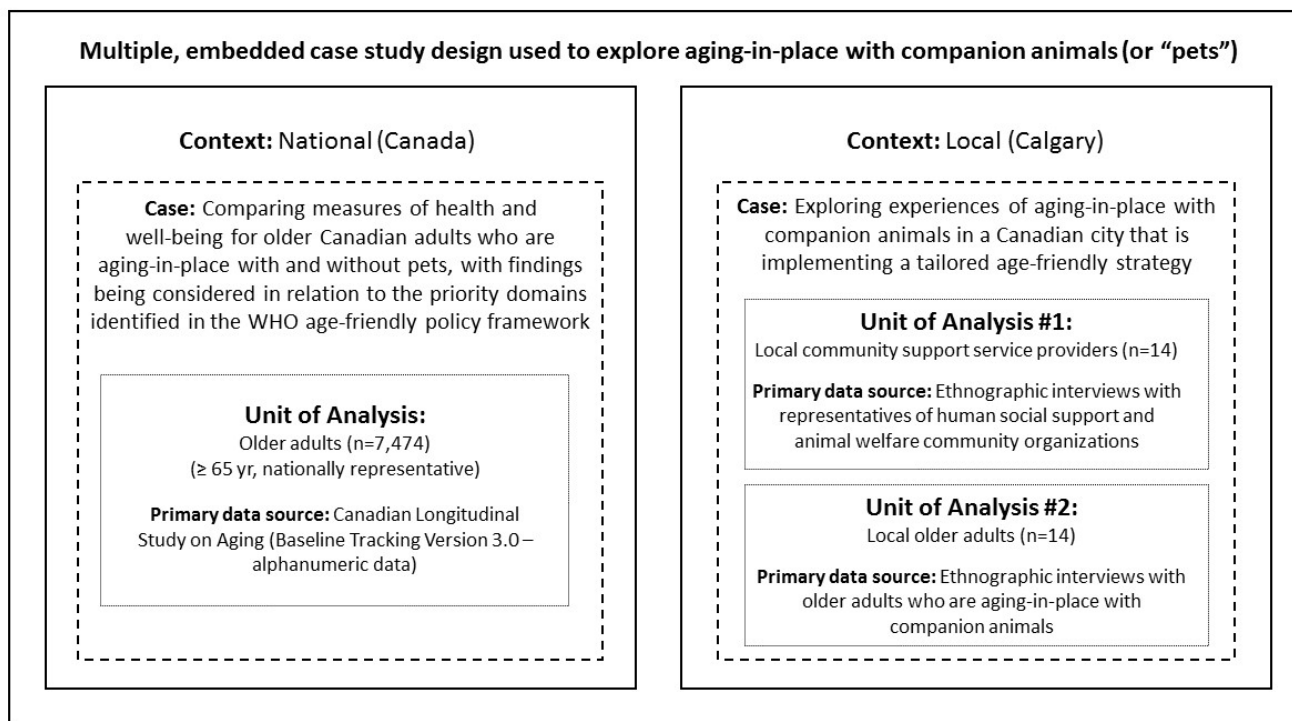
In one particular situation (discussed further below), I was able to employ extensive participant observation so as to observe first-hand and in a naturalistic way the complicated web of factors that led to simultaneous benefits and challenges of pet-ownership for an older adult who was aging-in-place in particularly disadvantaged circumstances. For this specific participant, this included having a very low fixed income, being single and childless, experiencing rapidly deteriorating mental and physical health, being wholly dependent upon the

rental market for housing, and requiring accommodation that would allow him to remain with his larger-breed dog, as his sole companion in life. This type of situation has received little attention within current efforts to study ways that companion animals influence aging, even as the importance of companion animals to older adults living in these sorts of circumstances has been suggested. Thus as a final ethnographic tenet, I sought to advance theoretical understandings of aging-in-place with companion animals by synthesizing experiential descriptions offered by individual participants with systemic contextual factors, as revealed and understood both within and across the three components of my broader case study.

My inclusion of a secondary analysis of quantitative, national data as a substantial component of my case study is also defensible from an ethnographic standpoint. Ethnographers have recognized the utility of theoretically-rich analyses of quantitative data sets to generate insightful understandings of locally-observable phenomena (Schensul, Schensul, and LeCompet, 1999). While the use of contextually-relevant quantitative data sources by ethnographers is noted to be “underutilize(d)” (Schensul, Schensul, and LeCompet, 1999, p. 217), inclusion of this type of data may help to enrich theoretical understandings. It is imperative, however, that such quantitative analyses are conceptually linked to theoretical models that shed light on human actions or culture, and are integrated with other types of ethnographic data (LeCompte & Schensul, 1999; Schensul, Schensul, and LeCompet, 1999). Within my own quantitative component, I was able to maintain an overt theoretical link with the underlying policy-level priorities of age-friendly communities.

## 2.2 Research setting

Canada, like many other countries around the world, is in the midst of accelerated population aging. The data collection period for my case study spanned 2011-2014 for the first component of my dissertation (i.e., the quantitative secondary analysis of Canadian Longitudinal Study on Aging data, as shown in Figure 2.1). This timeframe captured what is generally agreed to be the “beginning” of the aging population trend, since 2011 was the year that the oldest members of the baby boom generation (i.e., those born in 1946) entered the  $\geq 65$  year cohort. On the other hand, data collection for my locally-set, qualitative components (also shown in Figure 2.1) took place between November 2014 and October 2016. This time frame thus captured the 2015 implementation of our local age-friendly municipal strategy (City of Calgary, 2015), as described in Chapter 1 and also summarized below.



**Figure 2.1: Multiple, embedded ethnographic case study design employed to explore companion animals and aging-in-place, as adapted from Yin (2005)**

Nationally, the older cohort of Canadians ( $\geq 65$  years), representing the aging “baby boom” generation, is projected to increase from approximately 17% in 2017 to 25% by 2031 (Statistics Canada, 2017). Calgary, while also experiencing an aging population, tends to have a younger population than that of Canada as a whole. In 2015, approximately 10% of Calgary’s population was 65 years or older, and that percentage is forecast to peak in 2042, when the older cohort will account for approximately 15% of the city’s population (City of Calgary, 2015).

Pet ownership is also prevalent among older Canadians. Previous Canadian research has found that over 25% of older Canadians report residing with a companion animal that provides companionship (Himsworth & Rock, 2013). At the same time, members of the baby boom generation, including those who have now entered the older adult cohort of the population, may be the most likely to view their companion animals as special types of family members (Fox, 2006; Perrin, 2009; Power, 2008; Putney, 2013). Taken together, our national context is one where relationships between older adults and companion animals are prevalent, and are also characterized by deep-felt attachments and responsibilities.

Statistics describing the prevalence of pet ownership among older adults have not, to my knowledge, been established within our local Calgary context. Yet, given its “pet friendly” reputation, there is no obvious reason to doubt that older Calgarians are any less likely to seek relationships with companion animals than are older Canadians in general. Calgary has certainly attained international recognition for its progressive approach to governing human-animal relationships via an emphasis on responsible pet-ownership versus risk-mitigation (Economy and Infrastructure Committee, 2016; Rock, 2013). This approach reflects the value that the citizenry – which includes older adults – places on human-animal relationships. As well, the number of licensed dogs in our city has grown consistently over the past 10 years, alongside growth in the

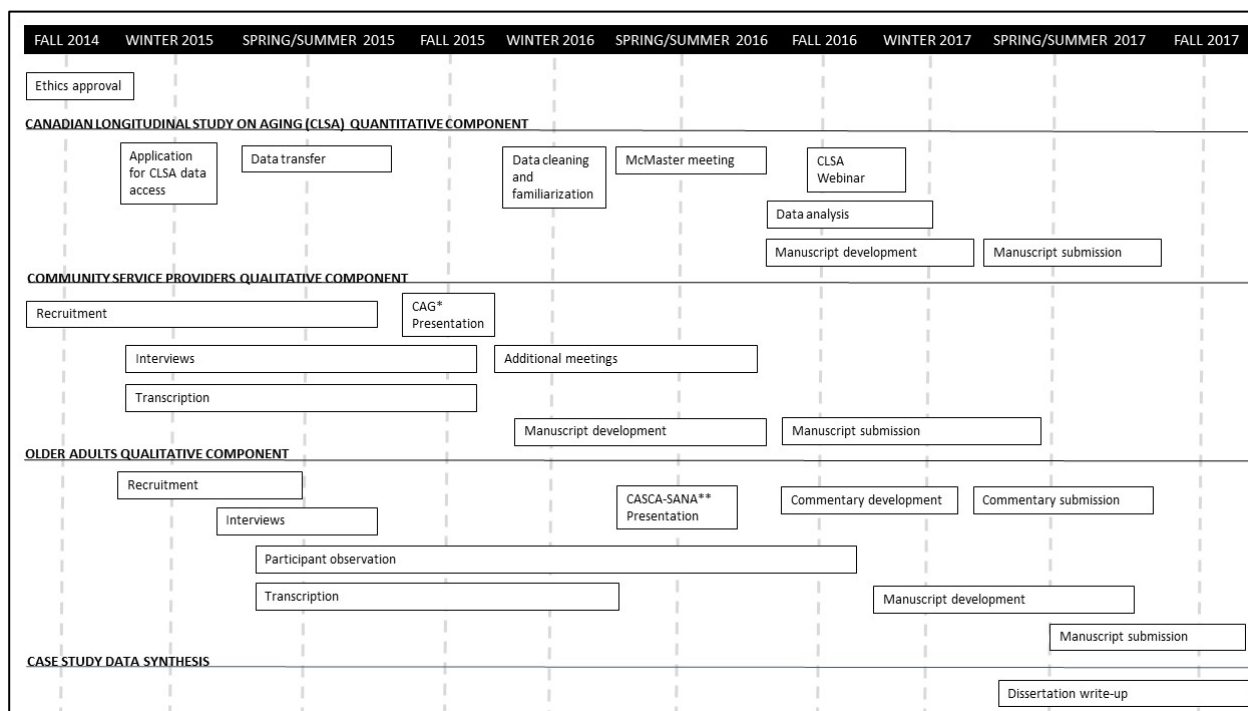
human population. It is difficult to discern whether this trend also holds true for cats, since people may be less likely to license their feline companions and thus cat-ownership is likely under-reported within our municipal licensing data (Logan, 2016).

While companion animal-related rules and regulations vary around the world, there is growing consistency in ways that various cities are preparing to support the aging population. As I discussed in Chapter 1, many cities have aligned their efforts with the WHO (2007) Age-Friendly Cities Guide, and individual preferences to age-in-place tend to underscore these organized efforts. As a testament to its uptake in the Canadian context, there are now hundreds of municipalities (i.e., towns and cities) across 10 Canadian provinces that have implemented various age-friendly initiatives (Public Health Agency of Canada, 2016). As already noted, the City of Calgary itself has implemented a municipal Seniors Age-Friendly Strategy (City of Calgary, 2015). Calgary's age-friendly priorities were ultimately tailored to reflect local interests and concerns elicited during an extensive community consultation process (City of Calgary, 2015). Calgary is also starting to evaluate the first phase of the plan's implementation (Tunstall & Eaton, 2016).

### **2.3 Research plan**

I have organized the methods sections that follow by discrete case study component, starting with the Canadian Longitudinal Study on Aging, followed by the component that sought the perspectives of local community organizations and animal welfare agencies, and ending with the component that involved speaking with local older adults themselves. This organization is imposed, however, as my case study data was collected in a temporally overlapping manner, as illustrated in Figure 2.2. Because I was immersed simultaneously in all components of my case

study throughout my project, I was able to consider emerging findings both within and across case components, which was a strength of my study design.



**Figure 2.2 Research plan and timeline for multiple case study components**

Notes: \*CAG=Canadian Association on Gerontology Annual Educational and Scientific Meeting in Calgary, October 2015; \*\*CASCA-SANA=Canadian Anthropological Society and the Society for the Anthropology of North America Annual Conference in Halifax, May 2016.

The first (quantitative) component of my study entailed garnering access to Canadian Longitudinal Study on Aging (CLSA) baseline alphanumeric data, and then using standard descriptive statistics and regression analysis approaches to gain a better understanding of older Canadians who are aging-in-place with companion animals. The process and methods I used for this component are described more fully below. For the second and third (qualitative) components of my study, my overarching research plan was to conduct ethnographic in-depth interviews (Spradley, 1979) on topics related to aging-in-place with companion animals in our



local context. I opted to adopt Spradley's ethnographic interviewing technique so as to both contextualize participants' perspectives within their daily regimes while also capturing broader socio-cultural patterns, which together would help to inform my theoretical framework (Stewart, 1998).

Even as I considered these ethnographic interviews to be my primary data sources for these two components, my broader analysis was also informed by several supplemental data sources. Some of these I encountered coincidentally (e.g., national news coverage following the story of an older adult who was evicted from her affordable independent living unit when she adopted a kitten), and others I sought out purposively as my data collection proceeded and areas of focus emerged (e.g., meetings with affordable housing providers). Below, I provide further details about the methods I used for each of the units of analysis that I considered within these two local case study components.

#### **2.4 Research methods overview: Canadian Longitudinal Study on Aging (CLSA)**

The first component of my dissertation explores the relevance of pet-ownership for both social participation and life satisfaction among a nationally representative sample of older Canadians. For this quantitative component of my thesis, I conducted a secondary analysis of baseline data collected by the Canadian Longitudinal Study on Aging (CLSA) (Release Version 3.0). In the section that follows, I provide overarching details about how I accessed the data, my steps for preparing the data so as to fit within my overarching case study, and an overview of my analytic approach. More specific methods for my analysis are also detailed in Chapter 3.

### **2.4.1 An overview of the CLSA**

Comprehensive descriptions of the CLSA are available via several published resources (Kirkland et al., 2015; Raina, Wolfson, & Kirkland, 2008; Raina et al., 2008). As a brief overview, the CLSA is a national longitudinal study of adult development and aging. The CLSA recruited over 50,000 Canadians between the ages of 45 and 85 years, to be followed for 20 years, with contact re-established every 3 years. Of this population, over 20,000 Canadians living in both urban and rural settings were recruited to form a representative sample to participate in telephone interviews. These telephone interviews were designed to facilitate provincial-level estimates of health determinants, health status, and health system usage. The CLSA is overseen by a collaborative Research Ethics Board forum chaired by McMaster University in Hamilton, Ontario, Canada. Specifically, for my dissertation I analyzed data from the initial data collection cycle for the telephone interview cohort (i.e., Baseline Tracking Version 3.0 – alphanumeric questionnaire data), as described by Kirkland et al. (2015).

### **2.4.2 Application for CLSA data access**

I learned about the CLSA during the 2014 Canadian Association on Gerontology conference held in Niagara Falls, Ontario, in October 2014. Following the conference, I consulted the study's official Web site and was able to confirm that the study had collected data on pet-ownership. Thus I submitted an application for data access in the December 2014 competition, which was panel-reviewed by CLSA research personnel (Canadian Longitudinal Study on Aging, 2016). My application was successful, and as a doctoral student, I was granted complimentary access to CLSA data to use within my dissertation research.

### **2.4.3 Data preparation and familiarization**

CLSA data undergoes an extensive data checking and data cleaning process led by the CLSA team. Even so, upon receiving the data, I spent several weeks familiarizing myself with the variables and both naming and coding conventions, as well as cleaning and optimizing the data for my own use. I used STATA IC/14.2 to manage and organize the data set. This process included dropping data with missing values, as well as recoding and labelling variables as needed for my exploratory analysis. During this initial process, I ran series of frequency tables and preliminary cross-tabulations in order to begin to gain an understanding of the spread of the data. In addition to basic socio-demographic data and self-reported health, I was especially interested in theoretically-rich variables representing mental and social well-being, including such measures as loneliness, depression, life satisfaction, social participation, social networks, general as well as instrumental activities of daily living, and self-reported mental health.

### **2.4.4 Moving from general to specific research questions**

While my broad interest in exploring associations that would be salient to aging-in-place with companion animals was clear, in July 2016 I was able to organize a meeting with several senior scholars, some of whom were aligned with the CLSA project, to weigh interest in potential directions that my analysis could explore. This meeting was attended by Dr. David Hogan (University of Calgary and site-lead investigator of the CLSA for Calgary), Dr. James Gillett (McMaster University), Dr. Parminder Raina (McMaster University and primary investigator of the CLSA), and Dr. Deborah Stoewen (Chief Empathy Officer with PetsPlusUs, as well as a trained social worker (MSW) and veterinarian (DVM) with a doctoral degree in veterinary epidemiology). Together, this esteemed collection of researchers provided valuable perspectives that represented expertise in gerontology (Raina, Hogan, and Gillett), animal

welfare (Stoewen), epidemiology (Raina, Stoewen), sociology (Gillett) and social work (Stoewen), as well as clinical expertise in both geriatric (Hogan) and veterinary (Stoewen) medicine.

Among the group, there was general agreement that research into companion animals and social well-being could make a valuable contribution to the literature, and was timely in light of the aging population. Based on my familiarity with the data set, this conversation inspired me to focus my analysis on social participation, as a form of social inclusion that is a key priority within most age-friendly frameworks (City of Calgary, 2015; World Health Organization, 2007). I further decided to consider life satisfaction as an overarching outcome that subsumes individual conceptions of both health and well-being, and which was previously shown to have complicated associations with pet ownership for a representative sample of the older Canadian population (Himsworth & Rock, 2013). Thus my analysis was designed to explore associations between pet-ownership, social participation, and life satisfaction, while also adjusting for theoretically relevant socio-demographic variables that have been established in the literature. This specific design also aligned with the underlying theoretical framework that I had devised (Figure 1.1).

#### **2.4.5 Data analysis**

With my research questions more tightly defined, I continued my process of optimizing the CLSA data set for my analysis. In particular, there were several steps required for me to format the social participation measures for an analysis that could consider (i) frequency of social participation, (ii) satisfaction with levels of social participation, and (iii) barriers to social participation. Further details on my treatment of these variables are offered in Chapter 3.

I considered associations between these different dimensions of social participation in relation to scores on the satisfaction with life scale (Pavot & Diener, 2008), as my primary

outcome measure. I also explored whether there were differences between pet owners and non-owners, as per answers to the question “Do you reside with a pet that provides companionship?” I included several socio-demographic measures in my analysis as well, namely age, gender, marital status, sexual orientation (i.e., heterosexual or LGBTQ), ethnicity (i.e., White or visible minority), household composition (i.e., living alone or with others), home-ownership (i.e., owning or renting), level of education, annual household income, and self-reported health. While my rationale is described more fully in Chapter 3, these co-variates were selected so as to capture some dimensions of the increasing socio-economic and socio-cultural diversity of Canada’s aging population.

As an overview of my analytic process, I first determined baseline characteristics of both pet owners and non-owners. I did this to provide a current description of older Canadians with pets, while also seeking to understand how pet ownership may be differentially distributed in relation to socio-economic circumstances. Next, I ran multivariate logistic regression models to explore differences between pet owners and non-owners in terms of levels of life satisfaction, social participation, and barriers to social participation. I then used multivariate logistic models to assess cross-sectional associations between different measures of social participation and life satisfaction, comparing pet owners with non-owners so as to understand both similarities and differences. All regression analyses were adjusted for socio-demographic covariates and sampling probabilities. A more detailed description of all models and analytic decisions can be found in Chapter 3.

After having derived associations and statistical significance from my descriptive statistics and regression modelling, as a final theoretical step I considered my findings in relation to the WHO (2007) Age-Friendly Cities policy framework. Both the socio-demographic data I

considered and the barriers to social participation that CLSA participants had identified offered natural linkages to this policy framework. Thus this final analytic step ensured that my analysis was theoretically rich, and that the results would have recognizable relevance in settings outside of the Canadian context. At the same time, this step also ensured that I could easily synthesize the results of this case study component with the findings of my two locally-set components, since Calgary's local age-friendly strategy is closely aligned with the WHO's international policy framework.

## **2.5 Research methods overview: Perspectives and experiences of community service providers**

In the second component of my dissertation research, I explored views on companion animals and aging-in-place from the perspectives of both community-based human social support and animal welfare service providers. I sought these perspectives for the valuable and experientially-based insights I felt that they could offer around ways that companion animal considerations might play into age-friendly initiatives. Furthermore, these perspectives are poorly represented within the current literature, even though pets may at times have an impact on the way that services are delivered to older adults who require support as they age-in-place (Morley & Fook, 2005; Ryan & Ziebland, 2015), and the relinquishment of pets as older adults' living and housing circumstances change has implications for animal welfare (Coe et al., 2014; Lepper, Cass & Hart, 2002). Related to this, the capacities of older adults to care appropriately for different types of pets may also be scrutinized (Callahan & Brotherton, 2014).

While most age-friendly policy efforts are attentive to access to community and health services, very few formal plans and strategies recognize the need for services aimed at

supporting relationships between older adults and their companion animals. For instance, in an environmental scan that I conducted in 2012 to explore age-friendly efforts in five Canadian cities (Mississauga, Ottawa, Edmonton, Vancouver, and Calgary), Calgary's municipal administration was the only one to formally acknowledge companion animals in older adults' lives through its "Seniors for Seniors" City-run subsidized adoption program (Toohey, 2012). I later encountered another exception, in the City of Philadelphia's "GenPhilly" plan, which formally identified the need for resources and approaches that help to alleviate some of the challenges that socio-economically diverse older adults face when aging-in-place with pets (Clark, 2014; Hoffman & Clark, 2012). These efforts, which affirm my own theoretical perspective on the importance of including companion animals within age-friendly strategies, are discussed in more depth in Chapter 4.

Within both this component and the third qualitative component of my case study, my primary mode of data collection was conducting in-depth ethnographic interviews with purposively sampled participants, which I describe below. However, I also had two opportunities to conduct non-participant observations during community "Spay Day" events offered by one of my participating animal welfare organizations. These events were promoted to residents living in lower socio-economic status and otherwise under-serviced quadrants of our city. All community residents with intact female and male cats were eligible to sign up for fully-subsidized spay and neuter appointments with participating veterinary clinics, for as many animals as needed, and with no means-testing required. These events were rich sources of contextual data, as they generated insights on both the sensitive conduct of these important animal welfare initiatives and the receptiveness of community members living in disadvantaged neighbourhoods to sign up to receive this valuable service for their companion animal(s).

Also during my data collection phase, a national gerontology conference was held in Calgary in October 2015. I was able to take advantage of this timing in order to organize and facilitate a symposium on Companion Animals and Aging that represented both scholarly and community service provider perspectives on issues as well as opportunities related to companion animals and the aging population (Canadian Association on Gerontology, 2015). The abstracts for the symposium presentations can be found in Appendix F, and the information shared within the symposium helped me to situate my own understanding of the various data sources that I was immersed in. While together these additional data sources contributed to my overarching understanding of aging-in-place with companion animals, in the next section I focus specifically on the methods I used to collect and analyze my primary interview data.

### **2.5.1 Sampling and recruitment**

I collected primary data by conducting interviews with a purposive sample of 11 employees (including administration and front-line) and volunteers with (i) social service providers working with socially-isolated and lower income older adults, and (ii) animal adoption technicians and volunteers involved in pet surrenders, sheltering, and rehoming. I recruited research participants through a combination of pre-existing relationships as supporters of Dr. Melanie Rock's research program, through facilitated introductions via members of these organizations or members of my advisory committee and other faculty members, and targeted self-introductions that I initiated, either in-person or via e-mail.

As my data collection progressed, issues specific to affordable seniors housing emerged as a recurrent theme, and thus I also identified and subsequently held meetings with six representatives of two different housing agencies that provide affordable independent living opportunities to lower income and otherwise vulnerable older adults living in Calgary. One of



these agencies had recently reversed a pet-friendly policy in one of its independent living facilities, and thus I was interested in trying to understand what sorts of factors had led to this decision. The second had been identified by other informants as providing what, to the best of my knowledge, is the only affordable (and provincially subsidized) independent living opportunity in Calgary that allows tenants to have cats in their units.

I was also able to speak formally with a policy analyst from another Canadian province, who had for several years been researching tenancy agreement strategies for allowing older adults to have companion animals in this province's state-subsidized social housing. This specific participant had attended the aforementioned Companion Animals and Aging research symposium, which was how we became acquainted. After the conference ended, I arranged a formal interview in order to learn more about their own research process and findings.

To round out the practical perspectives I collected, I also conducted interviews with two family physicians whose clinical practices included older adult patients, and who could reflect on both the challenges and benefits of relationships with companion animals later in life from a clinical perspective. Both physicians were involved in undergraduate and graduate medical training, and were identified for me by a senior faculty member and administrator at the University of Calgary's Cumming School of Medicine. Following an e-mail introduction by my contact, I described my study and invited their participation. A third family physician had also been invited to participate, but declined.

Lastly, I interviewed an employee from an out-of-province long term care facility, who was also the handler of a trained therapy dog that visited the facility's residents. While her perspective was not directly relevant to my focus on aging-in-place and independent living, it served to enrich my own understanding of ways that older adults may experience relationships

with companion animals in the years leading up to assisted living needs, including both benefits and challenges that characterized transitions from community-based to institutionalized residential settings that do not allow residents to have companion animals.

I had identified specific organizations of interest *a priori* (i.e., organizations that served the needs of vulnerable older adults to support aging-in-place, and animal welfare organizations), yet my sampling approach was also adaptable, as I learned of new organizations or issues throughout my data collection. As my data collection progressed, I found that eventually similar themes and issues began to recur, both within social support and animal welfare agency interviews. This suggested that I had adequately captured an acceptable breadth of representation from both agencies providing social support and those dedicated to protecting animal welfare. I realized that there are valid perspectives that could be added to my study of companion animals and aging-in-place (e.g., home care professionals, occupational therapists, and veterinary professionals, among others, discussed in the limitations section of Chapter 6), yet felt that my focus on community service providers was a valuable one, in light of the age-friendly policy framework. An overview of my case study participants is provided in Table 2.1 below.

### **2.5.2 In-depth ethnographic interviews**

Prior to conducting interviews, I obtained informed consent from each participant. Interviews were semi-structured, and were informed by Spradley's (1979) ethnographic interview approach, particularly in his recommendation to spend time developing rapport prior to moving into the process of asking more descriptive and reflective questions. This approach also ensured that my interviews were sensitive to both contextual factors and to garnering insights on the sociocultural factors that influence aging-in-place with companion animals, as per Stewart's (1998) methodological tenets. Even so, Stewart highlights the extent to which even ethnographic

interviews hinge upon the co-construction of knowledge that results from the particularities of the researcher, the participant, and the interview setting. In aligning with Stewart's methodological guidance, and as discussed above, I aspired to interview my participants in such a way that I minimized my own influence on how they responded to the questions that I posed (Stewart, 1998). That said, I had also designed my questions to explore specific topics of interest that I had identified *a priori*, based on my understanding of the literature and the aims of my project. Examples of interview questions are listed in Chapter 4, and replications of sample interview guides can be found in Appendix G.

**Table 2.1 Overview of participants recruited for interviews and /or meetings to explore community service providers' perspectives on aging-in-place with companion animals**

<i>Description</i>	<i>Participants</i>
<b>Social support agency targeting lower income older adults</b>	6 participants representing 4 agencies participated in one-on-one interviews. These included senior administration, front-line service providers, and established volunteers.
<b>Animal welfare agencies</b>	5 participants representing 3 agencies participated in one-on-one interviews. These included senior administration, front-line service providers, and established volunteers.
<b>Affordable/subsidized independent living housing providers</b>	6 employees from 2 housing providers participated in group meetings. These included both administration and front-line employees.
<b>Policy analyst</b>	1 senior policy analyst who had conducted a review of pet-related housing policies for subsidized seniors housing facilities across their province
<b>Family physicians</b>	2 family physicians involved in both undergraduate and graduate medical training, and whose practices included older adults who are aging-in-place
<b>Long term care recreation coordinator</b>	1 recreation coordinator from a long term care facility located in another province, and who was also the handler of a therapy dog assigned to the facility where they worked

Tactics that I employed during interviews included making repeated explanations of my interest in the particular perspective my participant could offer, and restating ideas that they had shared to ensure that I had correctly understood these, while refraining from coming across as judgmental (Spradley, 1979). My questions were also shaped by Spradley's typology of questions, with interviews typically beginning with broad "grand tour" questions, which also help to establish rapport, as participants recounted their typical or normal experiences, duties, routines, etc.. Following these general descriptions, my questioning proceeded to garner both specific examples and experiences that participants could draw upon to illustrate the types of situations that shaped their perceptions. I generally concluded each interview with one or more reflective questions. I did this to ensure that each participant's personal sensibility about value of animal companionship could be captured and used to temper my interpretation of our conversation in its entirety. At the same time, I wanted to allow each participant the opportunity to identify aspects of aging-in-place with companion animals that they wished to share, but that I might have missed, having organized my line of questioning within the confines of my theoretical interests.

My interview guides were tailored for each participant based on my understanding of both their overarching organization's mandate, and their specific role within that organization. I iteratively adapted my overarching questions as data collection proceeded and as specific themes became apparent. Interviews lasted, on average, an hour, and ranged from 40 to 90 minutes. Most interviews took place in-person, although I did conduct a small number of interviews (3) by telephone or by Skype, either due to geographic considerations or else at the participant's request. Most in-person interviews took place in participants' workplaces, and one participant chose to meet in a coffee shop.

With just one exception, all in-person interviews were digitally recorded using a Sony audio recording device. For the participant who declined to have our conversation recorded, I took extensive notes during the interview. I transcribed these and shared a copy with the participant within just a few hours of our meeting, so as to receive their approval or further input if needed. Similarly, I did not record the meetings that were held with housing providers, but instead followed a similar protocol, in terms of note-taking, transcribing, and sharing within 24 hours for approval or revision. Digital recordings were transcribed verbatim. I transcribed several, and transcription was also shared with a professional transcriptionist hired to support our research team. I reviewed and corrected all transcripts for accuracy.

### **2.5.3 Fieldnotes and research memos**

After each interview, I wrote extensive fieldnotes reflecting on what I had learned, observed, and experienced. My ethnographic approach to both my fieldnotes and research memos allowed me to be both intuitive and empathetic throughout my reflective process, rather than being systematic about what I chose to document after any given interview (Emerson, Fretz, & Shaw, 1995). This approach allowed me to think through the content of each interview within my understanding of the broader socio-cultural context that was evolving as I interviewed different participants. An ethnographic approach to writing fieldnotes and research memos also allowed me to remain aware of my own perspective and potential biases, and ways that these were actively informing my responses to the content of each interview. In other words, the process of crafting reflective field notes and research memos enabled me to hone my own reflexivity, especially when I encountered views that I found contradictory to my own (Green & Thorogood, 2009). In memos that I wrote while transcribing or reviewing transcripts, I was also able to draw upon my breadth of knowledge of the public health research on companion animal

relationships broadly, and more specifically in the context of aging. This helped me to identify and make sense of salient topics or situations, or to sharpen or justify my understandings of my data.

#### **2.5.4 Analytic approach**

To analyze my interview data, I conducted a *theoretical* thematic content analysis (Braun & Clarke, 2006), in that I imposed theoretically relevant categories that I had identified *a priori* on my analysis (noting that these were also reflected in the questions I asked). These categories included both (i) perceived benefits and challenges of pets for older adults living in economically-disadvantaged, socially isolated circumstances, and (ii) experiences of negotiating clients' relationships with pets within the practice of providing services to these clients, whether in relation to social support or animal welfare. Within these broad categories, however, themes were allowed to emerge directly from descriptions, views, and perspectives shared by my research participants, and reinforced by the additional data sources that I have described. I was also attentive to ways that the thematic patterns that became discernable as my data set grew also fit within my proposed theoretical framework for understanding companion animals and aging (as per Figure 1.1).

To assist with my analysis of interview data, I uploaded all interview transcripts into QSR-NVivo 11.0, which I used to assist with capturing and organizing thematic content. I sought validation of my initial proposed themes first through ongoing discussions with my supervisor throughout my data collection process, and then by sharing a sampling of interview transcripts with my supervisory committee members, who are also my co-authors for the manuscript presented in Chapter 4. We met once as a group to discuss these, and further reflection continued via e-mail correspondence and in-person conversations as analysis proceeded.

Overall, the recruitment, data collection, and data analysis processes I have described for this second component of my case study took place in tandem with the similarly-designed process of interviewing older adults themselves, as laid out in the next section. While I have described each separately, my immersion into data stemming from both of these components iteratively informed my analysis of both sets of interviews.

## **2.6 Research methods overview: Perspectives and experiences of older adults with companion animals**

For the third component of my case study, I explored perceptions of and experiences of aging-in-place with companion animals from the perspectives of a socio-economically diverse sample of older adults. I aspired to ensure that my sample included older adults living in lower income and socially isolated circumstances, as these perspectives are rarely considered within current literature on pets and aging. Even so, sampling older pet-owners representing a wide range of experiences would allow me to explore the extent to which this observation rang true, which could then have implications for promoting social justice for older adults.

### **2.6.1 Sampling and recruitment**

To be eligible for my case study, participants had to be 60 years or older and living independently in the community, alongside a companion animal. Proficiency in the English language was also a requirement. Because I sought to investigate older adults' contextualized experiences of aging-in-place with companion animals, my aim was to speak with older adults representing a range of different individual circumstances, particularly in relation to socio-economic status and social isolation. Thus, I recruited older adult participants in several ways. Two of the animal welfare agencies that participated in the second component of my case study

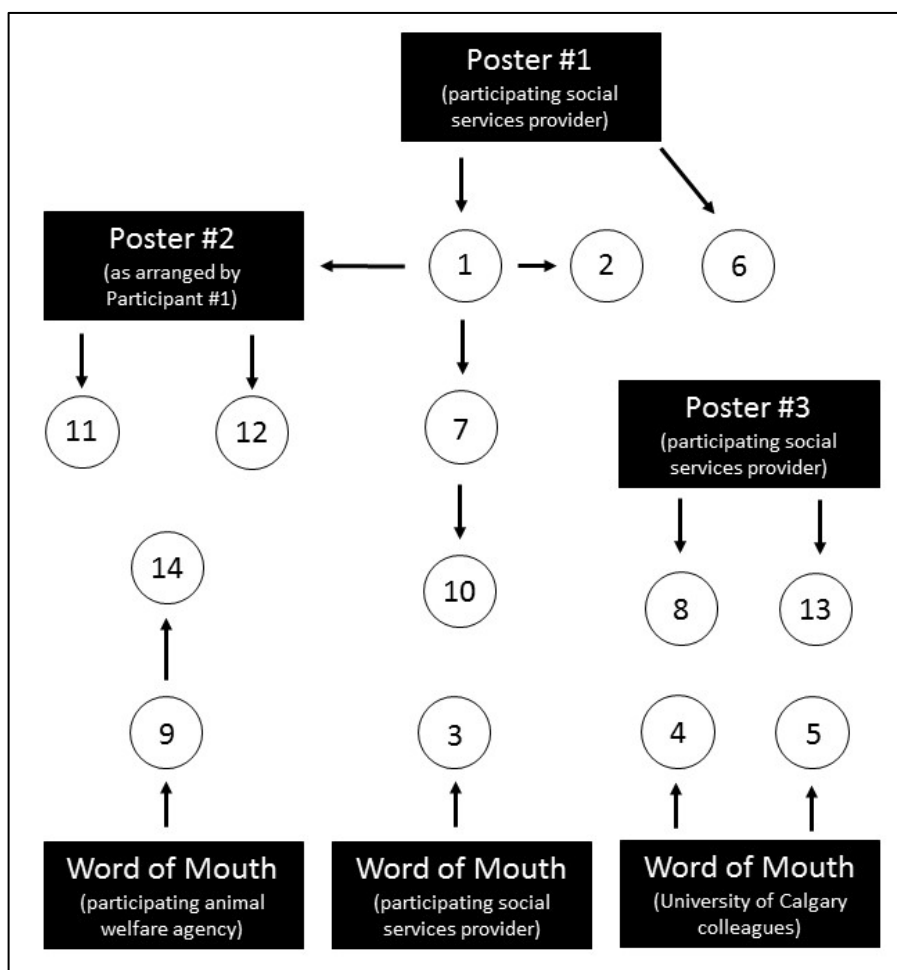
assisted with recruiting older adults on my behalf. One displayed my recruitment poster (see Appendix H) in their public shelter area. The second distributed copies of my poster (either electronic or printed) to recent adopters who were over the age of 60 years. Both of these sources had the potential to prospectively reach older adults representing a range of socio-economic and social circumstances, given that they served a broad clientele base, although neither proved to be a source of participants. Even so, I was also invited to attend a pair of community events hosted by one of these agencies (as described previously), and upon learning about my study, one of their long-time volunteer members who also met my recruitment criteria volunteered to participate.

Given my particular interest in the challenges that lower income older adults may be facing when aging-in-place with companion animals, I was able to arrange for two of the social support organizations that had participated in my study to also display my poster in public areas. Both of these organizations provided services and supports to segments of the population living in lower socio-economic circumstances. Additionally, a participant from my second component, representing a third social support agency, also recruited on my behalf a client whom they felt could offer a valuable perspective, who would benefit from having the opportunity to be interviewed, and who was socially isolated to the extent that they would be unlikely to come across my poster in the community.

I was also able to recruit several participants through word-of-mouth (i.e., snowball sampling) initiated by older adults who had responded to my posters and subsequently participated in interviews. Three participants voluntarily recruited older adults with companion animals who were part of their own respective social networks. These efforts also allowed me to reach older adults who were aging-in-place, but who did not actively seek out public spaces or



community services. Beyond this, one participant, who had initially learned of my study through a poster at a local seniors' centre, hung my poster in several public libraries and community centres where they actively volunteered. Finally, two colleagues at the University of Calgary also recruited participants from their own social networks on my behalf. A diagram of how each participant was recruited is provided in Figure 2.3. As per the terms of my ethics certification, I did not reach out directly to any of these older adult recruits, but instead responded with further information about my study once they contacted me.



**Figure 2.3: Recruitment strategies for interviewing purposively sampled older adults (n=14) living in a range of different socio-demographic circumstances**

I screened all prospective study participants either via a telephone call or an e-mail exchange, to ensure that they met my inclusion criteria, and to arrange for our meeting. I also inquired about their companion animal(s), to assist me with preparing for our pending interview, since each participant received both a \$25 grocery gift card and a small gift (e.g., treats and toys) for their companion animal(s). I stopped recruiting participants once I felt that I had achieved both breadth, in terms of a diversity of socio-economic characteristics and a balance of dog and cat owners, and depth, in terms of having a sense that my data was capturing a wide range of experiences and perspectives yet similar themes were beginning to repeat from interview to interview. Overall, I recruited 14 older adults, whose basic characteristics are summarized in Table 2.2.

**Table 2.2 Overview of participants recruited for interviews and /or meetings to explore older adults' perspectives on aging-in-place with companion animals**

<b>Participant</b>	<b>Gender</b>	<b>Species of pet</b>	<b>Socio-economic status (approx.)</b>	<b>Human household composition at time of interview</b>	<b>Mode of recruitment</b>
1	Female	Cat	Mid	Lived alone (divorced)	Poster
2	Female	Dog	Mid	Lived alone (husband in long term care)	Word-of-mouth
3	Male	Cats (2)	Low	Lived alone (single)	Word-of-mouth
4	Female	Dog	High	Lived with husband	Word-of-mouth
5	Female	Dog	Mid-to-high	Lived alone (divorced)	Word-of-mouth
6	Female	Dog	Mid	Lived alone (single)	Poster
7	Male	Cat	Low	Lived alone (single)	Word-of-mouth
8	Male	Dog	High	Lived with wife	Poster
9	Female	Cats (2)	Mid	Lived alone (single)	Word-of-mouth
10	Female	Cat	Low	Lived alone (single)	Word-of-mouth
11	Female	Cat	Low	Lived alone (divorced)	Poster
12	Female	Dog, cat, rabbit	Mid	Lived alone (single)	Poster
13	Female	Cat	Low-to-mid	Lived alone (widowed)	Poster
14	Male	Dog	Low	Lived alone (divorced)	Word-of-mouth

### **2.6.2 In-depth ethnographic interviews**

Prior to conducting interviews, I obtained informed consent from each participant. As described in detail in reference to the second component of my thesis, interviews with older adults were semi-structured and informed by Spradley's (1979) ethnographic interview approach. I drew on ethnographic interviewing methods as a means of connecting older adults' perspectives with their daily experiences of aging-in-place, as well as with indications of broader socio-cultural values and norms that were shaping experiences of both aging and animal companionship. My interview guides were tailored to each participant, and I drew upon details that I had collected about each participant's companion animal – i.e., name and species – at the outset of each interview, in order to quickly establish rapport with each participant. Interview guides also evolved iteratively as both components of my case study progressed, so as to be responsive to emerging themes and issues.

My interviewing tactics were also similar to those described above, in relation to the second case study component. I was attentive to minimizing my own influence on ways that our conversations unfolded, yet without sacrificing the important rapport and sense of trust that led to engaging conversations. My interviews generally ended with reflective questions and an opportunity for my participants to bring up any ideas or observations that I had not overtly asked them to consider. I hoped that this strategy would allow each participant an opportunity to identify what they felt were important aspects of aging-in-place with companion animals that they wished to share with me, but that I may have missed when shaping my interview guides around my own theoretical interests. Interviews lasted, on average, one hour, and ranged from 40 to 90 minutes. Examples of interview guides can be found in Appendix G.

All interviews took place in-person, many in the homes of the participants, although a small number of participants (n=4) chose to meet in a more public location, including a cafe, library, outdoor park, or centrally-located seniors centre. When interviewing participants in their homes, I shared my location and interview schedule with my supervisor or else another research team member who had received ethics clearance through the Social Justice and Pet Ownership research grant.

With just one exception, all interviews were digitally recorded using a Sony audio recording device. For the participant who declined to have our conversation recorded, I took extensive notes during the interview, to compile a thematic transcript at a later date. Digital recordings were transcribed verbatim. I transcribed several of these, and this task was also shared with a professional transcriptionist hired to support our research team. I reviewed and corrected all transcripts for accuracy.

### **2.6.3 Fieldnotes and research memos**

After each interview, I wrote extensive fieldnotes reflecting on what I had learned, observed, and experienced when I spoke with older adults and observed their interactions with their companion animal(s). I aspired to understand each interview in relation to both personal experiences and any plausible structural influences that may have shaped personal experiences of aging-in-place with companion animals. I was also attentive to ways that my participants' experiences were captured within my theoretical framework (Figure 1.1). I wrote reflective memos as my data collection advanced, synthesizing insights from both of the qualitative components of my case study as well as my broader knowledge of the literature on companion animals and aging. These memos helped me to remain reflexive of my own evolving perspectives, but were also helpful in terms of making comparisons both within and across the

two sets of data. Eventually, I also drew upon the age-friendly policy framework as a means of bridging insights from my quantitative analysis with those emerging from my qualitative data, which helped me to better understand some of the scenarios that were described by the older adult participants.

#### **2.6.4 Participant observation**

For the most part, I had just a single encounter with each older adult participant and (for most, but not all) their companion animal. There was one significant exception, however, which led to my following one participant's trajectory for just over one year. This case was singular in nature, as it involved an increasingly frail older adult who was in his 80s, and was precariously housed due to intersecting influences of (i) his deteriorating physical and emotional health, (ii) his extreme low income, including an absence accumulated wealth, (iii) his diminished social status as a long-time renter in a gentrifying neighbourhood, (iv) his lack of available family support (his children and siblings had predeceased him, and he had no spouse), (v) his deep attachment to his companion animal, a large (i.e.,  $\geq 90$  lbs) yet gentle dog, and, lastly, (vi) the fact that his long-time (and neglected) apartment was on the market when we first met. This particular participant's situation was especially illustrative of the types of housing challenges that may be faced, coping mechanisms that may be employed, and community service gaps that may be experienced by older adults with few social and financial resources at their disposal, as they endeavour to arrange to age-in-place with companion animals, and particularly with dogs.

Dogs have been well-studied in relation to promoting healthy aging, with dog-walking readily identified as a key mechanism for both achieving and maintaining adequate levels of physical activity, for younger and older adults alike (Christian et al., 2013; Curl, Bibbo, & Johnson, 2016; Oka & Shibata, 2009; Thorpe et al., 2006; Toohey, McCormack, Doyle-Baker,

Adams, & Rock, 2013). Furthermore, dogs have also been posited within the literature to support the health of older adults, including those who don't have a dog of their own, through daily routines of dog-walking and heightened opportunities for social interactions (Johnson & Meadows, 2010; Knight & Edwards, 2008; Peel, Douglas, Parry, & Lawton, 2010; Rogers, Hart, & Boltz, 1993; Toohey et al., 2013). Yet, as was confirmed throughout my interviewing process, it is notoriously difficult for older adult renters in our local setting (and elsewhere, as discussed in Chapter 1) to find any, let alone affordable and appropriate, rental housing that welcomes pet dogs. Thus it was informative for me to follow the trajectory of this particular older adult via monthly check-ins, and to both observe and reflect upon the constraints that he navigated until his housing needs were eventually resolved. The details of his situation are described more fully in Chapter 5.

### **2.6.5 Analytic approach**

While the entirety of my interviews with older adults contain themes and insights that have informed my overarching case study findings, I conducted a formal and in-depth qualitative analysis of the data I collected for three specific participants (i.e., Participants 7, 10, 14 as labelled in Figure 2.2 and Table 2.3). Since themes around housing challenges transcended my different data sources, I focused my analysis on this sub-group because their circumstances offered novel and detailed insights into the lived experiences of older adults who are economically vulnerable, and who have access to little or tenuous social support. Specifically, each of these three participants had recently been or was still being challenged to find affordable and appropriate housing that would allow them to live independently while also maintaining fundamental, long-standing relationships with companion animals. Their experiences, I felt, were particularly salient to describe and analyze in relation to the public health implications of ways

that aging-in-place is being actively promoted, with housing being a prioritized age-friendly domain (World Health Organization, 2007).

I approached my analysis guided by Arthur Frank's (2012) dialogical narrative methodology. As per Frank's methodology, I drew upon the experiences shared with me during interviews in order to reconstruct narratives that could also be linked to themes that had arisen in my community organization interviews. Frank's (2012) socio-narratology approach offers methodological guidance into interpreting and retelling peoples' narratives so as to provide scholarly insights around the human experience. This analytic approach also dovetailed well with the ethnographic orientation I have described throughout, for it gives license to the researcher to scrutinize socio-cultural intricacies, which for me meant bridging individual, collective, and institutionalized practices.

In particular, I used the stories to explore and extend the concept of solidarity that is of growing interest within the domain of public health ethics, and that underlies both individual behaviours and policy domains. Solidarity also offered an avenue for rethinking the motivations that lie behind older adults' efforts to maintain relationships with companion animals, which at times have been understood as neurotic (Parslow, Jorm, Christensen, Rodgers, & Jacomb, 2005), psychopathological (Beck & Katcher, 2003; Chur-Hansen, Winefield, & Beckwith, 2009), or simply misguided (Wells & Rodi, 2000). Further analytic and methodological details in relation to this analytic approach are offered in Chapter 5.

## **2.7 Overarching case study synthesis**

Each of the three components of my case study was designed to stand alone as an individual study, yet all three are linked conceptually to the overarching aim of my dissertation.

Each component offered an intentional exploration of one or more underlying theoretical proposition, as illustrated in Figure 1.1. Furthermore, each component explored these propositions from a different angle, and aligned with a different age-friendly priority area. Each also maintained a socio-ecological stance, and thus throughout each analysis I endeavoured to remain attentive to as-yet unexplored structural influences on ways that companion animals may be experienced as people age-in-place.

My primary approach to synthesizing my case study data involved an immersed process of explanation-building (Stewart, 1998; Yin, 2009). Because I was able to collect and analyze data for each case study component concurrently, drawing together and making sense of information from diverse data sources took place throughout the entirety of my study. My process of capturing insights through field notes and crafting reflective research memos, while remaining wholly immersed in my data, led to a coalescing of the different insights gained from each component of my overarching case study. As well, the age-friendly policy framework offered a unifying thread that transcended each of the case study components, and thus offered an overarching organization into which my findings naturally fit (Yin, 2009).

My approach to explanation building also helped to situate the insights gained from my study within a theoretically-identifiable context, that may be relevant (or transferable) in settings that are facing an increasing proportion of older adults who are aging-in-place, where having companion animals is a common socio-cultural practice throughout the life course, and where policy level attention has been turned to focus on age-friendliness. The relevance of my findings beyond the local and national settings in which my research was conducted can also be directly linked to the methodological rigor of my research design, which I move on to describe in the next section.



## **2.8 Methodological rigor in ethnographic case study research**

The overarching methodologies for both case study research and ethnography include detailed consideration of scientific rigor. In the section that follows, I discuss the main goals of both methodological orientations, and draw these together by offering examples of ways that I approached ensuring rigor within my study design. Table 2.3, at the end of this section, provides a summary of the different tactics I used to ensure rigor in my overarching methodological approach, thus summarizing the details discussed below.

### **2.8.1 Concepts and tactics related to rigorous case study research design**

In considering conceptions of rigor in my specific case study, it was instructive for me to align with Stewart's (1998) ethnographic thinking around rigor, and the links that he creates between the lexicon of ethnography and the more familiar epidemiology and social sciences terminology employed by Yin (2009), i.e., validity, reliability, and generalizability or transferability. Specifically, Stewart (1998, pp. 14–17) proposes “veracity”, “objectivity”, and “perspicacity” as the key expectations of ethnographic methods that underlie rigor. Below, I define and discuss each of these, and situate them in my multiple case study design.

Veracity, Stewart (1998) suggests, addresses accuracy of representation within primary data. Veracity can thus be linked with conceptions of internal validity put forward by Yin (2009), including correctly choosing meaningful measures, and ensuring that clear logical connections underscore emerging explanations of the phenomenon being studied. Within my overarching case study approach, paying close attention to contextual details and ensuring triangulation of multiple data sources were specific tactics that I used to ensure that my depiction was as accurate as possible, and that it addressed considerations of validity. As well, the iterative nature of my interviewing process enabled me to explore the extent to which my growing understanding of

aging-in-place with companion animals was applicable both within and across the different components of my case study.

From his ethnographic perspective, Stewart equates objectivity with reliability, or the extent to which a study is unbiased and replicable. To a greater extent than Yin, Stewart (1998) overtly acknowledges the situatedness of ethnographic research, and suggests that replicability cannot ever be realistically achieved, due to the temporal nature of ethnographic study and its insertion into ever-shifting individual, relational, and cultural contexts. Stewart highlights instead the extent to which a study is able to transcend both the perspective of the researcher and that of the research participants. To this effect, my case study employed checks with my committee members (co-authors) around both my overarching research plan, my interview templates, my coding conventions for the qualitative components, and my interpretations of both quantitative (i.e., Chapter 3) and qualitative data (i.e., Chapters 4 and 5). I was also transparent in identifying all data sources that I drew upon, and offered justification for why I considered each one as adding value to my case study. Finally, and as discussed further below, I strived to maintain reflexivity via my process of taking ethnographic field notes, and engaging in reflective memo-writing, as well as through discussing my emerging interpretations with both committee members and other content-area experts, including both mentors outside of my committee and peers within my program of study.

As the third measure of rigor, Stewart (1998) suggests perspicacity as an alternative means of thinking about generalizability, transferability, or what Yin (2009) describes as external validity. Each of these concepts is concerned with the extent to which study findings are relevant outside of the setting and context of the case study research. In identifying perspicacity as a goal

**Table 2.3: A summary of tactics used to ensure rigor in ethnographic case study research design, as informed by methodologists Stewart (1998) and Yin (2009)**

<b>VERACITY (STEWART, 1998); CONSTRUCT AND INTERNAL VALIDITY (YIN, 2009)</b>	<b>OBJECTIVITY (STEWART, 1998); RELIABILITY (YIN, 2009)</b>	<b>PERSPICACITY (STEWART, 1998); EXTERNAL VALIDITY (YIN, 2009)</b>
Multiple data sources (triangulation) drawn upon so as to understand (i) the extent to which views transcend geographical, individual, and professional orientations and practices and (ii) implications of socio-demographic circumstances on lived experiences of relationships with companion animals	Thorough documentation of procedures and contextual of considerations (i.e., transparency of data collection and analysis protocols)  Rationale for use of all data sources provided	Study findings are situated at the convergence of local, national, and international socio-cultural trends (i.e., human-animal bonds, and aging-in-place) and relevant policy frameworks (i.e., WHO (2007) Age Friendly Cities guidelines)
Comparative observations that consider views of pet-owners and non-owners so as to explore socio-cultural value systems shaping perceptions of and dispositions towards companion animals and aging-in-place	Active discussion of data and interpretation with supervisor, committee members, peers, and other experts in relevant fields (to the extent that compliance with ethics certification protocols could be maintained)	Interpretations are situated in international and inter-disciplinary literatures on companion animals and aging  Novel insights generated from focus on previously unexplored dimensions of aging-in-place and companion animal relationships
Inclusion of contextual factors that could naturally bridge individual experiences and policy-level practices	Reflexive awareness throughout data collection and interpretive processes, including both qualitative and quantitative data sources	Findings are situated within current frameworks of health promotion, population health intervention research, public health ethics, One Health, and both social and critical gerontology
Iterative evolution of theoretical propositions and exploration of alternative explanations and disconfirming data via reflexive memoing		

of ethnographic research, Stewart encourages researchers to remain astute to the extent to which their study generates novel insights that can be plausibly meaningful based upon socio-cultural, rather than geographical, relevance. In seeking to ensure wide-spread relevance of my case study findings, my research addressed novel facets of aging-in-place with companion animals that are missing within existing academic literature. At the same time, it appears, from my literature review, that my socio-ecological and contextualized approach to understanding how human-animal bonds play out in older peoples' lives will have increasing salience, given the rapidly aging population and the shifting socio-cultural views on the status of companion animals. I have taken careful steps to ensure that my interpretations of my findings are situated within

international and inter-disciplinary scholarly literatures on companion animals and aging, on aging-in-place more broadly, and on age-friendly policy implementation. I have also situated my findings within broader conceptual frameworks relevant to health promotion, population health intervention research, public health ethics, and to One Health. It has been both strategic and theoretically informative to maintain a consistent, analytic link with the WHO (2007) age-friendly policy framework, given the international underpinnings of the guide itself, as well as the international uptake of the guide within far-reaching efforts to plan at municipal levels for aging populations.

### **2.8.2 Reflexivity and consideration of alternative explanations**

In aspiring to remain consummate with both ethnographic and case study methodology, it was imperative that I mindfully weighed evidence in relation to alternative (or rival) interpretations and explanations of my emerging findings (Stewart, 1998; Yin, 2009). Indeed, the literature on companion animals and aging is rife with contradictory evidence and null findings, and thus has an abundance of documented alternative explanations to consider. This necessary exercise of interrogating alternative explanations was thus integrally connected to my own reflexivity as a researcher. In order to give rival and disconfirming explanations their due, I ensured that I remained self-aware regarding the presuppositions and opinions that I held as both an individual and a researcher, as I considered and made meaning of my various data sources. I have also aspired throughout my study, and as I continue to contemplate my findings, to give balanced consideration to the range of evidence that I gathered. In doing this, I have been consciously reflexive of my own predispositions around both the emotional and practical attributes of human-animal relationships when developing field notes and memos, when

contemplating thematic patterns, and when asserting theoretical understandings onto the statistical modelling I did for the quantitative component of my study.

## **2.9 Transitioning into manuscript chapters**

As described at the outset of this chapter, the overarching objective of my dissertation research was to evolve current understandings of lived experiences of relationships with companion animals as having plausible influence upon the health and well-being of older adults who are aging-in-place. I move into the next section of my dissertation by reporting on the first component of my multiple case study (i.e., Chapter 3), which used a quantitative approach to explore both the socio-demographic characteristics of older Canadians living with companion animals, and the relevance of pet-ownership for both social participation and life satisfaction among a nationally representative sample of older Canadians. These national level results are interpreted in reference to the age-friendly policy framework (World Health Organization, 2007), which I then continue to thread through both of the locally situated, qualitative case study components (i.e., Chapters 4 and 5). Finally, in Chapter 6, I weave together the findings from these three individual components and reflect upon the implications of my synthesis from the perspective of my broader, cohesive ethnographic case study design.

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**Chapter 3: Is pet ownership relevant to social participation and life satisfaction for older adults who are aging-in-place? Findings from the Canadian Longitudinal Study on Aging (CLSA)**

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### **3.1 Abstract**

Nationally representative baseline data from the Canadian Longitudinal Study on Aging (CLSA) was used to assess whether pet ownership is associated with social participation and life satisfaction for older adults ( $\geq 65$  yr,  $n=7,474$ ). Descriptive statistics were used to discern patterns of pet ownership within Canada's aging population, and logistic regression models were used to estimate associations between social participation and life satisfaction for pet owners and non-owners. Pet ownership was reported by one-third of all older adults in our sample. On average, pet owners were less likely than non-pet owners to report life satisfaction ( $OR=0.73$ ,  $p<0.001$ ) and to participate in social, recreational or cultural activities on a frequent basis ( $OR=0.68$ ,  $p<0.001$ ), but pet owners were no less satisfied with their current levels of social participation than were non-owners. For pet owners experiencing barriers to social participation, pets appeared protective of life satisfaction in some circumstances. Both individual characteristics and structural factors linked to the World Health Organization's Age-friendly Communities framework were relevant to understanding these findings.

**Keywords:** ageing-in-place, age-friendly cities, social participation, population health, companion animals, public policy

### 3.2 Introduction

Over the past several decades, researchers from a range of gerontology disciplines have explored the proposition that relationships with companion animals, or “pets,” may be especially beneficial for older adults, helping to maintain or even improve physical health and emotional well-being throughout old age. Just as population aging is recognized as a global phenomenon (United Nations, 2015), such a trend has also been noted for pet-ownership (McNicholas et al., 2005), including among older adults. For instance, in most Western countries between a quarter and a third of older adults ( $\geq 65$  yr) live in the company of a pet (Bennett, Trigg, Godber, & Brown, 2015; Himsworth & Rock, 2013; McNicholas, 2014; Peak, Ascione, & Doney, 2012; Pikhartova, Bowling, & Victor, 2014), and pet-ownership is also on the rise as a cultural practice in Japan and China (Hansen, 2013; Headey, Na, & Zheng, 2007). Thus, consideration for pets within organized efforts to promote aging-in-place, i.e., enabling older adults to live independently and safely in the community throughout old age (Menec, Means, Keating, Parkhurst, & Eales, 2011), may contribute to the health and well-being of the aging population.

In Canada, over one-quarter of older adults ( $\geq 65$  yr) have previously reported residing with a pet that provides companionship (Himsworth & Rock, 2013). The popularity of pet-ownership among older adults might also be expected to increase in the coming years. The older cohort of Canadians, reflecting the aging “baby boom” generation, is projected to increase from approximately 17% in 2017 to 25% by 2031 (Statistics Canada, 2017), and findings from several countries suggest that members of the baby boom generation may increasingly view pets as “kin”

or family (Fox, 2006; Perrin, 2009; Power, 2008; Putney, 2013). Canada, like many other countries, has embraced the World Health Organization's (2007) Age-Friendly Communities framework as an overarching strategy to support the aging population (Public Health Agency of Canada, 2016). Yet the age-friendly agenda pays little attention to ways that pets fit into experiences of aging, despite their plausible links to health and well-being. Given the WHO movement's global influence (Menec et al., 2011; Plouffe & Kalache, 2011; Steels, 2015), this omission has arguably led to an absence of pet-related considerations within local efforts to promote aging-in-place, regardless of pets' prevalence within the aging population.

### **3.3 Background**

Research into companion animals and aging dates back several decades, and scholars continue to hone methodological approaches to try to capture the complex qualities of the human-animal bond and its potential to impact health later in life (McNicholas et al., 2005). There is general agreement that longitudinal studies are needed, and that outcomes that can both consider the quality of people's relationships with their companion animals (e.g., attachment to a pet) and the multifaceted impacts (i.e., considering physical, mental, and social health and wellbeing) are needed. As an early contribution that adopted such an approach, a Canadian study by Raina and colleagues (1999) produced longitudinal evidence that pets may support both physical function and psychological well-being for older adults as they age. Other studies have also suggested that pets may support both the mental and physical health of community-dwelling older adults who are managing chronic diseases like type 2 diabetes (Peel, Douglas, Parry, & Lawton, 2010), as well as those recovering from a stroke (Johansson, Ahlström, & Jönsson, 2014) or cardiovascular events (Chowdhury et al., 2017; Friedmann, Thomas, & Son, 2011).

Several sources have explored different ways that pets may contribute to the mental health and emotional well-being of older adults in positive ways. For instance, Swift and Tate (2013) reported that animal companionship is perceived by some older adults as making a positive contribution to what they view as “successful” aging. Along these lines, a recent Australian study was able to demonstrate that the amount of time older adults spent simply in the presence of their companion animal throughout the day seemed to support several dimensions of positive mood and mental health (Bennett et al., 2015). At the same time, a longitudinal analysis of English data highlighted the complex ways that pets may both reflect and offset loneliness among older adults as they age-in-place (Pikhartova et al., 2014). Findings from the USA have also suggested that while older pet owners were more likely to be lonely than non-owners, they were also protected from negative consequences like depression, when compared to non-owners who were similarly lonely (Krause-Parello, 2012).

Yet links between pets and mental health appear to be neither straightforward nor uniformly positive. A recent Canadian cohort study found that having a pet was correlated with lower life satisfaction for a nationally-representative sample of older Canadians (Himsworth & Rock, 2013), although divorced pet owners who were living alone appeared more likely to be satisfied with life than non-owners living in the same circumstances. And, while rarely considered, pet loss may trigger severe grief for some pet owners, to the extent that their lives lose meaning (Adams, Bonnett, & Meek, 2000; Morley & Fook, 2005). Older adults with pets have also been reported to experience more boredom and to have poorer mental health than their non-pet-owning counterparts (Enmarker, Hellzén, Ekker, & Berg, 2015; Parslow, Jorm, Christensen, Rodgers, & Jacomb, 2005; Wells & Rodi, 2000). Taken together, these studies point to the complex ways that relationships between pets and older adults may manifest in both

improved and diminished health outcomes. Findings thus far have highlighted both domestic circumstances, i.e., marital arrangements and household composition (Himsworth & Rock, 2013), and low levels of social support (Raina et al., 1999) as contributing factors.

To date, studies exploring pets and aging have primarily focused upon the individual attributes of older adults and their pets. However, alongside a growing interest in “aging-in-place” as a concept, scholarship has also begun to highlight the importance of considering “place” in relation to the implications of pet ownership for the aging population. Perhaps more than any other public health interest, research on dog-ownership and physical activity later in life has confirmed that dog-walking – which generally takes place in public spaces like neighbourhood parks, pathways, and sidewalks – can help to maintain recommended levels of physical activity, thus supporting mobility while also contributing to physical and mental health and social well-being (Curl, Bibbo, & Johnson, 2016; Dall et al., 2017; Feng et al., 2014; Garcia et al., 2015; Thorpe et al., 2006; Toohey, McCormack, Doyle-Baker, Adams, & Rock, 2013). In drawing a conceptual link between dog-walking and perceptions of public space, Toohey and colleagues (2013) found that older adults who walked their dogs more frequently reported a more positive sense of community in their neighbourhoods, and were also more physically active than older dog-owners who were infrequent dog-walkers and non-dog-owners. Other studies have also found that older adults feel safer in their neighbourhoods when walking their dogs (Knight & Edwards, 2008).

Dog-walking and dog-supportive public spaces may also serve to contribute to community mobility for some older adult participants (Gardner, 2014). In exploring social engagement among elderly ( $\geq 75$  yr) persons living independently, albeit alone, it became apparent that for some participants, social identity was linked to an affinity for dogs. Maintaining



this identity, in turn, facilitated participants' efforts to remain mobile and engaged in their neighbourhoods and local dog walking area, which involved committed negotiation of both personal and environmental challenges (Gardner, 2014). Researchers have also suggested that cats may help to facilitate relationships between neighbours and regular outings (Mahalski, Jones, & Maxwell, 1988; McNicholas, 2014). These various findings point to the value of integrating a socio-ecological dimension into explorations of pets and aging, as a means of recognizing "dynamic interrelations among various personal and environmental factors" (McLaren & Hawe, 2005, p. 12) that might mediate or confound ways that pets influence human health. Importantly, socio-ecological theory offers a bridge for research into pets and aging to be linked to policies that promote aging-in-place (Menec et al., 2011; Plouffe et al., 2012; Plouffe & Kalache, 2011; Scharlach & Lehning, 2013; Steels, 2015).

Canadian policy approaches to promote aging-in-place have been largely shaped by the World Health Organization-led age-friendly movement (Menec et al., 2011; Plouffe et al., 2012; World Health Organization, 2007), yet attention to pets is absent from this agenda. As discussed above, this omission is concerning, given the popularity of pet ownership in Canada (Perrin, 2009) and worldwide (McNicholas et al., 2005). Even prior to the "baby boom" cohort starting to turn 65 years old, nationally-representative data collected in 2008-2009 indicated that nearly 27% of older Canadian adults had a pet that provided companionship (Himsworth & Rock, 2013). At that time, over half of all Canadian households included at least one dog or cat (Perrin, 2009). These national results were weighted so as to represent the socio-demographic composition of the Canadian population, and suggest that we might anticipate a rising prevalence of pet ownership among older adults as the population continues to age. Thus there is a growing need to align research into pets and aging with current aging policy frameworks, and with the

World Health Organization's Age-Friendly Cities framework in particular, given its sweeping influence.

At their core, age-friendly initiatives are intended to “optimiz(e) opportunities for health, participation and security in order to enhance quality of life as people age” (World Health Organization, 2007, p. 1). An overarching goal of age-friendliness is to promote social inclusion and to reduce loneliness and social isolation. Social participation as a concept is generally viewed as an antidote to social isolation, and is thus positioned as a key strategy for enhancing social inclusion of older adults living in a wide range of social circumstances (World Health Organization, 2007). The definition of social participation remains broad, subsuming various forms of engagement in social, recreational, and formal group activities that may include, but are not limited to, cultural, educational, spiritual, and volunteer activities and events (World Health Organization, 2007). Conceptually, social participation is also relevant to understanding roles that pets play within the context of aging-in-place, given underlying concerns that pets may disrupt relationships with other people (Beck & Katcher, 2003; Chur-Hansen, Winefield, & Beckwith, 2009; Wells & Rodi, 2000). These concerns, however, also contradict growing evidence that positions pets as contributing to social engagement and to a positive sense of community for older adults (Gardner, 2014; Mahalski et al., 1988; Rogers, Hart, & Boltz, 1993; Toohey et al., 2013; Wood, Giles-Corti, Bulsara, & Bosch, 2007). Even so, relatively little attention has been paid to the impact that physical and social environments may be having on older adults' experiences of pet ownership, and how these factors may also be influencing their patterns of social participation.

To begin to address this knowledge gap, in this study we sought to better understand ways that older adults' relationships with pets might be relevant to social participation and life

satisfaction as growing numbers of Canadians are aging-in-place. We frame our analysis within a socio-ecological understanding of aging-in-place, and thus consider the potential influences of both individual and structural factors. Our specific research objectives were to: (i) describe the baseline characteristics of older Canadian pet owners and non-owners ( $\geq 65$  yr) participating in the Canadian Longitudinal Study on Aging (CLSA), so as to better understand ways that pet ownership may be distributed across the aging population; and (ii) assess associations between measures of social participation and life satisfaction for older Canadian pet owners and non-owners. Through this study, we hope to begin to link the policy frameworks guiding age-friendly movements with novel understandings of the complexities of human-animal relationships, as experienced by older adults throughout the aging process.

### **3.4 Theoretical model: Pets and human health**

McNicholas and colleagues (2005) have proposed a theoretical model that accounts for three different mechanisms by which pet ownership may be associated with human health. These include: (i) a non-causal association that rests upon common factors (e.g., income and housing) that may facilitate pet ownership, but that also have independent associations with improved health; (ii) a direct effect, such that pet ownership itself—i.e., “exposure” to a pet—may lead to specified health benefits; and (iii) an indirect effect, whereby having a pet may facilitate contact with people, which in turn may contribute to health. In aligning with the age-friendly priority of social inclusion, our study is primarily engaged with the “indirect effect” mechanism, in trying to understand ways that people’s relationships with pets have the potential to influence social participation. A socio-ecological conception of aging-in-place accounts for its active construction at the individual level, yet also acknowledges the potential roles of enablers and

constraints within physical and social environments that reflect policy priorities and societal values (Richard, Gauvin, & Raine, 2011). Thus by adopting a socio-ecological stance, we seek to consider both individual attributes and broader structural factors as we explore pets, life satisfaction, and social participation.

### **3.5 Methods**

#### **3.5.1 Data source and study sample**

The Canadian Longitudinal Study on Aging is a national longitudinal study of adult development and aging. Methods for CLSA sampling, recruitment, retention and data collection, as well as an overview of measures, are described in detail by Raina et al. (2009). As an overview, the CLSA has recruited over 50,000 Canadians between the ages of 45 and 85 years, who will be followed for 20 years, with contact re-established every 3 years. Of this population, over 20,000 Canadians living in both urban and rural settings were recruited to form a representative sample to participate in telephone interviews designed to facilitate provincial-level estimates of health determinants, health status, and health system usage (i.e., the “telephone interview cohort”). This study is overseen by a collaborative Research Ethics Board forum chaired at McMaster University.

After having our own proposed study approved by the University of Calgary Conjoint Research Ethics Board (Ethics Certification REB14-1445), we acquired access to CLSA data through a panel-reviewed application process (Canadian Longitudinal Study on Aging, 2016). Our study considered data from the initial data collection cycle for the telephone interview cohort (i.e., Baseline Tracking Version 3.0 – alphanumeric questionnaire data), as described by Kirkland et al. (2015). Participants in this cohort were recruited in three ways: 3,923 participants

were recruited via the Canadian Community Health Survey (CCHS) on Healthy Aging (CCHS 2008-2009) conducted by Statistics Canada; 3,810 participants were recruited via mail-outs from provincial health ministries; and 13,508 participants were recruited through random digit dialing (Kirkland et al., 2015). Eligible participants at baseline were community-dwelling older adults; 45-85 years of age; fluent in English or French; and had no identifiable signs of cognitive impairment, as determined by trained interviewers. Of the 21,241 eligible tracking cohort participants recruited, 8,845 were aged 65 and older at the time of the interview. Baseline telephone tracking interviews took place between September 2011 and May 2014; were 60- to 70-minutes in length; and employed computer-assisted telephone interview software to minimize data transcription errors and optimize data security.

### **3.5.2 Measures**

To achieve our research objectives, we explored measures of life satisfaction, social participation, and pet ownership, as well as conceptually-relevant socio-demographics that were captured in the CLSA Telephone Tracking cohort.

#### ***Life satisfaction***

We used the Satisfaction with Life Scale (SLS) to assess subjective well-being (Diener, Emmons, Larsen, & Griffin, 1985). This scale offers robust psychometric properties, including high internal consistency (reported coefficient alphas have ranged from 0.79 through 0.89) and test-retest reliability scores that suggest moderate temporal stability while being subject to change over time (Pavot & Diener, 2008), and has also been validated in French (Raina, Wolfson, & Kirkland, 2008). The SLS asks participants to indicate their level of agreement with five items: (i) In many ways my life is close to ideal; (ii) The conditions of my life are excellent; (iii) I am satisfied with my life; (iv) So far, I have gotten the important things I want in life; and

(v) If I could live my life over, I would change almost nothing. Levels of agreement, assessed using a 7-point Likert scale, are then summed and aggregated into seven categories: extremely dissatisfied (score=5-9), dissatisfied (10-14), slightly dissatisfied (15-19), neutral (20), slightly satisfied (21-25), satisfied (26-30), and extremely satisfied (31-35) (Pavot & Diener, 2008). The overall Cronbach's alpha for the life satisfaction scale within our CLSA dataset was 0.78, with coefficients for each item ranging from 0.71 to 0.79, confirming an acceptable level of internal consistency for the scale. Life satisfaction was also skewed towards higher scores in our sample, and thus we dichotomized this measure around the score of 26, with scores below 26 indicating lower life satisfaction.

### ***Social participation – levels and barriers***

The CLSA interview module on social functioning considered several dimensions of social participation, which have been developed and tested for use in other longitudinal cohort studies on aging (Raina et al., 2008). In measuring levels of participation in community activities, participants were asked to report the extent (i.e., daily, weekly, monthly, yearly, or never) to which they participated in the following activities: (i) family or friendship-based activities outside of the household; (ii) church or religious activities; (iii) sports or physical activities done with other people; (iv) educational or cultural activities involving other people; (v) service club or fraternal organization activities; (vi) neighborhood, community or professional association activities; (vii) volunteer or charity work; and (viii) other recreational activities involving people (e.g., hobbies, games, gardening, etc.). We derived a measure of “frequent social participation” using an approach described by Gilmour (2012), such that frequent participation was defined as (i) at least weekly for one or more family/friendship activities; church-related activities; sports or physical activities; or other recreational activities

that include people; and (ii) at least monthly participation in educational/cultural activities involving others such as courses, concerts, museums; service club or fraternal organization activities; neighborhood, community or professional association activities; or volunteer and charity work. We then calculated the number of activities considered “frequent” for each participant (i.e., none, one, two, etc., through six or more).

Participants were also asked whether they had felt like they wanted to participate in more social, recreational, or group activities over the past 12 months. Those who answered “yes” to this question were then asked to identify any barriers that had prevented them from participating more often. Interviewers coded responses into the following categories: (i) cost; (ii) transportation problems; (iii) activities not available in the area; (iv) location not physically accessible; (v) location is too far; (vi) health condition/limitation; (vii) time of the activities not suitable; (viii) don’t want to go alone; (ix) personal or family responsibilities; (x) language-related reasons; (xi) too busy; (xii) afraid or concerns about safety; and (xiii) other.

#### *Pet ownership and socio-demographic covariates*

Within the CLSA’s social functioning module, participants were asked to answer “yes” or “no” to the question, “Do you have a household pet that provides you with companionship?” In addition to pet ownership, we considered several covariates that are conceptually relevant to aging-in-place with pets, including age, gender, marital status, sexual orientation (i.e., heterosexual or LGBTQ), ethnicity (i.e., white or non-white), household composition (i.e., living alone or with others), home-ownership (i.e., owning or renting), level of education, and annual household income. With the exception of home-ownership and sexual orientation, these covariates were identified based on earlier studies that have suggested possible confounding effects (examples include Enmarker, Hellzén, Ekker, & Berg, 2012; Himsworth & Rock, 2013;

Pachana, Ford, Andrew, & Dobson, 2005; Pikhartova et al., 2014; Raina et al., 1999). Home-ownership was included as a prospective confounder (Power, 2017), and also because access to appropriate and affordable housing is a priority of the age-friendly agenda (World Health Organization, 2007). Sexual orientation was included for its relevance to social inclusion and the growing diversity of the older adult cohort, combined with indications that pets may play particularly supportive roles for older adults who identify as LGBTQ individuals (Putney, 2013). Self-reported health was also considered as a plausible confounder.

### **3.5.3 Statistical analysis**

The final sample was established by excluding individuals with missing responses for any of the measures that were included in the analysis. Next, we determined baseline characteristics of both pet owners and non-owners. In calculating proportions, we applied probability weights to adjust for sampling probabilities and used F-tests to assess whether differences were statistically significant at a significance level of 0.05. We then ran multivariate logistic regression models to explore differences between pet owners and non-owners in terms of life satisfaction, social participation, and barriers to social participation, thus generating odds ratios (OR) and 95% confidence intervals for the different measures. Finally, we used multivariate logistic models to assess cross-sectional associations between our different measures of social participation and life satisfaction, comparing pet owners with non-owners so as to understand both similarities and differences. All regression analyses were adjusted for socio-demographic covariates and sampling probabilities. Statistical analyses were completed using STATA/IC 14.2.



## **3.6 Results**

After eliminating observations with missing data, our final sample included 7,474 valid observations: 2,464 (33.0%) older adults who indicated that they had a household pet that provides companionship and 5,010 (67.0%) who did not. The average age of study participants in our sample, adjusted for probability weighting, was 72.6 years. As we report on our findings, results were considered to be statistically significant if they achieved a 0.05 level of significance.

### **3.6.1 Baseline description of participants**

As shown in Table 3.1, pet owners and non-owners as a whole differed in several ways. After adjusting for probability weights, we found that compared with non-owners, significantly lower proportions of pet owners were 75 years or older, lived alone, rented their homes, reported belonging to a visible minority, and had completed post-secondary training. Even so, 22% of the renters in our sample reported having pets, as did 29% of participants who lived alone, 31% of those whose household incomes were under \$20,000 per year, 23% of those belonging to a visible minority, and 46% of those who identified as LGBTQ. Within the age-subcategories of our CLSA participants, we observed that pet ownership was reported by 39% of participants aged 65-69 years, 35% of those aged 70-74 years, 27% of those aged 75-79 years, 22% of participants aged 80-84 years, and 19% of participants 85 years or older.

### **3.6.2 Life satisfaction**

Table 3.2 illustrates that in general, pet owners had lower scores on the life satisfaction scale compared with non-owners. Table 3.3 shows that after adjusting for sampling probability and socio-demographic covariates (i.e., age, gender, ethnicity, marital status, sexual orientation, household composition, home ownership, household income, education, and self-reported health), pet owners were less likely to report higher life satisfaction than were non-owners.

Covariates that were significantly associated with lower life satisfaction included belonging to a visible minority, renting versus owning one's home, and having poorer self-reported health.

### **3.6.3 Levels of social participation**

We found that as a group, fewer pet owners reported frequent participation in one or more social, recreational, or group activities compared with non-owners (Table 3.2). Results listed in Table 3.4 indicate that after adjusting for sampling probability and socio-demographics, pet owners were less likely than non-owners to report frequent participation in one or more social activities. Other covariates that were significantly associated with lower levels of social participation included renting versus owning one's home, having a lower household income, having a lower level of education, and having poorer self-reported health. Conversely, covariates that were significantly associated with higher levels of social participation included being female and being married or common-law.

Table 3.5 shows that pet owners and non-owners did not differ significantly in terms of being satisfied or dissatisfied with their current level of participation in social, recreational, and group activities over the past 12 months. Covariates that were significantly associated with being dissatisfied with current levels of social participation included being female; being married or common-law, widowed, or divorced; and having poorer self-reported health. Participants who were 75 years or older were more likely to be satisfied with their current levels of social participation.

### **3.6.4 Barriers to social participation**

A sub-sample of 2,235 participants (32%) indicated that they had wanted to participate in more social activities over the past year, comprising 766 pet owners (34%) and 1,469 non-

owners (66%). For these participants, we explored which barriers to social participation they identified as being pertinent, and whether these differed for pet owners and non-owners.

As presented in Table 3.6, the most common barriers to social participation identified by these participants were being too busy, having a health condition or limitation, having personal or family responsibilities, not wanting to go alone, and having no activities in the area. Having personal or family responsibilities was the only barrier that a significantly higher proportion of pet owners identified compared with non-owners, without considering covariates. Logistic regression findings presented in Table 3.7 suggest that compared with non-owners, and after adjusting for covariates, pet owners had significantly higher odds of identifying barriers related to location, including transportation issues and activities being located too far away. Pet owners were also more likely than non-owners to identify having health conditions or limitations and having personal or family responsibilities as being experienced as barriers to social participation.

### **3.6.5 Associations between levels of social participation and life satisfaction**

For both pet owners and non-owners, frequent participation in one or more social, recreational or group activities was associated with higher life satisfaction, with non-owners being somewhat more likely to have higher life satisfaction (OR=1.93, 95% CI [1.50, 2.48],  $p<0.001$ ) compared with pet owners (OR=1.88, 95% CI [1.42, 2.48],  $p<0.001$ ). Both pet owners and non-owners who had wanted to participate in more social activities over the past year were significantly less satisfied with life, and the association was more pronounced for pet owners (OR=0.38, 95% CI [0.31, 0.47],  $p<0.001$ ) compared with non-owners (OR=0.43, 95% CI [0.37, 0.51],  $p<0.001$ ).

We also examined whether there was a threshold for levels of social participation after which gains towards life satisfaction were minimal. As shown in Table 3.8, the odds of being satisfied with life increased for both pet owners and non-owners as their levels of social participation

increased. However, while non-owners' satisfaction with life appeared to level off at 3-4 social activities, pet owners' life satisfaction rose substantially if they participated in 5 or more social activities, and exceeded non-owners' odds of being satisfied with life when experiencing a similarly high level of social participation.

### **3.6.6 Associations between barriers to social participation and life satisfaction**

Finally, as presented in Table 3.9, we explored associations between each barrier to social participation and life satisfaction, comparing pet owners and non-owners. In terms of similarities, having personal or family responsibilities was associated with lower life satisfaction for pet owners and even more so for non-owners, while being too busy to participate was associated with higher life satisfaction for both pet owners and non-owners. We also found several differences between pet owners and non-owners. For pet owners, barriers that were associated with lower life satisfaction were cost, having no activities available in the area, and finding that locations are not physically accessible. For non-owners, barriers associated with lower life satisfaction included not wanting to go alone, having a health condition/limitation, and finding timing to be unsuitable. Indicating that locations of activities were too far away was associated with higher life satisfaction for non-owners, but with lower life satisfaction for pet owners.

## **3.7 Discussion**

The purpose of our study was to illuminate the relevance of pet ownership for aging-in-place by assessing the extent to which pet-ownership was associated with measures of social participation and life satisfaction for older Canadians. Overall, we found that older pet owners in Canada had lower life satisfaction and lower levels of social participation than non-owners, and

yet pet owners were not more likely to be dissatisfied with their levels of social participation when compared with non-owners. For pet owners experiencing barriers to social participation, pets appeared to be protective of life satisfaction in some circumstances. Costs and personal responsibilities, which might plausibly be linked to pet ownership, also appeared to obstruct social participation at times. We cannot determine from our study whether pets themselves may be barriers to social participation, i.e., disrupting the “indirect effect” mechanism linking pet ownership with human health (McNicholas et al., 2005), although it was notable that pet owners were significantly more likely to identify personal responsibilities as barriers to social participation. Even so, while pet owners who identified this barrier were less satisfied with life, non-owners identifying this barrier appeared to fare somewhat worse than their pet-owning counterparts, as the negative association with life satisfaction was more pronounced for non-owners.

Our findings highlight the extent to which interconnections between pet ownership, social participation, and aging-in-place are complicated. Just as Himsworth & Rock (2013) discuss the influence of domestic relationships on quality of older adults’ relationships with pets, our findings point to relational interactions involving older pet owners’ individual circumstances, their levels of social participation, and their satisfaction with life. For example, older pet owners in our sample who identified either not wanting to participate alone or experiencing health-related limitations as barriers to social participation did not necessarily report lower life satisfaction, while non-owners who identified these barriers had significantly lower life satisfaction scores. This result appears to be consistent with Raina et al.’s (1999) conclusion that pets may buffer some older adults from the deleterious mental health consequences of having

low levels of social support, although we acknowledge that social participation and social support are distinct, if arguably inter-related, concepts.

These two specific barriers—i.e., not wanting to go alone and experiencing health-related limitations—may signal increased vulnerability to social isolation for those participants who identified them. In understanding why pet owners who faced these two barriers to social participation also fared better than non-owners in terms of higher life satisfaction, pet companionship itself may be a contributing factor (Bennett et al., 2015; McNicholas, 2014), as may be the meaningful occupation and sense of control that caring for pets may generate for some older adults (Raina et al., 1999; Swift & Tate, 2013; Zimolag & Krupa, 2009) as they undergo physical, social, and psychological transitions related to aging. Ultimately, however, we found that pet owners with the highest levels of social participation also had the highest satisfaction with life, even when compared to non-owners who were similarly engaged in social activities.

In keeping with our interest in the indirect mechanism by which pets may influence older adults' health and well-being (McNicholas et al., 2005), our findings also confirm the value of adopting a socio-ecological perspective to explore the extent to which pet ownership, social participation, and aging are embedded within the physical and social environments where aging-in-place occurs. These environmental attributes, in turn, are actively shaped by policy efforts to achieve age-friendliness (Menec et al., 2011; Plouffe et al., 2012; Plouffe & Kalache, 2011). In Table 3.10, we utilize the WHO Age-Friendly Cities framework's guidelines for promoting social participation (2007, pp. 38–44) to examine the different barriers that pet owners and non-owners in our study faced. We found that pet owners were more likely than non-owners to experience barriers in areas of accessibility (i.e., overcoming challenges around distance and

transportation), the range of activities available (i.e., choices available for those with health-related limitations), and social isolation (i.e., prohibitive distance from activities and constraints around personal responsibilities).

We also observed that pet owners who experienced structural barriers related to cost, accessibility, and a shortage of nearby opportunities had significantly lower life satisfaction, which was not the case for non-owners. Further investigation is needed to understand why pet owners disproportionately experience these barriers, yet it is possible that these may reflect situations where pet-related responsibilities are prioritized over social opportunities (see, for example, Wells & Rodi, 2000), especially for participants who have no one in their lives available to provide short-term relief from pet care. This suggestion underscores the need to ensure that ample social opportunities for social participation are available in all communities, do not hinge on existing social networks, and are subsidized so as to be affordable. While these types of initiatives may benefit all older adults regardless of whether they have pets (Richard et al., 2013; Richard, Gauvin, Gosselin, & Laforest, 2009), they hold promise to ease some of the constraints that pet owners appear most susceptible to experiencing, and that ultimately might obstruct them from achieving desired levels of social participation.

In understanding our findings, we must acknowledge limitations around operationalizing the social participation concept, which is still evolving (Levasseur, Richard, Gauvin, & Raymond, 2010). In particular, we are concerned that current approaches to measuring social participation may not adequately capture some of the indirect ways that pets may support human health through contact with people (McNicholas et al., 2005). Dogs in particular have been posited as catalysts for social interactions and other forms of social inclusion for older adults (Gardner, 2014; Graham & Glover, 2014; Knight & Edwards, 2008; Toohey & Rock, 2011). For

example, dog-walking may help to catalyze inter-generational interactions within neighbourhoods and parks (Gardner, 2014; Graham & Glover, 2014; Wood et al., 2007), which could further instill a sense of being socially connected into older adults' lives. Thus optimizing neighbourhood environments to support dog-walking for older adults, as discussed by Toohey and Rock (2011), may help to facilitate informal opportunities for social participation by supporting efforts to remain active and engaged within the community (Gardner, 2014), while also contributing to both increased physical activity and heightened sense of community for older dog-walkers (Toohey et al., 2013). We caution, however, that the tool used to assess levels of social participation in the CLSA may not be sensitive to detecting dog-walking as an impactful mode of social participation, given the tool's emphasis on organized versus informal social activities taking place outside of the home. Thus levels of social participation for the dog-owners in our sample may be inadvertently underestimated.

Importantly, the benefits to older adults who are aging-in-place may not be exclusive to dog-owners alone, given that non-owners may benefit through getting to know regular dog-walkers in their neighbourhoods (Toohey & Rock, 2011); by walking with friends, family or neighbors and their dogs (Peel et al., 2010); or by simply being identified and appreciated for having an interest in dogs (Gardner, 2014). While less public in nature, cats and other species of pets may also contribute to social participation for older adults through catalyzing social interactions and access to social capital (Mahalski et al., 1988; McNicholas, 2014; Wood, Giles-Corti, & Bulsara, 2005; Wood et al., 2007). In our study, however, we were not able to consider social participation patterns in relation to species of pets since this information is not collected in the CLSA, despite its theoretical value.



Because over one-third of older Canadian adults are aging-in-place with pets, including older adults who may be subject to social exclusion (e.g., lower income, visible minority, and LGBTQ Canadians) we suggest that both quantitative and qualitative approaches to understanding older adults' social circumstances may benefit from increased attention to the ways that pets are integrally involved in peoples' lives (also see Ryan & Ziebland, 2015). In being more attentive to the influence of human-animal relationships within people's routines and decisions, we might also gain insights into ways that diverse older pet owners could potentially be enticed to participate more regularly in social settings. For instance, we observed that nearly half of the self-identified LGBTQ respondents in our sample reported having a companion animal. One study that we are aware of has explicitly discussed inclusion of gay men within efforts to appropriate public lands to create a dog park within a gentrified neighbourhood (Tissot, 2011), and there is also a small but compelling series of studies that have explored the importance of human-animal bonds within the aging experiences of older lesbian women (Putney, 2013, 2014). Graham and Glover (2014) observed that status of pet-owner could transcend typical social stratification based upon gender, race, age, ethnicity, and others within dog-walking communities, and we similarly propose that social participation opportunities which take pet ownership into consideration, or even include pets (for instance, through organized dog-walking groups, or basic pet grooming workshops), might facilitate improved integration of diverse older adults into social life.

In adopting such a strategy, we also point to the need for social and public policies that enable improved access to pet-friendly environments (Morley & Fook, 2005). Aside from efforts to promote dog-walking for older adults (Curl et al., 2016; Toohey et al., 2013; Toohey & Rock, 2011), this approach is currently missing in relation to encouraging social participation, and

plausibly improving life satisfaction, for pet-owning older adults. While pets are generally restricted from many public spaces and venues, there may be appropriate times and appropriate sites where these restrictions might be eased in order to facilitate social participation. This type of barrier was highlighted by dog owners living in a Canadian setting where dogs are not allowed to be tied unattended outside of shops or cafés (Degeling & Rock, 2012). This local bylaw reflects the public policy priority of minimizing risk of injury via interactions with temporarily unattended dogs rather than promoting dog-walking as a viable means of increasing both social participation and daily physical activity for a substantial proportion of the population. Rethinking the sweeping nature of pet prohibitions in public places, including on public transportation, might also serve to create connections among pet-owners to a greater extent than otherwise would happen, ideally expanding social networks and strengthening social support (McNicholas & Collis, 2000; Morley & Fook, 2005). Such initiatives must also, however, be underscored by affective policies around responsible pet ownership (Rock, 2013).

In addition to rethinking the nature of and settings for social activities themselves, we might also make concerted efforts to improve social connectedness for older adults within their immediate neighbourhoods, since these may lead to both pet-related and non-pet-related forms of assistance and a broader sense of social inclusion (Toohey & Rock, 2011; Wood et al., 2005, 2007). Such efforts could be made in tandem with establishing organized volunteer-based or subsidized services designed to offer older adults occasional or regular respite from pet-care duties, yet without exorbitant costs attached. Keeping in mind the notable prevalence of pet-ownership within socio-culturally and socio-economically diverse cross-sections of Canada's aging population, we propose that greater attention to pet-friendliness has the potential to contribute to optimizing age-friendliness.

In terms of methodological limitations, our cross-sectional study design prevents us from being able to assess the extent to which associations between pet ownership, social participation, and life satisfaction are causal. Methodological biases may also exist within our sample, given that our data was collected via telephone interviews. There is a possibility of selection bias, should those who declined to participate in the CLSA differ in a systematic way from those who agreed to participate, although such a difference was not detected during pilot testing (Raina et al., 2008). Our data may also be subject to recall and social desirability biases, given reliance on self-reporting. Social desirability might serve to overestimate our measures of both social participation and life satisfaction in positive directions, if these were perceived by respondents as representing idealized notions of socially-acceptable lifestyles. However, we would not expect pet owners and non-owners to differ, in terms of the frequency or direction of these potential biases.

Even as we consider these limitations, we suggest that our findings serve to highlight the importance of viewing aging-in-place with pets as a relational experience (Putney, 2013) that is shaped by an array of both individual and environmental factors. Understanding these interactions merits increased attention, particularly around the structural influences on older adults' negotiations of both pet-related responsibilities and opportunities to participate socially. In the future, the CLSA will offer invaluable opportunities for researchers to further explore questions around pet ownership and aging-in-place. For instance, it will be important to consider the impact of pet acquisition on social participation patterns. Pet loss, which can result in profound grief and distress (Adams et al., 2000; Morley & Fook, 2005), also merits closer study, given its potential to alter social participation patterns in both positive and negative directions (Degeling & Rock, 2012; Knight & Edwards, 2008). Given the breadth of CLSA data available,

it will also be possible to account for changes in social networks, social support, and loneliness over time (Pikhartova et al., 2014) and to explore the extent to which these factors interact with pet ownership, social participation, and life satisfaction. Further longitudinal analyses will also enable increasingly nuanced understandings of the roles of animal companionship amid life transitions like retirement, loss of loved ones, or changes in health status, so as to better understand the implications of pet ownership for both social isolation and social participation. Finally, and importantly, longitudinal analyses of CLSA data will enable opportunities to track the extent to which the implementation of policies and practices designed to promote social participation are effective for both pet owners and non-owners who are aging-in-place in Canadian settings.

### **3.8 Conclusion**

Our study has found that pets are relevant to both social participation and life satisfaction for older Canadian adults, and that the direction of effect appears to be contingent upon both individual circumstances and structural considerations that shape the places where aging-in-place occurs. Our findings suggest that increased attention to pets is justified for two overarching reasons. The first relates to the socio-demographics of the aging population. Pet ownership was reasonably prevalent across the entirety of our sample, and might be expected to increase as growing numbers of the baby-boomer generation enter the older adult cohort. The second reason relates to the differential impacts of barriers to social participation that pet owners and non-owners appear to be experiencing. Since many of the barriers that our study participants identified are also aligned with age-friendly policy frameworks for promoting social participation, they offer clear targets for intervention and redress.

Overall, we subscribe to the importance of differentiating – but not diminishing – the beneficial qualities of relationships with pets from desires to interact with other people. We caution not to view pets as replacements for social inclusion, or as avenues to achieving life satisfaction. Simply because a person has a companion animal does not necessarily mean that they do not wish to or need to remain active participants in social life as they age. Clearly, we cannot lose sight of the need to balance opportunities for all older adults to age-in-place in ways that are meaningful and inclusive. By ensuring that pets are considered as we seek to create age-friendly communities, we might leverage the potential of both relationships with pets and social participation to effectively promote health and well-being via aging-in-place.

### **3.9 Acknowledgements**

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## 3.10 Tables

**Table 3.1: Baseline socio-demographic description of older Canadians ( $\geq 65$  yr) participating in the Canadian Longitudinal Study on Aging, comparing pet owners with non-owners**

Characteristic	Frequency (n=7,474)	%	Non-owner (%) (n=5,010)	Pet owner (%) (n=2,464)	F-test result
<b>Age</b>					<b>24.27</b> <sub>F(3.91,29244.16)</sub> **
65-69 yr	2,439	37.7	34.2	44.8	
70-74 yr	1,596	24.8	24.0	26.3	
75-79 yr	2,054	22.8	24.6	19.2	
80-84 yr	1,217	13.1	15.2	8.7	
85 yr and older	168	1.7	2.0	1.0	
<b>Gender</b>					0.0003 <sub>F(1,7473)</sub>
Female	3,608	51.1	51.1	51.1	
Male	3,866	48.9	48.9	48.9	
<b>Ethnicity</b>					<b>11.61</b> <sub>F(1,7473)</sub> **
White	7,092	94.5	93.7	96.1	
Visible minority	382	5.5	6.3	3.9	
<b>Marital Status</b>					1.07 <sub>F(2.98,22295.58)</sub>
Single/never married	342	4.6	4.7	4.3	
Married or common-law	4,813	68.1	67.8	68.7	
Widowed	1,527	16.8	17.3	15.7	
Separated or divorced	792	10.6	10.2	11.3	
<b>Sexual orientation</b>					3.23 <sub>F(1,7473)</sub>
Heterosexual	7,407	99.0	99.2	98.7	
LGBTQ	67	1.0	0.8	1.3	
<b>Household composition</b>					<b>10.29</b> <sub>F(1,7473)</sub> **
Lives alone	2,298	27.0	28.4	24.1	
Lives with others	5,176	73.0	71.6	75.9	
<b>Home ownership</b>					<b>37.70</b> <sub>F(1,7473)</sub> **
Rent	1,125	15.0	17.3	10.3	
Own	6,349	85.0	82.7	89.7	
<b>Total Household income</b>					0.41 <sub>F(3.98,29727.48)</sub>
<\$20,000	650	7.6	7.8	7.3	
\$20,000 - \$49,999	3,265	39.9	39.3	41.1	
\$50,000 - \$99,999	2,666	38.2	38.4	37.8	
\$100,000 - \$149,999	599	9.5	9.7	9.1	
>\$150,000	294	4.7	4.8	4.7	
<b>Highest level of education achieved</b>					<b>2.61</b> <sub>F(3.00,22409.03)</sub> *
Some high school	1,095	12.9	12.9	12.7	
High school diploma	1,050	13.3	12.4	15.2	
Some post-secondary	596	7.9	7.9	7.9	
Post-secondary degree/diploma	4,733	66.0	66.8	64.2	
<b>Self-rated health</b>					0.93 <sub>F(3.99,29794.79)</sub>
Poor	194	2.4	2.2	2.8	
Fair	827	10.3	10.5	9.9	
Good	2,284	29.8	29.6	30.3	
Very good	2,853	38.3	37.9	39.0	
Excellent	1,316	19.2	19.8	18.0	

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities.

\* p<0.05

\*\* p<0.001

**Table 3.2: Distribution of satisfaction with life scores and levels of social participation for older Canadians (≥65 yr) participating in the Canadian Longitudinal Study on Aging, comparing pet owners with non-owners**

Characteristic	Frequency (n=7,474)	%	Non-owner (% <sup>a</sup> ) (n=5,010)	Pet owner (% <sup>a</sup> ) (n=2,464)	F-test result
<b><i>Satisfaction with life</i></b>					<b>4.97<sub>F(5,98,44660.52)</sub>**</b>
Extremely dissatisfied (SLS score ≤ 10)	67	0.9	0.6	1.3	
Dissatisfied (SLS score 10-14)	166	2.2	2.0	2.7	
Slightly dissatisfied (SLS score 15-19)	400	5.1	4.6	6.0	
Neutral (SLS score = 20)	149	2.0	1.8	2.2	
Slightly satisfied (SLS score 21-25)	941	12.3	11.5	14.0	
Satisfied (SLS score 26-30)	2,238	30.2	29.8	31.3	
Extremely satisfied (SLS score ≥ 31)	3,513	47.3	49.7	42.5	
<b><i>Satisfaction with life (dichotomized)</i></b>					<b>19.23<sub>F(1,7473)</sub>**</b>
Not satisfied	1,723	22.4	20.6	26.2	
Satisfied	5,751	77.6	79.4	73.8	
<b><i>Number of social activities where participation is considered frequent*</i></b>					<b>4.58<sub>F(6,00,44804.12)</sub>**</b>
None	784	10.7	9.4	13.2	
One	1,081	15.2	14.7	16.3	
Two	1,271	16.2	15.7	17.3	
Three	1,294	18.3	18.5	17.8	
Four	1,215	16.2	17.0	14.7	
Five	912	12.3	13.0	10.8	
Six or more	917	11.1	11.7	9.9	
<b><i>Number of social activities where participation is considered frequent* - dichotomized</i></b>					<b>14.72<sub>F(1,7473)</sub>**</b>
None	784	10.6	9.4	13.2	
One or more	6,690	89.4	90.6	86.8	
<b><i>Would have liked to have participated in more social activities over past 12 months</i></b>					<b>0.87<sub>F(1,7473)</sub></b>
No	5,239	68.5	68.9	67.6	
Yes	2,235	31.5	31.1	32.4	

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities.

\* As per Gilmour (2012), frequent participation was defined as **at least weekly** for family/friendship activities outside of the household; church-related activities; sports or physical activities with others; other recreational activities that include people such as hobbies, games, etc.; and **at least monthly** for educational/cultural activities involving others such as courses, concerts, museums; service club or fraternal organization activities; neighborhood, community or professional association activities; volunteer and charity work

\*\* p<0.001



**Table 3.3: Odd ratios for reporting life satisfaction for older adult ( $\geq 65$  yr) participants in the Canadian Longitudinal Study on Aging (CLSA) (n=7,474)**

<i>Respondent Characteristics</i>	<b>Unadjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>	<b>Adjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>
Non-pet owners	1.00	-	-	1.00	-	-
Pet owners	0.76	0.67, 0.86	<0.001**	<b>0.72</b>	<b>0.64, 0.83</b>	<b>&lt;0.001**</b>
Younger (65-74 yr)	1.00	-	-	1.00	-	-
Older ( $\geq 75$ yr)	0.94	0.84, 1.06	0.32	1.01	0.89, 1.15	0.87
Male	1.00	-	-	1.00	-	-
Female	0.77	0.68, 0.87	<0.001**	0.89	0.78, 1.02	0.10
White	1.00	-	-	1.00	-	-
Visible minority	0.66	0.52, 0.85	0.001**	<b>0.74</b>	<b>0.57, 0.97</b>	<b>0.03*</b>
Single	1.00	-	-	1.00	-	-
Married or common-law	1.87	1.66, 2.10	<0.001**	1.35	0.96, 1.90	0.08
Widowed	0.70	0.61, 0.80	<0.001**	1.02	0.75, 1.39	0.90
Divorced/separated	0.51	0.43, 0.61	<0.001**	0.78	0.57, 1.08	0.14
Heterosexual	1.00	-	-	1.00	-	-
LGBTQ	0.85	0.54, 1.57	0.60	0.91	0.46, 1.80	0.79
Lives with others	1.00	-	-	1.00	-	-
Lives alone	0.57	0.50, 0.65	<0.001**	0.91	0.71, 1.16	0.44
Home-owners	1.00	-	-	1.00	-	-
Renters	0.54	0.46, 0.63	<0.001**	<b>0.73</b>	<b>0.61, 0.86</b>	<b>&lt;0.001**</b>
Higher income ( $\geq$ \$20K)	1.00	-	-	1.00	-	-
Lower income ( $<$ \$20K)	0.49	0.41, 0.59	<0.001**	0.82	0.66, 1.01	0.07
Higher education	1.00	-	-	1.00	-	-
Lower education	0.80	0.71, 0.90	<0.001**	0.92	0.81, 1.04	0.19
Higher self-reported health	1.00	-	-	1.00	-	-
Lower self-reported health	0.30	0.26, 0.35	<0.001**	<b>0.32</b>	<b>0.27, 0.37</b>	<b>&lt;0.001**</b>

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health

\* p<0.05

\*\* p<0.001

**Table 3.4: Odds ratios for indicating frequent participation in one or more social, recreational or group activity for older adult (≥ 65 yr) participants in the Canadian Longitudinal Study on Aging (CLSA) (n=7,474)**

<i>Respondent Characteristics</i>	<b>Unadjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>	<b>Adjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>
Non-pet owners	1.00	-	-	1.00	-	-
Pet owners	0.71	0.60, 0.84	<0.001**	<b>0.68</b>	<b>0.57, 0.81</b>	<b>&lt;0.001**</b>
Younger (65-74 yr)	1.00	-	-	1.00	-	-
Older (≥75 yr)	0.96	0.81, 1.12	0.59	0.99	0.83, 1.18	0.90
Male	1.00	-	-	1.00	-	-
Female	1.38	1.17, 1.63	<0.001**	<b>1.64</b>	<b>1.36, 1.97</b>	<b>&lt;0.001**</b>
White	1.00	-	-	1.00	-	-
Visible minority	0.77	0.55, 1.08	0.13	0.91	0.65, 1.29	0.61
Single	1.00	-	-	1.00	-	-
Married or common-law	1.38	1.17, 1.64	<0.001**	<b>1.82</b>	<b>1.18, 2.80</b>	<b>0.006*</b>
Widowed	0.98	0.80, 1.20	0.84	1.40	0.93, 2.10	0.11
Divorced/separated	0.64	0.50, 0.82	<0.001**	1.02	0.67, 1.56	0.93
Heterosexual	1.00	-	-	1.00	-	-
LGBTQ	1.06	0.43, 2.61	0.90	1.43	0.54, 3.75	0.47
Lives with others	1.00	-	-	1.00	-	-
Lives alone	0.83	0.69, 0.98	0.03*	1.28	0.93, 1.76	0.13
Home-owners	1.00	-	-	1.00	-	-
Renters	0.56	0.45, 0.69	<0.001**	<b>0.71</b>	<b>0.56, 0.90</b>	<b>0.005*</b>
Higher income (≥\$20K)	1.00	-	-	1.00	-	-
Lower income (<\$20K)	0.44	0.35, 0.56	<0.001**	<b>0.62</b>	<b>0.46, 0.82</b>	<b>0.001**</b>
Higher education	1.00	-	-	1.00	-	-
Lower education	0.50	0.42, 0.59	<0.001**	<b>0.55</b>	<b>0.46, 0.66</b>	<b>&lt;0.001**</b>
Higher self-reported health	1.00	-	-	1.00	-	-
Lower self-reported health	0.40	0.33, 0.49	<0.001**	<b>0.46</b>	<b>0.38, 0.57</b>	<b>&lt;0.001**</b>

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health

\* p<0.05

\*\* p<0.001

**Table 3.5: Odd ratios for having wanted to participate in more social, recreational or group activities over the past 12 months for older adult ( $\geq 65$  yr) participants in the Canadian Longitudinal Study on Aging (CLSA) (n=7,474)**

<i>Respondent Characteristics</i>	<b>Unadjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>	<b>Adjusted odds ratios</b>	<b>95% Confidence intervals</b>	<b>p</b>
Non-pet owners	1.00	-	-	1.00	-	-
Pet owners	1.06	0.95, 1.19	0.29	1.05	0.93, 1.18	0.41
Younger (65-74 yr)	1.00	-	-	1.00	-	-
Older ( $\geq 75$ yr)	0.88	0.79, 0.98	0.02*	<b>0.86</b>	<b>0.76, 0.96</b>	<b>0.008*</b>
Male	1.00	-	-	1.00	-	-
Female	1.18	1.06, 1.32	0.02*	<b>1.16</b>	<b>1.03, 1.30</b>	<b>0.01*</b>
White	1.00	-	-	1.00	-	-
Visible minority	1.25	0.99, 1.59	0.06	1.20	0.94, 1.53	0.14
Single	1.00	-	-	1.00	-	-
Married or common-law	0.89	0.80, 1.00	0.05*	<b>1.43</b>	<b>1.04, 1.96</b>	<b>0.03*</b>
Widowed	1.11	0.97, 1.27	0.11	<b>1.39</b>	<b>1.04, 1.85</b>	<b>0.03*</b>
Divorced/separated	1.21	1.02, 1.44	0.03	<b>1.46</b>	<b>1.07, 1.97</b>	<b>0.02*</b>
Heterosexual	1.00	-	-	1.00	-	-
LGBTQ	0.87	0.49, 1.55	0.63	0.95	0.53, 1.71	0.87
Lives with others	1.00	-	-	1.00	-	-
Lives alone	1.15	1.02, 1.29	0.02*	1.18	0.95, 1.48	0.14
Home-owners	1.00	-	-	1.00	-	-
Renters	1.02	0.88, 1.19	0.78	0.94	0.80, 1.11	0.41
Higher income ( $\geq$ \$20K)	1.00	-	-	1.00	-	-
Lower income ( $<$ \$20K)	1.18	0.98, 1.42	0.09	1.06	0.86, 1.31	0.56
Higher education	1.00	-	-	1.00	-	-
Lower education	1.01	0.90, 1.13	0.89	0.97	0.87, 1.09	0.66
Higher self-reported health	1.00	-	-	1.00	-	-
Lower self-reported health	1.62	1.39, 1.88	$<0.001^{**}$	<b>1.63</b>	<b>1.40, 1.89</b>	<b><math>&lt;0.001^{**}</math></b>

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health

\* p<0.05

\*\* p<0.001

**Table 3.6: Proportions of older adult ( $\geq 65$  yr) pet owners and non-owners participating in the CLSA that identified a range of barriers to social participation (n=2,235)**

Barrier	Pet owners (n=766)	Non-owners (n=1,469)	F <sub>(1, 2234)</sub>
Cost	6.3%	7.3%	0.51
Transportation	5.5%	5.0%	0.25
Activities not available in area	9.7%	9.6%	0.01
Location not physically accessible	2.0%	1.7%	0.18
Location too far away	7.2%	5.2%	2.89
Health condition/limitation	25.0%	21.6%	2.17
Timing not suitable	8.9%	9.6%	0.15
Did not want to go alone	12.0%	12.8%	0.19
<b>Personal or family responsibilities</b>	<b>16.9%</b>	<b>13.0%</b>	<b>3.95*</b>
Language-related reasons	0.8%	0.6%	0.04
Too busy	31.3%	32.8%	0.34
Afraid or concerned for safety	2.1%	2.3%	0.03

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Multiple barriers could be identified by each respondent.

\* p<0.05

**Table 3.7: Likelihood of older adult ( $\geq 65$  yr) pet owners selecting a range of barriers to social participation, compared to non-owners (n=2,235)**

Barrier	Pet owners	
	Odds ratios	95% Confidence Intervals
Cost	1.03	0.71, 1.48
Transportation problems	<b>1.55</b>	<b>1.05, 2.29*</b>
Activities not available in area	1.20	0.90, 1.59
Location not physically accessible	1.40	0.78, 2.51
Location too far away	<b>1.46</b>	<b>1.02, 2.09*</b>
Health condition/limitation	<b>1.30</b>	<b>1.01, 1.68*</b>
Timing not suitable	1.00	0.72, 1.40
Did not want to go alone	1.01	0.75, 1.36
Personal or family responsibilities	<b>1.37</b>	<b>1.04, 1.80*</b>
Too busy	0.90	0.72, 1.12
Afraid or concerned for safety	1.25	0.66, 2.36

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health. Language-related reasons was not included in the analysis due to low representation of participants who indicated this barrier (n=11 or 0.7% of respondents; 5 pet owners, 6 non-owners).

\* p<0.05

**Table 3.8: Exploring thresholds for number of frequent social activities associated with life satisfaction for pet owning older adults and non-pet owning older adults ( $\geq 65$  yr) participating in the CLSA (n=7,474)**

	<i>Pet owners</i>		<i>Non-owners</i>	
	Odds of being satisfied with life	95% Confidence Intervals	Odds of being satisfied with life	95% Confidence Intervals
<i>Number of social activities where participation is reported to be "frequent"*</i>				
None	1.00	-	1.00	-
Low (1-2 activities)	1.51	1.11, 2.06**	1.53	1.17, 1.99**
Mid (3-4 activities)	1.95	1.42, 2.68***	2.34	1.76, 3.09***
High (5 or more)	2.97	1.99, 4.42***	2.38	1.74, 3.26***

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health.

\* As per Gilmour (2012), frequent participation was defined as *at least weekly* for family/friendship activities outside of the household; church-related activities; sports or physical activities with others; other recreational activities that include people such as hobbies, games, etc.; and *at least monthly* for educational/cultural activities involving others such as courses, concerts, museums; service club or fraternal organization activities; neighborhood, community or professional association activities; volunteer and charity work

\*\* p<0.01

\*\*\* p<0.001

**Table 3.9: Associations between experiencing barriers to social participation and satisfaction with life, for older adults ( $\geq 65$  yr) pet owners and non-owners who had wanted to participate in more social activities over the past 12 months (n=2,235)**

	<i>Pet owners</i>		<i>Non-owners</i>	
	Odds ratios	95% Confidence intervals	Odds ratios	95% Confidence intervals
Cost	<b>0.34</b>	<b>0.18, 0.65**</b>	0.72	0.46, 1.14
Transportation problems	0.69	0.37, 1.30	0.88	0.52, 1.49
Activities not available in area	<b>0.53</b>	<b>0.32, 0.86*</b>	1.06	0.71, 1.57
Location not physically accessible	<b>0.38</b>	<b>0.16, 0.92*</b>	0.85	0.42, 1.73
Location too far away	<b>0.58</b>	<b>0.34, 1.00*</b>	<b>2.00</b>	<b>1.17, 3.40*</b>
Health condition/limitation	0.78	0.52, 1.15	<b>0.73</b>	<b>0.54, 1.00*</b>
Timing not suitable	0.79	0.46, 1.36	<b>1.71</b>	<b>1.05, 2.79*</b>
Did not want to go alone	0.69	0.41, 1.15	<b>0.65</b>	<b>0.45, 0.92*</b>
Personal or family responsibilities	<b>0.60</b>	<b>0.39, 0.92*</b>	<b>0.53</b>	<b>0.36, 0.76**</b>
Too busy	<b>1.50</b>	<b>1.03, 2.19*</b>	<b>1.54</b>	<b>1.14, 2.07*</b>
Afraid or concerned for safety	0.59	0.22, 1.54	1.59	0.64, 3.98

**Note:** CLSA sampling weights are applied to all analyses to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health. Language-related reasons was not included in the analysis due to low representation of participants who indicated this barrier (n=11 or 0.7% of respondents; 5 pet owners, 6 non-owners).

\* p<0.05

\*\* p<0.001

**Table 3.10: Aligning barriers to social participation identified by older adult ( $\geq 65$  yr) CLSA participants with the WHO (2007) Age-Friendly Cities framework for social participation**

	Barriers identified by respondents			Implications for life satisfaction (significant associations <sup>*</sup> )	
	% Pet owners (n=766)	% Non-owners (n=1,469)	Higher odds, pet owners	Pet owners (Odds ratios)	Non-owners (Odds ratios)
<i>Accessible opportunities</i>					
Afraid or concerned for safety	2.1%	2.3%	-	-	-
Location not physically accessible	2.0%	1.7%	-	0.38	-
Location too far away	7.2%	5.2%	X	0.58	2.00
Transportation problems	5.5%	5.0%	X	-	-
Timing not suitable	8.9%	9.6%	-	-	1.71
Did not want to go alone	12.0%	12.8%	-	-	0.65
<i>Affordability</i>					
Cost	6.3%	7.3%	-	0.34	-
<i>Range of events and activities</i>					
Activities not available in area	9.7%	9.6%	-	0.53	-
Health condition/limitation	25.0%	21.6%	X	-	0.73
Timing not suitable	8.9%	9.6%	-	-	1.71
Too busy	31.3%	32.8%	-	1.50	1.54
Did not want to go alone	12.0%	12.8%	-	-	0.65
<i>Awareness of activities and events</i>					
Language-related reasons	0.8%	0.6%	-	-	-
<i>Encouraging participation and addressing isolation</i>					
Location too far away	7.2%	5.2%	X	0.58	2.00
Activities not available in area	9.7%	9.6%	-	0.53	-
Health condition/limitation	25.0%	21.6%	-	-	0.73
Did not want to go alone	12.0%	12.8%	-	-	0.65
Personal or family responsibilities*	<b>16.9%</b>	<b>13.0%</b>	X	0.60	0.53
Language-related reasons	0.8%	0.6%	-	-	-
<i>Fostering community integration</i>					
No relevant barriers identified	-	-	-	-	-

**Note:** CLSA sampling weights are applied to all percentages to adjust for sampling probabilities. Findings are adjusted for age, gender, ethnicity, marital status, orientation, household composition, home ownership, income, education, and self-reported health. Language-related reasons was not included in the analysis due to low representation of participants who indicated this barrier (n=11 or 0.7% of respondents; 5 pet owners, 6 non-owners).

\* p<0.05



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## **Chapter 4: When 'places' include pets:**

### **Broadening the scope of relational approaches to promoting aging-in-place**

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#### **4.1 Abstract**

Aging-in-place is a well-established concept, but rarely considers that many older adults live with pets. In a ‘pet-friendly’ city, we conducted semi-structured interviews to explore perspectives of community-based social support agencies that promote aging-in-place, and those of animal welfare agencies. Applying a relational ecology theoretical framework, we found that pets may contribute to feeling socially-situated, yet may also exacerbate constraints on autonomy experienced by some older adults. Pet-related considerations at times led to discretionary acts of more-than-human solidarity, but also created paradoxical situations for service-providers, impacting their efforts to assist older adults. A shortage of pet-friendly affordable housing emerged as an overarching challenge. Coordination among social support and animal welfare agencies, alongside pet-supportive housing policies, will strengthen efforts to promote aging-in-place in ways that are equitable and inclusive.

**Keywords:** companion animals, older adults, aging-in-place, community services, affordable housing

## 4.2 Introduction

With population aging now well underway, we have witnessed global efforts to initiate coordinated, cross-sectoral strategies to support older adults in ways that promote independence and social inclusion (Steels, 2015). In particular, there are growing efforts underway to promote ‘aging-in-place,’ a policy orientation that has the goal of enabling older adults to live independently and to lead meaningful lives while remaining in their homes and neighbourhoods for as long as possible (Menec, Means, Keating, Parkhurst, & Eales, 2011; Stewart, Crockett, Gritton, Stubbs, & Pascoe, 2014). This strategy is also well-aligned with the preferences of older adults themselves (Gitlin, 2003; Stewart et al., 2014; Wiles et al., 2009; Wiles, Leibing, Guberman, Reeve, & Allen, 2011).

Promoting independence and social inclusion via aging-in-place hinges upon efforts to support the physical, emotional and social well-being of older adults (Rowe & Kahn, 1997). To date, the aging-in-place literature has viewed this endeavour through an anthropocentric lens, positioning aging-in-place as an exclusively human activity. Yet, in most Western countries, between a quarter and a third of older adults ( $\geq 65$  yr) live in the company of a pet (Himsworth & Rock, 2013; McNicholas, 2014; Peak, Ascione, & Doney, 2012), and pet-ownership is also on the rise in Japan and China (Hansen, 2013; Headey, Na, & Zheng, 2007). Even so, few aging-in-place strategies acknowledge the likelihood that a pet will be present in many older adults’ lives. Similarly, consideration of relationships between older adults and pets are missing from

prevalent understandings of qualities of physical and social environments needed to create equitable opportunities to age-in-place.

The potential of pets to contribute to older adults' aging-in-place experiences is far-reaching and holistic. Older adults, and especially those who live alone, are likely to spend substantial amounts of time with their pets, upwards of 80% of their day (McNicholas, 2014). Such companionship positions these relationships to be key sources of well-being for many older adults (Enders-Slegers, 2000; Knight & Edwards, 2008; Lago, McConnell, & Knight, 1983; Mahalski, Jones, & Maxwell, 1988; Raina, Waltner-Toews, Bonnett, Woodward, & Abernathy, 1999; Wilson & Netting, 1987). The companionship of a pet may also help offset the negative mental health impacts of loneliness and grief experienced later in life (Garrity, Stallones, Marx, & Johnson, 1989; Knight & Edwards, 2008; Krause-Parello, 2012; Mahalski et al., 1988; Stanley, Conwell, Bowen, & Van Orden, 2013; Wells & Rodi, 2000), although pet loss may also become a substantial source of grief for some (Adams, Bonnett, & Meek, 2000; McCracken, 1987; Morley & Fook, 2005). Beyond companionship, having a pet may also help to support physical function as people age (Branson, Boss, Cron, & Kang, 2016; Curl, Bibbo, & Johnson, 2016; Raina et al., 1999; Thorpe et al., 2006). Together, these factors may contribute to maintaining independence throughout old age, a desired outcome that drives aging-in-place initiatives (Menec et al., 2011; Steels, 2015; World Health Organization, 2012).

At the same time, older adults' relationships with pets may also challenge our idealized conceptions of aging-in-place. Older adults may, for instance, ignore their own health issues in order to accommodate a pet's needs, and particularly to avoid being parted from their pet (McNicholas, 2014; Wells & Rodi, 2000). Older adults may also divert scarce financial resources so as to meet their pet's needs alongside, or even before, their own. Indeed, this situation

prompted the Meals on Wheels Association of America to initiate pet-meal programs in several communities (Huss, 2013). Older adults may also delay transitioning into appropriate housing situations, if they are not allowed to remain with their pet (McNicholas, 2014; Morley & Fook, 2005; Ormerod, 2012; Shore, Petersen, & Douglas, 2003).

While housing supply is a key and pressing priority for aging-in-place (Menec et al., 2011; Steels, 2015; Stewart et al., 2014), there is a shortage of both private and subsidized rental housing that is both affordable and pet-friendly (Huss, 2005, 2013; Ormerod, 2012; Power, 2016). This situation is particularly concerning if we consider that older adults living in vulnerable circumstances (i.e., having lower incomes and facing increasing social isolation) may also benefit the most from the companionship of a pet (Anderson, Lord, Hill, & McCune, 2015; Lago et al., 1983; Mahalski et al., 1988; Morley & Fook, 2005; Ormerod, 2012; Smith, Seibert, Jackson, & Snell, 1992; Wilson & Netting, 1987). Furthermore, denying older adults the choice to age-in-place with pets may also impede efforts to promote social inclusion and autonomy, desired goals of formal efforts to promote aging-in-place (Menec et al., 2011; Steels, 2015; World Health Organization, 2012).

Importantly, our inattention to pets' contributions to aging-in-place experiences has troubling consequences for the animals themselves. Pet-prohibitive housing policies constitute one of the main reasons why pets are relinquished to shelters (Coe et al., 2014; Shore et al., 2003). Arguments used to defend pet-prohibitive rental policies, including concerns around older adults' abilities to care for their pets, may be unfounded (Huss, 2013; Mahalski et al., 1988; McNicholas, 2014). Even in the US, where responsible pet ownership is considered a civil right (Huss, 2013), there are few statutory provisions that ensure that older adults who rent homes can keep a pet (Huss, 2005, 2013).

To our knowledge, only one municipal aging-in-place initiative, “GenPhilly”, has formally identified pets as a priority within its government-sanctioned, multi-sectoral efforts to sustainably support aging-in-place (Clark, 2014). Thus far, this initiative has generated a comprehensive online resource that connects older adults with pet-related information and services, in addition to raising broader awareness of the need to support older adults and their pets (Clark, 2014). To date, it appears that no resources have been directed towards offsetting systemic challenges like pet-friendly housing supply, although valuable efforts along these lines continue to progress (Hoffman & Clark, 2012).

As researchers whose interests span gerontology, social work, and veterinary medicine, we are concerned with the prevailing anthropocentric conception of aging-in-place. Few studies have paid explicit attention to ways that human-animal relationships are influenced by the physical and social environments that ultimately enable or constrain aging-in-place experiences. Nor do we understand how the reluctance to formally position pets as a potential source of health and well-being – or conversely, as a source of anxiety and concern – may also be impacting the effectiveness of our organized efforts to promote independence and social inclusion via aging-in-place.

Agencies that provide support services designed to assist vulnerable older adults to age-in-place may offer invaluable, experientially-informed insights into ways that relationships with pets may shape clients’ lives, yet these perspectives are rarely considered within the literature on aging and pets. Similarly, little attention has been paid to ways that population aging may be affecting animal welfare agencies, whether through rates of surrenders, the condition of animals being received, difficulties with rehoming older pets, or other types of challenges as well as opportunities. Our study was designed to shed light upon these gaps in understanding by

gathering the perspectives of community agency employees and volunteers who work directly with older adults, either through human social support services or through animal welfare programs. In particular, we explored perspectives on (i) roles that pets play in relation to older adults' aging-in-place experiences; and (ii) ways that pet-related considerations may shape their own efforts to assist older adults.

In approaching this study, we applied a relational ecology theoretical framework (Putney, 2013) to build our understanding of human-animal relationships as both influencing and being influenced by experiences of aging-in-place. This novel framework highlights ways that relational contexts shape human-animal bonds and contribute to psychological well-being amongst older people. Putney's framework interweaves concepts derived from developmental theory, relational theory, anthropology, and ecology in order to highlight contextually-contingent interdependencies between people and pets. More specifically, Putney's (2013) relational ecology theory is built upon five overarching theoretical premises around ways that human-animal relationships may: (i) enable older adults to adapt to aging through a continual evolution of identity through productive activity and experiencing both dependence and independence; (ii) influence definitions of self, including self-efficacy, self-confidence, and self-acceptance; (iii) assist with developing and maintaining feelings of stability, security, and safety, in addition to sense of self; (iv) provide continuity throughout transitions that occur with increasing frequency later in life; and (v) mirror ecological inter-dependencies that manifest in both similarities and differences, but without devaluation of things that are considered to be "other." These theoretical underpinnings, however, tend to rest exclusively upon inter-personal experiences with the creation and maintenance of a particular social identity throughout the aging process. Below, we elaborate upon Putney's work by shifting our attention towards ways that broader social



contexts, including policies, practices and ethical considerations, may further influence older adults' relationships with their pets and their experiences of aging. We draw upon current understandings of relational public health ethics frameworks (Baylis, Kenny, & Sherwin, 2008) and of relational coordination theory (Gittell, 2011) as we consider relational ecologies, pets and aging-in-place.

### **4.3 Methods**

This study represents one component of a multiple case study (Yin, 2009) designed to understand ways that human-companion animal relationships shape experiences of aging-in-place in a Canadian city known for having progressive policies around pet-ownership (Rock, 2013). In this article, we focus specifically upon the perspectives of community agencies whose staff and volunteers bear witness to a range of situations that involve older adults and their pets, an important source of knowledge that is underrepresented within the study of pets and aging. Ethical clearance for this study was granted by the Conjoint Health Research Ethics Board at the University of Calgary.

#### **4.3.1 Case Selection**

Our location lends itself to a case study on aging-in-place with pets for several reasons. First, Calgary is recognized across Canada and beyond as a 'pet-friendly' city, based in part on the City's policies on responsible pet-ownership (Rock, 2013). Importantly, Calgary is in the process of implementing a municipal age-friendly strategy (City of Calgary Community & Neighbourhood Services, 2015). Thus, there is a current policy interest in planning and evaluating efforts to respond to the needs of the aging population. While pet ownership is not specifically mentioned, the municipal strategy emphasizes social inclusivity for all older adults,

and also attends to the specific needs of older adults living in vulnerable circumstances, including lower household income and social isolation.

#### **4.3.2 Sampling Strategy and Description**

Our sampling strategy was purposive. We recruited participants based on our interest in elaborating upon Putney's (2013) relational ecology framework for understanding human-animal relationships, and specifically by considering the policy and practice contexts in which aging-in-place is experienced. As such, we garnered contextual information from several sources (Yin, 2009).

##### ***Interviews***

Our main sample comprised 14 semi-structured interviews: 6 participants representing four local community agencies that support vulnerable older adults; 5 participants representing three local animal welfare organizations; 2 family physicians whose practices include older adults; and 1 senior policy analyst who had been involved in a review of subsidized seniors' housing pet policies in another Canadian setting. Both paid employees and volunteers were included in our sample, representing both front line service delivery and administration, with specific participants being identified at the discretion of each organization's senior administration. The majority of participants (10 of 14) were women, and a majority (9 of 14) had their own companion animals at the time of the interview. For the analysis that follows, we focused specifically on our sub-set of 11 interviews with representatives of community-based social service (SS) and animal welfare (AW) agencies, as described in Table 1. The additional interviews with physicians and the policy analyst served to inform our interpretations of our primary interviews, but are not referenced directly in our findings.

We obtained informed consent from each participant. Interviews were semi-structured, conducted using an interview guide designed to establish rapport and to draw out insights and experiences relating to companion animals and aging-in-place in our local context. While examples of general interview questions are listed in Table 2, each specific interview guide was tailored to reflect the participating organization's mandate, and was also shaped by a priori knowledge of the participating individual's position within that organization. The interview guide was adapted iteratively as data collection proceeded, and as specific themes and issues began to emerge.

The first author conducted all interviews between November 2014 and June 2015. Most interviews took place in-person and on-site at participating organizations' venues. One interview was conducted by telephone (AW5), and one took place at a local café (SS4). All interviews were digitally audio-recorded and transcribed, with the exception of SS1, who did not wish to be audio-recorded. For this exception, extensive fieldnotes were taken, and SS1 reviewed and approved the written record within 24 hours. Interviews were on average an hour in length, ranging from 40 to 90 minutes.

### ***Meetings***

As our study progressed, we became aware of repeated concerns around the lack of affordable pet-friendly housing in our city, both within the subsidized housing supply and in the private market. As a result, the first author initiated two additional meetings with local organizations that provide subsidized housing to lower income older adults. One of these organizations serves older adults with underlying mental health concerns, and was in the process of revoking its pet-tolerant tenancy practices. The second organization provides one of our city's only pet-friendly subsidized residences for independent, lower income older adults, and allows

tenants to have cats. To our knowledge, our city offers no comparable subsidized housing options that allow dogs of any size or breed.

Both meetings were attended by multiple employees, each of whom provided informed consent. The first meeting occurred in October 2015; the second in May 2016. We opted not to audio-record these conversations. Instead, the first author took extensive fieldnotes. Informal meeting guides were crafted for each meeting, to ensure that discussions remained focused and relevant (see Table 3 for sample questions). Participants were provided with an electronic copy of the final documentation within 24-48 hours, and were invited to review and revise the written record. The perspectives shared during these meetings alerted us to practical complexities of providing affordable rental housing that allows pets, which we recognize must be considered in relation to the perceived shortage of such housing supply.

#### *Companion animals and aging research symposium*

In addition to our interviews and meetings, the first author organized a research symposium on companion animals and aging, which took place under the umbrella of a national gerontology conference held in October 2015, in the city where our research took place. The symposium brought together both academic scholars and representatives of animal welfare agencies in order to discuss emerging practical issues and scholarly research related to pets and the aging population (Canadian Association on Gerontology, 2015). The content presented, together with the discussion that ensued, evolved our understanding of aging-in-place with pets, within our local context and also within a broader Canadian context.

### **4.3.3 Data analysis**

Digital audio recordings of interviews were transcribed verbatim. Transcription was shared by the first author and a professional hired to assist with this project. The first author reviewed all transcripts for accuracy and corrected errors and omissions. During this process, the first author also wrote extensive research memos to capture post-hoc reactions and reflections, drawing iterative comparisons both within each interview and between interviews, while also maintaining reflexivity and self-awareness. Data were reviewed multiple times by the first author, who led the inductive thematic content analysis (Braun & Clarke, 2006), combining first-level coding of manifest themes alongside a process of immersion and crystallization (Borkan, 1999) that led to identifying latent themes. At this point, all authors reviewed a sample of transcripts and discussed proposed themes, which were then refined. The first author continued coding the data set in its entirety and refining themes based on iterative and evolving understandings of the data. All authors met to discuss transcript content and theme derivation, and utilized e-mail correspondence so as to remain in communication until consensus was achieved. QSR-NVivo10 was used to manage the data analysis.

### **4.4 Findings**

We designed our interviews to explore participants' perspectives on ways that relationships with pets contributed to their clients' experiences of aging-in-place, and also on the ways that clients' pets impacted their own efforts to assist older adults. Accordingly, the themes discussed below are organized within these two overarching categories.

#### 4.4.1 Pets and older adults' experiences of aging-in-place

In reflecting upon their clients' relationships with pets, all of our participants remarked on ways that having pets seemed to help older adults to situate themselves socially. At the same time, participants also observed situations where pets became conduits through which older adults experienced socially-patterned barriers that constrained their autonomy as individual citizens. Both of these perceptions are explored below.

##### *Social situatedness*

Throughout the entirety of our interviews, we were repeatedly struck by ways that pets were viewed as enabling older adults to feel both purposeful and intrinsically valued. For many older adults, having a pet also meant participating in a valued cultural practice that could transcend the bounds of age and isolation. This view was aptly expressed by a long-time volunteer involved in front line work serving lower income and isolated older adults, "... 'cause a lot of these seniors, they're living by themselves, they have all these issues and it's almost like they become the centre of the universe. Whereas to me, I like to put it, if you're a pet owner you become part of the universe" [SS6].

Several participants also reflected on the sense of purpose that pets provided for older adults who were aging-in-place, and especially for those living in lower income situations and having weak social networks. This sense of the connection between having a pet and having a valued position in society was reflected in the view of a front line employee with an animal welfare organization:

This animal is so important to them because it is what keeps them going... fine, they don't have a lot of money. But they're doing the best for this animal that they can do with the money that they have. And they will subsidize (sic) their own food to be able to feed this animal the best that they can, and take care of it the best that they

can. And if that's what they need to make them happy, and feel like a person in society that really means something, then go for it... because now they can give to something else that's a living, breathing creature that they have to look after. [AW2]

Similarly, an employee with an agency that serves our city's most socially isolated, low income older adults discussed that for those clients who have pets, their relationships are "...a lifeline. That is, time and time again, 'Without this animal? There's no reason for me to wake up in the morning.'" [SS2]

### *Constrained autonomy*

Participants were acutely aware of the challenges many older adults must negotiate as their living circumstances change. While some participants discussed these challenges in relation to diminishing capacities, most often they were framed in relation to housing arrangements. Often clients were put in the position of having to choose between housing and their pet, which had negative consequences for their quality of life and well-being, as described by a front line employee with an agency that assists vulnerable older adults:

...in this city, not a lot of seniors housing bodies accept pets. Very, very few do, and so then the senior is faced with the difficulty of 'Well, do I accept housing and get rid of my pet, or do I stay where I am?' Maybe it's not a good environment for them, or they could end up homeless, potentially. It becomes that difficult decision of 'What do I do? Do I get rid of my pet or do I stay in, maybe, a not-so-good situation for myself?' [SS3]

Participants often referred to a general, societal-level expectation that older adults will obligingly give up their pets as long as there is someone within their social network – a family member or a close friend – who will take the animal. Yet a front line employee who helps older adults to locate and apply for affordable housing reflected that "Regardless of whether they do or

do not (have such relationships), no one wants to part with their pet.” [SS1 (excerpt from fieldnotes)]

Several participants commented on how often they heard older adults express a genuine longing for a companion animal. In describing intake conversations with new clients, one senior administrator with an agency that delivers in-home support mentioned, “Cause we ask, regardless of where they live, do you have a dog that we need to know about? ‘Oh I wish I could have a dog, oh I wish!’ ‘I had to give up my dog when I moved in here’. Those kinds of things? So, we do hear that” [SS5].

The shortage of affordable pet-friendly housing for older adults was also discussed by participants from animal welfare agencies. One participant reflected on the increasing frequency with which formerly-adopted animals were being returned to their agency due to older adults’ housing transitions, “I would say at least 4 or 5 (cats) have come back (recently) because they’ve had to move into other accommodations that just don’t allow pets. I think that’s really sad because they’re really devastated, and the cat’s devastated, too” [AW4].

Participants also noted the negative consequences of financial hardship on older adults and their pets. As one front line service provider described:

“...there are times when a senior is facing financial difficulties and then the conversation comes up about the pet and how much the pet is costing and whether or not that’s feasible any longer...(It) comes down to who can afford what. And those who can afford it do better in general, and those who can’t always end up suffering and going without.” [SS3]



#### **4.4.2 Pets and organized efforts to promote aging-in-place**

Because of the pivotal roles pets played in the lives of many clients, our participants often viewed any efforts directed towards pets as being integral to supporting people as well. Yet they also described ways that these efforts were discretionary, and at times confounded by limitations imposed by organizational mandates and priorities. Both of these scenarios are described below.

##### *Acts of more-than-human solidarity*

Many of our participants shared stories illustrating ways that actions directed at helping pets, versus people, were acts of solidarity that in fact served the interests of both people and pets. As observed by the co-founder of a local animal welfare agency: “I’m helping the cats. Which, in turn, helps the people.” [AW3] This sentiment was mirrored by a front line service provider, reflecting on a situation she had recently encountered:

...the senior, he was very attached to his dog. It had been with him for, I think it was something like 13 years, so he had aged along with the dog. And, you don’t want to be the one to really kind of tear that relationship apart. So, what we do often is try and kind of get to the root of why is the senior not managing? Hopefully if we can help them manage better, then in turn they’ll be managing the care of the pet better. [SS3]

This same participant described efforts she had made to investigate formal service animal certification programs after a client, who depended on her dog for mental health support (as confirmed by a letter from her psychiatrist), was turned down by a housing provider. This form of assistance extended well beyond the scope of this participant’s professional duties, and illustrates the discretionary capacity that front line service staff may have to act upon their sense of the importance of human-animal relationships in their clients’ lives.

Organizational-level solidarity for both people and their pets was less common, and was also complex. For instance, an administrative employee with an agency that addresses food

insecurity, who noted that older adults' requests for food assistance had doubled over recent years compared to the broader population, recounted that:

We know that they are in crisis or they're on a low income... If a person is asking for a couple of extra cans of tuna, and with an extra couple of questions, they respond that "Well, this is for my pet, or cat, or whoever," this just reminds us (to mention) that ... besides human, we have pet food... and we type down (this information) in the hamper request. So volunteers won't miss it.  
[SS4]

While this specific agency embraces the philosophy that supporting people through times of crisis must include supporting their pets, the agency's guiding organizational mandate forbids direct purchase of pet food and supplies using operational monies and donated funds, and it may only redistribute pet-related items that are received in the form of in-kind donations. Thus even as a defining philosophy, the more-than-human solidarity enacted by this organization has been shaped at the discretion of its current administrative management.

### *Paradoxes in practice*

Participants often shared challenges they faced, when responding to situations involving older adults and pets. At times, these situations interfered with, or even disrupted altogether, their efforts to assist older adults. One participant framed the pet-related obstacles she faced in terms of broader social values: "I find that a lot of agencies that provide emergency financial support in one way or another don't consider pet supplies or pet costs as a need." [SS3] Most commonly, however, participants described the shortage of affordable pet-friendly housing as the primary barrier to helping their clients. For instance, a front line service provider observed that, "...it doesn't balance out. I mean, you're wanting to help the senior and protect them and make sure that these individuals have a high quality of life, but at the same time you're taking away the thing that makes that happen" [SS2].

Reflecting upon older adults who refuse to part with pets so as to secure housing, another front line service provider admitted that "...they do fall off the radar. We just can't assist them. Their files usually end up getting closed." [SS3] A similar sentiment was shared by another participant from a different agency, who was similarly tasked with helping older adults to locate affordable housing:

SS1 is very sensitive to the pet issue, as many of the seniors she assists are emotionally distressed by the prospect of losing their beloved pet, to the point of being in tears on the telephone. If she knows ahead of time that she will be assisting a senior who is trying to find housing that will allow a dog, she tries to call them prior to their appointment. Since many have to make an effort to get to her work site, she feels that they need to know that there are no dog-friendly facilities available within subsidized or not-for-profit housing, and that there is nothing that her organization can do about this situation. [SS1 (excerpt from fieldnotes, emphasis added)]

On the day of our interview alone, this participant had meetings scheduled with three separate older adults who were seeking housing with a pet.

#### **4.5 Discussion**

We set out to understand the implications of older adults' relationships with pets in the context of aging-in-place, conceived as both a policy focus and an individual preference. Our findings have reaffirmed suggestions that older adults may experience both benefits and challenges in relation to pets and aging. Our findings have also evolved current understandings by illustrating situations where broader policies and practices related to aging-in-place become integral components of the relational ecologies that shape human-animal relationships and aging.

Regarding the benefits of human-animal relationships for older adults themselves, our participants described ways that having a pet may generate and support in their clients a sense of being socially-situated. As a concept, 'situatedness' suggests that human existence is experienced and defined in relation to environmental, social, and cultural factors (Costello, 2014). For older adults in particular, pets seem to offer a nexus where these different factors converge, establishing a firm social role that remains intact, even as other life circumstances shift and change. We surmise that to some degree, feeling socially-situated may arise directly from the companionship provided by a pet (Enders-Slegers, 2000; McNicholas et al., 2005; McNicholas, 2014). Beyond companionship, however, we suggest that feeling socially-situated may also be linked to the meaningful occupation of caring for a pet, as we consider all that is required in order to meet a companion animal's needs on a regular, daily basis (Raina et al., 1999; Zimolag & Krupa, 2009). Between the reciprocity of companionship and the responsibility of caring for a pet, older adults may derive both intrinsic fulfilment and extrinsic meaningfulness, thus situating the aging self as being both valued and capable. This effect may be especially salient to older adults living in socially isolated and low income circumstances (Anderson et al., 2015; Lago et al., 1983; McNicholas et al., 2005; Ormerod, 2012), for whom opportunities to reinforce a sense of social worth may be obstructed by inequitable social and material conditions (Ferraro & Shippee, 2009; Pavalko & Caputo, 2013).

Still, even as our findings have reaffirmed ways that older adults may benefit from relationships with pets, they also illustrated how older adults, and especially those living in vulnerable circumstances, may face inordinate barriers to having pets as they age-in-place. The barriers that our participants described in relation to their clients were often contingent upon having low income and weak social networks. The challenges these older adults faced around

having pets illustrated the extent to which individual autonomy is experienced in relation to oppressive social structures, and ways that social conditions shape the choices available to older adults living in, or transitioning into, lower income situations (Baylis et al., 2008). Affordable housing that is also pet-friendly is virtually non-existent in our city. Consequently, discriminatory housing rules were mentioned repeatedly as a primary reason why older adults and often longtime companion animals were forcibly separated; why agencies were at times unable to effectively assist clients in need of support; and also why new relationships with pets could not be forged by older adults, even when desired. The uncertainty that many lower income clients faced, as they searched for housing situations where they could remain with their pet, also resulted in significant emotional anguish (Stoewen, 2012). These troubling situations point towards the need for us as a society to rethink ways that ethical principles shape the contexts we have created to support aging-in-place. It is important that we begin to formally recognize the implications that human-animal relationships have in relation to the aging experiences of older adults themselves, as reinforced by our relational ecology perspective.

A novel contribution of our study has been to shed light on tangible ways that human-animal relationships can affect, both negatively and positively, efforts to enable aging-in-place. Our participants were purposively selected for their direct and practical experiences with this endeavour. Not once did we hear that companion animal relationships “should” be dispensed with, in order to meet conventionally-recognized aging-in-place needs and priorities. In some cases, we learned that discretionary efforts directed towards pets themselves had meaningful, positive impact on older adults’ lives. We understood these perspectives as aligning with Rock and Degeling’s (2015) conception of more-than-human solidarity. Rock and Degeling expand upon Prainsack and Buyx’s (2012, p. 346) conception of solidarity as both interpersonal- and

collective-level “manifestations of the willingness to carry costs to assist others” for particular situations when “...cared-for others include non-human animals, plants, or places” (Rock & Degeling, 2015, p. 62). Still, we also learned of situations where pet-related issues created paradoxical situations that inhibited agencies’ capacities to appropriately and effectively serve their clients. In particular, our participants noted the regularity with which files were closed or clients were turned away altogether if they were unwilling to part with their pet in order to find suitable and affordable housing.

We realize that challenges may arise, when it comes to including pets within the ‘places’ where people are meant to age-in-place. For instance, our informational meetings with subsidized housing providers alerted us to distressing situations like animal abuse and neglect that building managers and other front line workers were occasionally faced with. These situations, however, were more prevalent among older adults living with mental illnesses, and were infrequently reported within the broader aging population, as others have also found (Huss, 2013; McNicholas, 2014). Importantly, it appears that older adults themselves, even those without pets, may support pet-friendly subsidized housing, as long as responsible pet ownership is practiced (Freeze, 2010; Mahalski et al., 1988).

Overall, our findings underscore a pervasively institutionalized view that pets are dispensable in the context of aging-in-place. This view is manifest in both policy-level factors and organizational practices, even as individual actions taking place within these structures may suggest an opposing sentiment. Yet, it became apparent to us that perspectives of both human social services and animal welfare agencies contained continuities that crossed species lines, in terms of recognizing the extent to which the well-being of older adults and their pets is intertwined and indivisible. This points towards opportunities for social support services and

animal welfare agencies to formally coordinate their efforts to support, in tandem, both human and non-human animal interests.

While relational coordination often refers to operations within a single organization (Gittell, 2011), we propose that relational coordination networks may extend across organizations, so as to also cross species boundaries. An example of this type of initiative has recently been launched in our own local context. “Pet Assist” (Calgary Seniors Resource Society, 2017) is being piloted by the Calgary Seniors Resource Society (CSRS), a community agency that provides supportive services to lower income and socially-isolated older adults. To deliver this program, CSRS has forged partnerships with a mobile veterinary clinic, a charity that provides financial assistance for pet care, and several local animal welfare agencies. Supported by this platform of inter-agency collaboration, CSRS recruits and trains volunteers in order to assist vulnerable clients with their pet care needs, including weight management, monitoring medication, and providing support during and following veterinary visits. This model program illustrates how closer collaborations between two, traditionally distinct types of community agencies can leverage the values that underscore more-than-human solidarity (Rock & Degeling, 2015) within the broader social and policy contexts of promoting aging-in-place. This approach also aligns with cross-sectoral approaches to promoting aging-in-place (Steels, 2015).

#### **4.6 Limitations**

The complexity of aging-in-place as both an individual experience and a population-level phenomenon suggests the involvement of multifaceted stakeholders, ranging from policy-makers to service-providers to older adults themselves. In approaching this component of our case study, we limited the scope of our sampling to community agencies that serve older adults so as to

promote independence, and to animal welfare agencies that may be affected by population aging. Our scope also limited our study's ability to capture the entire breadth of valuable perspectives on aging-in-place and pets. For example, exploring the perspectives of homecare providers and community nurses, whose clients and patients may be experiencing multiple transitions in terms of health and ability, would offer invaluable insight. The perspectives of veterinary professionals must also be considered in relation to the mounting challenges older adults may face to care for an animal as they and their pets age. Naturally, the perspectives of older adults themselves, on the lived experiences of aging-in-place with pets, must also be considered.

As with all case studies, our study reflects aging-in-place with pets within our own local context. Even so, our findings may be meaningful across a range of settings, given that both population aging and the popularity of pets are global phenomena; that promoting aging-in-place is an internationally-sanctioned effort; and that the availability of affordable, appropriate housing is fundamental to promoting aging-in-place.

#### **4.7 Conclusion**

We can anticipate that for a substantial proportion of older adults, aging-in-place will involve a pet. Ideally, these important relationships will support aging-in-place by contributing to maintained independence and by reaffirming a sense of social inclusion. Yet, especially for older adults who experience reduced incomes and increased social isolation, these advantages may be offset by social conditions that make having a pet difficult or even impossible. To redress this situation, our society must start to formally recognize both the existence and the importance of older adults' relationships with pets. Considering these relationships through a relational ecology theoretical framework has enabled us to understand ways that existing social structures and



approaches to promoting aging-in-place may both constrain and enable positive relationships between older adults and pets. We thus encourage community-based social services and animal welfare agencies to forge relational networks that cross both organizational and species lines. But first and foremost, we need to adopt a policy structure that will improve the availability of affordable, pet-friendly housing options for older adults. Without enough ‘places’ where older adults can age with their pets, we will continue to be hindered in our efforts to promote aging-in-place in ways that are equitable and inclusive – for older adults, and for their pets.

**Table 4.1: Description of participants interviewed as part of a case study exploring opportunities and benefits of companion animals for older adults who are aging-in-place in an urban Canadian setting**

<i>Description of Represented Organization</i>	<i>ID/Description of Position</i>	<i>Pet owner</i>
<b>Social support agency</b> (not-for-profit organization) – social support, older adult-specific	SS1/ employee, front line*	No
<b>Social support agency</b> (not-for-profit agency) – social support, vulnerable older adult-specific	SS2/ employee, administration	Yes
	SS3/ employee, front line	No
<b>Social support agency</b> (charitable, non-profit organization) – material support, lower income-specific	SS4/ employee, administration	No
<b>Social support agency</b> (not-for-profit organization) – material support, older adults and other vulnerable populations	SS5/ employee, administration	No
	SS6/ volunteer, front line	Yes
<b>Animal welfare agency</b> (regulating body) – impounding, shelter, adoption, spay/neuter (dogs and cats)	AW1/ employee, front line	Yes
	AW2/ employee, front line and administration	Yes
<b>Animal welfare agency</b> (registered charity and humane society) – rescue, shelter, adoption, spay/neuter services (cats)	AW3/ volunteer, front line and administration	Yes
	AW4/ employee, front line	Yes
<b>Animal welfare agency</b> (non-profit charitable organization) – rescue, adoption (cats)	AW5/ volunteer, front line and administration	Yes

\*NOTE: SS1 requested that the interview not be audio-recorded. The first author took detailed fieldnotes and shared these with the participant within 24 hours of the interview. The participant verified the accuracy of the written record.

**Table 4.2: Sample interview questions used to facilitate semi-structured interviews with research participants**

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***Examples of general topics of interview questions\****

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Description of daily activities as employee/volunteer for organization, and contextualization of activities within broader mandate of organization

Description of target population for services

Discussion of impact of aging population on current service provision

Reflections on situations that have arisen, that have involved pets and older adults

Regularity with which situations involving pets arise, and descriptions of such situations

Descriptions of any formal training received around pets (for human social support agencies) and communication with older adults (for animal welfare agencies)

Discussion of any formal organizational policies or practices relevant to pets and aging-in-place

Identification of any formal organizational partnerships between human social support and animal welfare agencies

Reflections on services and supports that would assist older adults with having pets

General views on roles of companion animals in older adults' lives, including both benefits and challenges

Perspectives on approaches for addressing situations where interventions are needed, for safety of older adults and/or companion animals

Personal experiences with pets

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\*NOTE: Each specific interview guide was tailored to reflect the participating organization's mandate, and was also shaped by *a priori* knowledge of the participating individual's position within that organization. Questions were adapted iteratively as specific themes and issues began to emerge.

**Table 4.3: Sample questions used to facilitate meetings with housing providers**

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*Examples of general topics for meeting facilitation\**

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Description of target population for housing and housing application process

Discussion of both past and current pet-related rental policy, including rationale

Reflections on demand for pet-friendly (subsidized) housing

Descriptions of situations that staff have experienced, involving pets and older adults

Regularity with which situations involving pets arise, and descriptions of such situations

Identification of any formal organizational partnerships between housing providers and animal welfare agencies

Reflections on services and supports that would assist older adults with having pets

General views on roles of companion animals in older adults' lives, including both benefits and challenges

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\*NOTE: Meeting guides were tailored for each housing provider.

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## **Chapter 5: Disruptive solidarity or solidarity disrupted? A dialogical narrative analysis of economically vulnerable older adults' efforts to age in place with pets**

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*This chapter of my thesis is dedicated to “Hank” and Jellybean – it has been a privilege for me to have been let into their lives. As a researcher, the perspective I have gained, having been along on this particular leg of their shared journey, has informed my own understanding, and has shaped the knowledge that I am able to share with the academic community and beyond.*

### **5.1 Abstract**

Over one-third of older adults in many countries have a companion animal, and pets may harbor health-promoting potential. Few studies have considered pet-ownership in relation to economic vulnerability, nor is pet-ownership often considered within policy efforts to promote ageing-in-place. We conducted a mixed methods case study to understand perspectives of both community agencies that support ageing-in-place and older adults themselves. A shortage of affordable, appropriate pet-friendly housing emerged as a challenge, even when framed as a legitimate choice and preference for many older adults. In this manuscript, we share the trajectories of three economically vulnerable older adults whose affordable housing needs became entangled with commitments to pets. Guided by dialogical narrative methodology, we offer each narrative as a short vignette in order to (i) illustrate the extent to which older adults will practice “more-than-

human solidarity” for a pet, even when their own well-being is compromised as a result; and (ii) highlight incongruence between the underlying moral values that shape solidaristic practices of individuals versus solidaristic arrangements that shape affordable housing opportunities. We suggest that housing rules and legislation that disrupt, rather than confirm, more-than-human solidarity may render older adults susceptible to, rather than protected from, deteriorating physical, mental, and social well-being. We propose that collective solidaristic practices must reflect and subsume the moral complexity of solidarity practiced by individuals, to enable fair and equitable ageing-in-place.

**Keywords:** solidarity, relational autonomy, ageing-in-place, age-friendly communities, affordable housing, health equity, older adults, pets

## 5.2 Introduction

Over one-third of older adults in many countries live with a companion animal (or “pet”), and there is evidence that relationships with pets may harbor health-promoting potential. Yet, few studies to date have considered pet-ownership in relation to economic vulnerability, nor is pet-ownership often considered within public policy efforts to promote ageing-in-place. We conducted a mixed methods case study in our local Canadian setting in order to better understand this gap in knowledge. Our study considered perspectives of both community agencies that support ageing-in-place and older adults themselves. As our research progressed, a shortage of affordable, appropriate pet-friendly housing emerged as a challenge, even when framed as a legitimate choice and preference for many older adults (Toohey and Krahn, 2017; Toohey *et al.*, 2017). This situation is not unique to our own local setting, and a lack of pet-friendly, affordable

housing available to older adults living in lower-income circumstances has also been raised as an issue in countries such as the US, the UK, and Australia (Ormerod, 2012; Huss, 2014; Power, 2016).

In this manuscript, we explore the moral underpinnings of this troubling situation. We situate our analysis using the concept of solidarity, as an evolving moral value that is relevant to public health ethics. Thus we explore practices of solidarity in relation to experiences of economic vulnerability later in life. Specifically, we explore the extent to which ethical values may be shaping older adults' experiences of their relationships with companion animals, particularly when faced with barriers like pet-prohibitive housing. To do this, we share the trajectories of three older adults whose affordable housing needs became entangled with their individual commitments to companion animals. As we recount each story, we consider the different solidaristic arrangements that may have shaped each circumstance, and the public health implications of the consequences of these arrangements. We seek to understand the extent to which honoring older adults' relationships with companion animals must also be subsumed within ways that solidarity for older adults themselves is enacted, and how such solidaristic arrangements may serve broader public health interests in supporting an aging population.

### **5.3 Theoretical orientation**

Solidarity is increasingly recognized as a value that underpins public health ethics, although definitions of solidarity remain subject to debate (Baylis, Kenny and Sherwin, 2008). In an effort to spark conceptual advancement, Prainsack and Buyx (2012, p. 346, emphasis in original) proposed that solidarity may be conceived as “signify(ing) shared practices reflecting a collective commitment to carry ‘costs’ (financial, social, emotional, or otherwise) to assist

others.” They then differentiated three “tiers” of solidaristic practices, i.e., interpersonal, communal, and institutionalized solidarity. Ideally, these tiers will encompass a progression of moral values, from individual commitments “to assist others one recognizes sameness with” (Prainsack and Buyx, 2012, p. 347) to a collective willingness to do the same. Importantly, Prainsack and Buyx suggest that their proposed understanding of solidarity reflects the historic evolution of solidarity as a societal value (Prainsack and Buyx, 2016).

Responding to Prainsack and Buyx’s initial conceptual contribution, Dawson and Verweij (2012, p. 2) introduced the idea of “constitutive solidarity.” They suggest that constitutive solidarity is a social, versus rational, value, and is thus grounded in “shared values, meanings, and identity.” They conceptualize constitutive solidarity as a quality that transcends any given individual actor or rational and economic interests, but instead rests upon moral judgments on what “should” be done. Having established this conceptual definition, Dawson and Verweij question the extent to which Prainsack and Buyx’s definition served to posit solidarity as “a normative moral concept” rather than as a value-laden decision that fluctuates, depending upon individual tolerances for “carry(ing) costs” (Prainsack and Buyx, 2012, p. 346) at any given time. In particular, they question whether interpersonal solidarity can be distinguished from concepts like altruism or beneficence, given the likelihood that “one-person-to-one-other relationships ... (preclude) some idea of a *group* in which people *share* commitments to others” (Dawson and Verweij, 2012, p. 3, emphasis in original).

In our study, we interweave elements of both conceptualizations of solidarity by proposing that institutionalized solidarity aimed at supporting an ageing population must also be anchored in normative moral values. Additionally, to be morally-congruent, institutional solidarity must encompass interpersonal solidarity practiced by older adults. In addressing



Dawson and Verweij's (2012) concern regarding the conceptual acuity of interpersonal solidarity, our analysis hinges upon a specific form of interpersonal solidarity, namely "more-than-human" solidarity. More-than-human solidarity has recently been proposed by Rock and Degeling (2015, p. 62) as an extension of the Prainsack and Buyx conception of solidarity offered above, but "...whenever the cared-for others in question include non-human animals, plants, or places." We suggest that acts of solidarity made by individuals towards non-human entities are conceptually distinct from benevolence or altruism. In other words, we propose that there is a duality inherent to more-than-human solidarity that may be aimed at one particular companion animal, but that also subsumes a sense of belonging to distinct groups, yet groups that have similar needs (Fox, 2006; Rock and Degeling, 2013).

Within this manuscript, we explore practices of more-than-human solidarity in relation to companion animals, or "pets." In doing this, we reframe the motivations that underlie some older adults' willingness to put their own well-being in peril (i.e., carry costs) in order to fulfil commitments to their animal companions. Within academic research on pets and ageing, such actions have been proposed, by some scholars, to reflect unhealthy levels of attachment (Beck and Katcher, 2003; Chur-Hansen, Winefield and Beckwith, 2009). We posit, however, that these decisions might also be understood in reference to constitutive solidarity, with pet-owners "'seeing' what ought to be done" (Dawson and Verweij, 2012, p. 2) while also "recogniz(ing) sameness or similarity" (Prainsack and Buyx, 2012, p. 346) that – importantly – crosses species boundaries. We also pay attention to the extent to which these acts of solidarity are reflected in, or absent from, the highest tier of solidarity proposed by Prainsack and Buyx (i.e., institutionalized solidarity). We consider how a disconnection between more-than-human solidarity practiced by older adults and institutionalized solidarity aimed at enabling older adults

to age in place may exacerbate socially-patterned inequities in health (Whitehead, 1991). Thus we also consider the extent to which social arrangements ultimately disrupt the progression of the moral underpinnings of solidarity for companion animals from interpersonal to institutionalized practices, and highlight the consequences of such disruptions for achieving public health goals around promoting ageing-in-place.

#### **5.4 Background**

Academic interest in the ways that pets may support older adults' physical, mental, and social well-being first emerged in the 1960s, and continues to evolve. This interest builds upon the notion that animal companionship can help to assuage or counter the often-isolating effects of growing old, a period of life when, for many, idle time expands while fulfilling social relationships wane. Indeed, there is mounting evidence that having an animal companion is both meaningful and health-promoting, to the extent that these relationships may support both psychological health and physical function among older adults (Garrity *et al.*, 1989; Raina *et al.*, 1999; Thorpe *et al.*, 2006). Examples of recent advances in knowledge include evidence that older adults who spend more time in the company of their pets appear to have better mental health (Bennett *et al.*, 2015); that pets may protect lonelier older adults from depression (Krause-Parello, 2012); and that animal companionship may ameliorate loneliness for older adults over time, even as lonelier people tend to seek out pets (Pikhartova, Bowling and Victor, 2014).

Still, some studies suggest that companion animals may have a mixed, null, or even negative influence on older adults' health and well-being (Wells and Rodi, 2000; Parslow *et al.*, 2005; Himsforth and Rock, 2013; Enmarker *et al.*, 2015). Several researchers have suggested that the mixed findings reflect methodological diversity in approaches used to study human-

animal relationships, compounded by the complexities of the relationships themselves (Morley and Fook, 2005; Fox, 2006; Franklin *et al.*, 2007; Chur-Hansen, Stern and Winefield, 2010; Himsworth and Rock, 2013; Putney, 2013; Rock and Degeling, 2013; Ryan and Ziebland, 2015). Notably, few studies have explored the influence of context, including social conditions and physical environments, on salient outcomes, given that relationships with pets are experienced *in situ* within communities where older adults are ageing-in-place.

Since 2011, when the oldest members of the post-WWII “baby boom” generation began to turn 65, the proportion of older adults living in neighbourhoods and communities has been rising. At the same time, a substantial and plausibly growing proportion of older adults’ homes include a companion animal. Approximately one-third of aggregated 65 years and older cohorts in Western countries report having a companion animal (Peak, Ascione and Doney, 2012; Himsworth and Rock, 2013; McNicholas, 2014; Bennett *et al.*, 2015), and pets are also becoming increasingly prevalent in non-Western countries (Headey, Na and Zheng, 2007; Hansen, 2013). In response to the aging of the population, many communities world-wide have begun to adopt and tailor an “age-friendly” approach to promoting ageing-in-place. According to the WHO, “an age-friendly city *adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities*” (World Health Organization, 2007, p. 1, emphasis added). The intent of age-friendliness is itself underpinned by predominant and recognizable public health interests, with strategies aimed at addressing social determinants of health that otherwise serve to perpetuate health inequities later in life (Pavalko and Caputo, 2013; McGovern and Nazroo, 2015). Yet even as these global efforts to optimize communities to support ageing populations have intensified (Plouffe and Kalache, 2011; Steels, 2015), little

attention has been paid at the policy level to the ways that companion animals fit into peoples' lives and ageing experiences.

Housing is a key priority when it comes to supporting the health and wellbeing of the ageing population, and is ubiquitously recognized as a priority for age-friendly communities (Menec *et al.*, 2011; Plouffe and Kalache, 2011; Steels, 2015). Housing is also recognized as both a human right and a social determinant of health, and thus in order to age in place, older adults require access to safe, appropriate and affordable homes (Plouffe and Kalache, 2011; Lehning, Smith and Dunkle, 2015; Leibing, Guberman and Wiles, 2016). A disproportionately low supply of rental housing in several different countries, whether aimed at older adults or not, is welcoming of pets (Ormerod, 2012; Huss, 2014; Power, 2016). Older adults in particular regularly encounter an implicit expectation that their pet is dispensable when seeking appropriate and affordable housing in which to grow older (Morley and Fook, 2005; Ormerod, 2012; Huss, 2014). Indeed, moving, rental or housing issues are among the most commonly cited reasons for pet relinquishments to shelters (Coe *et al.*, 2014). Shelter statistics further suggest that between one-quarter and one-third of relinquished pets, which number in the millions each year, will be euthanized rather than re-homed (Coe *et al.*, 2014; ASPCA, 2017). Thus for older adults with pets, contemplating housing options that exclude a longtime companion animal may be complicated by feelings of guilt and grief (Adams, Bonnett and Meek, 2000; Morley and Fook, 2005), given the possibility that euthanasia may be their relinquished pet's fate. Such experiences may also be exacerbated by the conflicting ethical values at play, with older adults feeling morally bound to protect and care for their companion animals, yet with housing providers viewing non-human animals as a liability that is also dispensable (Power, 2017;

Toohy and Krahn, 2017). Few studies have considered the impact of enduring such situations on older adults' physical, mental, and social well-being.

To help to elucidate ways that pet-prohibitive housing rules may be experienced by older adults living in economically vulnerable circumstances, we offer accounts of three specific cases where matters of housing affordability and availability were enmeshed with personal attachments and commitments to animal companions. Each of these stories offers insights into different ways that individuals may negotiate their constrained capacities, as they make active efforts to maintain their relationships with, and fulfil their commitments to, companion animals as while aging-in-place. Our interpretation of these stories is shaped by our interest in advancing evidence around manifestations of solidarity, as conceptualized using the different theoretical orientations discussed above, and in relation to perpetuation of socially-patterned health inequities across the ageing population.

## **5.5 Methodology**

For this study, we have drawn empirical material from a comprehensive, mixed methods case study (Yin, 2009), using an approach that also drew closely on tenets of ethnographic research (Stewart, 1998; LeCompte and Schensul, 1999; Schensul, 2009). Our case study garnered a range of perspectives that contribute to a comprehensive understanding of ageing-in-place with pets. These included six administrative, front-line, and volunteer representatives of social service agencies that support vulnerable older adults; five administrative, front-line, and volunteer representatives of local animal welfare organizations; two family physicians who treat older patients; one policy analyst involved in housing provision for older adults; six administrative or front-line employees representing two state-subsidized seniors housing providers; and a socio-

economically diverse sample of fourteen older adults who were living independently with pets at the time of our interviews. The perspectives of service providers informed, but are not the focus of, this manuscript, and thus a detailed description of our recruitment and sampling strategy for that component of our study is offered elsewhere (Toohey *et al.*, 2017).

Our sample of older adults was purposively recruited via posters displayed at a prominent and centrally-located seniors centre, public libraries, a prominent animal shelter, and our city's primary central foodbank. Snowball sampling also took place, as a small number of both service provider and older adult study participants voluntarily recruited additional participants from within their social or professional networks, which resulted in representation of harder-to-reach voices in our study (i.e., those older adults who do not frequent public venues).

Our fieldwork was conducted in Calgary, Canada, between January 2015 and October 2016. In addition to conducting participant observation, semi-structured interviews, and facilitated meetings, the first author also organized a research symposium on companion animals and ageing, which took place under the umbrella of a national gerontology conference held in October 2015 in the city where our research took place. The symposium brought together both academic and community agency perspectives on ageing-in-place with pets, thus helping to establish contextual currency for our case study (see Supplementary File).

Based on our data-gathering, a stark shortage of affordable, pet-friendly housing within our city was repeatedly highlighted as an overarching problem for both lower-income older adults and, often, for organizations that were assisting them (Toohey *et al.*, 2017). In this article, we delve more deeply into understanding tangible ways that this housing supply shortage may be affecting older people's lives, as well as the lives of their companion animals.

All interviews were conducted by AT, at a location of the participant's choosing. Often,

these took place in the homes of our participants, or in a nearby public park that they enjoyed and frequented. The participants were often accompanied by their companion animal during the interview, which offered valuable opportunities for AT to observe these relationships *in situ*, as captured in field notes (Emerson, Fretz and Shaw, 1995) and in reflective research memos that AT created as data collection progressed. Interviews were designed to begin by establishing a comfortable rapport, before posing a series of experiential and reflective questions (Spradley, 1979). Interviews invariably began with the participant describing how their companion animal fit into their typical day. The conversations would then move onto topics including the nature of the participant's relationship with their pet (or, occasionally, pets); caregiving activities, challenges and costs; social networks and social support; housing; and, finally, perceived benefits and challenges of animal companionship later in life.

Over the course of interviews with our full sample of fourteen older adults, three participants described for us experiences of undergoing, or else initiating, a major housing transition. These three were also living in economically vulnerable circumstances, and were thus dependent upon our city's affordable housing stock in order to establish a home where they could grow older in a safe and meaningful way. We therefore selected these specific and deeply personal ageing-in-place accounts for deeper analysis, drawing upon a socio-narratology approach (Frank, 2012) as described below. Ethical clearance for this study was granted by the University of Calgary Conjoint Health Research Ethics Board. Informed consent was provided by all individuals who participated in our study.

Digital audio recordings of each interview were transcribed verbatim and reviewed for accuracy by AT, who also wrote extensive research memos to capture post-hoc reactions and reflections. Throughout this process, AT drew iterative comparisons both within each interview

and between interviews, while also maintaining reflexivity and self-awareness of both scholarly knowledge and evolving understandings of the range of experiences that emerged as data collection progressed. MR reviewed all written materials, and both authors met frequently as data collection and analysis progressed to discuss the cases individually, and also as a subset of the wider dataset.

Based on the content shared by each participant, we present their stories as reconstructed vignettes that remain as close as possible to their own accounts. In doing this, our approach was guided by Frank's (2012, p. 105) conception of dialogical narrative analysis, with our vignettes becoming the "...retelling (of a story) in a varied form to create new connections." We have reorganized the original stories somewhat to clarify context and chronology, so as to render these understandable to others. Yet in doing this, we have also asserted a layer of interpretation, by making decisions about which details constitute meaningful representations of our theoretical interests in solidarity, health equity, and the ethical principles that underlie active promotion of ageing-in-place. We have aimed to do this responsibly, thus respecting these tales as belonging to our participants (Frank, 2012).

We do not speculate on the extent to which our participants' accounts are typical ageing-in-place situations, yet Frank (2012) attests that extreme stories enable deep understandings of social arrangements that affect all, thus invoking a "movement of thought" (Frank, 2012, p. 74) that is both informed and shaped by such accounts. Accordingly, in our analysis, we have critically engaged with the stories so as to draw out plausible understandings of ways that moral values may be understood in relation to lived experiences of ageing-in-place and relationships with companion animals, and have also drawn links between these underlying ethical considerations and health equity. We have been attentive to the intermingling of human and



companion animal interests within activities that our participants described, given the centrality of these considerations to establishing or maintaining a home in which to age in place.

## **5.6 Findings**

Because our overarching intent was to explore older adults' experiences of ageing-in-place with pets, we initially identified age and pet-ownership as primary determinants of eligibility for our study. While we harbored a theoretical interest in the experiences of older adults experiencing economic vulnerability, we also acknowledged that many retired persons may be negotiating fixed incomes and shifting needs. With our broader case study findings pointing to housing as a key determinant of ageing-in-place with a pets (Toohey *et al.*, 2017), we were privileged to have had the opportunity to speak with three participants who related to us their first-hand experiences of – and in all cases, challenges with – housing transitions. These three participants were dissimilar in many respects, yet all were renters, and none owned a home when we spoke; all were single and somewhat socially-isolated, with no spouse or immediate family (siblings, children, etc.) available to provide symbolic or material support; and all were living in lower income circumstances, with minimal or non-existent investments, equity, or savings. Finally, each also felt an unequivocal commitment to a companion animal, who was also viewed as an integral and dependent member of their household.

As we present our participants' situations below, we use vignettes to highlight the complicating ethical dimensions of their relationships with their animal companions, which factored into their efforts to secure an appropriate home in the community. We also consider how each participant negotiated their particular ageing trajectory, as constrained by reduced capacities

in relation to both autonomy and agency. Pseudonyms have been assigned to our human participants, but at their respective requests, their companion animals' names have remained unchanged.

### **5.6.1 Being housed versus having a home: More-than-human solidarity and agency**

Alice, a petite woman with greying hair and an intensity about her, lived in a local trailer park alongside her cat, Kismet. And truly, they did live alongside one another in those early days. Alice felt responsible for, but not particularly fond of, her feisty feline companion.

Alice owned her trailer and had lived there for several years. She was not quite 60 when the trailer suffered irreparable water damage and was condemned. Living on a very low income, she and Kismet were suddenly homeless and in need of affordable housing. Alice hunted the private market for something affordable and cat-friendly, but with no luck. She also began applying for seniors' housing, but was regularly turned down for being under 65. None of the leads she followed accepted cats, either. She described herself as being "stuck."

Temporarily, Alice and Kismet were able to move into another trailer that was being rented by a girlfriend, who was living there with her two dogs. This was not optimal, though – the dogs chased Kismet at any opportunity. And Alice's view of Kismet began to transform: she was impressed by the small cat's spunkiness, holding her own in the face of canine adversity. She also admitted that Kismet spent a lot of time living out-of-doors, which was not ideal.

And, more to the point, the trailer was on the market. Alice recounted how she and her roommate would hide the "for sale" sign whenever they could, as both knew that it was next-to-impossible to find affordable homes for their multi-species families. So, Alice continued to seek more permanent solutions, applying to a variety of seniors' housing providers.

As her own level of desperation grew, so did her anxiety about Kismet. Aloof and independent, Kismet did not have a temperament that would easily lead to rehoming, plus she was an older cat, which cut her chances even further. And then, there were the stories in the news about adopted animals being horribly mistreated. With these thoughts weighing heavily upon her, the specter of euthanasia began to haunt Alice.

Finally, Alice had her break, and was offered an apartment in a seniors housing facility. With a strict no-pets policy. Alice resolved to have Kismet euthanized. Desperation gave way to devastation as she took her small cat, by taxi, to a veterinary clinic. But her request was refused. Not just once, but by two different veterinarians. "They did not understand my story," Alice said. Both accused her of viewing her cat

as “inconvenient,” and both asked “Don’t you have friends?” So – two of her nine lives spent, Kismet survived, although finally, Alice was left with no choice but to surrender her to a shelter. To Alice, this felt like a fate worse than death. Another cab ride, some paperwork, a hand-off, and that was that.

Alice truly was devastated at this point. Yet, as she made arrangements to move into her new home, she made another decision. She was going to get Kismet back. And as soon as she had settled into her new home, she did just that. She took a city bus back out to the shelter and pleaded with the personnel to let her take her cat back. One refused outright, stating “Sorry, you gave her up.” But another was sympathetic. Acting upon her own discretion, the technician returned Kismet to Alice. Alice did not, at this tenuous point, reveal the truth, that she would be keeping Kismet illegally in her new home. Instead, she lied and said that they would be going back to a rental at the trailer park. The implicit understanding, though, was that Kismet was not to be brought back again.

All went well for Alice and Kismet for the first few months in their new home. Until a complaint from a neighbour, who heard the pitter-patter of feline feet through his ceiling, brought Alice’s cat to the building manager’s attention. He, in turn, was sympathetic: Alice was a model tenant in all other ways. But the facility’s board of directors was adamant. The building manager was over-ruled, and Alice was given one month to vacate the premises with her cat.

Alice offered few details about this next phase of her life. A man had moved into the trailer park shortly before she had left. She knew that he had problems with alcohol. Still, Alice approached him to see if she and Kismet could share his trailer, as roommates. They had nowhere else to go. Not even a drop-in centre would let Alice stay together with Kismet. The man agreed. Alice admitted vaguely that “there were problems, but I dealt with them.” But she also recounted, of her continued efforts to find housing, that “I was looking furiously, ‘cause things were getting kinda heated in the place I was living.”

Eventually, Alice found herself in downtown Calgary, with a friend, celebrating Canada Day. She loved the vibrancy of the area, and noticed that several of the high-rise buildings housed state-subsidized units. She tracked down the managing organization. It was sheer luck that one of these was a seniors affordable housing facility that allowed pets – the only one in the city to officially sanction cats. It was also sheer luck that Alice met the criteria for tenancy in terms of her age and her income-level, and that an apartment was available for immediate occupation, once her application was accepted.

Alice had been in limbo for three years, from the time that her trailer was condemned until the point when she found her new home. “And my cat, you know, she was the saving grace, really, because she was so resilient. And I knew once we got into the building, we – it was gonna be fine.”

Alice's story offers a glimpse into the indomitable resolve that must underlies active, if constrained, efforts to establish a stable home in which to grow older with a companion animal. While much of the literature on human-animal relationships has focused on emotional and psychological factors, Alice's story reveals the extent to which moral considerations also underscore her actions. In particular, we were struck by Alice's shifting sensibilities around manifestations of solidarity for her feline companion. For Alice, the types of costs she was willing to carry were wide-ranging, and evolved as her situation progressed. At different points throughout her trajectory, she was willing to accept the mental anguish of ending her cat's life; the risk of being "caught" breaking housing rules; and the physical danger and emotional strain of living in an unsafe situation. Indeed, her perception that even drop-in shelters would not accommodate her pet has been confirmed as a commonly-encountered situation (Labrecque and Walsh, 2011).

Alice's active agency, as manifest in the strategies she used to protect Kismet, may be understood in terms of constitutive solidarity (Dawson and Verweij, 2012), via her sense of having a moral obligation to a dependent "other" belonging to a separate species. Simultaneously, her actions align with Prainsack and Buyx's (2012) definition of interpersonal (Tier I) solidarity, as in Kismet she recognizes similarity (for instance, resilience) and is willing to carry costs that she believes are in her cat's interests, which she prioritizes even over protecting her relationship with Kismet. Still, as Alice sought housing that would enable her to age in place and *also* maintain her commitment to protect her cat, her opportunities to do this were limited by her position within a social hierarchy, and particularly being a lower income, less educated, single female, as well as a renter (Power, 2016). The factors that held her in this disadvantaged social position also served to constrain her autonomy (Baylis, Kenny and

Sherwin, 2008), and shaped her limited opportunities for agency, as she desperately sought a home for herself and for her cat.

If we view solidarity as a moral value that underscores society's willingness to provide subsidized and affordable housing opportunities for those living in economically disadvantaged circumstances, Alice's situation serves to point out its failure to truly serve this population's interests. Housing providers in our locality currently stop short of carrying the perceived costs of protecting older adults' desires to maintain relationships with pets as they age in place, regardless of the potential health benefits that these relationships may proffer and the unfairness to a population within which autonomy is already highly constrained. Furthermore, disrupting more-than-human solidarity creates a moral conundrum for such older adults, whose moral commitment to a companion animal must be considered alongside the experienced benefits of the relationship itself, and weighed against the basic and urgent need for a home. The systemic factors that conspire against older adults' desires to maintain a relationship with a companion animal, as illustrated throughout Alice's story, raise questions around social justice for this population (and for their companion animals), since they serve to both negate the potential benefits of animal companionship and curtail access to affordable and appropriate housing. In the end, Alice literally stumbled upon a rare situation where re-establishing a home for ageing-in-place would not preclude fulfilling her moral commitment to Kismet.

### **5.6.2 Negotiating changes in status: More-than-human solidarity and dignity**

Jack is a well-educated man, holding two different bachelor's degrees. He had lived in several different cities across Canada, and worked professionally in several different sectors – including teaching and journalism – before settling into a 30-year career in the auto industry. Throughout his tenure, Jack was, by his own admission, exceptional at his job and regularly outperformed his colleagues. Thus he lived comfortably, and easily found employment wherever he elected to live.

At the time when he recounted his story, Jack and his cat, Kleo, had been together for about eight years. Jack had adopted Kleo from an Ottawa shelter. The moment he set eyes on her, he knew that he had found his cat, and Kleo seemed to have chosen Jack as well. Kleo was very young, under a year old, and had suffered abuse and neglect in her previous situation. Jack admired her resilience, and – keenly aware of the cruelty she had been subjected to – he doted on her from the start. Kleo, in return, gave him her exclusive trust. Jack viewed his relationship with Kleo as equivalent – or even preferable – to any human companionship that he has ever experienced. He reflected that, “My life would be very empty without her.”

Prior to relocating to Calgary, Jack had owned a condo unit in Ottawa. After choosing to move to Calgary in the early 2000s, Jack found property values to be inordinately expensive, and opted to rent rather than purchase another home. Because he earned a comfortable salary, he was able to acquire a private-market, cat-friendly rental in the southwest quadrant of Calgary. But, as Calgary’s economy boomed, his rent rose steadily. Tired of this, Jack moved with Kleo into a more stable and affordable rental situation, near downtown. This is where Jack and Kleo lived quite happily for about 5 or 6 years, until Jack’s circumstances changed.

In May of 2012, Jack was sitting at his desk at work when he suffered a stroke. Recognizing the signs, he was able to call 911, and credits the quick response time of the paramedics with the extent to which he has been able to recover. Still, three years later and in his early 60s, Jack walks slowly and with a distinct limp. He has lost hearing and feeling on one side of his body, and simply cannot process information as quickly as he once could.

After his initial recovery, Jack tried to resume his career, where years of hard work had led to a respected and responsible placement in a fast-paced, competitive environment. But his efficiency had slowed considerably, and he second-guessed his ability to be thorough and accurate. He began to face scrutiny and criticism from his colleagues, and soon left again. He explored alternate employment options, but with no luck. He quickly realized that he could no longer work. As he put it, “I had gone through over \$50,000 in savings in three years, keeping my lifestyle afloat, figuring I’m going back to work tomorrow. Not happening.”

During those years, Jack experienced increasing constraints. He had less and less money for the modest extras that he had always enjoyed, and his savings were put towards the basics: his rent, his medication, food on the table, and of course Kleo. She asked for little, and yet Jack took great pride in maintaining an exceptional level of care for his feline companion. The efforts he made to maintain his attentive caregiving routine also salvaged for Jack a sense of purpose and self-efficacy, as he has struggled to come to terms with his own diminished abilities and uncertain future.

Eventually Jack could no longer pay his rent, and was forced to face the reality that he and Kleo must move elsewhere. A neighbour recommended that he contact a local seniors centre for assistance, which he did. Jack was directed to consult with one of the

housing advisors. When he mentioned Kleo, the advisor exclaimed, “Well, that narrows the search!” Jack had exactly one option to consider. So there he went. “I left 1,020 ... to come to 400 square feet. Talk about a furniture sell-off and giveaway!” And at the time when we spoke, Jack was still struggling to adapt to the constraints of his new, impoverished existence. He described a pervasive frustration with the relentless sound of sirens, which flood his new home at all hours of the day and night.

In arranging his affairs, Jack had always planned to work well into later life, as had his father, his uncle, his grandfather. Jack had led his life accordingly, putting a modest amount of savings aside while anticipating several years of income still to come. Instead, he found himself embroiled in a struggle even to access the disability income that he is due. His initial application was rejected, much to the disbelief of his two attending physicians, both of whom supported his (eventually successful) appeal.

As he listed the many ways that his life has been irrevocably changed by his stroke, Jack reflected that he had fallen far, and had landed in a place where he never expected to find himself – a place that is destitute of the choices and privileges he once had. Yet there is one choice that he refuses to relinquish. “I wouldn’t be living (in this affordable apartment), or anywhere without Kleo. I’d be renting a room somewhere for \$500 a month. In a basement. Probably an illegal suite. Because there’s no way I would give up the cat!”

Jack’s story illustrates the extent to which a close bond with a pet may underscore unprecedented transitions in ability, identity, and status, thus offering a source of continuity that maintains an important link to one’s former identity and, ultimately, dignity. Jack’s story does not encapsulate the raw vulnerability of Alice’s, and yet his trajectory was steeped in social decline in a way that Alice’s was not. Prior to his stroke, Jack had led a life that reflected normative middle-class status. As a result, Jack was accustomed to a level of autonomy and choice akin to such a social position. Alice, in contrast, had not attained such cultural markers as university-level education, property-ownership, or a competitive and economically-valued career. Both Jack and Alice (coincidentally) arrived in the same cat-friendly and affordable haven. Yet even as Alice struggled, she had ultimately moved laterally across her available social spectrum, and was grateful for the stability of her eventual resolution. Jack, on the other hand, was keenly aware of his downward fall. With his physical and mental ability severely

compromised, his financial resources depleted, and his social resources few, Jack was acutely affected by the absence of choices remaining available to him.

We suggest that Jack's story illustrates a disruption of moral values felt by individuals and those that shape institutionalized practices. Having found himself in a new and unfamiliar socio-economic situation, Jack was astute to what he viewed as an ungrounded and puzzling absence of compassion on the parts of housing agencies in Calgary for older tenants who wish to have a pet. Many older adults, like Jack, will inevitably be navigating changing physical, emotional, and material circumstances, as lives their transform in unpredictable ways that are often outside of their control. Throughout the challenges that Jack experienced following his stroke, the continuity provided by his relationship with Kleo became steeped with symbolic meaning around ability, achievement, and identity. At the same time, as all other aspects of his life continued to decline, Jack's sense of the importance of doing whatever it took to ensure that her needs were being met and well-being assured became non-negotiable. Thus Jack's story interweaves his sensibilities around having a moral responsibility to care for and earn the trust of a formerly mistreated and abandoned creature (i.e., constitutive solidarity) with an acute recognition of his and Kleo's own particular inter-dependencies (i.e., more-than-human solidarity at the interpersonal (Tier 1) level). Overall, the circumstances brought on by Jack's stroke and resultant impairment forced him to endure a series of transitions that stripped away layers of dignity, as his own autonomy was eroded by loss of wealth, profession, ability, and identity. Remaining insistently committed to Kleo was one of the few ways that Jack was able to assert control and choice as he negotiated his new reality.



### 5.6.3 Nowhere to go: More-than-human solidarity and (relational) autonomy

Hank and Jellybean, a three-year-old labradoodle, lived in an old, run-down apartment building located on a side street of a gentrifying neighbourhood. In fact, they lived almost directly across the river – about two kilometres as the crow flies – from the building where Jack and Alice (and their respective cats) finally found their new homes. On his street, Hank’s home stood out for its shabbiness and disrepair – but also for the ways that he had put his own personal signature on the postage-stamp-sized yard that lay between his front door and the street. During the summer, his garden comprised a colorful tangle of wild flowers and tomatoes, bursting from a ramshackle collection of flower pots. It also held a large bowl of fresh water adorned with a cheeky, hand-written sign that read “Dog water - no cats.” It was impossible to sit out in Hank’s tiny front yard without bearing witness to a steady stream of spontaneous greetings and conversations, as both regular and transient passers-by would stop to say hello to Hank and to the affable Jellybean.

Indoors, Hank’s apartment was neatly kept and might even be described as cheerful, in spite of its cluttered dimness. Over the years, he had filled it with an array of contents that were rife with meaning, and that also helped to mask signs of overwhelming neglect on the part of the landlord. In the 35 years he had lived there, Hank’s carpet had never been replaced; his walls never painted. Hank had covered his dingy walls with ageing photographs of family members, most of whom were now gone. Hank had no spouse, and having been predeceased by most of his relations – including his parents, all four of his siblings, and his two sons – he lived alone with Jelly. Yet he was also fortunate to have had a dedicated, if informal, network of neighbours keeping their eyes on him – occasionally enlisting him for small jobs or favours, but also ready to step in when he needed support.

At 81 years of age, Hank’s daily existence generally revolved around two priorities: taking care of his dog, and dealing with his own deteriorating health. Hank was managing ailments like blood clots and blocked arteries. More recently, he had begun to struggle with painful arthritis in his hands, shoulders and knees, rendering certain daily activities, like getting dressed each morning, difficult and painful ordeals.

Even so, aside from the occasional day when lethargy or pain prevailed, Hank’s various health issues did not impede his daily routine where Jelly was concerned. Their day started early, with a quick drive to a half-hour walk around a nearby dog park, a spot where both were known and welcomed. In addition to regular, shorter jaunts through their own neighbourhood, the two repeated this longer walk at least once, often twice more, each day and in all but the most inclement of weather. Most days, they also picked up two neighbours’ dogs, who otherwise would not get out. Hank also lavished Jellybean with toys and treats, generous meals, and – most importantly – attention. Jellybean responded with deep loyalty and affection for Hank in return. They were an inseparable pair.

Eventually, a third priority crept into Hank's life: trying to find a new home. An ominous "for sale" sign had been placed in front of his building. And this was just one of the challenges that his current housing increasingly posed. His rent had been rising for years, as had the cost of his utilities. With his annual income falling well below the poverty line, Hank sublet a room to offset these expenses. His roommate, though, suffered from alcoholism, and Hank was often forced to track him down to collect the rent several days past-due. And with his own health diminishing, Hank increasingly struggled with the basic tasks required to keep his space livable. Around this time, and in an effort to cope, Hank added physician-prescribed antidepressants to his growing battery of medications.

Hank began to actively search his neighbourhood for a new home that he could afford, and that would accept Jellybean. But even local landlords with whom he had become acquainted over the years would not budge on their 'no-dogs' rules. Hank reflected that "They look at you like you're from outer space, when you ask about the dog!" And indeed, several local community agencies have painted a similarly grim picture of the severe shortage of affordable housing in Calgary that allows dogs. Still, Hank was uncompromising when it came to his commitment to Jellybean. "That's why a lot of dogs and cats get abandoned!" he reflected. "It's because people get evicted, or they just have to move for some reason, and they got a pet, and they can't find a place. So the only way they can do it is they gotta abandon the- the- the – I'd never do that with him anyway. I'd live on the street first."

As time passed, however, the inevitability of their fate became more pressing for Hank. As did his frustration with his home's disrepair and neglect, a constant reminder of recurring challenges with his landlord. Hank was keenly aware that property values in his neighbourhood had skyrocketed as it gentrified. The increasing shabbiness of his own complex, however, in conjunction with the fluctuating economy of the city, led to difficulties keeping tenants in the other three units, resulting in substantial rent reductions for those units subject to turnover. But not for Hank, whose monthly rent continued to reflect a time when the building was more desirable. Hank eventually went so far as to withhold his rent in an effort to convince his landlord do something, "...just brighten the place up a little." This act of resistance, however, was met with a curt eviction warning, swiftly taped to his front door within two days of the rent being due. The symbolism of this gesture, alongside the tangible financial and physical struggles that Hank was enduring day in and day out, pushed him even further into a place of despondency and hopelessness. In essence, Hank found himself living daily with the conviction that he and Jellybean needed to leave, but they simply had nowhere to go.

In Hank's situation, we are confronted with the consequences that a scarcity of affordable housing options for older adults with pet dogs may have in relation to promoting ageing-in-place. Dog-ownership later in life appears to hold particularly promising health-promoting potential. Beyond companionship, dog-walking has also been shown to facilitate social engagement, sense

of community, and daily walking (Rogers, Hart and Boltz, 1993; Thorpe *et al.*, 2006; Knight and Edwards, 2008; Toohey *et al.*, 2013; Gardner, 2014), all of which may help to offset the growing risk of social isolation associated with older age (Cloutier-Fisher and Kobayashi, 2009; Newall and Menec, 2015). This was unquestionably the case for Hank. Yet as time progressed, Hank's experience of ageing-in-place gradually became characterized by struggle, dependency, and a paucity of options, all of which served to undermine the health-supporting attributes that dog-ownership was otherwise contributing to Hank's life.

The shortage of dog-friendly housing in Calgary also served to create a unique dependency situation for Hank, thus amplifying landlord-tenant power arrangements. Hank's life, in his early 80s was characterized by a powerlessness stemming from extreme poverty, deteriorating physical and mental health, eroded dignity, and continual uncertainty in relation to both his own and his dog's fates. The treatment Hank received by his landlord was demeaning, and yet the absence of alternatives for keeping his relationship with Jellybean intact gave him little choice but to tolerate it. Renters are particularly susceptible to exploitation on the part of landlords, as property owners who are advantaged by their combined cultural and material positions of power (Power, 2016). Based on his tenuous social position and lack of resources, Hank's autonomy was severely constrained (Baylis, Kenny and Sherwin, 2008), and his opportunities for agency seemingly non-existent unless he was willing to dispense with his only companion in life. Instead, while struggling to maintain his home and to continue to live independently, Hank was beholden to a landlord that was able to profit from the desperate shortage of dog-friendly housing by charging an unfairly elevated rent and allowing the unit to fall into untenable disrepair, even as it was steadily occupied.

As he reflected on the depth of his personal commitment to Jellybean, Hank's mindful and non-negotiable solidarity with Jellybean embodies a willingness to carry costs and a recognition of similarity in needs (Prainsack and Buyx, 2012). Simultaneously, his perspective suggests a recognition that the differential treatment of non-human animals versus people leads to suffering on the part of both people and their pets, revealing a more generalized sense of normative moral values, in accordance with constitutional solidarity (Dawson and Verweij, 2012). Hank unequivocally viewed the lack of pet-friendly housing at a societal level as a troubling cause of pet-relinquishment, and (ultimately) suffering on the part of the animals themselves, which is also confirmed in the literature (Coe *et al.*, 2014). Ideally, this coalescing of more-than-human solidarity practiced at both individual (i.e., interpersonal) and organizational (i.e., communal or collective) levels, via an easing of dog-prohibitive housing rules, would ultimately extend the choices and decisions available to Hank, and would ideally serve to leverage the health-promoting potential of dog-ownership. Even as Hank's own physical and mental health deteriorated, his commitment to Jellybean's well-being remained his top and defining consideration. And while affordable seniors housing that banned dogs could have been attainable for Hank, his moral and emotional commitments to Jellybean rendered him both trapped and invisible (Leibing, Guberman and Wiles, 2016).

## **5.7 Implications**

In presenting these three accounts of ageing-in-place with pets, we have suggested that in situations where individual capacity is constrained by economic vulnerability, older adults may practice more-than-human solidarity by prioritizing both their moral and emotional commitments to their pets, even as these disrupt their own ageing-in-place needs and put their own health and

well-being at risk. In failing to reflect older adults' values and moral commitments to their companion animals, the pet-prohibitive rules that often dominate affordable housing provision may render older adults more susceptible to, rather than protected from, deteriorating physical, mental, and social well-being as they age.

In our estimation, the stories we have shared in this manuscript do not suggest that Alice, Jack, or Hank's attachments to their pets were unusual or leaning towards being psychopathological (Beck and Katcher, 2003; Chur-Hansen, Winefield and Beckwith, 2009), even as each prioritized their commitment to their companion animal in a way that complicated and even eroded their own health and well-being. We suggest that each story reflects a series of rational, deliberate decisions, shaped by individual capacities and commitments to care for their animal companions, but shaped as well by moral values, which we understood as being motivated by their sense of more-than-human solidarity. Each honored their individual human-animal bond; recognized both similarity (in terms of needs and experiences) and difference (in terms of the diminished status of pets as subjects in their own right); and, finally, indicated a willingness to carry costs stemming from the belief that it is simply not "right" to abandon a dependent creature in order to prioritize human needs and expectations.

We thus question the extent to which a constitutive form of solidarity (Dawson and Verweij, 2012) underscores collective commitments to provide affordable housing that enables disadvantaged older adults to age in place in ways that are meaningful and fulfilling, if it disrupts the choice to retain animal companionship. Within the prospective tiers of Prainsack and Buyx's (2012, 2016) conception of institutionalized solidarity (i.e., the housing rules established by housing providers and the absence of legislative protection for the rights of pet-owning tenants), housing opportunities in Calgary overwhelmingly fail to account for more-than-human solidarity

practiced by many of the individuals whom affordable housing is intended to support. The constraints imposed upon this population, as disadvantaged by economic vulnerability and rental insecurity, illustrate a tension around the expectations placed upon our ageing citizenry in return for the supports that are provided, and the terms under which these are offered. Requiring an older adult to abruptly end a relationship with a companion animal also has social justice implications, as such situations are disproportionately experienced by the most economically and socially vulnerable older adults in our population, for whom a pet may arguably proffer the most benefit (Poresky and Daniels, 1998; Morley and Fook, 2005), and for whom autonomy is most constrained (Baylis, Kenny and Sherwin, 2008). Furthermore, disrupting these relationships also harms the companion animals themselves and feeds into the human-caused problem of unwanted pets, leading to millions of healthy animals being euthanized every year (Coe *et al.*, 2014; ASPCA, 2017).

The complex emotional and ethical relationships that many people experience with companion animals reflect individual views of companion animals as having a valued subjectivity (Fox, 2006; Rock and Degeling, 2013) and having interests that merit the same consideration as would be granted a dependent (human) family-member. As cautionary tales, our three vignettes illustrate the extent to which an individual's own physical, mental, and social well-being may become entangled with that of their pet. In light of these complex relational dynamics, we suggest that solidaristic practices at institutionalized levels, such as those that shape housing prospects for older adults in lower income circumstances, must reflect and subsume the moral complexity of solidarity practiced by individuals. Congruency of moral values that underscore both interpersonal and institutional practices will be foundational to achieving fair and equitable promotion of ageing-in-place.

### **5.8 Statement of conflict of interest**

None to declare.

### **5.9 Acknowledgements and funding**

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### 5.11 Supplementary File – Companion Animals & Ageing Research Symposium Program

Organized by the first author as part of the 2015 Canadian Association on Gerontology (CAG) - 44th Annual Scientific and Educational Meeting

Title: Companion Animals & Ageing: Sharing Perspectives on Benefits and Challenges

Date: Saturday, October 24, 2015

Chair: Ann Toohey, University of Calgary; Discussant, James Gillett, McMaster University

S10 ElderDog Canada: Supporting Seniors and their Canine Companions

Ardra Cole<sup>1,2</sup>

<sup>1</sup>ElderDog Canada, Canada, <sup>2</sup>Mount Saint Vincent University, Canada

S11 The impact of the aging population on animal shelter operations: Thinking through the consequences for seniors and their pets

Philip Fulton\*

Calgary Humane Society, Canada

S12 Pet ownership, survival, cardiovascular health, and quality of life over time: The Manitoba Follow-up Study

Audrey Swift, Robert Tate\*

University of Manitoba, Canada

S13 Pet ownership, other domestic relationships, and satisfaction with life among seniors: Results from a Canadian National Survey

Chelsea Himsworth<sup>1,3</sup>, Melanie Rock\*<sup>2</sup>

<sup>1</sup>University of British Columbia, Canada, <sup>2</sup>University of Calgary, Canada, <sup>3</sup>BC Ministry of Agriculture, Canada

S14 Promoting health for an aging population: The role of community services in enhancing benefits and addressing challenges of pet ownership for seniors

Ann Toohey\*, Jennifer Hewson, Cindy Adams, Melanie Rock

University of Calgary, Canada

S15 Representations of Companion Animals and Aging in North America

\*Rachel Weldrick

University of Western Ontario, Canada

\* indicates presenting author

Note: a summative analysis of this session prepared by the first author and distributed to all participants (see Appendix F). Source: [http://cag.conference-services.net/programme.asp?conferenceID=3888&action=prog\\_list&session=35248](http://cag.conference-services.net/programme.asp?conferenceID=3888&action=prog_list&session=35248) (accessed May 2017)

## Chapter 6: Discussion

### 6.1 Overview: My research aim

The overall aim of my case study was to explore the health-promoting potential of relationships between older adults and companion animals as they unfold through experiences of aging-in-place, and in the contemporary context of a rapidly aging population. As an important contributing factor, aging-in-place is being actively promoted and supported by governments. Moreover, these efforts are increasingly being shaped by the World Health Organization's (2007) age-friendly framework, which was devised to enable active participation in social life throughout older age. This policy framework is intended to be an enabling one (Scharlach, 2016), and highlights the need for the supportive involvement of a wide range of sources, including different levels of government, various community and healthcare service providers, neighbours, friends, family members, and others. Even so, there has been a substantial lag in terms of prioritizing efforts to ensure readiness for the aging population, which has meant that there remains a deficit of structured supports for aging-in-place. My case study has therefore considered a range of socio-ecological factors, in rethinking the complexities that underlie the health-promoting potential of human-animal relationships, and the public health implications of our treatment of these relationships. My case study also sought to generate insights around economically- and socially-vulnerable older adults' experiences of aging-in-place with companion animals in our local setting. While there are indications that such older adults may benefit the most from having a companion animal (Anderson, Lord, Hill, & McCune, 2015; Himsworth & Rock, 2013; McNicholas, 2014; Morley & Fook, 2005; Poresky & Daniels, 1998), the literature that has focused on these sub-populations is scant.



Throughout my case study, I have aligned my research interests with priorities held by the World Health Organization's (2007) age-friendly communities movement, which has shaped both global and local efforts to promote aging-in-place, including here in Calgary (City of Calgary, 2015). Thus my findings are positioned to be directly linked to local policies and practices within my case study setting. Yet I suggest that the insights generated through my research also have national and international relevance in settings where trends of both pet-ownership and population-aging are similar to Canada's, and where age-friendly strategies are being put into place (Menec, Means, Keating, Parkhurst, & Eales, 2011; Plouffe & Kalache, 2011; Steels, 2015).

## **6.2 Summary of manuscript-specific findings**

Below, I provide summaries of the main findings of each of my case study components, followed by a brief synthesis of these. From there, I expand more fully upon the overarching implications of my case study as a whole, revisiting the conceptual framework that I offered in Chapter 1 (i.e., Figure 1.1).

### **6.2.1 Is pet ownership relevant to social participation and life satisfaction for older adults who are aging-in-place? Findings from the Canadian Longitudinal Study on Aging (CLSA)**

At times, older adults have been criticized for prioritizing their pets' needs and interests over their own (Beck & Katcher, 2003; Chur-Hansen, Winefield, & Beckwith, 2009; Wells & Rodi, 2000). Conventional discourses around "successful" and "active" aging (Katz, 2000; Rowe & Kahn, 1997; Rozanova, Noulas, Southwick, & Pietrzak, 2015; Tate, Swift, & Bayomi, 2013) may underscore this critique. Furthermore, researchers have observed that older adults with

companion animals may sometimes seclude themselves from human contact in ways that are detrimental to their own health and well-being, yet have rarely considered how systemic factors may underscore these decisions.

In addressing this gap in understanding, the first component of my thesis explored associations between pet ownership, social participation, and life satisfaction for a nationally representative cohort of older Canadians. Importantly, I paid explicit attention to structurally-relevant barriers to social participation, organized in relation to the WHO (2007) Age-Friendly framework. Social participation is an overarching age-friendly priority, and is often framed as both an antidote to social isolation and a means of promoting the physical, mental, and social health and well-being of older adults who are aging-in-place.

When we compared the pet owners and non-owners in our sample, we noted that pet owners tended to have lower levels of both social participation and life satisfaction compared with non-owners. Pet owners were, however, no less satisfied with their current levels of social participation. Pet owners appeared somewhat more susceptible to structural barriers that inhibit social participation, including issues around transportation and a lack of nearby opportunities. In addition, pet owners were more likely than non-owners to identify personal responsibilities and health limitations as barriers to participation. Even so, among all respondents who had selected these particular barriers to achieving desired levels of social participation, pet owners were also less likely than non-owners to report lower life satisfaction. This finding tentatively suggests that the companionship offered by a pet may help to protect mental health and emotional well-being in some circumstances.

Finally, the results of this study suggested that having a pet is a practice that may increasingly transcend socio-economic and socio-cultural divisions. Substantial proportions of

various sub-populations of older adults who face a heightened risk of social exclusion (e.g., those who report lower income, who rent versus own their own homes, who identify as LGTBQ, and who report belonging to visible minorities) indicated that they lived with a companion animal. This finding is an interesting and relevant one, because it positions attention to companion animals as a yet-to-be explored avenue for enhancing inclusiveness across the aging population, given its growing diversity and heterogeneity.

### **6.2.2 When ‘places’ include pets: Broadening the scope of relational approaches to promoting aging-in-place**

Ensuring provision of and access to community and health services that support aging-in-place is an age-friendly priority (World Health Organization, 2007). In gathering the perspectives of both volunteers and professionals involved in providing social services to some of the most vulnerable older citizens who live independently in our local setting, this study has contributed a new and valuable perspective to understandings of companion animals and aging in place. This understanding was also enriched for having included perspectives of participants working within animal welfare agencies as well. The experientially-based views collected in this case study component offer both novel understandings of the characteristics of (truly) age-friendly cities, and new insights into the roles companion animals may play within the lives of older adults living in economically- and socially-vulnerable circumstances.

Both the human social services and animal welfare perspectives reaffirmed that companion animals may play pivotal roles in older adults’ lives, but that they may also present challenges that cannot be easily addressed without financial means and access to a reliable and supportive social network. The looming outcome in these situations is an uncertain fate for the “more-than-human” family (i.e., the older adult(s) and their companion animal(s)). Being forced

to make difficult decisions (e.g., relinquishment to a shelter, or euthanasia) about a companion animal's fate may also, ultimately, lead to both inordinate levels of grief and feelings of guilt (Adams, Bonnett, & Meek, 2000). Understandably, such situations may have substantial negative consequences for older adults' overall health and well-being, as they continue to age in place after having suffered such a loss.

Because of the current nature of institutionally-disparate domains of practice (i.e., those organizations that attend to animal welfare versus those that attend to human social support), the ability to deliver services that leverage the conjoined nature of human and non-human animal well-being may be impeded. For example, we learned that a shortage of affordable independent-living housing opportunities for older adults with companion animals disrupted broader efforts to support aging-in-place for economically- and socially-disadvantaged older adults. At the same time, perceptions of the problems caused by pets in affordable housing, which appeared to be an underlying barrier, could be addressed through collaborative partnerships between human and animal welfare agencies. An overt recognition of the inextricable nature of human and companion animal thriving could result in shared efforts to achieve organizational mandates together (i.e., optimizing both human well-being and animal welfare).

Thus relational coordination (Gittel, 2007) across agencies could position older adults to maintain positive human-animal relationships that contribute to physical, emotional and social well-being while also protecting animal welfare. Adopting such an approach would involve establishing collegial and trusting human relationships and recognizing task interdependencies across these different agencies. This relational approach could be achieved through an emphasis on common goals, knowledge, and mutual respect between human social service and animal welfare agencies. Importantly, the strength of this type of collaborative, "One Health" (Rock,

2017) arrangement could be underwritten by governmental organizations that promote aging-in-place, and especially those that are invested in the age-friendly agenda.

### **6.2.3 Disruptive solidarity or solidarity disrupted? A dialogical narrative analysis of economically vulnerable older adults' efforts to age in place with pets**

This final manuscript extends the previous study's findings around housing. This case study component focused on three economically vulnerable older adults' efforts to acquire appropriate housing arrangements where they could remain with a long-time animal companion as they aged in the community. Calgary's severe shortage of affordable and pet-friendly housing for independent living obliged all three of these participants to endure situations where they put at risk their own physical, mental and emotional health and social well-being, in order to fulfill their commitments to their companion animals. Importantly, the issue of severely limited rental accommodation opportunities for lower-income older adults who wish to reside with companion animals has been noted in other locales world wide (Huss, 2014; Ormerod, 2005; Power, 2017).

In considering each of the three narratives that this manuscript describes, we were struck by ethical considerations of "more-than-human" solidarity (Rock & Degeling, 2015), defined as a willingness to accept certain costs or sacrifices in order to assist cared-for others (and specifically non-human animals). We were also aware of each participant's relational experience of autonomy as being contingent upon their particular social disadvantages (Baylis, Kenny, & Sherwin, 2008). The overarching conclusion of this case study component was that the solidarity that older adults may demonstrate towards their own companion animals, and the sense of solidarity evoked for each around the value of non-human, versus human, beings, is absent from ways that affordable housing for aging-in-place is provided. While provision of affordable housing may appear to institutionalize solidarity for lower income older adults, it fails to

subsume the solidaristic practices of older adults towards their companion animals, thus failing to appropriately serve their needs and interests (Prainsack & Buyx, 2012, 2016).

Furthermore, housing rules that position companion animals as dispensable commodities appeared to take advantage of constrained autonomy. By severely restricting choices around maintaining relationships with companion animals, these rules also disrupted essential nurturing relationships that, for the older adults described in this study, were contributing to the mundane yet meaningful ways that caring for a companion animal also fed into overarching physical, mental, and emotional health and social well-being. As a final contribution, this case study component offered an alternative understanding of older adults' motivations to place themselves at risk in order to protect a companion animal. Rather than viewing our participants' actions as indicating unhealthy or "psycho-pathological" levels of attachment (Beck & Katcher, 2003; Chur-Hansen, Winefield, & Beckwith, 2009), we understood their behaviors as representing complicated reactions to deeply-held ethical sensibilities grounded in solidarity for companion animals, and shaped by structurally-imposed constraints upon individual autonomy.

### **6.3 Synthesis of case study findings**

The resounding conclusion of the WHO (2007, p. 75) Age-Friendly Cities Guide puts forth the statement that "Active ageing in supportive, enabling cities will serve as one of the most effective approaches to maintaining quality of life and prosperity in an increasingly older and more urban world." Yet, each of the three manuscripts summarized above has highlighted different ways that efforts to ensure that cities are indeed "supportive" and "enabling" may be disrupted by the systematic omission of consideration for companion animals and aging. The manuscripts have also explored the ways that the influences of human-animal relationships are

complicated, such that their impact on older adults' health and well-being may at times be beneficial, yet at other times harmful. An overarching synthesis of the three individual case study components suggests that when understood within the lived contexts of older adults' lives, the health-promoting potential of relationships with companion animals will be consistently shaped by the intersecting influences of individual, socio-cultural, and structural factors, including policy-level approaches to support aging-in-place.

Importantly, my case study affirms the need to recognize that the exclusively human focus of the age-friendly agenda may unintentionally perpetuate health inequities. Housing provision is perhaps the most fundamental support for aging-in-place. The extreme shortage of affordable housing that accepts tenants' pets puts lower-income and socially-vulnerable older adults in situations where they are expected to willingly part with a long-time companion animal. This situation does not support older adults' abilities to make basic choices that lead to meaningful and inclusive aging experiences. Nor is this situation an enabling one. Those who comply by relinquishing or euthanizing a companion animal may be at heightened risk of experiencing intense grief, loneliness, and isolation. Yet those who refuse to part with their animal companions will likely be left to their own devices, in terms of finding alternative ways to protect and care for both their companion animals and themselves, so as to keep this important form of companionship intact. Ensuring an adequate supply of affordable housing that allows tenants to age-in-place with companion animals would be well-aligned with the overarching intent of the age-friendly agenda as a means of enabling health, well-being, and inclusion throughout old age.

My case study also sheds light on ways that companion animal relationships merit further attention in relation to promoting continued social participation as people age in the community,

which is another high-level age-friendly priority. The findings highlight the extent to which social participation opportunities might be better leveraged as enablers of social inclusion for all older adults, but particularly for under-served or harder-to-reach populations. My case study has illustrated the extent to which these socio-demographically defined subpopulations of older adults will also include companion animals. At the same time, older adults with companion animals appear to be more sensitive to a range of structural barriers to social participation, including transportation and having a lack of support for respite from pet-related responsibilities. Therefore, efforts to include companion animals in planned activities, to provide temporary care for people's pets during activities and events, and to facilitate stronger social networks within neighbourhoods, such that occasional pet care relief is available, could help to allay experiences of these barriers and thereby facilitate social participation in a more encompassing way.

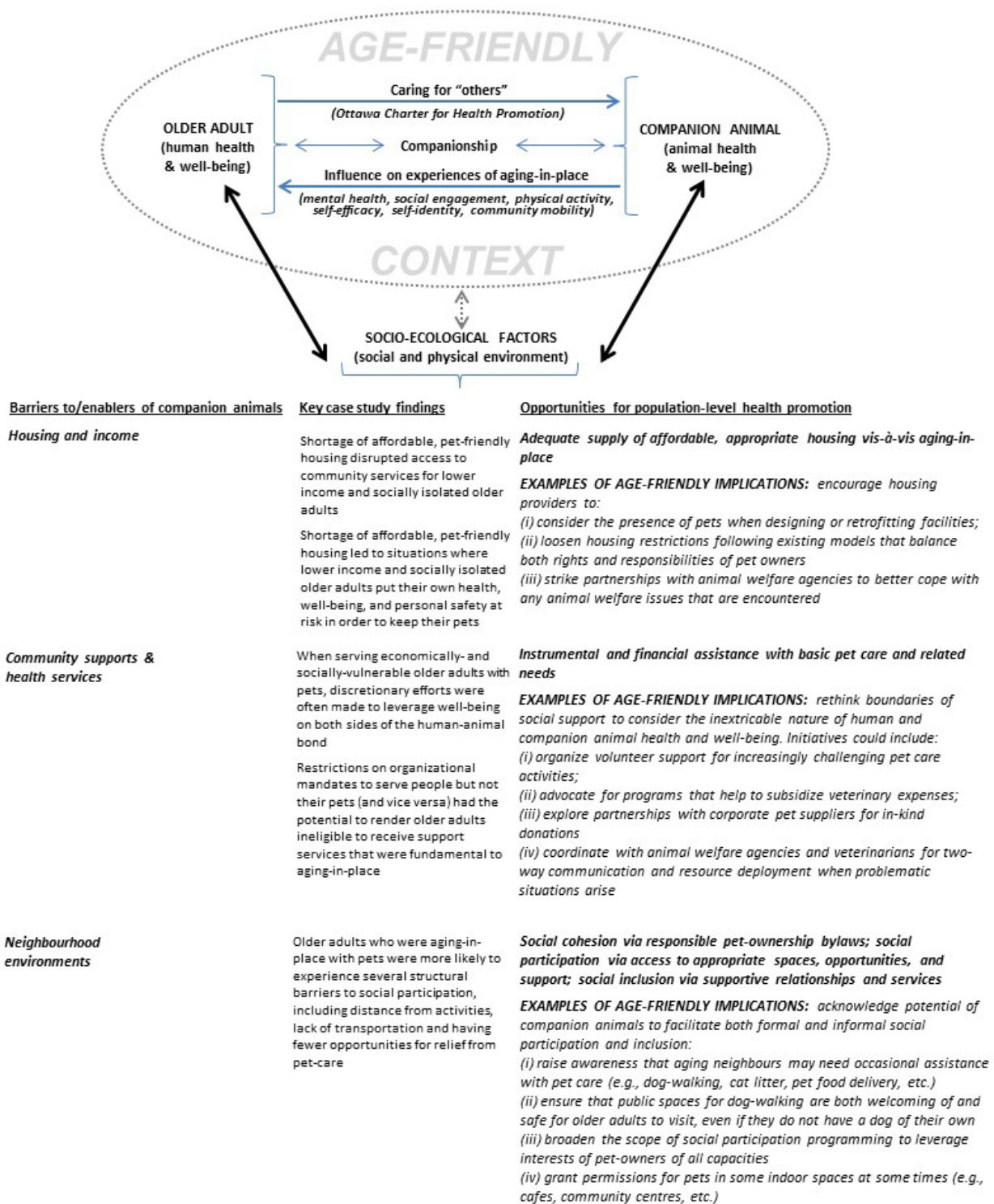
The consequences of failing to recognize, at the policy level, both the importance of companion animals in the lives of older adults, and the related potential of human-animal relationships to both enhance and erode individual health and well-being later in life, ought to raise concerns for public health practitioners. This study has highlighted some of the prospective consequences around access to housing, but also in relation to access to supportive social services and opportunities for social participation, both of which can be linked to health, well-being, social inclusion, and maintained independence. At the same time, pet-restrictions in housing are contributing to the overwhelming numbers of relinquished pets that are euthanized each year simply because they cannot be appropriately re-homed (Coe et. al, 2014). Of relinquished animals without compounding behavioral or health considerations, older animals may be particularly susceptible to this undeserved and unethical fate (Lepper, Kass & Hart, 2002).



### 6.3.1 Support for my proposed conceptual framework

I now return to my proposed conceptual framework, as introduced in Chapter 1. The expanded version of this framework (Figure 6.1) includes insights generated from each component of my case study, and highlights specific initiatives that could arguably extend current, human-focused age-friendly approaches. When I initially introduced this framework, I suggested that it was robust to accommodating heterogeneity within older adult populations, as per Bourdieu's (2005) habitus concept, which explains how patterned individual dispositions may be linked to socio-economic position. My findings point out the extent to which dispositions around companion animals are systematically disregarded for older adults living in economically vulnerable circumstances, even as the desirability of human-animal bonds transcends both socio-economic and, increasingly, ethnocultural divisions (McNicholas et al., 2005).

My findings, in turn, help to confirm suggestions that access to companion animals is unequally distributed in relation to socio-demographics (Pachana et al., 2005), even as those older adults who are living in more disadvantaged circumstances may benefit the most from animal companionship (Morley & Fook, 2005; Poresky & Daniels, 1998). At the same time, collective efforts to address the challenges experienced by members of disadvantaged populations could also contribute to the health and well-being of older adults across the entire socio-demographic spectrum. As discussed above, rethinking human-animal relationships as both potential enablers *and* inhibitors of social participation could have a population-level impact, contributing to a reduction of health inequalities and an improvement of health and well-being across the aging population.



**Figure 6.1: Revisiting the proposed conceptual framework for promotion of aging-in-place with companion animals and implications for age-friendly approaches**

An overarching challenge, however, will lie in shifting socio-cultural views around companion animals, including views that human-animal relationships do not factor into meeting basic human needs and thus are dispensable. Furthermore, companion animals are typically viewed as a privilege, rather than as a basic right as per freedom of choice. This privilege is thus considered to be available only to those whose individual circumstances include adequate economic and social resources to ensure that duties of care are maintained. Related to both of these points, care for companion animals, including financial considerations, is generally seen to be an individual responsibility, with relinquishment to a shelter being the only viable solution offered to those who struggle to do this. In light of these predominant views, in section that follows I explore several competing perspectives on my argument that society might better support and facilitate companion animal relationships for older adults who are aging-in-place.

### **6.3.2 Competing perspectives on companion animals and aging-in-place**

It is conceivable that the findings I have put forward in my case study could lead to an alternative conclusion, namely that older adults who do not have the resources to adequately meet both their own needs and those of a companion animals ought not to have a companion animal, and that experiencing these deficits does in fact justify disrupting human-animal bonds. Such a critique is implicit within current policy approaches that view aging-in-place as a wholly human activity. In my mind, there are several factors that might contribute to this orientation, including (i) the inconclusive nature of the evidence-base that has explored associations between companion animals and human health (Chur-Hansen, Stern & Winefield, 2010; Franklin, Emmison, Haraway & Travers, M., 2007); (ii) overarching concerns around companion animals and aging in relation to competing public health priorities, including illness (e.g., allergies, zoonoses) and injury (e.g., falls, bites, and scratches) (Stull et al., 2015); (iii) the view that

companion animals are a privilege based upon merit and circumstance, rather than a fundamental source of physical and mental health and social well-being for some (Toohey & Krahn, 2017); and (iv) the unconscious posing of pet-related restrictions as vectors through which older adults who have failed to achieve economic independence can be oriented to make “responsible” choices for themselves (Power, 2017).

Beyond these challenges, it is imperative that the welfare of the companion animals whose lives are implicated is also accounted for, in relation to aging-in-place. During the Companion Animals & Aging symposium that took place as part of the 2015 Canadian Association on Gerontology conference (see Appendix F), the Calgary Humane Society shared several distressing images of companion animals in states of extreme neglect as a result of diminishing capacities of elderly pet-owners who were socially isolated and, in some cases, in an uncertain state of mental health. These images can be difficult to reconcile, when juxtaposed with simplistic, yet common, framings of companion animals as being good company for the elderly.

Clearly, compromised animal health and well-being cannot be ignored, as they bring to the fore questions around our duties as a society to protect animals from falling victim to the deteriorating cognitive and physical capacities as aging progresses. Standard responses to these situations, however, tend to be punitive, such as imposing fines or performing seizures, rather than restorative, as might be possible via referrals to supportive agencies, provision of material supports, or facilitation of transitional “ownership” arrangements. Current intervention approaches are reactive rather than proactive in nature, and generally involve termination of the human-animal relationship once an animal has reached a point of suffering. In light of my case study findings, I advocate for adopting a more fulsome sense of collective responsibility for both

older adults and their companion animals may prevent such situations from arising in the first place. One strategy to accomplish this would be to adopt a relational coordination approach, as discussed in Chapter 4, to prevent such problems from becoming critical. Strengthened partnerships, and individual relationships, between human social service and animal welfare efforts could shift efforts from a reactive “rescue the animal” approach to a proactive and preventive “support the human so as to benefit the animal” lens.

Even as our understanding of how older adults’ relationships with companion animals may support health is growing and becoming more refined, some may question whether the population-level benefits are sufficient to outweigh the prospective, cumulative costs that would be accrued in order to maintain these relationships. There have, indeed, been efforts to produce economic evaluations of pets’ contributions to society, especially in terms of (reduced) health care usage on the parts of pet owners (for example Headey, 1999; Parslow & Jorm, 2003; Siegel, 1990), although findings remain inconclusive (Herzog, 2016). Regardless of the results, however, this rationale arguably rests upon a somewhat rigid epidemiological and positivist conception of evidence, such that a pet is conceived as an “exposure” (i.e., having some sort of standardized beneficial effect on those who are exposed, the absence of which disadvantages those who are not exposed) that may plausibly “cause” improvements in physical and mental health outcomes of interest. The findings reported in my dissertation, however, have shed light on the fallacy of viewing a companion animal as simply an exposure, without accounting for contextual influences that may render the quality of the relationship between an older adult and their companion animal as health-promoting, versus compromising.

In terms of questions around values and costs, there are vast complexities that revolve around issues of pet-ownership, and these become increasingly manifest as we explore what it

means to age-in-place with a companion animal, particularly for those living in more disadvantaged financial and social circumstances. Thinking of the vignettes shared in Chapter 5, is it relevant that a companion animal may confer a variety of health benefits to someone who has no choice but to live in an unsafe situation, unless they are willing to part with their dog or cat? On the other hand, should we as a society pass judgement on older adults who prioritize caring for a companion animal over social outings, if they themselves are satisfied with this choice? And should we not be concerned by situations where we deny eligible older adults access to supportive social assistance if they will not relinquish a companion animal for whom they feel responsible and view as kin, and from whom they garner a sense of purpose and companionship, of being valued and cared about?

Traditional investigations of links between companion animals and health have tended to focus upon access to, versus disruption of, the health-promoting potential of companion animals. This approach perpetuates the view that companion animals are individual responsibilities, and overlooks the potential of human-animal relationships to incrementally shift health-related aging outcomes at a population level. My case study findings have also highlighted the extent to which considering both access to and disruption of relationships with companion animals through a wider, social justice lens underscores the myriad ways that social injustice and health inequity intersect. Because an overwhelming majority of evidence around companion animals and aging dilutes or misses altogether the experiences of the socially- and economically-vulnerable, there has been little attention paid to the potential harms of revoking choices around animal companionship for older adults living in such circumstances, a tactic that regularly includes forced termination of the human-animal bond in order to be granted access to social supports and appropriate, affordable housing for aging-in-place. My case study has highlighted the extent to

which resisting these terms may ultimately put older adults' physical and emotional health in peril, both because of and in spite of their relationships with companion animals.

In summary, there has been no impetus, to date, to suggest that there is a greater value to society to intervene in preserving, rather than disrupting, relationships between older adults and their companion animals. Thus, systematic constraints around companion animals unfairly burden disadvantaged older adults, even as they share the same expectation to invest in their own health and well-being as the rest of the population. These complicated and ethically-fraught dimensions of companion animal relationships and aging, as have emerged across all components of my case study, have rarely been engaged with or even considered by researchers, in spite of their implications for policy-level efforts to promote and support *all* older adults as they age-in-place.

#### **6.4 Strengths and limitations**

The methodological strengths of my dissertation have been discussed in the Methodology chapter, as well as within each of the individual manuscript-based chapters (i.e., Chapters 3, 4, and 5). By way of summarizing these, my dissertation has brought to light several considerations and perspectives that help to disentangle the complicated ways that relationships with companion animals may be experienced by older adults as they age in place. In remaining attuned to the socio-cultural factors that shape both the quality of companion animal relationships and expectations around aging, my case study has highlighted the extent to which socio-ecological, environmental-level influences may shape ways that individual human-animal relationships play out in the context of daily living. A particular analytic strength throughout my study has been my close alignment with the World Health Organization's (2007) age-friendly policy framework.

This framework continues to guide efforts to promote aging-in-place on a global scale, and I suggest that organizing my findings around this framework will ensure salience of my findings for scholars, practitioners, and policymakers.

In particular, understanding experiences of aging adults and companion animals from the perspectives of social service providers has formally recognized the extent to which the sphere of influence of companion animal relationships extends beyond simply the household or family level. At the same time, shedding light upon the experiences of lower income older adults' experiences with companion animals later in life has provided an informative glimpse into negotiations of constrained agency as may be experienced later in life. These participants' deeply personal and, at times, troubling accounts of the decisions they made in order to remain together with their pets confirm the need to think beyond mechanistic associations, whether direct, indirect, or non-causal (McNicholas et al., 2005), when arguing that attention to companion animals is merited within the age-friendly policy framework. My findings have suggested ways that individual decisions around housing, access to supportive services, and efforts to remain socially-engaged may become complicated when there is a mismatch between ways that companion animals are valued by individuals, and ways that these relationships are supported at the levels of policy and practice. My findings have also identified several ways that deleterious outcomes may be avoided by redressing this mismatch, a shift that could contribute to the health and well-being of older adults, and their companion animals, at a population level.

The setting of my research has also been a strength of my case study. Calgary is renowned internationally for its approach to regulating pets via responsible pet ownership practices, and for its underlying ethos of balancing the rights of pet-owners, the comforts of others, and the welfare of companion animals themselves (Economy and Infrastructure



Committee, 2016; Rock, 2013). At the same time, Calgary is in the early stages of implementing its own age-friendly strategy (City of Calgary, 2015), which has helped to position my study to have practical applications, when this plan is evaluated and revised in the future. The timing of my research is also a strength, as data collection occurred early into the demographic shift that is taking place as the population ages. The proportion of older adults in Canada has recently surpassed the proportion of younger adults in the population (Statistics Canada, 2017), a divide that will continue to grow over the next few decades.

My ethnographic case study design has also allowed for inclusion of unanticipated yet valuable data sources that shed light on the phenomenon of aging-in-place with companion animals. As my study progressed, I encountered several such data sources. One of these involved a series of local and national newspaper stories tracking the case of an older Calgarian who was evicted from her affordable independent living situation when she refused to part ways with a newly adopted kitten (see Appendix I). The local media attention that this case generated was valuable to witness, and validated my own growing understanding of the challenges being faced by older adults living on lower, fixed incomes who wish to include a companion animal in their life as age independently. The national coverage inspired the preparation of my co-authored commentary (Toohey & Krahn, 2017) described in Chapter 1 and reproduced in Appendix A.

Also during my data collection period, a new volunteer-run program designed to assist socially- and economically-disadvantaged older adults with challenges related to pet care was piloted. This program, “Pet Assist” (Calgary Seniors Resource Society, 2017) is also mentioned in the Discussion section of Chapter 4, and received local television news coverage. While I did not engage directly with the implementation of the program as a data source, I have been able to

draw upon it, both in publications and in scholarly presentations, as a model for the relational coordination approach that my study has recommended.

Even in light of these strengths, my case study findings also include several limitations, regarding the scope of contribution my study has made to understandings of the complicated roles companion animals may play within the aging population. As with the strengths, many of my study's limitations are discussed within the inner chapters of my dissertation. However, there are also overarching limitations that apply to case study methodology. As an obvious example, it is important to consider the extent to which contextualized findings will be meaningful outside of the setting in which they were understood. While I have hailed my research setting as a strength, this view could be called into question, should our local context be thought to reflect a particularly extreme or unusual situation, especially when it comes to prohibiting pets from affordable independent living options for older adults.

Considerations around provision of and eligibility for different models of affordable housing for older adults may vary among cities, provinces, states, and countries, as may discretionary housing rules related to accommodating pets. Such discontinuities can, for example, be found within the United States, which offers legislative protections for older adults who are eligible for *federal* social housing to keep their pets, while still allowing *state-level* housing providers to devise and enforce their own rules around pets (Huss, 2014). While setting-specific differences will exist, the challenges that lower income older adults face when it comes to securing housing that allows companion animals have been identified repeatedly in the literature (Huss, 2014; Morley and Fook, 2005; Ormerod, 2005; Power, 2017). Thus I believe that the insights I have gained throughout this dissertation, stemming from our local context, will

be applicable elsewhere as well (also see Toohey & Krahn (2017) in Appendix A for a more detailed discussion of this point).

While I have aspired to introduce new insights into understandings of companion animals and aging-in-place by prioritizing both relational and socio-ecological considerations, my findings remain limited by some important gaps. For instance, it was both valuable and practical to focus upon social service agencies and animal welfare organizations, given my particular research interest in the aging-in-place experiences of lower income and socially-isolated older adults. Even so, the perspectives of veterinary professionals and agencies involved in the delivery of home healthcare (e.g., professional caregivers, informal caregivers, community nurses) are also needed. I am aware of one study that described a situation where homecare was denied to a client because of their pet (see Ryan & Ziebland, 2015). I was also contacted in early 2017 by a seniors advocacy lawyer from British Columbia who was involved in a similar case. The prevalence of these types of situations has not, to my knowledge, been compiled, although a formal record would be helpful. Such situations have concerning implications for the health and well-being of the client, but also raise questions around the expectations placed on homecare workers to face situations that involve other people's pets, and the training (or lack thereof) that might help them to better assess personal safety, or to identify appropriate resources for assistance. While a relational coordination approach could help to ameliorate these specific challenges, by strengthening partnerships with agencies that include this area of training and expertise, further research is needed to fully explore issues, opportunities, and implications of the range of types of services that are provided in the homes of older adults residing with pets.

Even as I have prioritized the age-friendly policy framework within my case study, and representatives from specific business units within our local government supported my

dissertation project in different ways, I did not formally interview the City administration's personnel who have been involved in developing Calgary's own age-friendly agenda as part of my data collection. Instead, I drew upon written documents (i.e., the Calgary Age Friendly Strategy (City of Calgary, 2015) and its evaluation plan (Tunstall & Eaton, 2016)). Prior to starting my dissertation, I had worked directly with members of the age-friendly planning team to consolidate an environmental scan of municipal-level age-friendly policy efforts from several cities across Canada. This research informed the initial bid to City council, as needed to garner political support to develop and implement an age-friendly strategy for the City. I maintained various forms of contact and levels of participation (including as a stakeholder invited to review and make recommendations around evaluation planning) throughout the age-friendly strategy's development and implementation processes. One result of my participation has been the inclusion of a pet-ownership measure within the evaluation of efforts to promote participation and inclusion as an aging-in-place priority (Tunstall & Eaton, 2016).

Another important limitation lies in my reflexivity as a researcher. In immersing myself in the data collected throughout my case study, I have used a number of processes (i.e., field notes, transcription, memos, and scholarly mentorship) to remain attuned to the insights that are supported by the data, and to remain reflexive around my reactions to and understandings of what I have heard. I have also benefited from peer review in submitting my related manuscripts to different journals for publication. Even so, my own views cannot be discounted from having shaped, to some extent, my understandings of the evidence I have collected throughout my exploration of aging-in-place with companion animals.

Issues involving companion animals and older adults may be emotionally-charged territory. I tend to be distressed and angered by the unconscious perpetuation of ageist attitudes

and practices that seem to be socially acceptable, not the least of which is the accepted practice of systematically restricting the choices available to older adults (Katz & Calasanti, 2014; Leibing, Guberman, & Wiles, 2016; Rozanova, Keating, & Eales, 2012; Wiles, Leibing, Guberman, Reeve, & Allen, 2011). At the same time, I am continually struck by the deep attachments that many older adults feel towards their companion animals, and the fulfilment that animal companionship often seems to provide for people who feel increasingly marginalized and undervalued within the community, as their roles and circumstances shift. Thus I find it challenging to maintain objective composure when witnessing the consequences of systemic barriers, based on a subtle yet acceptable forms of ageism, that repeatedly cause distress and emotional suffering on the parts of older adults and their companion animals.

As another point for reflexivity, I have personally experienced the benefits, the challenges and the complexities of living with companion animals (both dogs and cats) in an urban setting. Thus I have been prone to draw upon my own mixture of experiences as I seek to understand various accounts shared with me by my research participants, and as I contemplate what it is to care for a companion animal as one's personal capacities and resources diminish. In extreme situations, animal suffering at the hands of individuals, whether intentional or not, is unacceptable. Collectively, however, we have become comfortable with the humanity of euthanasia, versus the humanity of interventions of assistance, to solve these problems. We know that pet-restrictive housing rules lead to relinquishment to shelters (ASPCA, 2017; Coe et al., 2014), and my own findings highlight the lack of systemic support that is offered to older adults who may be struggling to care for their companion animals.

## **6.5 Implications and future directions**

As the research component of my dissertation wraps up, I remain mindful of the need for knowledge dissemination. The reach of peer-reviewed literature is often limited. Thus at the time of writing this dissertation, I am committed to creating opportunities to share my findings directly with key stakeholders at various levels of government, within various organizations and vocations that serve older adults and promote aging-in-place, and with animal welfare agencies, as prospective advocates and stakeholders for the initiatives I have recommended.

At the same time, my own data has not been mined to its full extent. I aspire to author at least one additional manuscript outside the scope of this thesis. In late 2016, I developed an abstract for this next contribution titled “The Curious Case of Lower Life Satisfaction Scores for Older Adults with Pets: Insights from a Mixed Methods Case Study”. I presented a preliminary overview of these findings at the 2017 Aging & Society Network Conference in Berkeley, California, USA, November 3-4, 2017 (see Appendix J).

### **6.5.1 Implications for research into companion animals and aging-in-place**

As an overarching recommendation, I encourage researchers with an interest in companions and aging to continue to draw upon an evolving theoretical framing that may help to nuance understandings of relationships with companion animals in old age, including (i) the helpful mechanistic distinctions proposed by McNicholas et al. (2005); (ii) the relational ecology understandings of the human animal bond that have been put forward by Putney (2013); (iii) the roles that companion animals play in shaping peoples’ social identities, as exemplified in Gardner’s (2014) work and contained within Graham and Glover’s (2014) insights; and (iv) the growing understandings of the nuanced effects that experiencing animal companionship in its

simplest form, throughout the mundane routines of daily life, may offer to older adults (Bennett et al., 2015).

There are also yet-to-be explored opportunities to draw upon rich and well-established social theory for a better understanding of human-animal relationships. My case study sought to do this by drawing on concepts from public health ethics as an alternative to understanding not just how, but why people negotiate responsibilities towards companion animals in ways that may put their own health and well-being at risk. Similarly, researchers might further explore Bourdieu's (2005) concepts of habitus and his theories around ways that different forms of capitals maintain entrenched social dynamics (examples of such approaches include Degeling, Rock, Rogers, & Riley, 2015; Graham & Glover, 2014), as means of shifting the gaze beyond simply "responsible" versus "irresponsible" citizens and pet-owners.

Importantly, I urge researchers to continue to account for the reality that relationships with companion animals are experienced within dynamic, socio-ecological contexts. The qualities of individual relationships with companion animals merit deeper exploration, but cannot be understood in isolation of the daily, lived experiences that people and their companion animals enjoy in some circumstances, and endure in others. Thus there is much more work to be done, in seeking to understand the socio-cultural underpinnings of structural considerations that lead to particular policy environments, and the consequences of these for human health and well-being, for socio-economically perpetuated inequities experienced by both older adults and their companion animals, and ultimately for social justice.

### **6.5.2 Implications for age-friendly policies and promoting aging-in-place**

In light of the findings I have presented in this case study, I hope that scholars, civil servants, practitioners, and others who are dedicated to creating age-friendly urban environments

will pause and consider the following: How do relationships with companion animals fit into older adults' lives, and how might these be salient to age-friendly initiatives that are designed to enable, rather than disrupt, opportunities to age well while remaining in the community? Where might people's relationships with or interests in companion animals be leveraged within efforts to promote independence and inclusion? In what instances might felt responsibilities towards companion animals be acted upon in ways that create barriers to achieving age-friendly goals? How can we all strike a better balance between respecting the rights and preferences of both older adults with companion animals and those older adults who do not wish to interact with other peoples' pets? My case study findings reaffirm the extent to which companion animals are prevalent within the increasingly heterogeneous aging population, whether they are overtly acknowledged or not. Perhaps the time has come to adapt our policy efforts to better reflect evolving socio-cultural and ethical understandings of the status of companion animals, and the sense of solidarity that they increasingly invoke for their human counterparts.

### **6.5.3 Implications for social support and animal welfare practices**

My case study has also underscored important considerations for practice. Because of the interdependencies between human and non-human animal health and well-being, it is increasingly important to create and adapt services that can target and accommodate the human-animal bond. While it is neither reasonable nor fair to expect professionals and volunteers in different sectors to become experts in addressing both human and companion animal needs. Instead, a promising way forward is to establish and embed formal relationships between human-focused and companion animal-focused organizations, and to ensure that these become enduring. Such activities will both raise awareness of the importance of recognizing the multi-faceted and sometimes unexpected ways that human-animal bonds may be shaping older adults' decision-



making processes, while also embedding collaborative approaches to addressing complex, multi-species situations.

While I recognize that establishing relational, cross-sectoral approaches of this sort will take time and investment, there are initiatives that could be more readily adopted that could also make important strides. For instance, I advocate for ensuring that all professionals and volunteers working in community organizations that support human needs receive training on ways of safely interacting with companion animals, as well as what to look for in terms of condition of animals that may raise concerns about the health and well-being of the person receiving support, as well as the welfare of the animal itself. Furthermore, it would be helpful to ensure that administration is familiar with the different resources that could be contacted to assist with concerns over companion animals. Conversely, given the increasing proportion of the population that will comprise older adults, I suggest that professionals and volunteers within the animal welfare sector will also benefit from formal training on effective strategies for communicating with older adults. Sensitive topics such as human mortality and decline may need to be addressed with delicacy and respect, if concerns around being outlived by a companion animal, or losing the capacity to appropriately care for a particular companion animal's needs. Understanding how to address these difficult subjects in respectful ways will also help to combat underlying ageism (i.e., prejudice and stereotyping based on age alone). It is also important for administrative volunteers and employees to become familiar with the types of support services available in the community for older adults who appear to be struggling, as connecting older adults with the support they require may benefit companion animals themselves.

Finally, I believe that an important and under-explored solution to addressing some of the challenges to human-animal relationships that may be linked to the process of aging lies in

rethinking the normative, sociocultural expectation of “pet ownership”. Thus I am a proponent of actively promoting alternative arrangements when it comes experiencing meaningful human-animal relationships. Examples of such arrangements include “pet sharing” within older adults’ social networks, such that a fulfilling bond can be established yet caregiving duties and costs are shared (see, for example, Degeling et al. (2015)); volunteer programs that enable older adults to interact with and care for companion animals without being sole caregivers (see, for example, Johnson & Meadows (2010)); and programs that facilitate maintained contact between older adults who must relinquish their companion animals and persons who foster or adopt relinquished animals (as was mentioned by Calgary Humane Society during the 2015 Companion Animals & Aging research symposium described in Appendix F). Shifting expectations around ways that we experience relationships with companion animals may ultimately help to address the challenges of both emotional and physical interdependencies between people and their companion animals that may become amplified later in life, while also reframing companion animal well-being as both a collective investment and responsibility.

## **6.6 Concluding remarks**

I have suggested throughout my dissertation that individual experiences of animal companionship are shaped by both individual dispositions and environmental factors, when environments are conceived as social-ecological settings. For many, human-animal relationships are experienced and valued in ways that are akin to other family relationship, even as species differences are acknowledged (Fox, 2006; Franklin, 2006; Power, 2008). There is a widely-held view that the supportive nature of relationships with companion animals intensifies as people age. This sentiment responds to expectations that older adults may become increasingly isolated

from their social networks and excluded from so-called productive activities like paid employment, and as their lives revolve to a greater extent around their domestic arrangements (Anderson et al., 2015; Baun & Johnson, 2010; McNicholas, 2014). Yet these views do not transcend the competing, and predominating, contention that pets are a privilege available only to those who meet certain societal conditions, namely an adequate income and an adequate social support network that can step in, should caregiving capacities diminish. As a result, those older adults who are most in-need of formal assistance with aging-in-place (e.g., affordable, subsidized housing and other forms of social services and supports) also find themselves at highest risk of losing the choice to share their lives with an animal companion. Their experiences are rarely captured by research exploring companion animals and aging, and thus their contextually-contingent interdependencies with their companion animals are not well understood in relation to physical and emotional health and social well-being and efforts to promote aging well. These are the older adults who disproportionately come up against the prevailing solution of dispensing with animal companionship when disruptive life challenges arise.

In effectively restricting who may versus who may not be granted access to the health-promoting potential of relationships companion animals later in life, the disconnection between individual sensibilities around companion animals and institutionalized approaches to limiting access to companion animals has rarely been interrogated for its role in perpetuating health inequity. Furthermore, this situation has rarely been framed as a social justice issue, even as there is an unfairness around constraints on self-determination at the intersection of advanced age, disadvantaged socio-economic status, and social isolation. The absence of relational coordination between agencies that prioritize human well-being and those that focus on animal welfare has allowed a “personal responsibility” framing to prevail, rather formalizing a discretionary

recognition that supporting companion animals is also supporting people, and vice versa. This rationale is perhaps at the root of the humanist orientation of the age-friendly agenda, even as human-animal relationships are increasingly viewed through a post-humanist lens that reveals interconnections, rather than solid divisions, among humans, non-humans, nature, and society (Fox, 2006; Rock, 2017). This shifting socio-cultural tendency to break down binary categories is increasingly apparent through individual experiences of relationships with companion animals (Fox, 2006; Franklin, 2006; Franklin, Emmison, Haraway, & Travers, 2007; Haraway, 2003), as well as through collective approaches to governing urban populations (Instone & Sweeney, 2014; Rock, 2013, 2017).

Overall, my case study findings highlight the incongruence between the value of relationships with companion animals experienced by older individuals and the systematic undervaluing of these relationships that continues to be perpetuated by dominant policies and practices designed to promote aging-in-place. Older adults' relationships with their companion animals merit acknowledgement and consideration within age-friendly efforts for two overarching reasons. The first is for their potential to contribute to physical, mental and emotional health and to social well-being at a population level, and the second is for their potential to advance organized efforts to promote and support independence and social inclusion via aging-in-place. At this time, the negative consequences of failing to account for companion animals within formal efforts to create age-friendly communities are being unfairly borne by economically and socially vulnerable older adults. Indeed, resisting the call to part with a long-time companion animal may disqualify older citizens from being eligible for critical social services and supports, and even for the basic right of attaining housing. Overt consideration of older adults' relationships with companion animals within the age-friendly agenda could help to

reverse this situation. Greater attention to companion animals within organized efforts to promote aging-in-place is warranted on the grounds of health equity and social justice, for older adults and for their companion animals.

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## Appendices

Appendix A: **“SIMPLY TO BE LET IN”: OPENING THE DOORS TO LOWER-  
INCOME OLDER ADULTS AND THEIR COMPANION ANIMALS**

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**Abstract**

Inspired by poet J.L. Borges's intimations on acceptance, this commentary highlights the eviction of an older woman and her kitten from an affordable independent living facility as representing exclusionary practices and policies that compromise the ability for some lower-income older adults to age-in-place. Even as efforts to promote aging-in-place have prioritized housing as a key need, and public health evidence suggests benefits from animal companionship later in life, there is a shortage of social and other types of affordable housing in Canada and elsewhere that allows older adult tenants to reside independently with companion animals. Within the private housing market, however, companion animals may be leveraged as a marketing tactic, with 'pets' being welcomed into rental arrangements. In light of this means-patterned discrepancy, this commentary troubles the persistent undervaluing of human-animal relationships that exists at policy and practice levels. Furthermore, banning companion animals from affordable housing subsumes an accepted yet insidious practise of regulating the lives of older adults who have not achieved idealized conceptions of responsible aging, including home ownership. We draw these two concerns together by advocating for adequate provision of affordable housing opportunities where lower-income older adults may be granted the choice to establish a home that includes a companion animal as they age-in-place.

**Keywords:** places, public health, socioeconomics factors

What if our society were to distribute public services and social benefits to disadvantaged populations based on principles of inclusion and simple acknowledgement of need, rather than requiring the relevant individuals to qualify based on demonstrations of merit? In exploring this proposition, Davidson et al (2001) cite a section of the poem ‘Plainness’ by J.L. Borges (1972):

This is the best that can happen –  
 what Heaven will perhaps grant us;  
 not to be wondered at or required to succeed  
 but simply to be let in  
 as a part of an undeniable Reality,  
 like stones of the road, like trees.

(Davidson et al., 2001, p. 375, citing Borges (1923/1972))

Such a model of acceptance is far from “an undeniable Reality” for many lower-income older adults in our society, even as “aging-in-place” is being actively promoted as a social policy priority (Menec, Means, Keating, Parkhurst, & Eales, 2011; Plouffe & Kalache, 2011) and acknowledged as a significant individual preference (Menec et al., 2011; Wiles, Leibing, Guberman, Reeve, & Allen, 2011). The housing needs of economically-vulnerable older adults are poorly served by the aging-in-place agenda (Leibing, Guberman, & Wiles, 2016; Walsh, Hewson, Paul, Gulbrandsen, & Dooley, 2015). Moreover, discrimination against those lower income older adults who wish to age independently with a companion animal (or ‘pet’) is compounded by the prevalence of no-pets housing rules adopted by government, not-for-profit, and private providers of affordable, independent living facilities for older adults (Centre of Public Legal Education Alberta, 2017; Éducaloi, 2017; Government of Manitoba, 2017; Huss, 2014; Morley & Fook, 2005; Office of Housing and Construction and Standards, 2017; Ormerod, 2012). The sweeping nature of pet restrictions for affordable housing raises troubling questions around inclusion versus exclusion of older adults who are already disadvantaged by economic

vulnerability. Such policies serve to regulate older adults whose housing dependencies may be viewed as representing individual failings to adequately prepare for self-sufficiency in later life (Power, 2017).

One such case captured national media attention in Canada in 2015, when the National Post newspaper featured the headline “‘I’m not getting rid of my kitty’: Calgary senior chooses homelessness over giving up kitten” (McIntosh, 2015a). This article reported on a 75-year old woman who was evicted from her home in an affordable independent living facility after she acquired a kitten following a change to the facility’s rules. As reported “...in June 2013, the society’s board decided to make the facility animal-free. Pets that lived there already were allowed to stay, but new tenants couldn’t bring them and current tenants wouldn’t be allowed to replace any that died” (McIntosh, 2015a).

The building’s administrator was described in the article as being ‘sympathetic’ to the tenant’s situation, but was also reported as holding that “...there are more issues at play. Many in the complex struggle financially...and will spend their money on veterinarian bills and pet food while feeding themselves through food banks. “A bag of Kitty Litter and cans of cat food is probably two or three day’s groceries for these people ... It’s very difficult to watch ... We’re not trying to be terrible people, because we do recognize that pets are very good for seniors” (McIntosh, 2015a). Even so, the board of this facility seems to have deemed the pet-restriction as an appropriate and acceptable course of action.

The result of this approach to regulating affordable housing, as illustrated in the article’s headline, may force some older adults to weigh the loss of their respective companion animals—which can result in severe grief and an eroded sense of meaning in life (Adams, Bonnett, & Meek, 2000; Morley & Fook, 2005)—against the loss of their respective homes (Huss, 2014;



McIntosh, 2015b; Toohey, Hewson, Adams, & Rock, 2017). This case also highlights the extent to which many older adults face increasing vulnerability to societal forces of exclusion, having their desires ignored regarding how and with whom they wish to live (Katz & Calasanti, 2014). Ironically, it is the acceptability of this practice that has become the “undeniable Reality” (Borges, 1972) for many older adults, with those existing on fixed low incomes and their companion animals particularly susceptible to the cruel consequences (Morley & Fook, 2005; Ormerod, 2012; Toohey et al., 2017).

More progressively, legislation that has passed in both France and the USA recognizes the choice to have a companion animal as a basic civil right (Huss, 2014; Ormerod, 2012; Randolph, 2017). This right hinges upon responsible caretaking, including licensing, using appropriate restraints in public settings, disposing of waste, and making pre-emptive arrangements should the owner become incapacitated or die. In the USA, this legislation has been applied to the Department of Housing & Urban Development’s federally-assisted rental housing, and a handful of individual American states have implemented similar protections (Randolph, 2017). Greece, Monaco, Norway, and Spain have also taken steps to introduce companion animal-supportive legislation (Ormerod, 2012), although it is unclear the extent to which this will have impact on housing-related policies and practices.

By comparison, Canada is lagging behind, even as over half of Canadian households include a companion animal (Perrin, 2009)—a practice that remains prevalent among older adults as well (Himsworth & Rock, 2013). Responsibility for housing policy in Canada falls to provincial, municipal and local jurisdictions, and there is no overarching national precedent to protect the rights of older adult (or any) tenants who wish to reside with companion animals. Relevant tenancy regulations vary from province to province (Centre of Public Legal Education

Alberta, 2017; Éducaloi, 2017; Government of Manitoba, 2017; Government of Ontario, 2014; Office of Housing and Construction and Standards, 2017), and the Province of Ontario is singular in its provisions for pets within its Residential Tenancy Act (Government of Ontario, 2014), albeit in practice, compliance with these provisions appears discretionary on the part of some landlords (Hulse, Milligan, & Easthope, 2011, p. 156). In other provinces, however, failure to comply with no-pets rules is viewed as grounds for eviction (Centre of Public Legal Education Alberta, 2017; Office of Housing and Construction and Standards, 2017).

Beyond civil rights arguments for allowing pets in affordable housing (Huss, 2014, p. 512; Randolph, 2017), there is growing evidence that relationships with companion animals may support cardiovascular health, physical function and mobility as people age (Chowdhury et al., 2017; Curl, Bibbo, & Johnson, 2016; Dall et al., 2017; Raina, Waltner-Toews, Bonnett, Woodward, & Abernathy, 1999). Companion animals may also provide meaningful occupation (Zimolag & Krupa, 2009), and often facilitate both relationships between neighbours and positive feelings about one's neighborhood (Mahalski, Jones, & Maxwell, 1988; Toohey, McCormack, Doyle-Baker, Adams, & Rock, 2013; Wood, Giles-Corti, Bulsara, & Bosch, 2007). Animal companionship may also help to reduce or offset loneliness (Krause-Parello, 2012; Pikhartova, Bowling, & Victor, 2014) and appears to support older adults' mental health in other salient ways (Bennett, Trigg, Godber, & Brown, 2015; Raina et al., 1999). While the epidemiological evidence is somewhat mixed (McNicholas et al., 2005), it is evolving as researchers become increasingly adept at addressing the complexities of such relationships.

Still, in Canadian settings and elsewhere, older adults are often expected to sever what are commonly committed, long-term relationships with their dependent companion animals in order to be considered for affordable housing (Huss, 2014; Morley & Fook, 2005; Ormerod,

2012; Toohey et al., 2017). Assessment of eligibility for social housing in particular may include considerations of applicants' needs as per responsibilities for dependents (Province of Alberta, 1994), but companion animals do not count as legitimate dependents, even as many people experience their relationships with their pets as familial in nature (Hansen, 2013; Power, 2008). Except in cases involving special welfare considerations, we do not normally ask parents to give up their children, or spouses to separate from each other, in order to qualify for social housing. It is, however, presumed morally permissible to ask applicants to give up their expectation to live with a dependent animal companion if they are accepted into these public programs, and into other affordable housing models. Those who resist risk being viewed as having unhealthy or abnormal attachments to their companion animals (Beck & Katcher, 2003; Chur-Hansen, Winefield, & Beckwith, 2009; Wells & Rodi, 2000).

Our eviction case also illustrates the extent to which lower-income older adults who do not own their homes may be framed as having failed in their responsibilities to arrange for self-sufficiency in old age (Power, 2017). Even as structured oppression may shape opportunities and choices across the life course (Katz & Calasanti, 2014), economically-vulnerable older adults may be particularly subject to disciplining, as those with power (i.e., housing providers and landlords (Huss, 2014; Ormerod, 2012; Power, 2016)) are granted license to constrain the choices made available to their prospective tenants. These structured practices actively oppress autonomy and are justified in the name of protecting such older adults from making irresponsible and misguided choices. Comparatively, marketing for privately-run retirement housing may welcome companion animals as a selling point to those prospective tenants who can afford the costs: "A place for you and your pet to call home!" (Comfort Life, n.d.; Kerby Centre, n.d., p. 9; "The Care Guide - Ontario 2014-2015," n.d.).

Disregard for the importance of companion animal relationships in the lives of many older adults (Enders-Slegers, 2000; McNicholas, 2014; Morley & Fook, 2005) is perpetuated by social policies and practices that posit companion animals as private property, subject to regulation and dispensable as required (Rock & Degeling, 2013). Unless practices of unfair discrimination are to be tolerated, the particular human or non-human animal(s) one chooses to live with—barring undue risks to public health and safety, unacceptable forms of nuisance, damage to others' private property, or inappropriate treatment of the animal(s)—should be a matter for individuals to decide for their own reasons. The negative consequences of this unjust situation are disproportionately borne by lower-income older adults who lack alternative options for housing (Leibing et al., 2016; Walsh et al., 2015). This injustice presents yet another factor that compounds cumulative income-based inequalities across the life course (McGovern & Nazroo, 2015; Pavalko & Caputo, 2013).

Still, we acknowledge the concerns of housing providers as real and substantial. These may include noise complaints, coping with neglected and abandoned companion animals, or addressing property damage and maintenance costs (Huss, 2014). Companion animals may be especially challenging for building management in situations where the mental and physical capacities of tenants are declining, or when balancing considerations for allergies and fears (Toohey et al., 2017). Yet these anticipated issues have not necessarily emerged when companion animal-supportive housing approaches have been adopted, particularly in the USA (Huss, 2014; Ormerod, 2012) and could be better addressed by coordination between human social support and animal welfare agencies (Toohey et al., 2017). Indeed, studies show that older adult residents, including those who do not have or desire a companion animal, may support

easing such restrictions, as long as the animals are being cared for responsibly (Freeze, 2010; Mahalski et al., 1988).

Addressing the risks of allowing companion animals to reside alongside their older adult counterparts within affordable independent living facilities likely will require clear and transparent communications and policies that outline expected responsibilities (Huss, 2014; Ormerod, 2012). But policies should be reasonable (e.g., proportionate to the risks involved), and aimed at balancing the rights of all residents. Instead, in several Canadian jurisdictions, they tend to be sweeping and prescriptive, favoring pet restrictions (Éducaloi, 2017; Government of Manitoba, 2017; Office of Housing and Construction and Standards, 2017; Province of Alberta, 1994). Just as there are laws to protect property rights, there should be laws against unjust discrimination that can be referenced to protect the rights of those who seek to live with companion animals (Hulse et al., 2011; Power, 2016). We envision revisions to predominating affordable housing rules that prohibit companion animals and the introduction of companion animal-protective legislation in Canada and elsewhere, as guided by comparable progressive legislation that has been established around the world (Ormerod, 2012).

Returning to our eviction case, there was eventually a resolution. In Calgary, a city of over one million people and over 120,000 older adults (City of Calgary, 2015), we know of just one provincially-supported facility that permits cats, which is where the pair ultimately acquired a unit (Klingbeil, 2015). Notably, no comparable facilities in Calgary appear to allow dogs, even as their prospective health-supporting roles become increasingly evident (Curl et al., 2016; Dall et al., 2017; Toohey et al., 2013). The severely limited supply of affordable independent living options available to older adults with companion animals is increasingly troubling when we begin to project experiences of aging-in-place for growing numbers of lower income Canadians

across an aging population. We thus advocate for adequate provision of affordable housing where lower-income older adults have opportunities to establish homes that include companion animals. In doing so, we hope that on a societal scale, and as supported by our governments, rather than seeking to restrict and regulate, we might start to “simply...let in” (Borges, 1972; Davidson et al., 2001) these older adults, and their companion animals, as recognized and valued members of civic life (Donaldson & Kymlicka, 2011).

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**Appendix A: Toohey, A. M., & Krahn, T. M. (2017). 'Simply to be let in': Opening the doors to lower-income older adults and their companion animals. Journal of Public Health.**

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## Appendix C: **CRITICAL REALIST SCOPING REVIEW ABSTRACT**

**Citation:** Toohey, A. M., & Rock, M. J. (2011). Unleashing their potential: A critical realist scoping review of the influence of dogs on physical activity for dog-owners and non-owners. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 46–54.

### **Abstract:**

**Background:** Dog-owners tend to be more physically active than non-owners; however, dogs have also been shown to inhibit physical activity for non-owners, under some circumstances.

**Methods:** We conducted a scoping review to identify studies pertaining to the influence of dogs on physical activity for both dog-owners and non-owners, and adopted a critical realist orientation to draw inferences about the positive and negative impact of dogs via their effect on physical and social environments.

**Results:** We identified 35 studies from disparate literatures for review. These studies confirm that dog and owner behaviors affect shared physical and social environments in ways that may influence physical activity patterns, not only among dog-owners but also among non-owners. The direction of influence appears to be most positive in neighborhoods exhibiting high levels of social cohesion, socioeconomic status, perceived safety, dominant culture, or all of these. In disadvantaged neighborhoods, the health of women as well as older adults may be disproportionately affected by dog and owner behavior.

**Conclusions:** While dogs have the potential to increase physical activity for both dog-owners and non-owners, the presence or absence of dogs will not have a standard effect across the physical and social environments of all neighborhoods. Dogs' contributions to shared

environments in ways that support physical activity for all must be leveraged. Thus, specific contextual factors must be considered in relation to dogs when planning neighborhood level interventions designed to support physical activity. We suggest this population health topic merits further investigation.

**Appendix D: DOG-WALKING AND SENSE OF COMMUNITY ABSTRACT**

**Citation:** Toohey, A. M., McCormack, G. R., Doyle-Baker, P. K., Adams, C. L., & Rock, M. J. (2013). Dog-walking and sense of community in neighborhoods: Implications for promoting regular physical activity in adults 50 years and older. *Health & Place, 22*, 75–81.

<https://doi.org/10.1016/j.healthplace.2013.03.007>

**Abstract:**

This study investigates whether dog-ownership and neighborhood characteristics are associated with sense of community (SC) and neighborhood-based recreational walking (NRW) for older adults. A random sample of adults  $\geq 50$  years of age ( $n = 884$ ) provided information on SC, dog-related factors, neighborhood walking, and socio-demographics in telephone and postal surveys. Associations between dog-ownership, neighborhood characteristics, and NRW were estimated using logistic regression (i.e., odds ratios (OR)). Frequent dog-walkers ( $\geq 4$  times/wk) were more likely than those not owning a dog to report a heightened SC (OR=1.94,  $p < .05$ ) and to achieve  $\geq 150$  min/wk of NRW (OR=10.68,  $p < .05$ ). SC was also tested but not found to mediate associations between neighborhood characteristics, dog-ownership and NRW. Older adults who walk dogs often in their neighborhoods may benefit from both increased physical activity and heightened sense of community to an extent that supports healthy aging. Longitudinal studies are needed to explore directions of associations among these factors.

## Appendix E: CANDIDACY CONCEPT MAP AND APPROVED READING LIST

## Concept map:

Research Area: Companion animals and the aging population			
Expected Competency Areas	Topic Areas underpinning Research Area		
	<b>Population health intervention research and health equity</b>	<b>Healthy aging and aging-in-place</b>	<b>The roles of human-animal relationships vis-à-vis healthy aging/aging-in-place</b>
<p><i>Thesis – Companion animals and the aging population: Exploring relationships, contexts, and</i></p>			
<b>Foundations underlying theories and conceptual frameworks</b>	Theoretical foundations in population health intervention research and health equity; Healthy cities movement; Socio-ecological models; Habitus	Successful aging and aging-in-place, age-friendly cities and communities; Governmentality and biopolitics	One Health framework and related anthrozoology studies examining the roles of human-animal relationships
<b>Methodology</b>	Methodological considerations surrounding the study of population health and health equity; Multiple case studies; Ethnographic methods; Qualitative methods; Realist approach to knowledge synthesis	Application of the age-friendly concept; Critical perspectives on “successful aging”; Multiple case studies; Ethnographic methods; Qualitative methods; Realist approach to knowledge synthesis	Methodological approaches to understanding the intricacies of pets and aging; Multiple case studies; Ethnographic methods; Qualitative methods; Realist approach to knowledge synthesis
<b>Research context, history and philosophy of the underlying science</b>	Links between health promotion strategies and social justice via efforts to contribute to improved health equity; influence of population health intervention research on developing policy and practices	Tenets of healthy aging and aging in place (social engagement, physical activity); social justice and health equity for older adults	Pets and promotion of healthy aging/aging-in-place; Barriers to pet-ownership, Health benefits that extend beyond the pet-owner dyad; Implications of pet loss/separation for older adults; Practitioner roles with respect to human-animal relationships

**Reading list:****Topic Area #1: Population health intervention research and health equity*****Competency #1: Foundations underlying theories and conceptual frameworks****Social determinants of health and health equity*

1. McKeown T. Determinants of Health. In: Brown PJ, Barrett R, eds. *Understanding and applying medical anthropology*. Vol 6. Mountain View, CA: Mayfield Publishing Company; 1998:70-76.
2. Link BG, Phelan JC. McKeown and the idea that social conditions are fundamental causes of disease. *Am J Public Health*. 2002;92(5):730–732.
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*Population health and health promotion*

4. Rose G. Sick individuals and sick populations. *Int J Epidemiol*. 2001;30(3):427-432.
5. Labonte R. Health promotion and empowerment: reflections on professional practice. *Health Educ Behav*. 1994;21(2):253–268.
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7. Frohlich KL, Potvin L. Health promotion through the lens of population health: Toward a salutogenic setting. *Crit Public Health*. 1999;9(3):211-222.
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*Healthy cities movement*

9. Hancock T. The evolution, impact and significance of the health cities/healthy communities movement. *J Public Health Policy*. 1993:5–18.
10. Petersen A. The “healthy” city, expertise, and the regulation of space. *Health Place*. 1996;2(3):157–165.

*Socio-ecological approach to understanding health promotion*

11. Richard L, Gauvin L, Raine K. Ecological models revisited: Their uses and evolution in health promotion over two decades. *Annu Rev Public Health*. 2011;32:307-26.

*Habitus*

12. Bourdieu P. Habitus. In: *Habitus: A sense of place*. 2nd ed. Burlington, VT, USA: Ashgate Publishing Company; 2005:43 - 49.
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***Competency #2: Methodology****Methodological considerations re: the study of population health and health equity*

14. McLaren L, McIntyre L, Kirkpatrick S. Rose's population strategy of prevention need not increase social inequalities in health. *Int J Epidemiol*. 2010;39(2):372–377.
15. Poland B, Coburn D, Robertson A, Eakin J. Wealth, equity and health care: a critique of a “population health” perspective on the determinants of health. *Soc Sci Med*. 1998;46(7):785–798.
16. Krieger N. Who and What Is a “Population”? Historical Debates, Current Controversies, and Implications for Understanding “Population Health” and Rectifying Health Inequities. *Milbank Q*. 2012;90(4):634-681.

***Competency #3: Research context, history and philosophy of the underlying science****Evidence and approaches highlighting social health gradients and implications for policy development*

17. Wilkinson RG. The Impact of Inequality. *Soc Res*. 2006;73(2):711-732.
18. Marmot MG, Rose G, Shipley M, Hamilton PJ. Employment grade and coronary heart disease in British civil servants. *J Epidemiol Community Health*. 1978;32(4):244-249. doi:10.1136/jech.32.4.244.
19. Evans RG, Stoddart GL. Consuming research, producing policy? *Am J Public Health*. 2003;93(3):371–379.
20. Graham H. Tackling Inequalities in Health in England: Remediating Health Disadvantages, Narrowing Health Gaps or Reducing Health Gradients? *J Soc Policy*. 2004;33:115-131.

## **Topic Area #2: Healthy aging and aging-in-place**

### ***Competency #1: Foundations underlying theories and conceptual frameworks***

#### *Successful aging and aging-in-place*

1. Rowe JW, Kahn RL. Successful Aging. *The Gerontologist*. 1997;37(4):433-440.
2. Menec VH. The Relation Between Everyday Activities and Successful Aging: A 6-Year Longitudinal Study. *J Gerontol B Psychol Sci Soc Sci*. 2003;58(2):S74-S82.
3. Michael YL, Green MK, Farquhar SA. Neighborhood design and active aging. *Health Place*. 2006;12(4):734-740.
4. King AC, King DK. Physical activity for an aging population. *Public Health Rev*. 2010;32:401-426.
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#### *WHO Age-friendly cities*

6. World Health Organization. Global age-friendly cities: a guide. 2007.

#### *Biopolitics and governmentality*

7. Foucault M. Governmentality. In: Burchell G, Gordon C, Miller P, eds. *The Foucault Effect: Studies in governmentality with two lectures by and an interview with Michel Foucault*. Chicago, USA: University of Chicago Press; 1991:87-104.
8. Foucault M. 17 March 1976 (Chapter 11). In: *Lectures at the College de France, 1975 - 76*, eds Mauro Bertani and Alessandro Fontana. New York: Picador; 2003.

### ***Competency #2: Methodology***

#### *Age-friendly communities concept*

9. Menec VH, Means R, Keating N, Parkhurst G, Eales J. Conceptualizing Age-Friendly Communities. *Can J AgingRevue Can Vieil*. 2011;30(03):479-493.

#### *Critical perspectives on successful aging*

10. Phelan EA, Anderson LA, Lacroix AZ, Larson EB. Older Adults' Views of "Successful Aging"—How Do They Compare with Researchers' Definitions? *J Am Geriatr Soc*. 2004;52(2):211–216.



11. Katz S. BUSY BODIES: Activity, Aging, and the Management of Everyday Life. *J Aging Stud.* 2000;14(2):135.
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***Competency #3: Research context, history and philosophy of the underlying science***

*The tenets of healthy aging and aging in place: social engagement, physical activity*

14. Fried L, Carlson M, Freedman M, et al. A social model for health promotion for an aging population: Initial evidence on the experience corps model. *J Urban Health.* 2004;81(1):64-78.
15. Boneham MA, Sixsmith JA. The voices of older women in a disadvantaged community: issues of health and social capital. *Soc Sci Med.* 2006;62(2):269-279.
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21. Blazer, D. G. Self-efficacy and depression in late life: a primary prevention proposal. *Aging & Mental Health.* 2002; 6 (4): 315-324.
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*Social justice and health equity for older adults*

23. Day R. Environmental justice and older age: consideration of a qualitative neighbourhood-based study. *Environ Plan A*. 2010;42(11):2658-2673.
24. Emery, J.C. H. and Matheson, J. A. Should income transfers be targeted or universal? Insights from public pension influences on elderly mortality in Canada, 1921–1966. *Canadian Journal of Economics/Revue canadienne d'économique*. 2012; 45: 247–269.
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**Topic Area #3: The roles of human-animal relationships vis-à-vis aging/aging-in-place**

***Competency #1: Foundations underlying theories and conceptual frameworks***

*One Health paradigm*

1. Zinsstag J, Schelling E, Waltner-Toews D, Tanner M. From “one medicine” to “one health” and systemic approaches to health and well-being. *Prev Vet Med*. 2011;101(3):148–156.
2. Rock M, Buntain BJ, Hatfield JM, Hallgrímsson B. Animal-human connections, “one health,” and the syndemic approach to prevention. *Soc Sci Med*. 2009;68(6):991-995.
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***Competency #2: Methodology***

*Understanding the intricacies of “pet ownership”—implications for methodologies*

4. Chur-Hansen A, Winefield H, Beckwith M. Reasons given by elderly men and women for not owning a pet, and the implications for clinical practice and research. *J Health Psychol*. 2008;13(8). - *highlights the need to better understand and consider both personal preferences as well as both personal and structural barriers*.
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*Key methodological resources for data collection and analysis*

6. Yin RK. Designing Case Studies: Identifying your case(s) and establishing the logic of your case study. In: *Case Study Research: Design and Methods*. Vol 5. 4th ed. Applied Social Research Methods Series. Thousand Oaks, California: Sage Publications; 2009:25-66.
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### ***Competency #3: Research context, history and philosophy of the underlying science***

#### *Pets and promotion of healthy aging/aging-in-place*

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#### *Barriers to pet-ownership*

14. Shore ER, Petersen CL, Douglas DK. Moving as a reason for pet relinquishment: a closer look. *J Appl Anim Welf Sci JAAWS*. 2003;6(1):39-52.
15. Smith DWE, Seibert CS, Jackson FW, Snell J. Pet Ownership by Elderly People: Two New Issues. *Int J Aging Hum Dev*. 1992;34(3):175-184.

#### *Looking at health benefits that extend beyond "pet ownership"*

16. Johnson RA, Meadows RL. Dog-walking: motivation for adherence to a walking program. *Clin Nurs Res*. 2010;19(4):387-402.

17. Wood LJ, Giles-Corti B, Bulsara M. The pet connection: pets as a conduit for social capital? *Soc Sci Med.* 2005;61(6):1159-1173.

*Pet loss or separation and implications for older adults*

18. Ormerod E. Supporting older people with pets in sheltered housing. *In Pract.* 2012;34(3):170-173.
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*The roles of practitioners with respect to human-animal relationships*

20. Risley-Curtiss C. Social Work Practitioners and the Human—Companion Animal Bond: A National Study. *Soc Work.* 2010;55(1):38-46.

**Appendix F: CANADIAN ASSOCIATION ON GERONTOLOGY – 2015 SYMPOSIUM  
ON COMPANION ANIMALS & AGING (ABSTRACTS AND SUMMARY)**

Organized by the first author as part of the 2015 Canadian Association on Gerontology (CAG) - 44th Annual Scientific and Educational Meeting

Title: Companion Animals & Ageing: Sharing Perspectives on Benefits and Challenges

Date: Saturday, October 24, 2015

Chair: Ann Toohey, University of Calgary; Discussant, James Gillett, McMaster University

Source: Source: [http://cag.conference-services.net/programme.asp?conferenceID=3888&action=prog\\_list&session=35248](http://cag.conference-services.net/programme.asp?conferenceID=3888&action=prog_list&session=35248)  
(accessed October 2017)

**S10 - ElderDog Canada: Supporting Seniors and their Canine Companions**

Ardra Cole 1,2

1ElderDog Canada, Rose Bay, NS, Canada, 2Mount Saint Vincent University, Halifax, NS, Canada

ElderDog Canada is a national, community-based, non-profit organization dedicated to supporting older people, older dogs, and the important relationship they enjoy. ElderDog was inspired by my decade-long program of research on caregiving and Alzheimer's disease, funded by the Social Sciences and Humanities Research Council of Canada and the Alzheimer Society of Canada. As a university researcher and leader of a national organization dedicated to the human-animal bond, I bridge two realms. As part of the Companion Animal and Aging Symposium, I will make a four-part presentation that will provide: 1) the research backdrop of ElderDog focused on the role of dogs in seniors' lives; 2) an overview of ElderDog Canada and its programs to support seniors and their canine companions; 3) narrative snapshots of some of the seniors and their dogs supported by ElderDog; and 4) key issues and challenges faced by seniors who benefit from and are committed to canine companionship. The complexity of the issues related to preserving the animal-human bond for seniors, revealed in the presentation, will contribute to the panel discussion about the need for cross-sectoral strategies and opportunities.

**S11 - The impact of the aging population on animal shelter operations: Thinking through the consequences for seniors and their pets**

Philip Fulton

Calgary Humane Society, Calgary, AB, Canada

Calgary Humane Society (CHS) is Calgary's primary animal welfare organization. We prioritize connecting the lives of animals and people, while also providing essential animal services to the community. In addition to pet relinquishments and adoptions, CHS also provides an emergency boarding program for people who encounter unexpected, but short term, interruptions in their ability to care for a pet.

With the growing number of senior pet owners in our community, we are noticing shifting patterns related to our services. These are of concern to our organization, in terms of animal welfare, but also in terms of the emotional well-being of seniors and others in their lives. In this presentation, we describe representative cases that illustrate the following four trends, as they relate to the aging population:

1. Seniors utilizing our Emergency Boarding program during periods of hospitalization, especially seniors lacking social support.
2. Pets surrendered by senior owners due to an inability to provide care for them.
3. Pets seized from senior owners due to neglect, often resulting from an owner's mental/physical health, mobility or financial circumstances causing their pet to be in distress.
4. Pets surrendered by friends or family due to shifting circumstances for the senior owner, including hospice care, long term care facility or even after death.

We conclude our presentation by highlighting ways our community might start to address these trends, to help protect the important connections between seniors and their pets.

## S12 - Pet ownership, survival, cardiovascular health, and quality of life over time: The Manitoba Follow-up Study

Audrey Swift, Robert Tate  
University of Manitoba, Winnipeg, Manitoba, Canada

Mixed evidence exists in the literature on pet ownership and health. The general consensus is that pet ownership is likely good for us, but for the most part, we don't know why.

In answer to a call for research that clarifies how pet ownership relates to health and well-being prospectively, we analyzed data from 860 community-dwelling older men from the Manitoba Follow-up Study (MFUS; mean age  $84.6 \pm 3$  years in 2005), one of the longest cohort studies of health and aging in the world.

Objective 1 was to examine pet ownership relative to mortality and ischemic heart disease morbidity prospectively over a period of nine years. Objective 2 was to contribute new knowledge to the field by examining pet-related psychological variables that could influence quality of life over time.

Survival analyses revealed that the mortality rate of non-pet owners was 20% higher than that of pet owners over the nine-year period examined: 1.20 [95%CI:(0.97,1.48)]. Similarly, pet owners

were four times less likely than non-pet owners to manifest ischemic heart disease over time: 4.27 [95% CI:(1.01,17.8)]. Annually since 2005, 35 to 40% of the MFUS men identified pets as important for present quality of life, even though only half of the men actually owned a pet.

Our findings support evidence to suggest that pet ownership benefits survival and cardiovascular health in older men. In addition, pets being present in older men's lives can be important for men's quality of life, irrespective of whether the men actually own a pet.

### S13 - Pet ownership, other domestic relationships, and satisfaction with life among seniors: Results from a Canadian National Survey

Chelsea Himsworth<sup>1,4</sup>, Melanie Rock<sup>2,3</sup>

<sup>1</sup>University of British Columbia, Vancouver, BC, Canada, <sup>2</sup>University of Calgary, Calgary, AB, Canada, <sup>3</sup>O'Brien Institute for Public Health, Calgary, AB, Canada, <sup>4</sup>BC Ministry of Agriculture, Abbotsford, BC, Canada

**Purpose:** Given the physical and psychological challenges associated with aging, it is important to identify ways to protect and promote quality of life for seniors. Previous research suggests that pet ownership may confer a variety of health and social benefits among seniors. The purpose of this analysis was to determine whether pet ownership was associated with satisfaction with life among Canadian seniors.

**Methods:** Quantitative data were obtained from the Canadian Community Health Survey—Healthy Aging, a nationally representative survey of Canadians  $\geq 45$  years of age conducted between December 2008 and November 2009. Analyses were restricted to a subsample of 11,973 individuals  $\geq 65$  years of age. Multiple logistic regression was used to model the relationship between pet ownership and satisfaction with life, controlling for sociodemographic factors. The final model was stratified to detect interaction.

**Results:** Pet ownership was negatively correlated with satisfaction with life in the sample as a whole (AOR = 0.79, 95% CI = 0.72–0.87) and among those who were married, in common-law relationships, and/or lived with others, while no association was found among those who were widowed, single, or living alone. Among those who were both divorced and living alone, pet ownership demonstrated the potential for being associated with greater satisfaction with life (AOR = 1.24, 95% CI = 0.89–1.73).

**Conclusion:** This analysis showed that the relationship between seniors and their pets is complex. Whether pet ownership correlates with satisfaction with life appears to depend on the presence and nature of other domestic relationships.

S14 - Promoting health for an aging population: The role of community services in enhancing benefits and addressing challenges of pet ownership for seniors

Ann Toohey 1, Jennifer Hewson<sup>1</sup>, Cindy Adams<sup>1,2</sup>, Melanie Rock<sup>1,2</sup>

<sup>1</sup>University of Calgary, Calgary, AB, Canada, <sup>2</sup>O'Brien Institute for Public Health, Calgary, AB, Canada

**Objectives:** Pet-ownership for seniors is a population-level phenomenon with implications for health promotion and health equity. Studies of companion animals and aging rarely consider how context influences the quality of human-animal relationships. This project explores systemic challenges older adults face in terms of having positive experiences with pets, and considers the implications in relation to aging-in-place.

**Methods:** This case study employs semi-structured interviews to understand perspectives of both pet-owning seniors and community organizations that provide support to seniors and/or pets. Understandings will be contextualized using national population-level data, including the Canadian Longitudinal Study on Aging, to describe socio-demographic characteristics of older pet owners and links with physical, mental and social well-being.

**Results:** Preliminary results suggest that animal companionship enhances seniors' quality of life, providing meaning and purpose. Seniors may prioritize expenses and activities related to pet care, yet also endure anxiety over looming challenges related to changing financial, health, or social circumstances. Local low income housing options tend to prohibit pets, and seniors may become ineligible for some forms of assistance if they will not part with a pet. Few community service organizations are able to support both human and pet needs, due to mandates and resource limitations.

**Conclusion:** Recognizing the potential of animal companionship to support physical, mental, and social well-being for older adults who are aging-in-place, but who face challenges related to low income and social isolation, highlights the need for strategic partnerships and policy redress related to low income housing and other forms of support for seniors.

S15 - Representations of Companion Animals and Aging in North America

Rachel Weldrick

University of Western Ontario, London, ON, Canada

**Introduction:** For many people, companion animals remain an important part of life well into their advanced years. Many older women, in particular, reach out to companion animals to provide companionship and comfort, especially during experiences with illness and bereavement. A rapidly growing body of research is beginning to explore the bio-psycho-social benefits of owning a companion animal in later life, as well as engaging with animals more generally. However, studies have yet to consider the various ways in which news outlets and popular media



portray pet ownership in later life, how "popular science" is reporting the findings from these emerging studies, and by extension, how public discourse may be shifting as a result.

**Methods:** The present study analyzed a sample of media and newspaper articles published in North America. Using LexisNexis, a comprehensive collection of media publications was retrieved, and a thematic analysis was conducted.

**Results:** Several themes emerged within the media publications. Older adults were often portrayed in ways that reflect several of the dominant themes that exist within broader media representations of older adults. Additionally, the companion animals themselves were typically presented as being medically or socially beneficial to the older adult(s), while the challenges and barriers to owning a companion animal in later life were rarely discussed.

**Conclusion:** Overly simplistic media representations of older adults and their relationships with companion animals are incomplete, and fail to capture the challenges that may arise in owning a pet in later life. Implications are discussed.

### **Session summary (written and circulated by A. M. Toohey, October 2015)**

Hello everyone,

Most importantly, I would like to acknowledge each of you for your excellent contribution to the research symposium over the weekend, and for your support towards making this happen.

In the name of our goal of knowledge mobilization, I wanted to leave you with a few last reflections on our session. For me, spending some time reflecting and summarizing has helped me to see some of the links between the distinct yet highly inter-related topics that each of our presentations covered, and I hope that this may be valuable to others as well.

One overarching theme that seemed to emerge is that community awareness and a willingness to become 'involved' could go a long way, in terms of contributing to the well-being of both older adults who are aging-in-community and also to the companion animals whose well-being hinges on the care they receive. This effort could be supported by media coverage, as highlighted by Rachel, that begins to balance the 'good' of pets for seniors with some of the challenges that they face, as well as the consequences of these challenges, as discussed by Phil. Media framing might begin to focus on the need for family, friends, neighbours, or else formally-organized volunteers (as per Zoe's "Pet Assist") to actively watch for and assist with situations that appear to be concerning. Such involvement might also help flag early stages of mental health or cognitive decline, before they manifest to an extent that harm is caused to an animal, or to the person her/himself.

At the same time, compelling evidence like the longitudinal findings that Robert brought forward, reflecting Audrey Swift's insightful analysis of their study population of elderly men, also may speak to policy-makers' appetites for causality. The multiple domains to which their findings were relevant -- cardiovascular health, longevity, AND quality of life -- also broaden the foundation for the argument that society could do more to support access to pets, including providing opportunities for seniors living in institutionalized settings to remain involved in pet care. Some such programs have been devised and evaluated in the US, so we can say that some of these initiatives are in fact evidence-based.

Melanie's presentation, however, cautions future researchers from looking at the pet-ownership/human-health relationship in isolation. One would have to dig deeply -- as she and Chelsea Himsworth did -- in order to realize that other domestic relationships also shape the roles that pets play in peoples' lives, and must be considered within the context of any given health outcome measures. The methodologies we use to explore animal companionship and aging must be able to accommodate the complexities of everyday life.

In terms of promising approaches to maximize benefits for people and pets, I was really happy to hear Phil talk about situations where surrendering a pet has not necessitated the complete severing of this important relationship. Fostering or adopting families who are committed to keeping intact the bond between a senior and their pet deserve kudos. This type of initiative would fit well with Robert and Audrey's findings regarding the continued importance of pet care to institutionalized older men, and also could be injected into public consciousness through mass and social media - again, as per Rachel's highlighting how much is currently missing within media representations.

Especially in light of the sobering images that Phil shared at the outset of the session, I hope that my own presentation pressed upon the urgent need for collaborations at the community-level. Working across senior social support and animal welfare concerns, programs like Zoe's "Pet Assist" may prevent the suffering of animals, and at the same time, may also bring both social contact and peace of mind into the lives of seniors who simply do not have supports and resources available within their own social networks. Still, the pervasive absence of pet-supportive affordable housing will limit the extent of this type of support unless we can find (or establish) models that seem to effectively balance the costs and benefits of pets for all involved in such housing arrangements, from management to residents to the companion animals themselves.

We have much to do, but I personally feel hopeful. By coming together to share knowledge and experiences, as we did last weekend, it seems that each of us can approach our own piece with renewed insights. As you move forward with your own important work, I invite you to consider how we might continue to work together in the future - whether directly or indirectly - in order to support people and their companion animals as the population ages.

With appreciation,  
Ann

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## Appendix G: SAMPLE INTERVIEW GUIDES

### (a) Sample interview conducted with representative of a social services agency:

#### Preamble:

The broad aim of my study is to explore both the benefits and challenges of pet-ownership for seniors, and especially lower-income and socially-isolated seniors. More specifically, I am trying to understand how seniors' relationships with their pets may be affected by things like fixed incomes, housing situations, the availability of support for pet care when needed, and the availability of community services that can help out older pet-owners with different aspects of having pets.

In particular, I am spending time speaking to representatives from different agencies who might be involved with seniors, whether in terms of pet acquisition itself, or in terms of other forms of social support, and asking them to reflect on these. I will also be speaking directly with seniors who share their lives with pets, including those who have recently adopted a pet. I am speaking with *both* seniors and organizations that support seniors because I wish to understand how relationships with pets affect healthy aging, but while also understanding how costs and other systemic challenges related to pet-ownership might affect seniors' experiences of aging more generally. Also, we find that views differ on the extent to which community services should assist with pet-keeping.

Because of the important work that (blinded organization) does to assist vulnerable seniors, and the reality that issues with pets regularly come up when you are supporting these seniors, your particular perspective is very valuable for me to hear and to include in my study. Today, I'm hoping that you will reflect on your own perceptions of both the benefits of pets for seniors *and* the challenges that seniors face in terms of owning or keeping pets, and your thoughts regarding circumstances where pets are particularly beneficial as well as particularly challenging.

*Switch on audio-recording device, if using.*

#### Grand tour questions:

1. To begin, could you please describe for me what your job as the (blinded position) involves?
2. Could you describe for me the different members of the (blinded) team? (*Prompts: are they all paid social workers? Volunteers?*)
3. What are the main outreach services that (blinded organization) offers?
4. How would you characterize the sorts of seniors that receive (blinded organization) outreach services? How does (blinded organization) identify seniors who require these services?

**Mini-tour and experience questions:**

5. Now, I would like to start to hear more about the topic of pets. How often would you estimate that your (blinded team members) encounter pets in the homes of the seniors you are supporting?
6. Thinking about one or two specific cases that you are familiar with, what are the different ways that pets seem to benefit the lives of the vulnerable seniors that you assist?

What are some of the challenges or issues that you feel your seniors face, as they relate to pets?

What about the pets themselves – can you think of any cases where one of your (blinded team member) was concerned about the pet’s quality of life?

7. Now I would like to ask you a little bit about the (blinded positions) on your team. Can you think of any examples of situations when an (blinded team member) was concerned about their own safety when visiting a client with a pet?

Are the (blinded team members) trained in any way for pet-related encounters? Do any prefer not to work in homes that include pets, either due to fears or allergies?

Are your (blinded team members) ever upset or distressed about pet-related challenges that they witness? Is there any sort of emotional support available for them, realizing that they will also encounter distressing situations that do *not* involved pets?

8. Does your team encounter situations where a senior has to part with a pet? If so, could you please describe the different circumstances when this happens?

What do you think the seniors themselves experience?

Do you know what generally happens to the pet?

9. Do you ever encounter seniors who don’t have a pet, but wish that they could? (blinded identifying information) Do you hear other reasons why the seniors you serve don’t have a pet?

10. I understand that (blinded team members) might be involved in assisting seniors throughout various life transitions, like moving into a new housing situation. I also realize that low-income housing that is also pet-friendly is scarce in Calgary.

Can you describe for me situations that you are aware of where a senior has been able to make such a transition while keeping their pet?

Have you observed any situations where seniors had to give up a pet before making a transition? What was this like for the senior? For the (blinded team member)? Do you know what happened to the pet itself?

11. Do your (blinded team members) ever coordinate pet-related support with any other community organizations? For instance, I am thinking about the (blinded charity), which provides pet food when it's available.

**Reflective questions:**

12. In public health, there is a lot of interest in dogs in particular, as having a dog may encourage seniors to be more physically active, and dogs help keep seniors socially involved, since they tend to be out walking and interacting with their neighbours and even strangers, who might even stop to say 'hello' to the dog. Yet, dog-ownership can be especially challenging for seniors, for a range of different reasons. Could you give me your reflections about both benefits and challenges of dogs for the seniors who you serve?

In your experience, are these different in any way from what seniors experience with cats?

13. In my experience, I feel that (blinded organization) is particularly sensitive to the importance of pets to the seniors that it serves, but that your efforts are understandably limited.

Based on your professional experience, what are the services or supports that would most benefit seniors – and particularly those who are lower income, socially isolated, or perhaps find pet care increasingly challenging – in terms of being able to keep a pet and provide for its welfare?

14. How about you? Are you, or have you ever been, a pet-owner? Or have you ever formed a significant attachment to someone else's companion animal?
15. In those situations where pet-ownership or pet-care simply end up being beyond someone's capacity, what might be humane approaches to intervening, considering both the senior and the pet?
16. Does you have advice or suggestions that could you could share with me, which might help me prepare to speak with the seniors?

I really appreciate your taking the time to speak with me again today, and for participating in our research study.

**17. Before we end, is there something we haven't touched upon that you would like to add?**

You are also welcome to contact me after-the-fact via e-mail or by telephone, if you have any additional reflections that you'd like to share. With your permission, I may also follow up with you, just to confirm that I have accurately understood your opinions and point of view. Otherwise, I greatly appreciate the time you have given me today, and your generosity in terms of sharing your experience and insight. I will look forward to sharing with you and your organization the results of our study, once these become available.

**(b) Sample interview conducted with representative of an animal welfare agency:**

**Preamble:**

This study is about what it is like to take care of pet, and how caring for a pet is affected by things like age, income, housing, rules set by cities or towns, and community services. We are going to be recruiting pet-owners through various community service organizations because we are interested in understanding how taking care of the costs that pet-owners face might affect the clients who are using these services, and even whole societies. Also, views differ on whether community services should extend to taking care of pets. I will also be recruiting seniors, in particular, who have recently acquired pets because I am interested in understanding how relationships with pets affect healthy aging, but while also understanding how costs and other challenges related to pet-care might affect seniors' experiences of pet-ownership.

Little is known about what it is actually like for people to receive pet-related supports from community services, and how these types of experiences fit into the lives of actual people and pets. Because of the work (blinded organization) does in terms of supporting relationships between people and pets, your particular perspective is very valuable. Today, I'm hoping that you will reflect on your own perceptions of the challenges of pet care, and the general experiences of pet-ownership, faced by lower-income pet owners. At the same time, I'd like to hear your perspective on the meaning of pet-ownership for those people who adopt through (blinded organization), and who are living in lower-income circumstances.

**Grand tour questions:**

1. To begin, could you describe for me what some of the typical things are that you do, in terms of (blinded position)?

**Mini-tour and experience questions:**

2. How would you describe the (blinded organization) adopters? Do they include lower-income pet owners? What proportion of adoptions that take place through (blinded organization) would you estimate involve lower income households? What about seniors?
3. Can you tell me a little bit about the application process for (blinded program)? Do most prospective adopters know about (blinded program), or do your adoption coordinators or

technicians discuss (blinded program) directly at the time of adoption?

4. Conversations regarding income can be very sensitive. How do you approach these? Have you ever received any sort of training about how to speak with your clients about their circumstances? Does (blinded organization) have any organizational strategies about this?
5. Would you say that you have enough resources for the number of (blinded program) applications you receive? If not, what sorts of factors are considered, in terms of accepting applications? How do you communicate with those applicants who are turned down? Are there any other resources you can recommend for them?
6. Are there any types of pet-related support services that you've heard your clients ask for but that fall outside of (blinded organization)'s mandate? (*Please describe.*) Are you able to direct them to any other services or resources?

**Reflective questions:**

7. Clearly, through the (blinded program), you will have encountered many pet-owners who struggle with the financial side of having a companion animal. Can you reflect, for me, about what having a pet means to people living in lower-income circumstances? Do you think financial challenges shape the experience of pet-ownership in any ways? Can you give me some examples of why you think this?
8. Do you have a pet? What kind of animal? What does she or he mean in your life?
9. Based on your professional experience, what are the services or supports that would most benefit lower income individuals and families in terms of being able to keep a pet and provide for its welfare, even as their own circumstances change?
10. At what point might pet-ownership or pet-care end up beyond someone's capacity, whether for financial reasons or – in the case of seniors – age-related changes. What do you think might would be the most humane approaches to intervening?
11. What advice would you give to another organization that might be interested in seeking to provide pet-related services to lower-income citizens?
12. What advice could you share, which might help me prepare to speak with the lower-income pet-owners that your organization serves?

I really appreciate your taking the time to speak with me again today, and for participating in our research study.

13. **Before we end, is there anything we haven't discussed that you would like to add?**

You are also welcome to contact me after-the-fact via e-mail or by telephone, if you have any additional reflections that you'd like to share. With your permission, I may also follow up with you, just to confirm that I have accurately understood your opinions and point of view. Otherwise, I greatly appreciate the time you have given me today, and your generosity in terms of sharing your experience and insight. I will look forward to sharing with you and your organization the results of our study, once these become available.

**(c) Sample interview conducted with an older adult:**

**Preamble:**

This study is about what it is like for seniors to live with pets, and how these experiences are affected by things like fixed incomes, housing situations, and having support with pet care when needed – whether through social networks, or through community organizations. While there are some existing studies that have explored relationships that seniors have with their pets, there are many questions about how these special relationships contribute to aging that remain unanswered. Importantly, very little research that I am aware of has investigated some of the challenges that older pet owners face during transitional periods of their lives, and how these challenges affect their own well-being and that of their pets. As such, I am speaking with seniors who are pet-owners in order to investigate the various links between pets and aging more thoroughly, and also to understand different dimensions of ways that pet-ownership may be experienced. That is why I want to learn from you. But in general, what I want most is to understand what life is like for you and (blinded name).

*Turn on audio-recorder, if using.*

**Grand tour questions:**

1. I am really interested in hearing about a typical day in your life, and the different ways that this involves (blinded name). Could you please describe this for me?

**Mini-tour and experience questions:**

1. How long have you had (blinded name)? How did she come into your life? Why did you decide to bring a (pet) into your life, at the time that you adopted her/took her in?
2. Since (blinded name) came into your life, can you describe any changes you noticed in terms of your own daily routines or activities, even when these don't directly involve her? *Prompts might include: diet, self-care, motivation to do other things, sociability, etc.*
3. Have you met any new friends or acquaintances because of (blinded name)?
4. What was your housing situation, when you adopted (blinded name)? Did you own your home, or were you living in pet-friendly housing? Did you have to move in order to have



a (pet)? If so, were there choices available?

5. (Question about housing blinded to protect anonymity.) How long have you lived there? Did you have to wait very long to get in? Did you have any other options to consider?
6. Can you describe what living in (blinded facility name) is like for you and (blinded name)? What are the positives? Are there any challenges?
7. Do you ever worry about having to look for a new place to live? Why or why not?
8. I want to ask you a little bit about veterinary care. What are your experiences with this?  
*Prompts: regular visits? Wellness check-ups? Or as-needed?*  
  
Do you find it challenging to get (blinded name) to the vet? How do you do this?  
  
Are you at all concerned about the costs of veterinary care, as (blinded name) gets older?
9. Do have any people in your life who might help out with (blinded name), if you get sick or need to be away from them for a few days? How about a longer period of time?
10. What about some of the other costs involved in having your (pet)? Are these ever concerning for you?
11. Thinking more generally, what do you find most rewarding or fulfilling, about sharing your life with (blinded name)? What do you find most challenging?

### **Demographic information:**

I'd like to ask you for a few more details about yourself

12. Did you have other pets in your life before (blinded name)?

#### ***Administer brief survey:***

1. Please indicate your year of birth: \_\_\_\_\_
2. Please indicate your country of birth: \_\_\_\_\_  
If outside of Canada, when did you immigrate here? \_\_\_\_\_
3. Please indicate your marital status:
  - \_\_\_ married/common-law
  - \_\_\_ widowed
  - \_\_\_ divorced/separated
  - \_\_\_ single
4. Which best describes your current dwelling?
  - \_\_\_ house (detached/ duplex)
  - \_\_\_ apartment or condominium
  - \_\_\_ seniors' housing
  - \_\_\_ other

5. Do you own or rent your dwelling?                    \_\_\_ own  
   \_\_\_ rent
6. What was the highest level of education you completed? \_\_\_\_\_
7. Which best estimates your current household income?  
   \_\_\_ less than \$20,000/yr  
   \_\_\_ between \$20,000 and \$50,000  
   \_\_\_ between \$50,000 and \$100,000  
   \_\_\_ more than \$100,000
8. In general, would you describe your health as:                    \_\_\_ excellent  
   \_\_\_ very good  
   \_\_\_ good  
   \_\_\_ fair  
   \_\_\_ poor
9. Are there any household chores that you receive assistance with? Yes / No

If yes, please list:

10. How often do you participate in social or recreational activities that involve other people?  
\_\_\_ daily  
\_\_\_ several times per week  
\_\_\_ weekly  
\_\_\_ several times per month  
\_\_\_ monthly  
\_\_\_ less than once per month

- (Optional) 11. Do these activities ever include your pet, or involve pets? Yes / No If yes:  
\_\_\_ rarely  
\_\_\_ regularly  
\_\_\_ often

Please describe these: <end survey portion>

13. When we write about our study results, we sometimes assign a pseudonym to both the people and pets involved, in order to protect your privacy. Would you like me to use a pseudonym for (blinded name), or would you prefer that I use her real name?
14. *Why* do you think that (blinded name) means so much to you? The essence...
15. **Before we end, is there something else that you'd like to tell me, that we haven't touched on, that you'd like me to consider in my study?**

I really appreciate your taking the time to speak with me today, and participating in our research study. Thank you again for the valuable insights that you've provided, and I wish you and (blinded) the very best.

## Appendix H: RECRUITMENT POSTER FOR INTERVIEWS WITH OLDER ADULTS

### **PARTICIPANTS INVITED**

TO TAKE PART IN A STUDY EXAMINING PET COMPANIONSHIP AND HEALTHY AGING

**Are you 60 years or older?**

**Do you have a pet in your life that provides you with companionship?**

If so, we are looking for volunteers to take part in a research project exploring links between pets and healthy aging. As a participant, you will be encouraged to share stories about your personal experiences of bringing a pet into your life.

You will receive an honorarium in the form of a Safeway® grocery gift card, and a gift for your pet.

If you would like to learn more about participating in this study, please contact us.

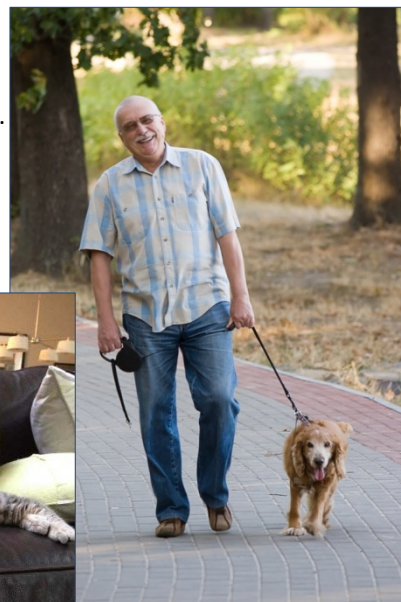
**Please note:** To participate, you will be asked to disclose information about yourself, including your age and household income level.

We look forward to hearing from you!

**Phone:** [REDACTED]

**E-mail:** [REDACTED]

**Web site:** <http://ucalgary.ca/mrock/>



Appendix I: LOCAL AND NATIONAL NEWSPAPER COVERAGE OF  
CALGARY HOUSING CASE

# CALGARY SINCE 1864 HERALD

## Senior chooses homelessness over giving up kitten



EMMA MCINTOSH, CALGARY HERALD

More from Emma McIntosh, Calgary Herald ([HTTP://CALGARYHERALD.COM/AUTHOR/EMCINTOSHERALD](http://CALGARYHERALD.COM/AUTHOR/EMCINTOSHERALD))

Published on: August 4, 2015 | Last Updated: August 4, 2015 5:16 PM MDT



**Should Louise Slade be able to keep her kitten without leaving her home?**



Total Votes: 388

## Despite public support, still no housing for senior with kitten



EMMA MCINTOSH, CALGARY HERALD

More from Emma McIntosh, Calgary Herald ([HTTP://CALGARYHERALD.COM/AUTHOR/EMCINTOSHHERALD](http://CALGARYHERALD.COM/AUTHOR/EMCINTOSHHERALD))

Published on: August 6, 2015 | Last Updated: August 6, 2015 7:55 PM MDT



# NATIONAL POST

FINANCIAL POST • NEWS • COMMENT • PERSONAL FINANCE • INVESTING • TECH • SPORTS • ARTS • LIFE • HEALTH • HO

NEWS CANADA POLITICS

## CANADA

TRENDING

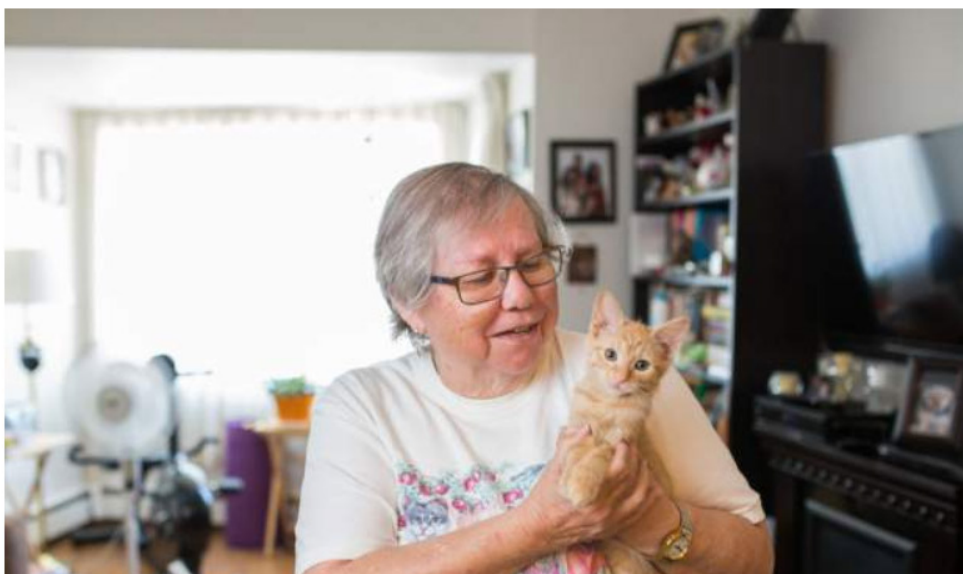
[Leonard Cohen](#) | [NHL](#) | [Akin](#) | [U.S. election](#) | [Hydro bills](#) | [Real estate](#) | [Lotto Max](#)

### 'I'm not getting rid of my kitty': Calgary senior chooses homelessness over giving up kitten

NP

EMMA MCINTOSH, POSTMEDIA NEWS | August 5, 2015 11:36 AM ET

[More from Postmedia News](#)



Appendix J: **2017 AGING & SOCIETY CONFERENCE, ABSTRACT SUBMISSION**

(<http://agingandsociety.com/2017-conference>):

**Title:** The Curious Case of Lower Life Satisfaction Scores for Older Adults with Pets

**Subtitle:** Insights from a Mixed Methods Case Study

**Short Description (30 words):** Older adult pet-owners have lower life satisfaction scores.

Insights from qualitative interviews highlight both individual and structural factors as influential.

Findings are relevant to policies promoting aging-in-place and social inclusion.

**Longer description:** It is often assumed that pets are good for older people. Yet empirical evidence on the health-related influences of pets later in life is contradictory and inconclusive. This inconsistent evidence-base may contribute to the absence of pet-related considerations within social policies intended to promote aging-in-place, which in turn may disproportionately impact lower-income older adults who rely on these policy provisions. To explore this proposition, we conducted a case study of aging-in-place with pets in a Canadian city. Our approach included indepth interviews with a socio-economically diverse sample of older adult pet-owners ( $\geq 60$  yr) living independently ( $n=14$ ). We also assessed life satisfaction, a valid and reliable indicator of well-being, within a representative cohort of older Canadians ( $\geq 60$  yr) participating in the Canadian Longitudinal Study on Aging (CLSA,  $n=10,648$ ). Our quantitative results indicate that 37.9 per cent of older adults have a pet that provides companionship, yet older pet-owners have significantly lower life satisfaction scores (adjusted odds ratio=0.71 (0.64, 0.79),  $p<0.001$ ). Inductive thematic analysis of our qualitative interviews highlights factors that influence qualities of human-animal relationships in relation to overall well-being. Together, our

mixed methods findings offer a nuanced understanding of the complicated ways that companion animal relationships may be experienced as people age, and confirm that the nature of these relationships is shaped by both individual and structural considerations. These findings have implications for redressing current policies and practices around affordable housing and social services designed to promote social inclusion and aging-in-place.

Keywords: (see <http://agingandsociety.com/about/themes>)

public policy

community support

mental, physical and social wellbeing