ADVANCING OUR UNDERSTANDING OF HOW PET OWNERSHIP IMPACTS HEALTH AND WELL-BEING AMONG COMMUNITY DWELLING PEOPLE LIVING WITH SERIOUS MENTAL ILLNESS

by

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A thesis submitted to the School of Rehabilitation Therapy
in conformity with the requirements for
the degree of Doctor of Philosophy

Queen’s University
Kingston, Ontario, Canada
(September, 2014)

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Abstract

Objectives

It is estimated that about 1 million (3%) Canadians will experience serious mental illness characterized by symptoms and impairments that are severe enough and of long enough duration to interfere with daily life (Canadian Mental Health Association, n.d; Kelly, 2002) including meaningful work and social engagement (Mental Health Commission of Canada, n.d.).

Methods

The purpose of this thesis was to develop the concept of pet ownership as an everyday North American occupation and to develop a theory of how pet ownership impacts on health and well-being. The first study used Rodgers’ (2000) evolutionary concept analysis approach to analyze North American newspapers and bestselling books. The second study used a grounded theory approach (Charmaz, 2006) to explore how pet ownership impacts (positively or negatively) on health and well-being among community dwelling people with serious mental illnesses. Data collection consisted primarily of individual interviews with 23 stakeholders with knowledge and experience related to pet ownership and serious mental illness.

Results

In study one, the findings demonstrate that pet ownership is a complex concept consisting of the attributes of: responsibility, investment, occupational engagement, entrepreneurship, relationships, morality, and attitude. Occupational engagement appeared as the central attribute. The Rubik’s Cube was used as a mental image representing the complexity of pet ownership. In study two, a theoretical model was developed that identified “transformation” through pet ownership as the overarching theme organizing the model of health and well-being through pet ownership. Transformation occurs through distinct processes at three levels: personal (psychosocial benefits), occupation (occupational engagement)
and context (thinking outside the box of service delivery). Each main process consists of five subprocesses (e.g., unconditional love and acceptance is a subprocess of psychosocial benefits).

**Conclusion**

The two phases of this research highlight that pet ownership has a range of associated tasks, and that the performance and experience of these tasks is enabled by a range of competencies, meanings, and motivations. These are personal elements that could potentially be supported if service providers themselves developed foundational knowledge and skills, and if this knowledge and skill base was given legitimacy as a valid community support option.
Acknowledgements

To the research facilitators and participants, thank you for your honesty and willingness to open your homes and offices to share your stories.

To Dr. Terry Krupa, thank you for your mentorship which had a profound influence on my life path and the quality of my life. You enabled me to leave a mark on the field of mental health with a topic of great importance to me. Upon undertaking this PhD thesis work, I was sure it would be a project of the greatest magnitude – and it was! – Little did I know that a much greater challenge was just ahead when I received a surprise diagnosis of advanced stage ovarian cancer on February 9, 2011. Thank you for your support during this difficult time. You are a person that I greatly respect and trust.

Thank you to the members of my advisory committee Rosemary Lysaght and Diane Buchanan for your suggestions and support. Thank you to the people at the Queen’s School of Rehabilitation Therapy and, prior to that, the School of Nursing for letting me belong in order to grow.

To Ed, my husband of 33 wonderful years, thank you for standing by me. You cheered me on when I wanted to give up and were my guiding light when I felt lost during the PhD work as well as the cancer experience. To Ed’s brothers and sisters - thank you for making me part of your family.

To Heike, thank you for bringing Daisey (my beautiful and spirited sheepdog) into my life when I was starting to go through chemotherapy. Thanks also to Bella (our cat) and the following past notable pets: Senta, Kyra, Bandit, Hassan, Dinah, Felicia, Jasper, Tomiko, Willy, Sam, Lorenz and Alex for sharing/having shared your lives with us.

To Sandy, Steve and family, thank you for listening to my troubles and for providing opportunities to eat healthy and to have fun and laughter during all major holidays and birthdays. Most notably thank you Sandy for sharing your son Matthew (since age 8) with Ed as his “Big Brother”. We all know it was a perfect match. Matthew (now age 25) – you inspired me the moment I met you. Being the “other parents” is such an honor!
Thanks to my oncologists (Dr. Biagi, Dr. Francis, Dr. Martin and Dr. Harle) for helping me live long enough to complete this thesis. Thanks to my nurse practitioner Jan Giroux, the nurses and staff at the cancer clinic and the homecare nurses from Saint Elizabeth Health Care (especially Ruth and Amanda) for your interest and encouragement.

Thank you to my parents, for your love and support and for encouraging me to follow my dreams. Thank you dad for your permission to bring home unwanted dogs and for supporting your family while struggling with mental illness. Mom, you are my hero for the way you stood by dad. As a volunteer, you profoundly impacted the lives of so many people. I loved caring for you during your last three Christmases and being with you during holidays. I also loved talking with you across the miles. Our talks accompanied me to almost the end of this thesis. I miss you both and wish you peace.

This thesis is dedicated to people living with mental illness everywhere. You inspire me and this thesis is a gift for you!
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Chapter 1

Introduction

1.1 Setting the Stage

The overall goal of this research is to advance knowledge of pet ownership as an occupation that can be engaged in by people with serious mental illnesses. Serious mental illness affects two percent of the world’s population (Mood Disorders Society of Canada, 2009). About three percent of Canadians will experience serious mental illness characterized by symptoms and impairments that are severe enough and of long enough duration to interfere with daily life (Canadian Mental Health Association, n.d.; Kelly, 2002) including meaningful work and social engagement (Mental Health Commission of Canada, n.d.). In addition to the functional implications, people with serious mental illness experience social consequences like stigma and discrimination that contribute to their social marginalization (Mental Health Commission of Canada, n.d., Public Health Agency of Canada, n.d.). For example, according to the 8th Annual National Report Card on Health Care conducted by IpsosReid on behalf of the Canadian Medical Association, 42% of 1,002 Canadians were unsure whether they would socialize with a friend who has a mental illness (Canadian Medical Association, 2008). A majority of Canadians (55%) said they would be unlikely to enter a spousal relationship with someone who has a mental illness or hire a person with a mental illness (Canadian Medical Association). One in four Canadians (27%) said they would be fearful of being around someone who suffers from serious mental illness (Canadian Medical Association).

The Canadian Alliance for Mental Illness and Mental Health has identified combating the stigma of mental illnesses and preventing discrimination against people with mental illnesses as one of the most pressing priorities for improving the mental health of Canadians (Public Health Agency of Canada, n.d.). Over the past two decades the mental health system in Canada, serving people with serious mental illness, has moved from a predominantly biomedical orientation to one that has been described as “recovery oriented” (Anthony, 1993; Anthony, 2000; Bellack, 2006; Borg & Davidson, 2008; Davidson & Strauss,
1995; Topor, Borg, Di Girolamo & Davidson, 2011). This means that service delivery moved from a focus on treatment that is meant to “cure” or reduce symptoms as a means to promoting health and well-being in the community, to one that is more focused on how to enable people with serious mental illness to live rich and meaningful lives in spite of persistent mental illness (Davidson, Borg, Marin, Topor, Mezzina & Sells, 2005). Current efforts to promote recovery from serious mental illness have focused on promoting and supporting participation in valued social roles and activities as a means to enhancing both community integration and health and well-being (Anthony, 2000; Davidson, Stayner, Nickou, Styron, Rowe & Chinman, 2001). To this end, mental health service delivery has evolved to develop a range of novel approaches to support paid employment, volunteering, education, leisure, parenting, independent community living and socializing, because participation in these occupations are considered integral to adult health and well-being in the community. Pet ownership is another example of a community activity that has the potential to support integration, health and well-being.

Pet ownership is a popular occupation in which over 53% of the Canadian population engage (Ipsos-Reid, 2001). Frequently people engage in pet ownership specifically for health and well-being reasons. For instance, being a pet owner has been associated with having someone to care for, a means for meeting people, stress reduction, and companionship (Hunt & Stein, 2007; Virués-Ortega & Buela-Casal, 2006; Wood, Giles-Corti, & Bulsara, 2005; Wood, Giles-Corti, Bulsara, & Bosch, 2007). These benefits may also apply to people with serious mental illness, although the pathways from pet ownership to health and well-being for people with serious mental illness are not well understood.

Several factors, including the variable course of serious mental illness, stigmatizing attitudes, views of family and service providers, and financial burden present major barriers to pet ownership for this population, and may prevent engagement in a potentially health promoting occupation. These barriers have not been systematically explored and hinder the advancement of knowledge about pet ownership. Ultimately, this limits our ability to develop pet ownership as an effective recovery and health promoting
occupational strategy for individuals with serious mental illness at a time when Canada is referred to as a “pet nation” (Gibson, 2007).

Preliminary evidence supports that pet ownership contributes to improved health and functioning in serious mental illness. Two studies on pet ownership among community dwelling and homeless individuals with serious mental illness found pet owners exhibited a greater tendency to look after themselves if they had a pet to care for (De Souza, 2000; Fiorito, 2005). Hunt and Stein (2007) reported that pets provided connectedness, responsibility, and emotional stability in the lives of individuals with serious mental illness. Emerging research evidence suggests that: (1) a significant minority of community dwelling mental health clients are pet owners; (2) caring for a pet is desired by many people with serious mental illness; (3) this wish is primarily motivated by the hope for companionship, and (4) pet ownership can enable community integration (Zimolag & Krupa, 2009; Zimolag & Krupa, 2010).

1.2 Objectives

The first phase of this research focuses on analyzing and developing the concept of pet ownership in a current North American context. Occupations refer to everyday tasks and activities that are performed with some consistency and are given value and meaning by individuals and a culture (Polatajko et al., 2004); pet ownership is a type of occupation. Even though popular literature suggests that pet ownership is a valued and health-promoting occupation among Canadians, there is a lack of consensus about what it means to be a pet owner and about what constitutes pet ownership. This lack of agreement negatively impacts on communication and hinders the advancement of theory about pet ownership as a wellness promotion activity. Importantly, this lack of consensus hinders service delivery and policy development to address “pet issues” among Canadians with serious mental illness.

In the context of health service delivery, clarity about the meaning of pet ownership is complicated by the advancement of various forms of therapies that use human-animal interactions to influence health (for example, animal assisted therapy [AAT]). AAT describes the intentional inclusion of an animal in a treatment plan to facilitate healing and recovery of patients with acute or chronic
conditions. AAT is goal directed based upon the individual’s personalized treatment plan, is carried out by a trained professional, and should be evaluated to monitor progress (Griffin, McCune, Maholmes, & Hurley, 2011).

A concept is “a cluster of attributes” (Rodgers, 2000, p. 83). Concepts have often been referred to as the building blocks of theory (Rodgers, 1989; 2000) and are essential to the advancement of discipline specific knowledge (Brilowski & Wendler, 2005). Like other concepts, the idea of pet ownership is publicly expressed and constantly changing. Best-selling literature influences readers who seek information or are interested to learn about this topic. Concept analysis has resolved many significant conceptual problems in nursing (Rodgers, 1989; 2000) and several scholars (Brilowski & Wendler, 2005; Coyne, 1996; De Montigny & Lacharité, 2005) have carried it out because they appreciated the inductive approach of analyzing text based on the idea that concepts are not static, but, rather, evolve with time. Conceptual development is the first step to developing knowledge about pet ownership as an occupation that could be engaged in by people with serious mental illness. Advancing clarity about the meaning of pet ownership and providing a balanced view of pet ownership as an occupation will provide a context for theory development and serve as a comparison for social and practical issues and how they are addressed between the general population and people living with serious mental illness.

The second phase of this research generated a grounded theory of how pet ownership impacts on health and well-being in serious mental illness. Researchers agree that more effort is needed to explore the mechanisms, or pathways, of pet ownership in health and well-being (Headey & Grabka, 2007; McNicholas, Gilbey, Rennie, Ahmedzai, Dono, & Ormerod, 2005). Many studies pertaining to the benefits of owning a pet(s) among a number of vulnerable and ill populations exist but only a few (Wisdom, Saedi & Green, 2009; Zimolag & Krupa, 2010) specifically address people living with serious mental illness. In light of the concerns about the social marginalization of Canadians with serious mental illness, neglecting the investigation of pet ownership for this population leaves an important gap in our
current knowledge. This gap negatively impacts on service provision and policy development pertaining to pet ownership among Canadians with serious mental illness.

Recent research on pet ownership and health and well-being indicates that this relationship may be complex and not direct in nature (McNicholas et al., 2005). Wood, Giles-Corti, and Bulsara (2005) and Wood, Giles-Corti, Bulsara, and Bosch (2007) conducted a random general population health survey of 339 adult community members and 12 focus groups (for a total of 86 participants) at community centers within study suburbs in Australia. They found that pet ownership was positively associated with social interactions, favor exchanges, civic engagement and sense of community. In other words, pet ownership was associated with important determinants of social-emotional health and well-being. How these positive impacts translate to people with serious mental illness who are pet owners is largely unknown.

The potential of pet ownership to connect their owners with community members is significant, because the World Health Report and the World Psychiatric Association have identified stigma related to mental illness as the most significant challenge facing the field of mental health today (WHO, 2001b). Link and Phelan (2006) reason that “when people are labeled, set apart, and linked to undesirable characteristics, a rationale is constructed for devaluing, rejecting, and excluding them” (p. 528). This, they argue, is linked to chronic stress and negative effects on mental and physical health.

Direct support on pets’ ability to facilitate community integration of their owners comes from a recent case study, which found that pet ownership facilitated community integration primarily through stigma reduction (Zimolag & Krupa, 2010). Although community dwelling persons with serious mental illness have been described as a socially marginalized group, there is notable inattention to a possible link between pet ownership and community integration as a potential pathway to health and well-being. To date, few studies have reported on individuals with serious mental illness and their pets in connection to their socio-emotional health and well-being. De Souza (2000) observed that “mental health consumers found comfort in the fact that they could talk to their pets without being judged, and that they could share personal details without worry of betrayal…” (p. 88), and pet ownership provided an outward focus
giving strength to sustain community tenure. These pet related benefits were echoed in a study on homeless people involved with Street Health in Toronto, Canada (Fiorito, 2005). While studies consistently suggest that individuals who feel isolated and rejected draw social-emotional benefits from their pets, theoretical development of how this happens and how it serves to promote health and well-being would advance scholarship in this field.

The results from both phases of this research will be of interest and relevance to: people who experience mental illness while also caring for their pets; those individuals with serious mental illness who desire to own a pet; mental health service managers and providers interested in developing recovery oriented services; animal care and community service providers including veterinarians, animal-welfare agencies and landlords; researchers in the broad discipline of human-animal interactions (anthrozoology); occupational scientists, and mental health researchers. The research and its implications have national and international relevance for researchers, practitioners, and social policy developers who are exploring innovative ways to enable recovery and positive mental health by promoting full occupational and community participation among individuals with serious mental illness.

1.3 Definition of Terms

**Serious mental illness.** Mental illnesses are health conditions that (a) disrupt a person's thinking, feeling, mood, ability to relate to others and daily functioning (National Alliance on Mental Illness, n.d.) and (b) can result in some level of distress or impairment in areas such as school, work, social and family interactions and the ability to live independently. Serious mental illnesses are associated with a formal medical diagnosis (Mental Health Commission of Canada, n.d.) and typically include schizophrenia, major depression, bipolar disorder, obsessive compulsive disorder (OCD), panic disorder, post-traumatic stress disorder (PTSD) and borderline personality disorder (National Alliance on Mental Illness). The DSM-IV defines mental illnesses as “serious” or “severe” when “many symptoms in excess of those required to make the diagnosis or several symptoms that are particularly severe are present, or the symptoms result in marked impairment in social or occupational functioning” (Kelly, 2002, p. 4).
Serious mental illness is thought to be the result of a complex interaction among social, economic, psychological, biological and genetic factors (Mental Health Commission of Canada, n.d.). Serious mental illness can affect persons of any age, race, religion, or income (National Alliance on Mental Illness, n.d.).

**Occupation** in this thesis is consistent with the definition proposed by the Canadian Association of Occupational Therapists (CAOT) (2012) which defines *occupation* as:

…groups of activities and tasks of everyday life, named, organized, and given value and meaning by individuals and a culture: occupation is everything people do to occupy themselves, including looking after themselves (self-care), enjoying life (leisure), and contributing to the social and economic fabric of their communities (productivity)… (Townsend & Polatajko, 2007, p. 369)

Occupational scientists propose that engagement in occupations is integral to human health and well-being (see for example, Law, Steinwender & Leclair, 1998; Rebeiro, 1998; Turner, 2007; Wilcock, 2005a, 2005b, 2006).

**Pet ownership** in this thesis is considered a universal and complex caregiving activity and interaction between a person and his/her pet. It is undertaken by the pet owner in everyday life situations and aims at promoting a pet’s development and well-being. Like caregiving for people (Hermanns & Mastel-Smith, 2012), pet ownership is facilitated by certain character traits, emotions, skills, knowledge, time and an emotional connection between a pet owner and his/her pet.

**Health and well-being** Health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1986). Health, including mental health, can be present in the face of mental illness. (Mental Health Commission of Canada).

“Well-being (wellness) is often used synonymously with health; however, well-being is a more comprehensive, multidimensional construct” (Rush Thompson, 2007). The World Health Organization’s (2001a) *International Classification of Functioning, Disability and Health* (ICF) defines *well-being* as “a general term encompassing the total universe of human life domains including physical, mental, and social aspects, that make up what can be called a ‘good life’…” (p. 211).
Health and well-being are also multidisciplinary and discipline specific concepts that have evolved. Of particular relevance in this thesis are the definitions that are advanced by occupational science. From an occupational science view health includes “having choice, abilities, and opportunities for engaging in meaningful patterns of occupation for looking after self, enjoying life, and contributing to the social and economic fabric of a community over the lifespan to promote health, well-being, and justice through occupation” (CAOT, 1997a; 2002, cited in Townsend & Polatajko, 2007, p. 368). From an occupational science point of view well-being is experienced when “(a) people engage in occupation that they perceive are consistent with their values and preferences; (b) support their abilities to competently perform valued roles; (c) support their occupational identities; and (d) and support their plans and goals” (Caron Santha & Doble, 2006; Christiansen, 1999; Doble et al., 2006, cited in Townsend & Polatajko, p. 374).

1.4 Theoretical Framework

This thesis was guided by two Canadian occupational therapy frameworks: the Person-Environment-Occupation Model (PEO) and the Canadian Model of Occupational Performance and Engagement (CMOP-E). Both conceptual models emphasize that human performance in occupations is shaped by the dynamic interdependence of persons, occupations and environments (Strong, Rigby, Stewart, Law, Letts, & Cooper, 1999). The PEO Model is conceptualized as the person, his/her environments and occupations dynamically interacting over time (Strong et al., 1999). The main dimensions (person, environment, occupation) are graphically represented by three inter-related circles or spheres transacting over the life span as shown by a cylinder. The extent of congruence in the PEO relationships is represented by the degree of overlap between the three spheres; the closer the overlap, the greater the degree of occupational performance and quality of a person’s experience with regards to their level of satisfaction and functioning (Polatajko, Davis et al., 2007, p. 28).

The CMOP-E (Polatajko, Davis, et al., 2007) is a three-dimensional illustration of the dynamic interaction between the person, occupation and environment that portrays not only occupational
performance but also occupational engagement. The construct of occupational engagement is broader than occupational performance and encompasses all that individuals do to “to involve oneself or become occupied; participate” (Houghton Mifflin Company, 2004 cited in Polatajko et al., 2007, p. 26). Visually, the CMOP-E is a set of overlapping shapes, with a centre triangle that depicts the person and his/her abilities (affective, cognitive physical and spiritual), an intersecting circle of occupations (self-care, productivity and leisure), and a larger circle enclosing both to depict the environment (physical, institutional, cultural, social) (see Polatajko et al., 2007, p. 23). The model stresses that occupational therapy’s (OT’s) domain of concern is occupation. The construct of occupational engagement broadens OT’s focus from how an occupation is done (e.g. occupational performance) to dimensions such as nature (active or passive), intensity (sporadic or constant), extent (fully engaged or barely attentive), degree of establishment (novel or long-standing), competency of performance (novice or expert) and so on (Polatajko, Davis, et al., 2007).

1.5 Structure of the Thesis

This manuscript style thesis consists of four chapters: Chapter 1 consists of the general introduction which sets the stage for this thesis and provides objectives, definition of terms, the theoretical framework, and the structure of this thesis. Chapter 2 consists of manuscript A, a concept analysis of caring for a pet as an everyday occupation. Manuscript A explores the everyday occupations of caring for a pet, as conveyed in the North American print media spanning 1999-2008. It has been published in “The Journal of Occupational Science”. Chapter 3 consists of manuscript B, which develops a grounded theory of how pet ownership has an impact on health and well-being in serious mental illness. The fourth and final chapter includes a general discussion of findings and their relation to the current literature. This final chapter details a number of recommendations for future research, implications for professional practice and conclusions.
References 1


Chapter 2
An Evolutionary Concept Analysis of Caring for a Pet as an Everyday Occupation

This chapter has been previously published.

Reference:

2.1 Introduction

In North America, caring for a pet is a ubiquitous everyday occupation (Grier, 2006). The 2009/2010 American National Pet Owners Survey revealed that 62% of all households own a pet (American Pet Products Association (APPA), n. d.). Similarly, the most recent Canadian Ipsos-Reid survey, The Business of Urban Animals, indicated that 56% of 3,973 Canadian households own at least one dog or cat (Perrin, 2009). The majority of pet owners are adults between 30 and 54 years old (Ipsos-Reid, 2001; Pew Research Center, 2006), and most pet owning households are families with children (Ipsos-Reid, 2001).

In North America (and worldwide) cats and dogs are the two most frequently owned pet species (APPA, n.d; American Pet Products Manufacturers Association (APPMA), cited in McLeod, n.d; Podberseck, 2009).

This study clarifies the everyday occupations involved in pet ownership. It demonstrates that, like other occupations, caring for a pet has inherent meaning with respect to: (a) private and public identity (Fidler, 1999; Hocking, 2000; Laliberte-Rudman, 2002; Unruh, 2004; Vrkljan & Polgar, 2007); (b) personal and
social transformation (Townsend, 1997), and (c) personal and public health and well-being (Law, Steinwender, & Leclair, 1998; Wilcock, 2005, 2006). The discussion begins with the background to the study, including definitions for the terms ‘pet’ and ‘ownership’ and a literature review on research pertaining to health and well-being outcomes. I will then present the research questions, study method, and results. The final section will identify study limitations and implications for future concept development.

2.1.1 What is a Pet?

Researchers in the field of anthrozoology (defined as the study of human-animal interactions) agree, “the concept of pet eludes a simple definition.” (Hart, 2003, p. 118; also see Anthrozoós, Vol. 16). For instance, some pets are used as working, guide, and service dogs during the day but become pets once their work day is over (Hart, 2003). Pet owners in England (1400-1800) allowed pets into the house, gave them an individual name, and did not eat them (Thomas, cited in Grier, 2006). While a pet is defined as “a tame animal kept in a household for companionship, amusement, etc.” (Anderson et al., 2007, p. 1215), the concept of a pet is also linked to one who is fondly indulged or a favorite.

The historian Grier (2006) argued that use of the word “favorite” suggests that “the most fundamental characteristic of pet keeping, [is] the act of choosing a particular animal, differentiating it from all other animals” (p. 6). Grier, who studied pet keeping in America between 1840 and 1940, used the word pet rather than the term companion animal, because “it was by the early nineteenth century, both in wide use and a word for which people had a practical understanding of its meaning” (p. 7). I will adhere to the occupational therapist Fidler’s (1999) definition of a pet as a living (animate) nonhuman object. Living objects (pets) are “dynamic entities integrally linked with action” (Fidler, 1999, p. 37). Their meaning is derived through the activity and relationship associated with them (Fidler, 1999).

2.1.2 Defining Ownership

Anderson et al. (2007) defined the noun ownership as “The state or fact of being an owner… [and] legal right of possession; proprietorship” (p. 1164). According to Cochrane (2009), the term ownership
dates back to the idea of dominion (dominance through legal authority) from the eighteenth century and has been viewed as an obstacle to achieving justice for animals.

However, Cochrane argued that ownership does not mean limitless control over animals (pets), but, rather refers to a set of context specific relations governing the ownership and use of animals. One such relationship between owning and using pets and other objects is that they can be a means to create a personal and social identity (Hocking, 2000). Despite these less contentious meanings, some scholars prefer to use surrogate terms, like “[pet] keeping”, “[pet] guardianship”, “[pet] stewardship”, or “[pet] parenting”.

2.1.3 Pet Ownership and Health and Well-being

A number of studies have reported positive associations between pet ownership and human health and well-being outcomes (see Wells, 2007, 2009; Wilson & Turner, 1998). Among adults and seniors, walking the family dog has been associated with higher self-reported physical fitness (Bauman, Russell, Furber, & Dobson, 2001; Brown & Rhodes, 2006; Christian, Giles-Corti, & Knuiman, 2010; Cutt, Giles-Corti, Knuiman, & Burke, 2007; Cutt, Knuiman,&Giles-Corti, 2008; Headey, Na, & Zheng, 2008; Thorpe et al., 2006; Yabroff, Troiano, & Berrigan, 2008), weight loss (Kushner, Blatner, Jewell, & Rudloff, 2006), and physical, social, and psychological benefits (Knight & Edwards, 2008). Recently, a study by Owen et al. (2010) found that children from dog owning families spent more time in light or moderate activity and recorded higher levels of activity counts per minute. Walking the family dog(s) is associated with reciprocity between neighbors and participation in community activities (Wood, Giles-Corti, & Bulsara, 2005; Wood, Giles-Corti, Bulsara & Bosch, 2007).

The responsibility and routine associated with Activities of Daily Living (ADL) involved in owning a pet was used as one explanation for higher survival rates after discharge from a coronary care unit (Friedmann, Katcher, Lynch, & Thomas, 1980); physical and psychological health of older people (Ender-Slegers, 2000; Raina, Waltner-Toews, Bonnet, Woodward, & Abernathy, 1999), and community integration of people with serious mental illness (Zimolag & Krupa, 2010).
Cavanaugh, Leonard, and Scammon (2008) found that “perceived closeness to one’s dog is a predictor of human well-being.” (p. 467). Touching, grooming, bathing, taking the pet to a veterinarian and riding in the car with a pet was associated with the perception of excellent health among older Latinos (Johnson & Meadows, 2002). Finally, women and single adults were found to be more likely to benefit from dog ownership than men and married individuals (Cline, 2010).

Not all studies supported the notion that caring for a pet supports health and well-being. A recent Finnish study by Koivusilta and Ojanlatva (2006) found pet ownership was associated with poor rather than good perceived health. Parslow and Jorm (2003) also found no evidence that pet ownership is associated with cardiovascular health benefits despite pet owners undertaking more mild physical activity than non-pet owners. According to Panchana, Ford, Andrew, and Dobson (2005), such inconsistent findings may be due to variations in the relationship between participants and their pets, measures used to determine health and wellbeing, and analyses used. Lack of an occupational definition of pet ownership (with a focus on the meaning of activities) may, at least in part, account for these unclear findings, especially as it pertains to the mechanisms by which pet-related doing enables health and well-being.

Three research questions guided this study. Firstly, what are performance, occupational, and environmental areas of pet ownership? Secondly, what are the antecedents, attributes, and consequences of pet ownership and how are they expressed in areas of occupations across time? Finally, how are attributes arising in the context of pet ownership similar or different across world continents?

2.2 Method

Rodgers’ (1989, 2000) evolutionary concept analysis approach was adopted. This rigorous approach involves the following steps: (1) Identify the concept of interest and associated expressions (including surrogate terms); (2) Identify and select an appropriate realm (setting and sample) for data collection; (3) Collect data relevant to identify the attributes of the concept and the contextual basis of the concept including antecedent and consequences; (4) Analyze data regarding the above characteristics of the concept; (5) Identify an exemplar of the concept, if appropriate, and (6) Identify implications for
further development of the concept (Rodgers, 2000, p. 85). I focused on the years 1999-2008 to remain contemporary and because the topic of pet ownership became the focus of tremendous attention during this time.

2.2.1 Data Collection

To arrive at the attributes of pet ownership in North America (Canada and United States), an extensive literature review was conducted between March 2008 and December 2008. Bestselling books were collected based on a review of popular pet literature by Donahue (2007) to learn about the activities involved in pet ownership and to access the meaning of engagement in those occupations. Newspaper articles were obtained (to learn about the continuum of pet ownership as expressed by various stakeholder groups) via the databases Newscan.com, Canadian Newsstand, National Newspaper Index and Factiva. In total, 3,017 news articles were found for the keyword pet ownership for this time period. Books and articles were included if they talked about things people do in relation to pets and eliminated if they did not provide an occupational perspective. Articles pertaining to the earlier mentioned surrogate terms were included. Only a few articles for these surrogate terms were found, meaning that the term pet ownership was the most significant term used to describe pet related occupations during the time period of interest. For reasons of feasibility, only books that related to pets in general (rather than a specific breed) were included. Newspaper articles were eliminated if they were: repeats in another newspaper, community briefs, neighborhood profiles, or community calendars. A total of 1,024 North American newspaper articles and 10 bestselling books were identified.

2.2.2 Sample

Based on Rodgers’ (2000) assertion that a rigorous concept analysis requires a random choice of a minimum of 20% of the literature meeting the inclusion criteria, a minimum of 25% of the data were randomly selected. After all newspaper articles and a booklist were printed and organized chronologically, I wrote the numbers 1-4 on separate pieces of paper, mixed them in a container, and then pulled the number 2. Starting the selection with the second article and book, every fourth article and book
were chosen, resulting in 256 North American newspaper articles and four books. Randomly selected newspaper sources were italicized (N=Newspapers), superscripted, and referred to in the text. Interested parties may contact the author for a list of newspaper sources. The four selected books (Grogan, 2008; MacGregor, 2006; Millan, 2006; Morgan, 2007) are included in the reference list.

2.2.3 Data analysis

Tables for antecedents, attributes, and consequences of pet ownership were created. Each table contained a column for date, code, quoted text, and reference. Coding consisted of highlighting a word label in the quoted text or of assigning a label. A scholar with experience in the area of concept analysis also reviewed the raw data and word labels were agreed upon. Codes were reviewed (and attributes chosen) based on their significance (frequent use) in the general population. For instance, even though they have a similar meaning, the word “responsibility” was used much more frequently than the word “commitment”. Responsibility entails pet owners acting upon their own reasoning of what it means to be a ‘proper’ pet owner, whereas, commitment involves action based on perceived obligations that restrict freedom (Anderson et al., 2007).

The labels occupation, doing, activities, and action were challenged and critically evaluated by examining occupational science and occupational therapy dialogue (Lentin, 2005; Polatajko, Davis et al., 2007). The label occupational engagement was chosen because it “captures the broadest of perspectives on occupation” (Polatajko, Davis et al., 2007, p. 24). Resulting perspectives were integrated with historical insights (Grier, 2006) and newspaper articles from around the globe. Remaining knowledge gaps were filled by consulting books by Burg (2007), Sheehan and Stites (1999), Woloy (1990), and a few peer reviewed articles and online sources.

Trustworthiness was established by using EPICURE criteria (Stige, Malterud, & Midtgarden, 2009) to evaluate qualitative research - Engagement, Processing, Interpretation, Critique, Usefulness, Relevance and Ethics. Engagement refers to the researcher’s continuous interaction with and relationship to the phenomenon studied. To meet this criterion, I reflected on my motivation for analysing pet
ownership and my pre-understanding as a life-long pet owner in both Europe and Canada. Processing refers to producing, ordering, analysing, and preserving empirical material. To this end, Rodgers’ (1989, 2000) steps were carefully adhered to. Interpretation involves the act of creating meaning by identifying patterns and developing contexts for the understanding of experiences and descriptions. North American and global contexts of pet ownership were thoroughly explored and described. Critique refers to the appraisal of merits and limits of research. Two anonymous journal referees commented on the merits of this research and study limitations were acknowledged. Usefulness refers to value to practical contexts. To this end, findings were presented (and deemed useful) at a 2010 occupational science conference. Relevance refers to how the study contributes to development of the involved disciplines or interdisciplinary field. This is the first study to investigate pet ownership in relation to everyday occupation. Apart from occupational science and occupational therapy, this study is relevant to the field of anthrozoology, health, and social sciences as the main disciplines that publish articles about the social and health benefits of pets. Ethics refers to how values and moral principles are integrated in the actions and reflections of research. I aimed to be respectful to cultural and religious differences in pet ownership and care.

2.3 Results

At the population level, domestication, colonization, and globalization were important antecedents of pet ownership. According to Woloy (1990), it is postulated that “the human capacity to generalize social responses and include wild animals and other species” (p. 7-8) and “the human need to relate to the nonhuman environment” (p. 9) were at the root of the domestication process. Grier (2006) argued that pet keeping in North America, in the form that can be recognized as the antecedent of modern practice, arrived with Spanish settlers who brought European dogs to both North and South America as tools of war and conquest. In non-Western countries, Western influence (e.g. the expansion of pet product markets) has been a factor in the development of pet culture (Veldkamp, 2009). At a personal level, consideration of lifestyle, personality, finances, allergies, previous experience, skills and characteristics of
person and pets emerged as key antecedents of pet ownership. The exemplar ‘Marley & Me’ by Grogan (2008) described how past experience with pets (happy childhood memories) served as a motivation for wanting to become a pet owner in adulthood (see p. 4-5).

Regardless of the pet’s species, pet owners’ cognitive capacities (e.g. the need to plan and critically reflect on the idea of becoming a pet owner) and psychological capacities (e.g. the need to think, reason, and use logic) were prioritized over emotional capacities (e.g. making predominantly emotion based decisions). These capacities pertained to the pet selection process, planning for emergencies, consideration of lifestyle, and pet care (including cost) requirements.

2.3.1 Attributes of Pet Ownership and Their Expression through Occupation

Arriving at the attributes of a concept is the key task of concept analysis (Rodgers, 2000). The 3x3x3 Rubik’s cube (Slocum, Singmaster, Huang, Gebhardt, & Hellings, 2009) emerged as a mental image to represent the complexity of pet ownership. Attributes are located within the cube’s occupational core. The analysis revealed the following distinct attributes of pet ownership: responsibility, investment, occupational engagement, entrepreneurship, relationship, morality, and attitude. Morality (the degree of conformity to conventional standards of moral conduct) was discussed solely in the areas of ‘other care’. Attitude (the way a person views something or tends to behave towards it), morality, and responsibility emerged as the longest standing (and most debated) attributes pertaining to the care of animals (pets) (see their large representation in Fig. 2-1). Occupational engagement was placed at the center of occupation to identify it as the means to achieve and express personal, social, and occupational identity and holistic health and wellbeing.
Pet care occupations emerged in solitary and shared contexts. Data indicate that pet related occupations have changed significantly across time. The following section of discussion will compare pet owners’ past and current (1999-2008) engagement in self-care, other-care, productivity, and leisure occupations.

**Self-care.**

Law, Polatajko, Baptiste, and Townsend (1997) defined self-care as “occupations for looking after the self” (p. 37). Walking a dog is seen as a key pet owner responsibility and everyday health promoting occupation. Walking the dog has been described as part of an everyday routine (Grogan, 2008), and meaningful because it enabled the ‘family’ to get exercise and enjoy part of the evening together. Hasselkus (2006) alluded to this power of occupation to shape and organize people’s daily lives.

In her historical analysis of pet keeping in North America, Grier (2006) did not cover the occupation of walking dogs because many people and dogs lived on farms and attained exercise through physical work. Today, walking the dog outdoors is important for pet socialization and requires that the...
dog has vaccinations. To walk a dog, pet owners need an outdoor space, a collar, leash, and ‘pooper scooper’ (Millan, 2006). Pet owners need to know how to balance exercise with discipline and praise, how to leash a dog, when and where to walk an aggressive dog (or a young dog) and how much to exercise a dog (Millan, 2006).

Other Care.

The concept of pet ownership, like the concept of caring for people, has the attributes of action, relationship, responsibility, and attitude (Brilowski & Wendler, 2005). Care of pets consists of more complex interactions than self-care and involves “arranging, supervising, or providing care for pets” (AOTA, 2008, p. 631). Like caring for people, the meaning of care lies in the concern (worry) for the other as self-care (van Manen, 2002) and/or is grounded in the selfless caring for others (Smith, 1995). The following other (pet) care occupations emerged.

Housing a pet(s) requires an indoor and/or outdoor space (or enclosure), knowledge pertaining to housing needs and preferences, and knowledge about potential household dangers and types of housing materials (Morgan, 2007). According to Grier (2006), “family dogs and cats in the nineteenth and early twentieth century lived more of their lives outdoors” (p. 62). Grier attributes this way of housing to the fact that owners needed cats to hunt rodents and because some pets were messy or harboured fleas. Since the 1980s flea preventatives “have made keeping cats and dogs indoors much easier, encouraging more physical closeness to pets” (Grier, 2006, p. 88). Today, housing a dog outdoors is viewed (at least by city dwellers) as heartless (N9). Cat owners buy special beds for the indoors (N10) and ready-made enclosures (see Kischer, n.d.) to give an indoor cat the chance to enjoy the outdoors. Pet owners also invest in home repairs (Grogan, 2008) and adapt their homes to give pets their own rooms, closets and televisions (N10). A frequently mentioned responsibility of caring for a pet was to not leave pets behind to fend for themselves when changing housing at the end of a lease (or college semester) and to not abandon pets after Christmas (N11).
At a minimum, pet owners are responsible for remembering to provide daily food and water for their pets. Feeding a pet requires knowledge of species specific dietary requirements, consideration of the pet’s life stage and physical health, how much to feed, how to switch foods, and how to store food to prevent spoilage (Morgan, 2007). In Victorian England (1837-1901) dog food “gradually became part of the middle-class grocery list because of its convenience and availability, its gradually decreasing cost, changes in cooking practices, and changing beliefs about the needs of dogs” (Grier, 2006, p. 288-289). Since the 2007 North American tainted pet food recall (where many pets succumbed to poisoned food), cat and dog owners read labels more carefully with home cooked, natural, and organic pet foods being more popular. It was estimated that in 2009/2010 U.S. pet owners would invest $18.3 billion in feeding their pets (APPA, n.d.). The heightened worry about feeding expresses pet owners’ attitudes towards caring for pets as valued relationship and occupation. For instance, Grogan (2008) reflected on his detailed feeding instructions to the pet sitter, stating that “the list of instructions [feeding, vitamins and water] could not have been more painstakingly detailed were we leaving a critically ill infant in her [sitters] care” (p. 82-83).

Grooming consists of combing, bathing, dental care, nail clipping, and ear care (Morgan, 2007). Grooming a pet signifies emotional and time investment and requires pet handling skills and knowledge of grooming equipment (Morgan, 2007). Grier (2006) noted that “one of the most important yet unremarked behaviors of pet keeping is how close people allow their pets to come and whether they pick them up, stroke them, or handle them gently” (p. 61). Today, 63% of pet owners groom their pets either daily or weekly. Grooming a pet can serve as a health check and bonding time (Morgan, 2007) and meet the human need for touch (Fidler, 1999).

Pet illness prevention and management require problem sensitivity, the ability to observe signs of illness, disease and injury, the ability to communicate observations to the veterinarian, and administer medications (Morgan, 2007). Until the 1920s, pet shop owners advised pet owners on pet health issues and people tended to treat their pets with the same over-the-counter remedies they used on themselves.
(Grier, 2006). Today, advances in veterinary medicine combined with the perception of (and care for) pets as family results in “pet owners investing two to three times more money for their pets’ health as compared to 20 years ago” (N14). About two million American pet owners have pet insurance, a number that is expected to increase (N15). Obtaining pet insurance enables pet owners (especially those who live on fixed incomes) to pay for unanticipated emergency and expensive treatments, thus, maintaining engagement in care of a pet as an occupation of choice, the loss of which “can deeply affect a person’s sense of identity and self-efficacy, and can cause emotional distress, depression, and periods of sadness” (Polatajko, Backman et al., 2007, p. 58). Due to the rising cost of veterinary care (ConsumerReports.org, 2003) pet owners also surf the Internet to obtain pet health information and pet health products (American Pet Products Manufacturer Association Advisor (APPMAA), 2005). Alternative health care for both dogs and cats is increasingly being considered and includes acupuncture, herbal therapies, chiropractic care, and massage therapy (Morgan, 2007).

Protecting pets from distress, pain, and abuse is another aspect of caring for a pet. Ascione and Shapiro (2009) defined animal abuse as “nonaccidental, socially unacceptable behaviour that causes pain, suffering or distress to and/or the death of an animal” (p. 570). The Humane Society of the United States (HSUS) (2010) defined animal cruelty as either deliberate abuse (e.g. beating the animal) or the failure to give animals the right food, water, shelter or vet care (neglect). According to Stowe (cited in Grier, 2006), children in 1896 were taught that in case of domestic animals in the house “not wanted in a family, it was far kinder to have them killed in some quick and certain way than to chase them out of the house, and leave them to wander homeless, to be starved, beaten, and abused” (p. 105). Grier stated that:

“…in making arguments for kindness, ordinary people grappled with big questions about the nature of the good person and the good society… the domestic ethic of kindness propelled an important step forward in popular concern about the well-being of animals.” (p. 131-132) For instance, in 1870, the Women’s Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals (SPCA) built the first animal shelter (Grier, 2006).
In the present time, proposed ways of protecting pets from abuse are to provide a consistent home (or if not possible to drop a pet off at a shelter), to provide veterinary care when a pet is ill, and to adopt shelter pets rather than buying a pet from a pet store (N16). Euthanasia (meaning ‘good death’) is accepted as a pet population control measure but must be painless, rapid, minimize fear and distress, and be reliable and irreversible (American Veterinary Medical Association, 2007; World Society for the Protection of Animals, n.d.). Allocating more money for shelters was advocated for as a community responsibility to optimize the welfare and prolong the life of shelter pets (N17). The need to create a crisis preparedness plan (N18) to care for pets and reduce evacuation failure has also been stressed as a responsible community occupation.

Engagement in HSUS fundraisers (N19-20) emerged as an important community occupation. According to the HSUS (2009), it is estimated that pet owners drop off 6-8 million cats and dogs at a shelter each year. Due to the lack of government funding (and resulting reliance on community generosity), fundraising for relinquished shelter pets remains a vital occupation (N21). Popular fundraising activities include walkathons (N22-23) and taking pictures of the pet with Santa Claus (N24). Taking pets to a veterinarian (or clinic) to be spayed or neutered emerged as an important occupation and responsibility because doing so is thought to reduce pet overpopulation and the associated problem of stray pets (N25-28).

Making decisions around pet euthanasia and engaging in pet funerals is the final aspect of caring for a pet. Morgan (2007) stated that “in the olden days, when pets lived mostly outdoors, they seemed to know when the hour arrived and disappeared quietly into the woods to die” (p. 294). Since the 1850s pet owners have wrestled with moral decisions and have to judge if, when, and how to euthanize a pet (Grier, 2006). This care for the welfare and oftentimes death of a pet requires moral reasoning skills and the ability to put the welfare of the pet before that of the human owner. Grogan (2008) wrote:

> It would be cruel to put him through a traumatic surgery... we could not ignore the high cost, either. It seemed obscene, almost immoral, to spend that kind of money on an old dog at the end of his life when there were unwanted dogs put down every day for lack of a home.... If this was Marley’s time, then it was his time, and we would see to it he went out
with dignity and without suffering. We knew it was the right thing, yet neither of us was ready to lose him. (p. 253-254)

To prevent euthanasia of healthy pets, it was suggested that tax payers devote a small portion of household taxes to spay and neuter programs (N29).

Engagement in pet funerals appears in the historical record as early as 1800 (Grier, 2006). Today, pet cemeteries, trust funds (N30) and the sale of sympathy cards are commonplace. Almost 1 out of 10 dog and cat owners are interested in buying a headstone for their pet’s final resting place (APPMAA, 2005). Engagement in Marley’s funeral helped the family (but especially the children) work through emotions of sadness and release via crying and ‘sending Marley off’ with emotionally charged drawings. Grogan stated: “Seeing them [referring to his children] grieving - their first up-close experience with death - deeply affected me... I told them it was okay to cry, and that owning a dog always ends with sadness because dogs just don’t live as long as people do” (p. 274)

Productivity

Productivity has been defined as that part of occupation which is aimed at “contributing to the economic and social fabric of people’s community” (Townsend & Polatajko, 2007, p. 369). One manifestation of productivity in relation to caring for a pet is creating pet products and pet services. Grier (2006) pointed out that “cages and containers may reflect the ideas and values of pet owners better than any other artefacts” (p. 295). By the 1870s, a few specialist companies concentrated on cage making for birds and shipped their goods and services to stores all across the United States (Grier, 2006). Decorative cages and containers were used as “accents to interior décor, as a means to highlight the aesthetic qualities of the animals within, and as settings for manipulating the behavior of animals for the delight of humans” (Grier, 2006, p. 295). Today, pet owning entrepreneurs contribute to the economic fabric of their community by hiring people to make canine luxury items (including fancy leashes and clothes) and by staffing luxury pet resorts and doggy day care services, dog summer camps, pet retirement homes, pet
grief counselling services, pet boarding and dog walking services, pet taxi services, and dating services that pair up dog owners (N31-40).

Producing a well-behaved pet through obedience training can enable good community relations, thus contributing to the community’s social fabric. Training a pet requires physical strength and endurance, decision making skills, problem solving capacities and verbal/nonverbal communication skills (Millan, 2006). Pet owners need to understand breed specific temperaments (and abilities) and be able to self-regulate frustration when training does not go as expected (Millan, 2006). For instance, Grogan (2008) used his controlled anger (pertaining to the rejection of Marley in obedience classes) as a motivation to work harder at teaching him social skills and manners (see p. 66).

Early in the eighteenth century, information on pet training practices was nonexistent or fragmentary, but by the second half of the 1800s and the early 1900s, authors of training advice relied on the metaphor of ‘educating and civilizing’ the animal (Grier, 2006), drawing attention to pets’ inferior status on ‘the great chain of being’ (Bynum, 1975). Training a pet was important and information was passed along by word-of-mouth and practical experience (Grier, 2006). MacGregor (2006) observed that training, then, involved “discipline - a rolled-up newspaper for punishment; a snout placed in, or almost in, an accident to make sure it didn’t happen again, though it usually did; a choke chain to teach them [dogs] to heel” (p. 63).

Currently, punishing pets for problem behavior for instance house soiling, is seen as reprehensible (Morgan, 2007) and people resort to training books or to hiring a trainer to teach obedience and to correct behavior problems. In fact, Cesar Millan’s 2004 premier of the television series The Dog Whisperer made dog training fashionable (Donahue, 2007). Millan (2006) a person of Mexican socio-cultural origin, criticized modern North American ways of spoiling dogs and expressed his attitude that dogs should remain dogs. Cat training has evolved from a focus on litter box training, to toilet training, trick and obedience training, and leash walking (Morgan, 2007)
Leisure

Leisure is defined as “a nonobligatory activity that is intrinsically motivated and engaged in during discretionary time, that is, time not committed to obligatory occupations such as work, self-care, or sleep” (Parham & Fazio, cited in AOTA, 2008, p. 632). Occupations for enjoyment are included as leisure (Law, Polatajko, Baptiste, & Townsend, 1997). In contemporary North America, 89% of pet owners play with their pets every day \(^{(N13)}\) and more owners invest in pets’ toys than ever before (APPMAA, 2005).

How people play with pet animals and how much they spend on toys is a measure of changing attitudes towards pets as kin and reflects the context of caring for a pet (e.g. population aging, increased consumerism, relentless marketing and consumer prosperity). Collecting pet memorabilia (china, collars, etc) is a popular pastime of pet owners. Being a collector requires space and enables communication with other collectors at auctions, stores, or garage sales. Many dog owners fondly collect only what is specific to the breed(s) that they own or care about the most (Sheehan & Stites, 1999). For some collectors their hobby is motivated by an interest in art, a childhood love for animals, an attempt to preserve the history of a program (e.g. Guide Dogs), the wish to add to a figure given by a parent, and/or to match the style of one’s home (Sheehan & Stites, 1999).

Thirty-six percent of Americans celebrate their pets’ birthday \(^{(N13)}\), using it as an opportunity to socialize with friends and take pet photos as a keepsake. Burg (2007) devoted an entire cookbook to ‘special [pet] occasions’. Burg’s recipes such as Pumpkin Brownies and her color illustrations provide a good example of North American’s humanization of pets. Joining a dog club and participating in dog camps are other popular occupations, which present pet owners with the opportunity to develop new relationships \(^{(N41)}\). Amateur sports activities announced by North American dog clubs present opportunities to get fit (see Ottawa Border Collie Club, n.d). Currently, the two (of 31) most popular Canadian amateur dog sports are agility and flyball (see Dog Clubs and Associations, n.d.). Cat agility is also becoming a popular sport for cats and their owners (Morgan, 2007). Although Grier (2006) examined cages and containers to house or transport pets, traveling with pets is a relatively recent and growing trend
For example, the 2005-2006 National Pet Owners Survey found that 19% (vs. 16% in 2002) of dog owners take the family pet with them when traveling (Netscape, n.d.).

2.3.2 Consequences of Pet Ownership

Positive health and well-being consequences of pet ownership matched those previously reported by researchers. Negative consequences were zoonosis (diseases that are passed on by contact between animals and humans), seniors avoiding hospitalization, financial burden, problems related to monitoring and control of exotic pets, cats use of neighbouring balconies as litter boxes, and pet hoarding.

2.3.3 A Global Comparison of Attributes and Their Expression in Nine Contexts of Pet Ownership

Sixty-six newspaper articles from five continents (and online accounts to fill knowledge gaps) were consulted to check the attributes and develop the context of pet ownership outside of North America (Asia, Europe, Africa, South America, and Australia/New Zealand). The continent of Antarctica was excluded because the Antarctic Treaty bans introduction of non-native species (Cool Antarctica, n.d.).

Time

The temporal context of occupation is defined as “the location of occupational performance in time” (Niestadt & Crepau, cited in AOTA, 2008, p. 645). Grier (2006) observed marked continuities (1870s to 2006) pertaining to staffing shelters and fundraising events and starting in the 1930s the creation of pet businesses. MacGregor (2006) coined the umbrella term “petification of North American society” (p. 114) to allude to the current preoccupation with pets and their care. The trend to invest in pets by purchasing pet related products and services can be observed on a global scale and across time (Euromonitor International, 2008).

Pivotal Events

During the period 1999-2008, three pivotal events drew attention to how people care for pets in North America: (1) Hurricane Katrina; (2) the recall of 60 million containers of pet food after an
unknown number of cats and dogs were poisoned, and (3) the conviction of Atlanta Falcons quarterback Michael Vick for dog fighting\(^{(N71)}\). Outbreak of avian flu caused worldwide concern about animal to human disease transmission. Pet owners were urged to be responsible and maintain high standards of health awareness and to contact a veterinarian if pet birds develop symptoms (Stephenson, 2004).

**Physical Context: Home and community spaces**

Home “is a container of memories of experiences” (Hasselkus, 2002, p. 26) and “understanding the meaning of home is one imperative way to understand the shape of people’s lives, their identities, and their everyday occupations” (Hasselkus, 2002, p. 32). Grogan (2008) provided the example of how his experience of home changed after Marley’s death. He described how the absence of Marley (who usually greeted him upon returning home from work) made his house seem silent, empty, “not quite a home anymore” (p. 276). Legislation exists regarding what people can and must do with their pets, where they can take them, and the number and breed of dog they can have in their home. For instance, in North America (and Europe) responsible pet ownership includes that dangerous dog breeds (e.g. pit bulls) must be sterilized, muzzled, and leashed by their owners when in public\(^{(N72-73)}\). In North America, pet owners are not allowed to take pets into most public buildings for hygiene reasons\(^{(N74)}\). In Europe, pet owners can take their pets on subways, buses, and restaurants and in Asia (China) police engage in dog sweeps, seizing animals whose master fails to follow the city’s rules\(^{(N75)}\).

**Social Change**

Pet ownership is occurring within conditions of populations aging (United Nations, 2009) and changed relationships resulting from rise of baby boomers who face an empty nest\(^{(N76-77)}\); disintegration of the traditional family unit and associated social isolation\(^{(N78)}\); decreasing social cohesion and sense of community\(^{(N79)}\), and rise in people who live alone (Euromonitor International, 2007). These conditions found in North America, Asia (e.g. Japan and China), Europe, and Australia/New Zealand may explain the greater investment in pet ownership and care.
Stakeholder

Globally, pet owners and the immediate community emerged as primary stakeholders in pet ownership and care. However, philosophers, lawyers, cognitive scientists, biomedical researchers, animal care and welfare workers also emerged as important stakeholders. In North America, thinking ahead to avoid inconveniences to community members was cited as an important responsibility \(^{(N80-84)}\) of pet owners. A good citizenship training program \(^{(N85)}\) and recently a competency test (Firkin, 2010) were two proposed ways to set standards for responsible pet ownership. Community priorities to increase responsibility varied across countries and included insuring pets, licensing and micro-chipping pets (Germany, Australia), mandating pet owners to take a course prior to pet ownership (Switzerland), and hosting educational events (South Africa and Asia) \(^{(N86-90)}\). In North America (and globally), there is a shared concern for ethical care of animals (see Hauser, Cushman, & Kamen, 2006; National Association for Biomedical Research, n.d.).

Culture

Serpell (2009) pointed out that “species specific cultural mores clearly demonstrate that moral intuitions regarding the proper treatment [care] of animals are socially and culturally determined” (p. 640). Northern Europe, British influenced North America and Australia have a long history of owning dogs and cats as life companions (Grier, 2006). The slogan, ‘A pet is for life and not just for Christmas’ expresses the attitude that; ideally, pet ownership is a responsibility for as long as the pet is alive.

In Japan, the relatively recent role of pets as companions (Veldkamp, 2009) and time and space constraints \(^{(N91)}\) were given as explanations for why renting pets and going to cat cafes have become popular occupations \(^{(N91-92)}\). In China, while increasing affluence and changes in the traditional extended-family structure have prompted a boom in pet ownership, the habit of eating cats remains in some areas \(^{(N93)}\). In South Korea, “dog consumption is strongly linked to national identity” (Podberscek, 2009, p. 615).
Religion

In North and South America, South Africa, parts of Europe and Australia/New Zealand a modern Christian ethic of compassion and care and an attitude towards pets as kin explain the taboo on pet consumption. Based on the concept of reincarnation and sanctity of life, Brahmins, the highest of four Hindu castes, never eat animals (Meyer-Rochow, 2009). For Brahmins vegetarianism and non-violent action, as it pertains to all life, are the foundation for becoming close with God and for self-realization (Gandhi, n.d., p. 109). Muslims view dogs as ‘ritually unclean’ (N94-95) and therefore they do not eat them.

According to Meyer-Rochow (2009), food taboos can serve to express empathy for pets and signify group cohesion and identity.

Economics

Globally, economic factors, including a slowing economy resulted in some people investing in having a pet rather than having a child (the latter being more expensive) (N96). According to Einhorn (2009), in the United States the recession may be worsening income equality; widening the rich-poor gap.

In China, a growing divide between the rich and the poor is resulting in pets being used as credibility and status symbols (Zhang, 2010).

Political Systems

In North America, there have been failed and successful attempts to invest animals (including pets) with legal standing (N97). Globally, continents with young and poor populations (e.g. parts of Africa and South America) invest less money in the creation of animal welfare laws than continents with ageing and wealthy populations (e.g. North America, Northern Europe, and Australia/New Zealand) (Animal Legal Defense Fund, n.d.; Animal Welfare Institute, n.d.; National Association for Biomedical Research, n.d.; Tomaselli, 2003; Trent, Edwards, Felt, & O’Meara, 2005).

2.4 Limitations

This research bases results on Anglophone print media. Thus, the voice of non-Anglophone writers is missing. As a result, the concept and occupation of caring for a pet remains fuzzy in non-Anglophone countries (e.g. parts of Asia, Europe, Africa, and South America). Also, gender and marital
status differences in health outcomes have been reported for pet ownership, but this aspect was not specifically explored.

### 2.5 Conclusion and Implications for Future Concept Analysis

The occupations involved in caring for a pet hold the potential to enable personal and social well-being, to acquire and express personal and social identity, and to achieve individual and national self-actualization. For the time span of interest, pet ownership can be described as a predominantly ‘other-care’ occupation. The meaning of pet ownership in North America arises from the interaction between stakeholders, the personal and social significance of pet related occupational engagement, and the context of pet ownership. In keeping with Rodgers’ view, the image of the Rubik’s Cube as the end product of concept analysis serves as a heuristic by providing occupational scientists with the clarity necessary for further inquiry. Future research should take an occupational perspective to explore the health and well-being outcomes of caring for a pet among children, seniors, and socially isolated individuals. Finally, exploration of the gendered, and marital status specific, health benefits of caring for a pet and further concept development by non-Anglophone writers are required.
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Read, N. (2002, March 20). Cats vastly outnumber dogs at overburdened shelters: 21,233 cats were turned in to provincial SPCA shelters last year and 7,923 of them were put down. *The Vancouver Sun*, p. B.4.


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Chapter 3

How Does Pet Ownership Impact Health and Well-being in Serious Mental Illness?

3.1 Introduction

The current study focuses on pet ownership and its impact on health and well-being among community dwelling people living with serious mental illness. Previous research has shown that people with serious mental illness do have pets, that pets are important to this population and that many would like to have a pet as part of their recovery process (see Wisdom et al., 2009 and Zimolag & Krupa, 2009).

Pet ownership in this study is defined as an activity and interaction between a person and his/her pet. It is undertaken by the pet owner in everyday life situations and aims at promoting a pet’s development and well-being. Pet ownership, like caregiving to people (Hermanns & Mastel-Smith, 2012), is facilitated by certain character traits, emotions, skills, knowledge, time and an emotional connection between a pet owner and his/her pet. The definitions of health and well-being that guided this study are consistent with those proposed by both the World Health Organization and contemporary occupational perspectives. From these perspectives health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1986), and as individuals “having choice, abilities, and opportunities for engaging in meaningful patterns of occupation for looking after self, enjoying life, and contributing to the social and economic fabric of a community over the lifespan…” (Townsend & Polatajko, 2007, p. 368). Well-being is “a general term encompassing the total universe of human life domains including physical, mental and social aspects that make up what can be called a good life” (WHO, 2001, p. 211). Well-being is experienced when “(a) people engage in occupation that they perceive are consistent with their values and preferences; (b) support their abilities to competently perform valued roles; (c) support their occupational identities; and (d) and support their plans and goals”
Literature Review

Studies in which pet ownership has been found to have no impact or even negative effects on physical or mental health are rarely cited, but Herzog (2011) notes that with the evidence to date, “the impact of pets on psychological well-being in the general population has been called into question” (p. 237). Herzog pointed to a Pew Research Center survey of 3,000 Americans which found no differences in the proportion of pet owners and non-owners who described themselves as very happy (Herzog, 2010 cited in Herzog 2011). Another recent study found that older adults who were highly attached to their dogs tended to be more depressed than individuals who were not as attached to their companion animals (Miltiades & Shearer, 2011). A study of 40,000 people in Sweden found that while pet owners were physically healthier than non-pet owners, they suffered more from psychological problems including anxiety, chronic tiredness, insomnia, and depression (Müllersdorf, Granström, Sahlqvist, & Tillgren, 2010). A Finnish Study of 21,000 adults reported that pet owners were at increased risk for hypertension, high cholesterol, gastric ulcers, migraine headaches, depression and panic attacks (Koivusilta & Ojanlatva, 2006).

Tower and Nokota, 2006 conducted a large Internet survey (n=2,291) using the Center for Epidemiology Scale for Depression (CES-D) and found that unmarried female pet owners reported the fewest depressive symptoms, while unmarried male pet owners reported the most. In their equally large survey of Australian seniors, Parslow, Jorm, Christensen and Rodgers (2005) found higher levels of depression in pet owners, while no association was found between pet ownership and depression in a survey of men (n= 1,872) participating in the Multicenter AIDS Cohort Study (Siegel, Angulo, Detels, Wesch, & Mullen, 1999).

A survey of a smaller group of elderly patients sampled in a physician’s office (Crowley Robinson & Blackshaw, 1998) revealed no significant differences in depression, happiness, life
satisfaction, hobbies, and interests between those with and without pets. Finally, zoonotic diseases are increasingly drawing the attention of health care professionals, policy makers and the general public (Reaser, Clark & Meyers, 2008) and dog attacks are a threat to human health (Langley, 2009). According to Poberscek (2006), “the main problems for pet owners are the development of behavioral problems in their pets, health issues (zoonoses, development of allergies) and the distress caused when their animal becomes injured, ill or dies” (p. 23).

In response to negative and/or neutral outcomes of pet ownership on human health and wellbeing, Gilbey, McNicholas, and Collis (2007) suggested conducting research with high risk populations (e.g. people living alone, those that are housebound) “as they may stand to benefit the most from the companionship and social facilitation an animal can provide “(p. 352). People with serious mental illnesses are a high risk population with regards to social exclusion and isolation, and therefore may be in a good position to benefit from pet ownership. A literature search within the time frame of 2000-2012 was conducted to evaluate both the existing evidence that animal-human interactions generally, and pet ownership specifically, positively impact health and well-being outcomes in serious mental illness.

The following databases were searched for peer reviewed journals: MEDLINE, PsychINFO, CINAHL, REHABDATA, AMED, Scholars Portal Journals, Global Health, EMB Reviews- Cochrane Database of Systematic Reviews, Academic Search Complete and Web of Knowledge. Keywords used were: “pet ownership”, “animal-assisted therapy”, “animal- assisted activity”, “human-animal interactions”, “therapeutic riding” and “equine facilitated therapy”. The “Pet Partners” (formerly Delta Society) library http://www.petpartners.org/about was also consulted. Articles on pets and “mental disabilities”, “psychiatric patients (adults and elderly)”, occupational therapy, and psychiatric rehabilitation were reviewed and included if applicable to this study. Animal terms included were “pets”, “dogs”, “cats” and “horses”.

Twenty-three studies demonstrating positive health and well-being outcomes of Animal-Assisted Activities/Therapy (AAA/T) among people with serious mental illness were identified in this literature
search. Animal assisted activities (AAA) and animal assisted therapies (AAT) are distinct from pet ownership. According to Kruger and Serpell (2006), AAT is a goal directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is delivered by a health/human service professional with specialized expertise and within the scope of practice of his/her profession. Kruger and Serpell clarified that AAA lack specific treatment goals; volunteers and treatment providers are not required to take detailed notes; visit content is spontaneous. AAA may have therapeutic benefit and is provided to enhance quality of life. AAA/T “… involves the carefully planned and monitored use of the therapist’s companion animal in sessions to build rapport, enhance the therapeutic process, and facilitate positive change” (Walsh, 2009). AAA/T’s are therefore used as a targeted therapeutic strategy, compared to pet ownership which is considered a human-animal bond occurring in the context of an individual’s daily life context.

Compared to AAA/T studies there were few studies that focus on pet ownership and its impact on health and well-being of this population. Only four such studies were found (see Table 1). A study by Yorke, Adams, and Coady (2008) found that six adults recovering from trauma were able to heal through the bond they established with their horses. Five of the six participants owned the horse, and for the sixth participant, the significant horse lived on the property but belonged to a friend. A case study on companion animals and community integration among people with serious mental illness described how pet ownership enabled a person diagnosed with bipolar illness to move beyond stigma (Zimolag & Krupa, 2010) and a survey study by the same authors suggested that individuals with serious mental illness served by community treatment teams had better social and community integration and community functioning than those without pets (Zimolag & Krupa 2009). Finally, Wisdom et al. (2009) found that outside of a structured therapy setting, pets viewed as family by people living with schizophrenia and bipolar disorder facilitated recovery by helping their owners feel understood, reconnect with others and increase their self-efficacy and self-worth. Wisdom and colleagues did not explore the perspectives of stakeholders other than people living with serious mental illness, limiting attention to how contextual
factors (e.g. the socio, economic and political environment) may impact on the occupation of pet ownership.

Occupational therapy research has examined the link between the daily occupation and health and well-being for people with mental illness (Eklund, 2006, Hvalsoe & Josephsson, 2003; Law, Steinwender, & Leclair, 1998; see also Zimolag, 2011 for a concept analysis of pet ownership). Research on caring for pets and health and well-being in the social sciences indicates that pathways may be complex and not direct in nature (McNicholas, Gilbey, Rennie, Ahmedzai, Dono, & Ormerod, 2005). McNicholas et al. (2005) proposed alleviation of social isolation and provision of social support through pet ownership as potential mechanisms to health.
### Table 3-1: Summary of Research Studies (2000-2012)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Study</th>
<th>Population/age group</th>
<th>N</th>
<th>Significant effect of pet ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barak et al. (2001)</td>
<td>AAT, non AAT group</td>
<td>Elderly patients with schizophrenia</td>
<td>10/10</td>
<td>Improved social function</td>
</tr>
<tr>
<td>Barker et al. (2003a)</td>
<td>15 min reading vs. 15 min animal interaction before stressor</td>
<td>Adult psychiatric patients receiving electroconvulsive therapy (ECT)</td>
<td>35</td>
<td>Reduction of fear and anxiety</td>
</tr>
<tr>
<td>Barker et al. (2003b)</td>
<td>Waiting room with aquarium, waiting room without aquarium</td>
<td>Adult psychiatric patients</td>
<td>42</td>
<td>Reduction of anxiety by 12%</td>
</tr>
<tr>
<td>Berget et al. (2007)</td>
<td>AAT with farm animals; 3 month intervention; video recordings</td>
<td>Psychiatric patients</td>
<td>35</td>
<td>Among patients with affective disorders increased intensity of work correlated significantly with increased generalized self-efficacy and decreased anxiety.</td>
</tr>
<tr>
<td>Berget et al. (2008)</td>
<td>AAT with farm animals, control group; 12 week intervention, 6 month follow up</td>
<td>Adult psychiatric patients</td>
<td>90</td>
<td>Higher self-efficacy and coping ability in the intervention group, no difference in quality of life</td>
</tr>
<tr>
<td>Berget et al. (2011)</td>
<td>AAT with farm animals, control group;</td>
<td>Adult psychiatric patients (age range = 41/28)</td>
<td>41/28</td>
<td>Lower state anxiety (measured via Spielberger</td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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<tr>
<td>Bizub et al.</td>
<td>12 week intervention</td>
<td>18-58)</td>
<td></td>
<td>State Anxiety Inventory) at 6 month follow up in the intervention group</td>
</tr>
<tr>
<td>(2003)</td>
<td>Therapeutic horseback riding</td>
<td>Individuals with psychiatric disability</td>
<td>5</td>
<td>Psychosocial benefits, including an augmented sense of self-efficacy and self-esteem</td>
</tr>
<tr>
<td></td>
<td>Qualitative study</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Burgon</td>
<td>Equine facilitated therapy</td>
<td>Users of a social services mental health team in the UK</td>
<td>6</td>
<td>Increased confidence and self-concept, aided social stimulation and acquisition of transferable skills</td>
</tr>
<tr>
<td>(2003)</td>
<td>Qualitative study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerino et al.</td>
<td>Uncontrolled before-after study</td>
<td>Patients with schizophrenia (age 18-40)</td>
<td>24</td>
<td>Significant decrease in BPRS (Brief Psychiatric Rating Scale) scores, significant improvement in both negative and positive symptoms (on PANSS scale)</td>
</tr>
<tr>
<td>(2011)</td>
<td>2 years -1 hour therapeutic riding sessions x 1/week which included grooming, riding and improving patients’ knowledge of the horse</td>
<td></td>
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</tr>
<tr>
<td>Chu et al.</td>
<td>Unblinded RCT</td>
<td>Taiwanese inpatients with schizophrenia from a psychiatric</td>
<td>30</td>
<td>Improved self-esteem, self-determination, positive psychiatric symptoms and</td>
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<tr>
<td>(2009)</td>
<td>2 months</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Weekly 50 minute dog</td>
<td></td>
<td></td>
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<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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<tr>
<td>Corring et al. (2013)</td>
<td>Therapeutic Horseback Riding – 10 weeks, weekly sessions – Qualitative research</td>
<td>Assertive Community Treatment (ACT) clients with schizophrenia or schizoaffective disorder (age 36-59)</td>
<td>6</td>
<td>Five themes emerged: (1) Having fun; (2) Bonding relationship with horse; (3) Increased Confidence and Self-esteem; (4) Human relationship gains; (5) The discovery of patients’ learning potential by staff</td>
</tr>
<tr>
<td>Hoffmann et al. (2009)</td>
<td>Pre-post-treatment with AAT (dog present or absent) controlled cross over design</td>
<td>Patients with acute depression(age 40.5+/- 10 years)</td>
<td>12</td>
<td>Reduction in state anxiety with dog present which was not the case after the control condition without the dog present</td>
</tr>
<tr>
<td>Kovacs et al. (2004)</td>
<td>Uncontrolled pre-post study with 9 month treatment period (weekly 50 minutes); weekly AAT sessions</td>
<td>Middle age patients with schizophrenia living in a social institution (age 18-65)</td>
<td>7</td>
<td>Significant improvement in domestic and health activities scores (measured via the Independent Living Skills Survey –ILS)</td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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<tr>
<td>Kovacs et al.</td>
<td>Animal assisted group therapy</td>
<td>Patients with chronic schizophrenia (age 32-71)</td>
<td>3</td>
<td>Improvement in usage of space during communication, partial improvement in nonverbal communication</td>
</tr>
<tr>
<td>(2006)</td>
<td></td>
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<td></td>
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<tr>
<td>Lang et al.</td>
<td>Controlled pre-post treatment crossover</td>
<td>Adult patients with acute schizophrenia (age 21-59)</td>
<td>14</td>
<td>Decreased state anxiety (measured via the State-Trait Anxiety Inventory-STAI) after interview in dog presence</td>
</tr>
<tr>
<td>(2010)</td>
<td>study; Clinical interview in presence of</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>and absence of dog</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marr et al.</td>
<td>AAT, control group</td>
<td>Adult psychiatric inpatients, age 20-66</td>
<td>69</td>
<td>More interactions with other patients, more sociable and helpful</td>
</tr>
<tr>
<td>(2000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moretti et al.</td>
<td>6 week intervention; pet group (interaction</td>
<td>Elderly patients with mental illness (mean age 84.7 years)</td>
<td>21</td>
<td>Geriatric depression scale symptoms decreased significantly, Mini-Mental State Examination scores increased. Five of 10 patients in the pet group reported an improved QOL</td>
</tr>
<tr>
<td>(2011)</td>
<td>with visiting pets) and control group (no interaction)</td>
<td>living in a nursing home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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<tr>
<td>Nathan-Barel et al. (2005)</td>
<td>Controlled before-after study</td>
<td>Adult psychiatric patients with chronic schizophrenia (age 19-62)</td>
<td>20</td>
<td>Modestly improved hedonic tone (SHAPS-Snaith-Hamilton Pleasure Scale), better use of leisure time (measured via Quality of life enjoyment and satisfaction questionnaire - QLESQ) and higher motivation (measured via the Subjective Quality of Life Scale-SQLS) No group difference in symptoms (measured via PANSS)</td>
</tr>
<tr>
<td>Pedersen et al. (2011)</td>
<td>12 week (2x/week-1.5-3hours) farm animal-assisted intervention</td>
<td>Adults with clinical depression</td>
<td>14</td>
<td>Levels of anxiety (State-Trait Anxiety Inventory-State Subscale -STAI-SS) and depression (Beck Depression Inventory – BDI-IA) decreased for challenging and complex work tasks not for</td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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</tr>
<tr>
<td>Pedersen et al. (2012)</td>
<td>12 week farm animal-assisted intervention; treatment and control group</td>
<td>People with clinical depression (age range 23-58)</td>
<td>29</td>
<td>A significant decline in depression and a significant increase in self-efficacy were seen in the intervention group; no significant changes were found in the control group</td>
</tr>
<tr>
<td>Sockalingam et al. (2008)</td>
<td>AAT - 3 weeks, intervention - daily interaction, walking with dog and caregiving, No control group; self report &amp; evaluation by nurses and physicians</td>
<td>Assault victim with bipolar affective disorder Type 1 (depression and mania) and head injury</td>
<td>1</td>
<td>Improved mood, improved outlook on life, increased spontaneous speech, decreased anxiety and psychomotor agitation, better ability to sleep and concentrate, less social isolation and better self-control; better health and</td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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</tr>
<tr>
<td><strong>Souter and Miller (2007)</strong></td>
<td>Systematic review and meta-analysis</td>
<td>Animal-assisted activities or animal-assisted therapy (4 RTC’s used dogs and 1 RCT used dogs and cats)</td>
<td>5 studies</td>
<td>Reduction in depressive symptoms as measured by self-report tools</td>
</tr>
<tr>
<td><strong>Villalta-Gil et al. (2009)</strong></td>
<td>RCT AAT group, control group</td>
<td>Adult inpatients with chronic schizophrenia (&gt; age 18)</td>
<td>21</td>
<td>More social contact, fewer symptoms, better quality of life related to social relationships in AAT group</td>
</tr>
<tr>
<td><strong>Wisdom et al. (2009)</strong></td>
<td>Pet ownership- Qualitative research- Grounded Theory</td>
<td>Community living US citizens living with schizophrenia, schizoaffective disorder, bipolar disorder or affective psychoses. (age range 16-84).</td>
<td>177</td>
<td><strong>Primary theme:</strong> Pets assist individuals in recovery from serious mental illness. <strong>Subthemes:</strong> (a) providing empathy and “therapy”; (b) providing connections that can assist in redeveloping social avenues; (c) serving as family in absence or addition to human family;</td>
</tr>
<tr>
<td>Authors</td>
<td>Study</td>
<td>Population/age group</td>
<td>N</td>
<td>Significant effect of pet ownership</td>
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<tr>
<td>Yorke et al. (2008)</td>
<td><em>Pet ownership</em></td>
<td>People recovering from trauma</td>
<td>6</td>
<td>Relationship with horse contributed significantly to healing from trauma</td>
</tr>
<tr>
<td></td>
<td>Qualitative research - Phenomenology</td>
<td></td>
<td></td>
<td>(d) supporting self-efficacy and (e) strengthening a sense of empowerment</td>
</tr>
<tr>
<td>Zimolag and Krupa (2009)</td>
<td><em>Pet ownership</em></td>
<td>Community dwelling people living with serious mental illness</td>
<td>60</td>
<td>Pet owners had better social community integration and Global Assessment of Functioning (GAF) scores than non-pet owners</td>
</tr>
<tr>
<td>Zimolag and Krupa (2010)</td>
<td><em>Pet ownership</em></td>
<td>Person with serious mental illness living in the community</td>
<td>1</td>
<td>Pet ownership enabled the person to move beyond the stigma of mental illness</td>
</tr>
</tbody>
</table>

### 3.2 Methodology

#### 3.2.1 Research Purpose and Question

This study develops a grounded theory of how pet ownership impacts on the health and well-being of people with serious mental illness who live in community settings. The main research question was: *How does pet ownership impact on health and well-being of community dwelling people living with serious mental illness?*
3.2.2 Research Design

Grounded Theory Design

Grounded theory is “a method of conducting qualitative research that focuses on creating conceptual frameworks of theories through building inductive analysis from the data” (Charmaz, 2006, p. 187). Grounded theory designs are systematic, qualitative procedures that researchers use to generate a general explanation (called a grounded theory) that explains a process, action, or interaction among people. The procedures for developing this theory ‘include collecting primarily interview data, developing and relating categories (or themes) of information, and composing a figure or visual model that portrays the general explanation. In this way, the explanation is “grounded” in the data from participants (Creswell, 2005, p. 52-53).

This research adopts a constructivist grounded theory perspective which has its foundation in relativism and an appreciation of the multiple truths and realities of subjectivism (Mills, Bonner & Francis, 2006). Undertaking a constructivist enquiry requires the adoption of a position of mutuality between researcher and participant in the research process (Mills, et al., 2006). Constructivism refers to a social scientific perspective that addresses how realities are made and assumes that people, including researchers, construct the realities in which they participate (Charmaz, 2006, p. 187).

Ethics

Prior to recruitment, ethics approval was obtained from the Queen’s University Health Sciences Ethics Board in September 2008. The approval forms, information sheets, and consent forms for this study are provided in Appendix A-F.

Sample

The study was conducted through three mental health service sites in two southeastern Ontario counties. The three sites offer Intensive Case Management Services and Assertive Community Treatment, well-established and evidence-based service approaches for people with serious mental illnesses (Dietrich, Irving, Park & Marshall, 2011; Dixon, 2000). The sites serve clients living in a small city and rural environments. Agency directors distributed study information to all team leaders at the sites and then
interested leaders arranged for the investigator to meet with service providers to orient them to the study. This recruitment strategy resulted in six teams participating from site 1 and 2 (County Y) and four teams from site 3 (County X). The principal investigator visited with the teams to distribute a study information package, to explain the recruitment strategy, and to answer their questions. Team members were asked to refer potential research participants who expressed interest in the study and in their opinion were able to speak to the research question.

Data collection consisted primarily of individual interviews. Interviews were conducted with a range of stakeholders with knowledge and experience related to pet ownership and serious mental illness. The sample included urban and rural (a) pet owners with serious mental illness, (b) providers of services to people with serious mental illness, and (c) providers of care to animals. The latter group was identified by the other research participants as key knowledge holders and important stakeholders on the topic.

The inclusion criteria for people with lived experience of mental illness included: (1) community dwelling individuals age 16 and older who have a primary documented history of serious mental illness and are served by one of the three mental health sites; (2) current and/or past pet owners; (3) able to give consent; (4) English speaking; (5) live in one of the two target counties. Exclusion criteria for these individuals included: having a primary diagnosis of substance abuse disorder, developmental disability or organic disorders.

Mental health service providers were invited to participate if they provided services to clients at the three recruitment sites and could share information relevant to the main research question. During the presentations to providers the principal investigator invited providers who had experience relative to the question to self identify. Providers who wished to participate were subsequently provided with the study consent information. Animal care service providers were included if they were from one of the two counties and had information and experience relevant to the research question. A mental health care provider research participant identified the police officer with previous experience as a veterinary technician as a key knowledge holder. In turn, the police officer suggested the names of two animal care
providers (one of the two animal care provider worked with a client volunteer from the mental health agency in county X).

**Data Collection/Generation**

All interviews took place either at the individual’s home (for research participants with lived experience) or the workplace (for care provider research participants). Informed consent was secured prior to participation in an interview.

Data collection was emergent and based on the research question of how pet ownership impacts health and well-being among people with serious mental illness. Initial recruitment resulted in 15 pet owners living with a serious mental illness. Consistent with grounded theory the study used purposive maximum variation sampling and theoretical sampling procedures. Twenty-three interviews with this broad range of participants were completed. This included: (a) 15 clients of mental health services (seven urban and eight rural clients); (b) five mental health care providers (one registered nurse, one crisis worker, one psychiatrist, and two community support workers); (c) two animal care providers, and (d) one police officer/former veterinary technician.

Data collection methods in this study consisted of in-depth semi-structured interviews and documented observation (e.g. type and number of pets, living situation, home environment, artifacts). To capture process changes across time, data were collected pertaining to the person’s past experience with pets to the present. Data collection occurred between January and June 2009, with interviews lasting for as long as client participants were comfortable with the interview process (usually 90-120 minutes). Data collection occurred until gathering more data about a theoretical category revealed no new properties nor yielded any further theoretical insights about the emerging grounded theory. This approach is termed theoretical saturation (Charmaz, 2006). The interview protocol for client and service provider research participants are provided in Appendix G and H.
Data Management

All interviews were audio-taped and transcribed verbatim by the principal investigator leading to in-depth familiarity with the data. Nvivo software (QRS International Pty. Ltd, 2007) was used for focused (thematic and conceptual) coding.

3.2.3 Data Analysis

The analysis process closely followed that proposed by Charmaz (2006). For the grounded theory analytic process employed in this study see Figure 3-1.

Figure 3-1: The grounded theory process and procedures used in this study
The following four strategies of constructivist grounded theory analysis (Charmaz, 2006) informed the analysis.

1. *Open (line by line) coding*

   Interviews were reviewed using line by line coding (labelling a line or segment of text based on what action it expresses). This procedure resulted in 3837 open codes. Line by line coding sparks new ideas to pursue and acts as a corrective to reduce the likelihood of merely superimposing preconceived notions on the data. Upon completion of the interviews, two interviews were coded by the principal investigator’s supervisor for discussion and learning and to compare data labels.

2. *Focused Coding*

   Focused coding means using the most significant and/or frequent earlier codes to sift through large amounts of data. In this phase, decisions about which initial codes make the most analytic sense to categorise the data needed to be made. Many focused codes were topical in nature (e.g. types of activities) while others were conceptual, such as “unconditional love”. The tree codes (nodes) were further divided into active sub-codes (e.g. key activities such as feeding a pet, visiting the vet, and dealing with emergencies or crises).

3. *Theoretical sampling*

   In this study theoretical sampling occurred from study outset. The purpose of theoretical sampling is to obtain data to help explicate categories (themes) and it thus pertains to conceptual and theoretical development. As it pertains to the category of well-being, the emerging analysis brought to light the added dimension of “pet well-being” and the concept of “proper pet care”. This prompted further questions, for instance, “What does it mean for a pet to have well-being”? and “What constitutes “proper pet care”? In this study, two animal care providers at the Humane Society in county X and Y and one former veterinary technician were approached to fill these theoretical gaps. Most insight into the main research question pertained to everyday life situations encountered by people with serious mental illness.
4.  **Memo writing**

Four types of memos (field notes, procedural memos, process memos and self-reflection memos) were written during data collection and data analysis stages. Each week, the principal investigator engaged in coding and writing to develop fresh ideas, to reflect on the data and discover gaps in data collection. The strategy provided the opportunity to collect further data which would saturate categories.

5.  **Diagramming and memo sorting**

Diagrams can offer concrete images of ideas (Charmaz, 2006, p. 117). Diagramming (or clustering – see Charmaz, 2006, p. 89) all interviews (1 page) was the key strategy to compare and develop increasingly focused codes and key categories (see Appendix I). Memo reading was helpful to re-experience the interview, to gain access to the thinking at the time of each interview and to reflect on biases. For example, as it pertains to interview 23 with Willy, I leaned towards thinking that having a pet directly impacts on well-being in a positive way. However, reflecting on Willy’s interview I noted that he found that successful pet ownership required considerable challenging preparation. He talked about the importance of taking medication and the need for planning for successful pet ownership. In this way, I was able to see that pet ownership could be simultaneously beneficial to one’s health while also presenting a challenge.

6.  **Development of a core category**

Diagramming and colour coding processes at the Person, Occupation and Contexts/Environment level (see Appendix I) enabled visualization and comparison of codes and evolving categories for client and provider participants across interviews. Use of the constant comparative method as it pertains to definitions and processes enabled the evolution of the core processes by which pet ownership enables health and wellbeing.

**Establishing trustworthiness**

Trustworthiness of the research was established via use of EPICURE Criteria (Stige et al., 2009) including the following:
**Engagement (E)** – The investigator maintained continuous interaction with and relationship to the phenomenon through in-depth interviews and ongoing exchanges with some of the research participants.

**Processing (P)** – Charmaz’s (2006) steps of constructing and conducting grounded theory were carefully followed.

**Interpretation (I)** – Meaning was created by staying close to the data to identify patterns and developing contexts of pet ownership.

**Critique (C)** – Eight research participants (four client participants and four service provider participants) critiqued this research and study limitations were acknowledged.

**Usefulness (U)** – Findings were presented at a national psychosocial rehabilitation conference and participants indicated that they rang true and were relevant and useful.

**Relevance (R)** – The model emerging from this research may inform and guide mental health care practice and future human-animal interaction research.

**Ethics (E)** – The principal investigator aimed to be respectful of all research participants and their varying opinions regarding a highly emotional and controversial research topic.

### 3.2.4 Establishing Rigour

Several criteria, as developed by Chiovitti and Piran (2003), for judging the quality and rigor of qualitative research were addressed in this study. **Credibility** refers to evidence that the study addresses the central phenomenon and depends on the degree to which the findings accurately describe/capture the phenomenon studied. The following provisions were made to promote credibility:

(a) **Adoption of research methods well established in qualitative investigation** – Grounded theory methods provided a set of strategies for conducting rigorous qualitative research.

(b) **Familiarity with the culture of the organization** – the investigators master’s research (2004-2006) on companion animals as rehabilitative agents among this population occurred at site 1 and site 2. From 2002-2004 the investigator was employed as an occupational therapist at research site 3.
From 2009-2011 the principal investigator maintained contact with the organization as a volunteer (cooking and serving a Christmas dinner to clients and their families).

(c) **Triangulation of sources** - data were collected from a wide range of sources (clients, mental health staff and animal care providers) to discover points of convergence and divergence with regards to the phenomenon. Including data dealing with the wider context, for example, organizational (three sites), county (two counties) and location (rural – urban) increased the range of informants and added to the breadth of the research.

(d) **Triangulation of perspectives** – A wide variety of participants’ perspectives were included via four types of sampling.

(e) **Member checking** – All research participants were given the opportunity to check their interview for accuracy of content (see Appendix J). During interviews, client and mental health provider study participants were invited to help refine, develop, and revise emerging categories. Eight volunteer research participants (four client and four provider participants) were given a copy of a PowerPoint presentation which included all parts of the study including the emerging results and diagrams of the emerging theory and asked to comment on the understandability, meaningfulness, completeness, logic of the emerging theory and to add their own comments (see Appendix K). Six of eight participants returned the comments sheet and all member comments were positive.

(f) **Tactics to help ensure honesty of information** – Participants were informed that they could withdraw at any time during the interview. Participants were encouraged to be frank by stressing that there are no right or wrong answers and by informing participants that what is said will not impact on the care they receive.

**Reflexivity** – Discussions with other researchers and with individuals not involved in the study provided the opportunity to consider multiple perspectives, to attend to negative influences of pet ownership and to consider rival explanations.
**Confirmability** – Refers to the degree to which any observer can trace the course of the research step-by-step via decisions made and procedures described. Confirmability in this study was addressed by:

(a) Analyst triangulation, particularly through comparison of codes by the principal investigator and her supervisor.

(b) Use of a study protocol, a data storage system, and creation of analytical memos enabled the development of an audit trail to confirm the research results.

(c) Full admission of my biases via ongoing reflective commentary

(d) Analytic diagrams added to the transparency of the analysis (see Appendix I)

**Transferability**

Transferability or fittingness pertains to the likelihood that the research findings have meaning to others in similar situations. Transferability was enhanced by the following:

(a) Context was provided by including a profile of research participants (e.g. age, gender) to develop the context from which the theory was developed.

(b) The literature pertaining to each emerging person, environment and occupational category was described. By highlighting similarities between the findings of this study and previous theoretical constructs in the literature, it was possible to show the potential fittingness of the phenomenon explored by other researchers.

(c) Finally, the level of theory was identified as “substantive” theory (interpretation of a delimited problem in a particular geographical and organizational area) rather than a “formal” theory (generic) which cuts across areas. Contextual information about the fieldwork sites was provided to enable the reader to make judgements about transferability to other sites.

3.3 Findings

The findings of this study are organized as follows. First, the profile of the research participants and the average annual cost of pet care are provided. Following this the positive and negative processes to
mental health and wellbeing are developed, as are the mediators between the positive and negative outcomes of pet ownership on health and well-being. In this study, mediators are defined as “go-between” contextual factors, events, skills etc. (e.g. receiving support with pet care, living with an ill pet) that sway well-being to either the positive or negative side.

Profile of Client Research Participants

All research participants’ names were changed to pseudonyms (see Table 3-2). All client research participants were “Caucasian” and identified as Canadian. They ranged in age from 26 to 69 years. At the time of the interview they had all received services from ACT or ICM for more than two years. Of the 15 client research participants, 13 were on the Ontario Disability and Support Program (ODSP) as their main source of income. Six client research participants were diagnosed with schizophrenia, seven with mood disorder (four with depression and three with bipolar illness), and two with an anxiety disorder (agoraphobia and post-traumatic stress disorder). Two of the mental health service provider research participants (a nurse and a crisis worker) identified as having experienced depression. Nine client research participants lived in rented apartments, two rented older homes, three owned homes and one lived with parents. All of the provider research participants were also pet owners.

Average Annual Cost of Pet Care

According to the Ontario Veterinary Medical Association, the annual cost of caring for a forty-pound adult dog in the year 2013 was $ 2,018.49. This included vaccinations, fecal exam, annual wellness profile (including heartworm test), heartworm/flea prevention, dental care, food, pet insurance and the annual municipal pet licence. The annual cost of caring for a ten-pound adult cat in the year 2013 was $ 1,483.84. This included vaccinations, fecal exam, wellness profile, flea prevention, dental care, cat litter, food, pet insurance and the annual municipal pet licence. In the year 2013, first year puppy ownership cost approximately $ 1,000 more than adult dog maintenance, while first year kitten ownership cost about $ 500 more than adult cat maintenance (Ontario Veterinary Medical Association, n.d.).
<table>
<thead>
<tr>
<th>Name</th>
<th>County</th>
<th>Urban/rural</th>
<th>Age</th>
<th>Pet(s) Type</th>
<th>Diagnosis</th>
<th>Type of Participant</th>
</tr>
</thead>
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<tr>
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<td>Client Participant</td>
</tr>
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<td>---</td>
<td>RN, Peer Support Worker</td>
<td></td>
</tr>
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<td>Doug</td>
<td>X</td>
<td>urban</td>
<td>29</td>
<td>fish aquarium</td>
<td>Schizophrenia</td>
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<td>Schizophrenia</td>
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<td>1 cat</td>
<td>Schizophrenia</td>
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<td>---</td>
<td>---</td>
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<td>Police Officer /Veterinary Technician</td>
<td></td>
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<td>---</td>
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<td>Mood (Depression)</td>
<td>Client Participant</td>
</tr>
<tr>
<td>Sally</td>
<td>Y</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Community Support</td>
<td></td>
</tr>
<tr>
<td>Tim</td>
<td>Y</td>
<td>rural</td>
<td>24</td>
<td>1 dog, 1 cat</td>
<td>Bipolar Illness &amp; Anxiety</td>
<td>Client Participant</td>
</tr>
<tr>
<td>Ursula</td>
<td>Y</td>
<td>rural</td>
<td>48</td>
<td>1 dog, 2 cats</td>
<td>Mood (Depression)</td>
<td>Client Participant</td>
</tr>
<tr>
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<td>rural</td>
<td>50</td>
<td>2 dogs</td>
<td>Schizophrenia</td>
<td>Client Participant</td>
</tr>
<tr>
<td>Willy</td>
<td>Y</td>
<td>rural</td>
<td>43</td>
<td>3 dogs</td>
<td>Mood (Depression)</td>
<td>Client Participant</td>
</tr>
</tbody>
</table>
3.3.1 Processes of Health and Well-Being Associated with Pet-Ownership

One central category, Transformation through pet ownership, was identified. Transformation refers to the processes that lead to positive changes in the magnitude of experiences of wellness compared to those of unwellness, specifically in the context of pet ownership (see Figure 3-2 for a visual depiction). This transformation occurs through distinct processes at three levels; personal, occupational and context. For optimal well-being to be achieved, processes labeled as “psychosocial benefits,” occurring at the person level, “occupational engagement”, occurring at the occupational level, and “thinking outside the box of service delivery”, occurring at the context level are optimized. Transformation is dynamic, shifting in a positive or negative way over time. Potential negative influences of pet ownership can compromise well-being and health, but these negative influences can be mediated by contextual factors.

Figure 3-2: The Three Main Categories of Transformation of the Unwellness and Well-Being Spaces

Transformation Of Unwellness and Well-being Spaces

Legend: UWS = Unwellness Space; WBS = Well-being Space; P = Persons; SMI = Serious mental illness; SP = Service Providers; OE = Occupational Engagement; M = Mediators; NIP = Negative Impact of Pet Ownership; PIP = Positive Impact of Pet Ownership
Each main process (“psychosocial benefits”, “occupational engagement” and “thinking outside the box of service delivery”) consists of five processes. The five processes for the psychosocial benefits and occupational engagement category are listed in Figure 3-3. Each is described and explained in the subsequent sections and interrelationships are explained.

**Figure 3-3: The Processes By Which Pet Ownership Impacts Positively on Health and Well-Being**

![Diagram showing the processes]

**Legend:** P-SMI = Persons with Serious Mental Illness  C = Contexts of pet ownership
PERSON LEVEL PROCESSES

Psychosocial benefits

Unconditional love and acceptance. This process refers to love that is infinite (vs. finite), freely given (vs. having to earn it) and without judgment. Unconditional love and acceptance received from pets negated the negative social and emotional experiences of not knowing whom to trust, feeling negative judgment, feeling one has to prove oneself to be accepted and living with the sense that one is unworthy of love and acceptance. Client research participants valued pets for providing unconditional love.

Unconditional love was associated with being needed and leading a happy and content life:

[Pets give me] unconditional love and just well… I guess for me they give me that … everybody needs to be needed and with me it’s the animals … [Ursula, client participant]

I could say I was never happy or content in my life… but I am really … when I stop to think about it … when I know he [cat] is here and he gives me unconditional love… [Ruth, client participant]

There is all this stigma… ahm… of people who don’t carry themselves well… that aren’t able to converse with you … they can’t go around town… like… comfortably… they have an animal … and I mean it is love … it is unconditional love… I think that is even more important for a lot of people [Gerda, client participant]

The sense of being judged and having to “prove” oneself was a common social experience. The perception of judgment occurred in relation to client research participant’s doing and their outward presentation. As pet owners, client research participants did not receive judgment and/or rejection from pets that do not care about their doing and/or appearance:

They [pets] accept who you are… you don’t have to have your teeth in… your face washed or anything! [Ellen, client participant]

I have always felt that I am different. And people have looked upon me as being different. And classifying me as different … just a little weird … and animals don’t judge like people do! They don’t judge! [Fred, client participant]

They (pets) are more accepting than humans… it's too bad that we can’t find in a human relationship what we find in our animals… man’s intolerance for man … judgment … people are so judgmental of one another … they are! They [animals] aren’t … they are so accepting and loving … they don’t care if you are bald, ugly or whatever … you are accepted … why can’t human beings accept other people with all their fallibilities and stuff like that as well?… [Ruth, client participant]
For them… you know what I mean… [if they have a dog] they don’t go out in the public and have people stare at them … you know… they can be with their animal. They can walk their animal … they can interact with their animal without having that kind of judgment... the animal is not judgmental … I think it is a huge benefit
[Olga, human & animal care provider]

Acceptance by pets comes without “pretense” therefore; it is perceived as an honest and true evaluation of worth. Client research participants perceived pet ownership as a predictable and straightforward relationship:

They look you in the eye and they are pretty honest… and I feel bad about this one… I am cranky and lose my cool… they are very forgiving! They don’t have an ego.... there is no real pretense in an animal… [Quincy, client participant]

They [pets] don’t put on a show or anything... you can read them [cats] very easily. Like they are not like a person in that sense… they are easily read! [Ellen, client participant]

It’s like society now… we reached the point… it’s really hard to find good genuine people… people with morals, integrity… people without agendas… it’s like you are OK if I can do something for you… it is!… Where our pets… you look at them they are what you see… [Ursula, client participant]

The experience of “rough patches” is part of the experience of living with serious mental illness and impacts on health and well-being. Pets have a positive impact on health and well-being during this time because they do not change their devotion and acceptance. In contrast to this positive experience with pets during a rough patch, participants experienced being disappointed and rejected in human relationships, especially if the rough patch was unpleasant to witness and of long duration. During a rough patch the relationship with their pets required less effort and was easier to maintain than relationships with people. Participants appreciated that during a rough patch they could count on their pets’ loyalty or on “weathering the storm” with them:

You can turn your back on an animal if you are in a really rough patch and tell them to go away… and they do… they don’t understand why but they do… but they will be right back there for you [Norman, client participant]

And she [dog] would give back to me constantly! Ah, it didn’t matter the mood I was in… whether I was so depressed that I couldn’t get up from the sofa … whether I was so agitated I couldn’t sit on the sofa. She was there! And she just loved me. [Cindy, RN, peer support worker]
I look at it now… I didn’t want to live… I had 3 overdoses... ahm… maybe a cry for help! I didn’t want to be around anymore. And ah … she [wife] could see there being no end in sight with this [bipolar illness]. I did not know this but she was planning the separation/divorce a year and a half before she even told me about it… so actually… I was… I was a little shocked and I wanted to work at it! Go to marriage counseling … but no, she wanted out… so… it ended!... I did my fair share of crying with her [dog] and when I cried she was always there to lick my tears… [Fred, client participant]

**Self-Affirmation** refers to the recognition and assertion of the existence and value of one’s individual self. Receiving self-affirming messages as pet owners was one way of transforming feelings of unworthiness into feelings of self-acceptance. For example, Ruth stated: “They [pets] make me calmer… he [the cat] makes me feel good about myself… with the depression… makes me feel worthwhile” [Ruth, client participant]

The experience of “being picked” by a pet was experienced as exciting and as instant connection: “I think what I can say is that ah… [takes a big breath] … she picked me!! She picked me… and I knew it! She hooked her eyes on me and I was hooked instantly! She picked me! Sorry what was the question?” [Fred, client participant]

Rescuing a dog or caring for an ill pet involved having the power to give someone a new lease on life. Client research participants related to the suffering of abused pets and experienced caring for them as satisfying and rewarding. For instance, Ursula stated: “… then you see an animal that needs to be saved or rescued… you can open your heart up and [open] yourself more to them than just going to a pet store or a breeder… yeah!” [Ursula, client participant]. Rescuing an abused pet enabled Fred to act out his belief that a shelter dog deserves a chance for a better life. He talked about the felt pleasure and pride when watching his rescue dog’s progress:

X [rescue dog] lived in a crate for a year… that was her home... she had no socialization with humans whatsoever for that year… She didn’t know what stairs were… she didn’t know what the outside world was … and she came down the stairs and she was terrified. And she learned how to walk down the stairs and then … the following week she is starting to show off… she is jumping [laughing] from the landing three stairs right down. I am noticing all this improvement… still… along the way I would have to hold her for ah… at least an hour almost every day while she was shaking… if I didn’t have her… I don’t think she would have made it in life!... I feel that I do have some sort of communication skill with pets… ahm they seem to take to me! [Fred, client participant]
Similarly, Tim and his girlfriend anticipated that saving an abandoned kitten would make them feel needed and happy: “She [the kitten] would have wound up being food for something… and in a sense we saved her… and we knew that it would both make us happy” [Tim, client participant]

For several client research participants, rescuing and being needed by an abused pet provided the reason for not committing suicide. Cindy decided to “stay around” so that her adopted shelter dog would be cared for. She observed that her caring behavior resulted in her dog being protective of her. The dog’s protectiveness affirmed her life’s value:

I was dealing with very severe depression at the time, to the point where ahm… you can convince yourself that your family would be better off if you weren’t around. Everybody would be better off!! And I remember thinking so many times even though my kids would be better off – she [dog] hadn’t bonded to anybody else and I thought if I am not here… it will kill her! And any time she thought there was any kind of danger to me she was there! [Cindy, mental health service provider]

Feeling accepted at face value changed some client research participants thinking about themselves as “bad” or “a burden” to “good” and “acceptable” people. Norman observed that: “The pet accepts me for who I am so there got to be… there is definitely got to be something there because if I was bad in any way then they wouldn’t have anything to do with me” [Norman, client participant]. Similarly, Quincy pointed out that being in the company of her dogs affirms herself as acceptable regardless of the mood she is in. She trusts her dogs as honest judges of her character. Quincy perceives her dogs as good listeners and as creatures that like having her around. These experiences affirm positive feelings; for instance, being an adequate person:

I find that… being out with them … hugging them … sometimes just addressing issues with them … it makes me feel I am connected to something viable and its important … because they are smart … they give you feedback … they look you in the eye and they are pretty honest … they are very forgiving! You know! And I think they like having me around. They will listen to me and nod intelligently … when I am on ranting about something … and asking them questions … and they seem to give me a little more positive feedback [Quincy, client participant]

One animal care research participant agreed that pets can make people living with serious mental illness feel important and valuable. She explained: “People with mental health issues may feel… you
know what … I don’t have much in my life but I do have… you know… Fido here and Fido looks at me like I am the best”… [Olga, human and animal care service provider].

Gerda, a client research participant affirms herself as an expert on animal knowledge. For Gerda, watching the American Quiz show “Jeopardy” means experiencing pride and competence in an area of longstanding interest:

I remember Jeopardy [an American Quiz show] would be on and… mammals… I just could answer them all. It blows me away when other people can’t… like when the contestants didn’t know… to me it has always been common knowledge… and that was always something I was interested in. And I’ve always been into art… like there is a lion picture up there that I wood burned! Ahm… like I have always been into animals. [Gerda, client participant]

Gerda’s knowledge about animals and her animal related artwork affirm her identity as an artist rather than person living with agoraphobia. Her skill of creating a wide variety of animal art (paintings, wood burning, and jewelry) developed and helped her cope with not being able to leave her house: “You will be hard pressed to find a piece that doesn’t have animals… well, when you are shut in… I was always an artistic little kid… but it really developed when you couldn’t get outside!” [Gerda, client participant]. For Gerda, the ability to learn new things and contribute learned knowledge to others despite illness related constraints was experienced as self-affirming:

**Filling a void.** A void refers to empty spaces which are experienced daily by people living with serious mental illness. These empty spaces are created by unemployment and other role losses. Client research participants identified a range of voids including the emotional void created by loneliness, the void of having nothing to do (boredom), the physical void created by living alone, and the sensory void created by lack of touch. Pet ownership transformed the experience of loneliness and boredom into the experience of living a fuller life. Through their engagement in pet related activity, client research participants filled many empty spaces:

They keep me busy and they keep my mind off other things I got my first dog about 12 ⅔ years ago. Basically, I was suffering from depression and I was bored too. I wasn’t working. I wasn’t doing anything… I was just on a disability pension… when I didn’t have dogs I was bored and sad all the time… [Willy, client participant]
They [people in the general public] have other interests… and they pursue factual things that take up their intellectual times… but me I sit here and listen to the radio every day or get drunk. Every once in a while I get a little bit of work… but like I mean if I didn’t have her [cat] I’d be a lot less happy! [Jim, client participant]

Living with voids deprived client research participants of a normal life, in other words a life filled with roles, meanings, values and goals. The inability to establish roles lead to a sense of alienation and retreat into a “nothing mode” where there was little to regulate or structure daily actions. Pets’ need for care transformed the “nothing mode” into an activity and a focus. Ruth stated: “You get in that nothing mode and I come home and the cat needs the litter box changed… something else to focus on” [Ruth, client participant]

For Jim, leading a fuller life meant receiving love and animal companionship as two ingredients of happiness: “[I wanted a cat] because I was lonely! I didn’t have a girlfriend… so I needed a companion… she keeps you company… she makes me happy… none of my family comes to see me…” [Jim, client participant]. According to a mental health care provider, loneliness is a common theme among people with serious mental illness:

I have a lady who has a little dog who she is completely devoted to… and it gets the best of care and they love each other and she is lonely… so the dog is a very important part of her life and another lady also lonely… loneliness seems to be a theme. [Karen, mental health care provider]

Having an emotional connection with a pet was considered better than having no one to connect with: Willy stated: “If you don’t have a partner or a best friend then … for me anyways … the best thing is to have an emotional connection with an animal” [Willy, client participant]. Similarly, for Jim, having a cat is: “like having a person in the house. I look at her kind of like my little daughter … who is not a daughter” [Jim, client participant]. Jim’s planned action to bury his cat reflects the high degree of importance ascribed to his cat:

She is going to die someday before me and then I bury her. That’s how much she means to me! Wherever I live I will bury her and like you know I am not going to throw her in a cardboard box… I may even build a coffin for her [Jim, client participant]
Several client research participants confirmed that pets fill a physical void by providing valued presence ("thereness"). Anna stated:

It’s the affection it’s the connection with something that you don’t have to wait for them to say yes, I love you, yes, I need you... when I am alone or the dogs are not here especially, she [the cat] is the one who if I am over here to watch TV she will just come out of nowhere... [Anna, client participant]

Helen pointed out: “Well, I don’t know what my life would be without her! I am home a lot… so we are together… she is affectionate… you know … and that makes me feel good! I am affectionate back to her” [Helen, client participant]. Jim also acknowledged the importance of “thereness”: “Just her presence… to know she is there… and to know if I call her out she is going to want to come and snuggle or whatever” [Jim, client participant]. Vicky added: “If I didn’t have anybody there … I would wake up and I would just feel alone” [Vicky, client participant]

According to mental health client research participants, the lack of touch is a common social experience. Touch provided by pets filled a sensory void and was perceived as pleasant, comforting, and calming: Vicky stated: “Every morning when I wake up she [dog] is there and I pet her and she feels nice and cuddly and she licks my arm and... it is pleasant” [Vicky, client participant].

Touch was also perceived as an anxiety reducing, basic human need. Both, Ruth and Quincy felt comforted, supported and reassured via the touch they received from their dogs:

[Pets bring] comfort... Soothing... because there is no touch in life... the only person who would give me a hug is X [community support worker] ... or J a friend next door... other than that there is no touch in your life ... you got to have touch... [Ruth, client participant]

I think touch is very important because it conveys... I hope... something positive and I hug the dogs ... they like to lean into me and sometimes we are all sitting on the couch... or I will be out there grumpy or anxious and they get up from where they are come over and lie down right close to me... touching me... as if to say I am here... it’s good... no problem! [Quincy, client participant]

Petra, a community support worker supported the notion that the presence of touch calms and comforts people with serious mental illness:
It [touch] is huge! I have been in sessions with clients… and because you go into their homes it is totally different than when you see them in your office… my client will be going on about something that had them so distraught and all worked up and all of a sudden their pet appears… and I will always encourage… when we are on the couch… I will encourage the cat or dog when it is small enough to get onto the couch and I watch… as my clients automatically start petting… they deescalate [Petra, mental health care service provider]

For client research participants the physical space of a house was transformed into a home once it contained someone to come home to, someone to take care of, noise and activity. A home containing a pet was associated with positive feelings of warmth and contentment. Ruth stated: “I like this apartment better with him in it… it may be selfish but it feels more like home… when you see him contented like that [stretched out on his pillow]… you feel contended” [Ruth, client participant]. For Helen “home” means living with a cat and knowing that her cat is available if she needs company. “Well, you are not alone! You know! She is somebody to take care of and… when I am here watching TV… I know she is in the bedroom … and I know she is there… she is company” [Helen, client participant].

Client research participants created their own, low cost enjoyment by teaching tricks to their pets, “Dogs you can teach them a lot of stuff if you take the time” [Willy, client participant], by playing games of chase with them, and/or by watching them play:

She [dog] has experienced a lot of things. I taught her tricks. She shakes one paw … she shakes the other paw… she gives kisses… she speaks… she sits pretty... [Fred, client participant]

We have a friend who has a cat… and she eats cat treats too and she will do tricks for him… that’s what I am trying to get her to do. She is still young enough to learn. [Jim, client participant]

I found an apartment that I could stay in and X [the cat] was with me and at that time I felt he was the only friend I had because I didn’t know anyone else in the town and we used to play games. He used to… I used to chase him around the coffee table and I had quite a big coffee table… I was very poor at that time. I had hardly any money [Ellen, client participant]

**Illness and crisis management.** There were many ways for pets to influence client research participants’ illness and/or crisis management. According to Fred, during illness and crisis pets act as a natural time-unlimited resource (social support). He explained
Do you know what pets have to offer? Unlimited time! You can be down… I don’t think they really want to hear about it… you know unless it’s my case worker or psychiatrist or my addiction councillor … and it’s just… if I want to go to bed right now… I just say the words… OK lets go to bed and they are in there…they are with me always! [Fred, client participant]

For Anna and Helen, the presence of a pet was experienced as comforting and stress reducing:

I will be just thinking about something that’s going on, that I am not having a good time with and the cat will be up here with her hands on my chest [Anna, client participant]

If I am under stress… I have a problem… just looking at her… it helps! You know. I don’t know why… it just helps seeing her there… and it helps my problem a bit. It lessens stress [Helen, client participant]

Two client research participants managed depression and anxiety by assigning the role of “scout” to their trusted dog. Having a pet with them on walks made them feel safe because they believed the dog would stay close and alert them of impending danger:

She [dog] has become quite the friend… whenever I go out into the woods or whatever she always comes with me… she is the scout… as I call her… she always goes ahead and makes sure everything is all right… you know she waits up for you… she never gets out of your shot… sort of thing… [Tim, client participant]

Everywhere I go, actually if you want to… with the depression, the animals sort of keep the feeling of… ahm I am safe, because as long as I have the animal and I know I can trust the animal it will protect me if I go outside and for a walk [Anna, client participant]

Client research participants managed mental illness with pets acting as motivators for health behaviors. For instance, pets motivated client research participants to stay on their medication, to manage anxiety and to get out of the hospital quicker. According to Ursula, her friend managed illness by using a pet as a motivator to take or stay on medication. She stated:

I had a friend… he always wanted a dog… he didn’t develop it [schizophrenia] until he was in his late 20s… while he stayed on his medication he was fine… like the rest of us … but you know he get feeling better and think I don’t need the medication… so he would relapse… and go in the hospital… the last time I saw him was about a year ago… he hadn’t gone off his meds in three years because he said if I do, X [the dog] will suffer. I don’t really think I need them [meds]… I feel fine … I don’t think I need them… but just because he was going to put that little dog at risk… just in case I wouldn’t be fine… I keep taking those pills… [Ursula, client participant]
Pets were instrumental for motivating clients to stay on top of their anxiety and/or for getting anxiety under control:

I have had a few clients in the past that were very anxious... and having really not been motivated to work on their anxiety... but they complain to me about their pet behaviors... so I say to them... your cat or your dog is probably picking up on your anxiety... and if you were to get your anxiety under control then these behaviors might stop. And it has motivated them... they work on it twice as hard if they are doing it for their pet versus if they are doing it for me or a family member [Petra, mental health service provider]

Having a pet enabled client research participants to go to the hospital less often and/or to get out of the hospital more quickly:

I was in hospital three times in very rapid succession in X [town]... extremely suicidal.... And at the end of it... when I finally did come out of it... I realized what I was putting my dog through and I called home one night and they put the phone down by the dog’s ear and I said hi to him [dog] and all of a sudden you hear this whining... sort of scratching at the phone come home!... and I was out of the hospital the next day! [Norman, client participant]

We try to keep them out of the hospital... we try to keep clients well... but periodically for whatever reason they need to be hospitalized... and pets can be a huge motivator to get well quicker. Because they know there is a stranger looking after my pet... or I had to board it at the vet... and they want to get home to their pet! [Petra, community support worker]

Several client research participants managed a “down mood” via having a pet. Pets’ presence, touch, the ability to walk and talk with a pet and their happy demeanor offset a “down mood”

You know when I have a bad day sometimes... which is another part of my illness... when people go like this mhm on the bus... and I get the impression they are doing it to me... I feel really bad and she cheers me right up... you know... just to see her... and she be happy to see me... she didn’t know anything and she just cheers me right up [Helen, client participant]

I have experienced pets’ presence help me come out of depression... it’s because... not that they did anything... well yeah, I had them come and put their head on my lap... I talk to them [dogs] so there is some kind of conversation going on and it helps me clear up that little hiccup and I feel that that’s opened the doors and I know it will leave and I will feel better! [Quincy, client participant]

Pets also help to manage mental illness and crisis by being indicators of a health decline. Pets act as a mood thermometer/barometer. For instance, Anna stated: They [animals] can sense your feelings; they can sense your mood, if you are sick [Anna, client research participant].
For Tim it is important to regulate his emotions since when his emotions run high his energy levels can get him into trouble to the degree of injuring himself. His dog picks up on his energy level and this enables him to prevent harm. He explained:

Sometimes if I get overexcited about especially music or writing I get right into it and I start writing too quickly or I start … you know … getting into the music too much where … I have seen myself stand there and play music and sing to such a degree that I almost passed out from holding notes and stuff … just because I had to hold my breath for so long while I was singing and it just didn’t even faze me … so I put myself through some extreme situations but mostly to do with music. They [cat and dog] sort of notice when my energy goes up especially M [the dog] … she can sort of sense it [Tim, client participant]

Two community support workers talked about how clients use pets to gauge their mental health:

Frequently my clients appreciate that when they are having a bad day… their pets know … the pets pick up on it… their pets cuddle them more… the pets seem to have that sensitivity… oh… they are not doing so well today… [Petra, mental health service provider]

Pets are almost like a mental health thermometer [for the community support worker]… you be surprised at the number of times… especially if it is a client I have seen on a regular basis and for any length of time and I know their pet and I know the behaviors of their pet… if I go in and that pet is acting differently and my client is saying X [pet] is off his food or he is very lethargic… even before I look at the wellness of the pet I ask my client what is going on with them… [Petra, mental health care service provider]

If the pet owner is stressed or they are going through a fragile state you see it in the pet… ahm… because animals react to people and you can see… that’s what I have noticed when I come into a client’s house… when the client is not well… the pet is very edgy… very nervous… ahm but if someone is in a good space and they are doing well you can see that in an animal [Sally, mental health care service provider]

Finally, client research participants managed illness not for themselves but because they felt a responsibility to their pets’ life and/ or happiness. Having a pet as a dependent provided Norman with a reason for living. He stated: “Having a dog gives me a reason to go on! It does… If you are going through a suicidal phase having that dog depend on you to a certain extent for its own mood makes you go on!” [Norman, client participant]

According to mental health and animal care provider research participants’ pets were instrumental in helping their clients manage suicidal thoughts and volatile behavior:
One thing I will say around health and wellness... if anybody doubts how important animals are to people and especially people in traumatic situations that have nothing else to hang onto... I am thinking again more about when I worked just the crisis line with a lot more calls... if I took a suicide call from somebody... I always listened for what is in the background... and if I hear somebody bark or meow... that’s what I am going to focus on... I think the animals save lives! They do! [Ida, mental health service provider]

If you are going to a home and people are volatile... very angry and so on... the animals are the first thing that I will go to and start talking about to take their mind off about why we [police] are there. And it works! It works! [Olga, human and animal care provider]

Other client research participants held onto life for their pets:

I know I must stay alive to fulfill the rest of her [dog’s] life... because there is no other place that she could be... I am it! [Fred, client participant]

They give me reason for living! There is no doubt about it! I don’t know what I would do... I just... there are moments where I just sit back and think this is amazing... like I mean it can’t get much better than this!... I won’t be having children. These are my children [Fred, client participant]

Basically it gives you a reason to go on. You have this little thing depending on you and you can’t let it down! So you got to keep above water somehow! [Jim, client participant]

Establishing social connections. Social connectedness refers to a sense of being linked to or having meaningful relations with people in society. Social connections can be established via talking about and engaging in shared interests and beliefs. Anna argued that when dealing with people, having animals and/or growing up with animals provided a topic of conversation and a basis for a lasting relationship: “Dealing with someone who doesn’t have... who didn’t grow up with... animals it was almost like a non-topic... it [communication] doesn’t last very long... it doesn’t last very long” [Anna, client participant]. For Anna, pet ownership enabled the transformation of apathy into occupational engagement:

I was in my bedroom with everybody else being outside playing in the summertime and I am inside my bedroom with the blinds closed and watching TV and I think that’s when I started getting more attached to them [animals] and they were the only ones that I could connect with at all.... Once I got the horse I just spent constant time at the barn with the horse. And then when I was 17 I moved in with the girl in the cabin there and took care of 30 horses. Tack horses and we did that for about a year [Anna, client participant]
Similarly, Gerda suggested that having the company of a pet means being able to have a topic of conversation: “Having your pet with you gives you something to talk about… especially if you are a more introverted person… some people… their mental illness inhibits them a lot!” [Gerda, client participant]

Having a pet along on a walk was perceived as making people more likable: “The social isolation… if you are out walking on the street with an animal… people they just smile… you can’t not see an animal with someone and not feel a bit warm towards the person” [Mary, animal care service provider]. Willy perceived having a pet as an icebreaker: “I think it [having a pet] is an ice breaker. It pulls down the barriers that might be there if the stigma is attached to somebody” [Willy, client participant]. Similarly Larry, an animal care provider, argued that pets act as socializing agents: “People say if you want to have… you want to meet a girl or a boy get a dog and go to a dog park. You know what I mean… an animal is a socializing agent” [Larry, animal care service provider].

For Anna pets acted as a social lubricant. She explained:

I am not one to stop [on the street] unless I had the dog or somebody else had the dog...and I would say something to do with the dog … or somebody else would come to me and say ‘Oh your dog is so nice’ or ‘how do you get your dog to do that’ or anyway … we go from there…. One friend of mine is an animal tech so we met through talking about the animals…. A couple younger people I have met that moved in as neighbors … I ended up giving her my friend’s dog the one he couldn’t keep... and she has been happy with that [Anna, client participant]

Similarly, Cindy talked with people as a result of walking with her dog and when volunteering with her dog. She stated:

She [dog] opened up a lot of opportunities to me. I could take her out for a walk and I could talk to people when I was walking her… people are drawn to dogs … especially cute little dogs! [Cindy, RN, peer support worker]

Vicky, a person living with the symptoms of schizophrenia, valued her pets because walking with them meant being able to have a daily chat with neighbors:

I like to have them [two dogs] around because they are friendly and they get me out of the house… I can go for a walk with them! I come across people that talk to me... Right now we have two people that we talk to on the way north and they give them cookies... the one house we
knock on their door... we have a little chat before we go... we are friends... It’s a nice break because I have someone to talk to every day [Vicky, client participant]

Having cats provided Ellen with the opportunity to reciprocate: “A friend of mine… the woman who looks after B [cat] and A [cat]… I bought her flowers… I sent her flowers … I have not done that for a long time” [Ellen, client participant]

**OCCUPATION LEVEL PROCESSES**

**Occupational Engagement** means “to involve oneself or become occupied, to participate in occupation (Houghton Mifflin Company 2004). Involvement for being, becoming, and belonging, as well as for performing or doing occupations (Wilcock, 2006)” (cited in Townsend & Polatajko, 2007, p. 370). In this study, five occupational processes for health and well-being through pet ownership emerged. The following section describes forms of occupational engagement and how occupational engagement through pet ownership had a positive impact on health and well-being.

“**Getting up and out**” is a first step towards active occupational engagement as a pet owner. Getting up and out is required for self-care, productive activities, leisure activities and caregiving activities. It refers to a person’s energy level and motivation for action. For people living with depression, caring for one’s pet was perceived as an important purpose and reason for getting up and out. Cindy stated: “I had purpose. I had a focus. I had a reason to get up in the morning because X [dog] needed breakfast. X needed to go out. I needed to look after her! You know!” [Cindy, RN, peer support worker].

The human-animal relationship, a sense of responsibility for pet care and the need for life purpose enabled client research participants to overcome inertia and become active.

I think that’s the big thing… maybe you are not caring for yourself really well but you are always going to care for the animals! Like that’s more important… so when that becomes so important to you that gets you out! [Gerda, client participant]

X [the dog] made me get up on my feet… like when I didn’t want to be bothered any more with the world or anything… every morning… she is the reason to get me out of bed… [Ursula, client participant]
I guess it was 2002… I had X [dog] for a couple of years at that point. That’s when I had my meltdown. And ahm… I don’t think A [dog] really understood what I was going through… she helped me… I had to walk every day! Ahm because I was in a morbid depression… physically it affects you [Fred, client participant]

Without them [the dogs] I would be the laziest person in the world. I wouldn’t do anything. If I didn’t have to get out of bed I wouldn’t get out of bed. With them I have to get up. I have to do stuff. And they also make me want to do more… like play with them and exercise [Willy, client participant]

Olga argued that having a purpose is important for well-being for people with mental illness who are unemployed:

Most of them [people with serious mental illness] are not employed… they also … you know… need a sense of purpose to take care of something… to have companionship to get up every day and know that they have something to do… they have to go for a walk or they have to feed or to groom or they have to play or they have to interact [Olga, human and animal care provider]

The degree of ease or effort for engaging in pet related activities was influenced by the degree to which the person was struggling with illness. For instance, Willy lives with depression characterized by low energy levels. In order to keep up with his pets and to manage depression, Willy resolved to synchronize his energy level with that of his pets:

I know when they [dogs] first get up they have lots of energy and they are going to go go go…ah… so I make sure I am really available with them… and then later in the day they get more tired so it is easier for me to take care of them. Easier for me to handle. [Willy, client participant]

“Running the show” refers to having choice and control over occupation. Having choice and freedom is associated with life satisfaction or being comfortable in one’s life situation. Running the show requires control or the belief that one can affect desired outcomes via taking action. Running the show also requires self-efficacy or the belief in one’s own ability to complete tasks and reach goals. Running the show requires the ability to cope with mental illness and consequently manage the activities associated with pet ownership. Running the show entails a sense of empowerment. According to Willy, running the show (having control and freedom) negates a feeling of dependency:
Well, we all have to be comfortable in our situation. That’s it. Really! And what makes me comfortable is… in my situation is… just being able to do what I want to do… you know and the same with them! Just doing what they want to do. So I… I know what makes me happy is doing what I want to do and I know what makes them happy is doing what they want to do [Willy, client participant]

For Willy, being able to run the show required illness management or being further along the journey of recovery:

Five years ago when it [mental health] was bad I couldn’t cope and I had puppies that were 2 years old and I had to let them go. I had to let them go because I couldn’t take care of them anymore because it was getting too bad. It was controlling me … I wasn’t dealing with it well. Now… see I got them because I figured I am not fixed… I am not cured… but I can deal with it and like I said before screw it, I am running the show here [Willy, client participant]

By managing illness Willy assured that he could keep his dogs. In doing so he protected his occupational engagement in pet ownership as a valued social role:

I didn’t want to get any new dogs until I was sure… this time… I am running the show here. Not my mental illness!! I am dealing with it! I am running the show. And that way there is no way they are going anywhere now. You know what I am saying? That’s what it takes! It wouldn’t take a couple of weeks or a couple of months for them just to go somewhere else and I could be a little better because when I got them back eventually they probably would have had to go back again and they would have to go back and forth… back and forth… [Willy, client participant]

**Routine and structure** is an ingredient of occupational engagement that, in this study, refers to commonplace pet ownership tasks, chores, or duties that must be done regularly or at specified intervals. Pets acted as an organizing entity for client research participants’ days. Pet related activities and chores took up certain parts of the day where time was spent engaging in pet care and pet-related leisure activities.

Examples of routine activities were finding the “proper food” for pets, feeding pets, making food for pets, cleaning cat litter, taking the pet for a walk, running with a dog(s), behavioral training, relaxing and playing with pets.

As a breeder and owner of several dogs, Quincy spends a lot of effort “finding the food” for her dogs. She stated: “I have gone through a series of products and I have found one [pet food] I like”… [Quincy, client participant]. Similarly, Helen invests time in feeding her cat. She explained: “The first
thing when I get up … and she makes sure of it … is I feed her and give her fresh water … I do that 3 times a day!” [Helen, client participant]

Quincy engaged in “general maintenance training” to uphold good relations with passersby’s and neighbors:

I do an awful lot of what I consider general maintenance training as in you wait… when I say wait… you wait … sit… stop… down… or when they are out there barking and they love it when people bike or jog… you know in front of the house… you know and they run from one side to the other barking them to excess… you know once or twice is fine… but if that happens all the time… it drives me crazy… so I bring them in… and they have a favorite squirrel they hate… so I do manners training… I don’t like my dogs to be aggressive in the house… they do have their own character but it is my house that we all live together…it’s just if one is a bully and one is a push over and that kind of stuff [Quincy, client participant]

Quincy cited “watching and relaxing” with her dogs as a routine activity: “What I like to do now is sit and relax and enjoy watching them… before it was take my camera out… take a picture... I had to record all of this” [Quincy, client participant]. For Norman “walking” with the pet became a routine activity:

My parents went away… I had to take over the walking. And when they came back I figured my dad would go back to walking with him …yeah right … my dad took him out for that first walk that night and made it as far as the end of the driveway and B [dog] wanted to come back. And I was sitting in the living room in my seat and the next thing I know B is standing there at the corner saying … hey boss are you coming? [Norman, client participant]

Willy’s routine consists of “running” with his dogs: “I like to exercise all the time … and dogs are perfect because you can play with them … or you can run with them … or go for a walk …” [Willy, client participant]. Bob routinely takes his dog for bathroom breaks,

…first thing in the morning at 7:10 –7:30 actually no later than 7:15 she [dog] comes. And she wants to get up on the bed and it’s not that she has to go to the washroom. She wants to get up on the bed and curl on a spot to go to sleep but I can’t take that chance because sometimes she has to go to the washroom. So I get up and say to myself if I don’t get up I am going to find an accident somewhere… She keeps me going every day [Bob, client participant]
Helen and Ellen engage in daily litter box cleaning:

I clean her littler out and once a week I put in fresh littler but I clean it out every morning… clean it out and make sure it is fresh from the day before [Helen, client participant]

I clean the kitty litter at 6 o’clock… no matter if I am watching TV… even between shows… the one finishes at 6 pm… I turn it over to another channel I like watching… and I get up and put my shoes on and clean the kitty litter … and I wash my hands… so I don’t have any of that on me… I do that every night at 6 o’clock [Ellen, client participant]

For Willy, the absence of pet care routines made living with pets more difficult and chaotic and decreased his life satisfaction. Routines took time and effort to establish but once established they provided peace of mind and order. Routines were used to teach a pet a new habit and to keep pets’ healthy. Establishing a routine and structure introduced predictability in the day (what is done when and in what order):

It [having pets] gives you a routine!! You know after a while… you know because they are puppies and you have to bring them up and you don’t know exactly what they are going to do… they don’t know what I am going to do and after a while we all get comfortable with each other and we know what to expect from each other and then it is easy to live with each other … the routine helps you maintain a certain level of comfortability… [Willy, client participant]

Mastery refers to knowledge and skill related to activities that the person needs to or wants to do. Self-efficacy, where the person believes he/she can accomplish a goal, develops through mastery experiences. Pet ownership provided client research participants with the chance to show competence and to experience a sense of accomplishment. Mastering key activities required client research participants’ creativity and resourcefulness during actions related to pet ownership: “They are strictly on the dry food… I get a big bag at X store and I save my coupons when I get gas… and my one neighbor gives me all his [coupons]… and he drives a big suburban… so when he stops to fill up it’s a 100 dollars [laughing]” [Ursula, client participant].

For Quincy, having a pet meant having to overcome self-doubt and achieving success with dog breeding as a personal goal:
I was doubting myself… and what I try to do is not doubt myself and because I worked it out… I did it… I produced my results… I wanted to get this [breeding a litter of puppies] done properly … I wanted this to look good and I wanted the puppies to be healthy [Quincy, client participant]

**Contributing via personal projects** is a complex form of occupational engagement. It requires being able to focus away from the self to reaching out to the community. The concept of personal projects was developed by Brian Little (1983) as a method for studying people’s reasons for acting within the context of their environment and personal set of ongoing projects (Christiansen, 1999; Little, Salmela-Aro & Phillips, 2006).

In this research the term “personal project” refers to activities that go beyond key pet ownership activities and routines. Personal projects were optional activities that were individualized, goal oriented, and self-chosen to benefit client research participants’ and community members’ well-being. Personal projects were experienced as important, enjoyable, time consuming, educational, challenging and/or at times stressful. Engagement in personal projects involved affiliations and relationships, a personal context, competencies, motives, beliefs, attitudes and values.

Client research participants were conscious of the importance of contributing to others. Examples of personal projects associated with pet ownership were: “breeding dogs with a specific goal in mind”, “creating a dog club website”, “selling or donating artwork”, “volunteering at the Humane Society”, volunteering for aquarium maintenance, and “collecting pop cans to raise money for the Humane Society” (joining fundraising efforts).

Contributing via personal projects (e.g. donating artwork to the Humane Society) fostered a feeling of being absorbed in doing what one wants to do. Contributing via personal projects enabled client research participants to feel accomplishment from being able to make use of their abilities. Contributing via personal projects gave Quincy the opportunity to identify and declare occupational identity:

I consider myself a conservationist of this breed… it is more than breeding because it is very difficult to breed properly… and I have a specific goal in mind… and [I am] hoping to build a little stronger communication relationship with X [the breed’s country of origin]… “[Quincy, client participant]
I don’t agree with a lot of the policies of the kennel club unless they are willing to adhere and uphold the country of origin standards period… for a dog breed…. So I created the X-Dog Association of Canada… it’s just a website… but they are not recognizing the dog here in Canada [Quincy, client participant]

I save all of the pop cans… the X town Humane Society… if you save up all the pop cans… there is some kind of refund… so I have been saving pop cans… boxes of them [Gerda, client participant]

Meaning and purpose was gleaned from feeling that what was done is valuable, worthwhile and valued by others. For instance, making artwork related to animals was a meaningful way to contribute to one’s own and someone else’s happiness.

I did a great big painting of the mother dog and the two daughter dogs and they gave it to the mother for Christmas… and I mean when she saw it… that was kind of the coolest moment ever!… When I gave it to the daughter that paid me to do it she cried! She just cried because these were her dogs… one of them was hers and I captured the dogs… they gave me the photo albums… and I had to kind of hodge podge together the picture of the dogs [Gerda, client participant]

The wish to support her local Humane Society enabled Gerda to reach out to her veterinarian to offer her artwork for fundraising purposes:

I always wanted to help out but… that wood burning I have a bunch of others… I talked to the veterinarian… and I showed them to him … and I said I want to work with you… because I know he works… so much to help the Humane Society… I do the artwork and give it to you and you sell them at the Humane Society [fundraiser] [Gerda, client participant]
3.3.2 Factors by Which Pet Ownership Negatively Impacts on Health and Well-Being

Six animal related factors had the potential to impact negatively on health and well-being (see Figure 3-4 below). They were: (1) animal hoarding, (2) feeling overwhelmed by caregiving responsibilities, (3) worry about lack of respite options during a hospital stay; (4) feeling tied down; (5) grief after pet loss; and (6) financial constraints.

Figure 3-4: The Negative Impact of Pet Ownership

1) Animal hoarding

Animal hoarding was identified as a potential negative aspect of pet ownership by care providers, but none of the providers had current experience with the issue. Sally, a rural mental health care worker was the only mental health care provider research participant that had experience working with an individual with mental illness who demonstrated animal hoarding. She provided the following example:
… she had 42 dogs… they were all collies… Lassie dogs… and oh my god… In the past she would breed them and sell them… so she had some of the older dogs that were in the house with her… and she had a fenced in kennel with tons and tons of these smaller dogs… it wasn’t healthy… it wasn’t good for the dogs… I was buying her dog food… a neighbor was buying her dog food… [Sally, mental health provider]

I think there were ducks and chickens in the house… it became a health concern because of the feces. I believe they were ducks or chickens… and the cows and the horses were starving… [Sally, mental health provider].

Animal care provider research participants had many examples of animal hoarding, yet they were not sure if the person had a mental illness. Mary, a Humane Society worker research participant stated that “in the animal community hoarding in itself is considered a mental illness” [Mary, animal care provider].

2) Feeling overwhelmed by caregiving responsibilities

A sense of feeling overwhelmed made some client research participant pet owners more anxious. Quincy stated that: “sometimes when I go through a stress period I am reminded of my responsibility and when I do that… then it gets to be a bit of an anxiety issue for me”… [Quincy, client participant].

Similarly, Tim felt anxious about being able to live up to his responsibilities of providing basic care to his pets:

I am always afraid… you know when I am here by myself that I might forget to feed her or forget to give her water… I am afraid of being not attentive enough because A [girlfriend] takes care of a lot of that… and I tend to forget about it a lot because I get busy in my own world sort of thing… so they are sort of… I don’t know… not quite a burden but… ah… something to keep on top of all the time… [Tim, client participant]

Ursula stated that not being able to live up to caregiving responsibilities may impact on a person’s self-esteem if the person has to relinquish his/her pet.

Yeah there is negative [impact of pet ownership on health and well-being]… you are taking a chance it may not work out… and there is a dog that has to find a new home… or a cat… or the person it doesn’t work out for may feel a lot worse about themselves… you know… they might buy back into the old… oh yeah they were right… too crazy to look after someone else [Ursula, client participant]

The type and age of a pet, timing of pet ownership and the health status of the pet were identified as mediating between positive and negative outcomes of pet ownership. As it pertains to the type of pet,
Ellen stated: “Well, dogs are just far more responsibility [than cats]… they are more of a… you have to be more responsible to have a dog. That’s why I gave up my dog” [Ellen, client participant].

“Puppy routines” were experienced as more time consuming and tiring than caring for adult pets.

Quincy explained:

I had an occasion when I was really tired especially after the puppies… puppies take all your time… I don’t get enough time to put my feet up … and I don’t take enough time because there is so much to do… I couldn’t ignore the other dogs and I needed to get arrangements made for people to come and pick up their puppies and all that… [Quincy, client participant].

For Ellen timing of pet ownership was another important mediator between positive and negative pet ownership outcomes. She explained:

I had a little dog when I was in X [city] when I was going to the College of Art –a friend gave me the opportunity to have an art show in her home and so I went there and made 400 dollars – then I went home looking for a dog. And I bought this little dog… This was a bad time… and I used to leave him in the kitchen and I reached a stage where when I would come home he would have pulled all the microwave and refrigerator cords out and all that and I knew he was going to electrocute himself if I left him like that any longer… so I took him and gave him to friends who lived in the country that were near my home where I grew up and that was the end of Ralph! [Ellen, client participant]

Living with a healthy rather than an ill dog also impacted on Ellen’s well-being. Ellen explained: “I did have a dog… He was so sick… he had the diarrhea and I didn’t have the money on the Ontario Disability Support Program to pay for all the veterinary bills, so I gave him up!” [Ellen, client participant]

Client research participants worried and felt overwhelmed by their inability to access after hours veterinary emergency services. Both client and mental health provider research participants shared that due to lack of insurance coverage, mental health agency staff are advised not to take clients to the veterinarian, meaning that clients have to take a taxi causing further distress and financial strain. Vicky who lives with two dogs stated: “I need to get taken to the vet every once in a while and it is hard to find somebody that will take your dog in their car. Mental health practitioners do not want to take the dog in their car!”
3) Lack of respite for pets during hospitalization

Both mental health provider and client research participants perceived the provision of respite for pets during hospitalization as a key missing service for people with serious mental illness. Anna’s well-being was negatively impacted because she had no respite for her pets during rehabilitation and had to sacrifice limited income to pay for expensive pet boarding. “I went into rehab... I phoned around. No one would take them… I paid $ 800 for them [pets] to be in treatment for six weeks.” [Anna, client participant]

Sally, a community support worker, confirmed that respite options for pets are not an ACT or ICM priority: “that’s the last thing that’s looked at I guess … the concerns are more on the person themselves”. Petra, highlighted that consideration of pet respite can be part of the reasoning process of service providers:

   My clients will say to me I am becoming very unwell… when I first connect with a client I work largely on knowing their symptoms… knowing when they are becoming unwell… because there are things we need them to do to get them able to go to the hospital… number one on that list – who is going to care for their pet [Petra, mental health service provider]

4) Feeling tied down

A negative experience was the responsibility associated with pet ownership that could constrain the ability of people with serious mental illness to engage in other activities and relationships that did not involve the pets. As these quotes from Ursula, Tim and Ellen highlight, pet ownership required additional planning to take up new and potentially rewarding opportunities, to connect with partners without the responsibility of the pet and to attend activities with meaning:

   If someone called up at the spur of the moment and said… oh come on I am going to the city for the weekend… my treat… you come too… you just don’t jump in the car and go … that would be the only negative I would say about having pets… you have to plan ahead… [Ursula, client participant]

   I would say the fact that we can’t go out for more than one night you know… or even that… we can’t go out for a night because we can’t leave the dog by herself… [Tim, client participant]
I had M [dog] for 7 years… and then when I came in here I started to go to mass [church] in the mornings and I couldn’t take her with me of course and she got really upset about it and when I would come home from wherever I was I never knew what to expect. And finally I decided to take her back to the Humane Society and gave her up… [Ellen, client participant]

5) Grief after pet loss/relinquishment

With pet ownership comes the possibility that the relationship with a cherished, living being will end. For pet owners with mental illness this included experiencing the grief of loss through death and also through the relinquishment of the pet. In such circumstances individuals were vulnerable to experiencing loss of support, becoming emotionally overwhelmed and receiving evidence of incapacity.

She is my life she makes me get up in the morning… and she has been all through this with me and I can’t imagine when she goes… I don’t know how I will ever cope without her [Ursula, client participant]

When I was going into the vets to get cat food she [relinquished dog] was there with her new owner and she started jumping all over me and the new owner said I don’t know what’s wrong with her… I don’t know why she is doing that and I said well, that’s because I was her owner… when they went out of the office I went to the desk and I started to cry, just bawling! And they said to me why are you crying? And what is wrong with you? She got a home… she is alright! And like they didn’t understand! I hadn’t grieved because I had blocked it out and I was grieving because I had lost her [Ellen, client research participant]

Not having supports and resources to deal with pet loss compounded the experience of living with serious mental illness. Ursula wondered why mental health agencies do not offer pet loss support to clients. “I often thought how come there is no pet support group... when you lose your pet... how come we can’t have something like that? Or how do you grieve the loss of your pet?”

6) Financial constraints

Client participants’ daily lives were characterized by poverty. Pet ownership within very limited financial circumstances was difficult and could impact both their ability to care for pets and also to attend to their own well-being. Costs associated with pet ownership were varied and included expenditures related to providing pets with basics for living and for maintaining healthy living environments for the pet and owner. Health care for pets was considered a necessity, but the associated costs were identified as
particularly prohibitive. Comments related to financial issues and pet ownership among people with serious mental illness were expressed particularly strongly by mental health providers:

Most people who are seriously ill … sadly are living in poverty and it costs money to take care of animals … especially as they get older and need veterinary care [Karen, mental health care provider]

…I had a couple of clients who have let fleas get too far… and again it comes down to the financial with them… and my one client… I called her on it and I just said I should not come into your house and see these fleas jumping around… you need to do something… well we all know how quickly fleas multiply so we sat down and I said no… you have to borrow the money from family… we have to address this… because by the time you have your check at the end of the month it will be out of control… so the neglect I have seen it has not been intentional neglect… there has been a root … typically again finances… well I think my cat has an eye infection or ear infection… and I can’t afford the vet till the end of the month [Petra, mental health provider]

People with mental illnesses are on disability… I think as far as not being able to take care of them… as far as the vet visits… it is because of their budget! And what they have to do to survive… that is a large aspect of it… [Sally, mental health provider]

One person in particular they had a big Doberman Pinscher… and the poor guy [pet]… you could just tell… every time he stood up he wobbled… and I went … you guys really need to take your dog to the vet… he is not well… and they said we can’t afford it… and I got thinking… poor dog… you could tell he is not well… he is alright you know and we feed him and provide water for him … it’s the vet part too that’s really sad … even down to worm pills… I end up providing a lot of this for people… [Sally, mental health care provider]

CONTEXTUAL LEVEL PROCESSES

Thinking outside the box of service delivery

I believe that we need to look outside the box of what we know helps people... and I think if an animal is really good for the person and the person cares for the animal then that should be supported. [Ida, peer support worker]

Besides “psychosocial benefits” (person level) and “occupational engagement” (occupation level), “thinking outside the box of service delivery” (contextual level) was the third main category identified through the analysis. Figure 3-5 below depicts the dynamic interaction between pet ownership, health and well-being. Positive mediators (or facilitators) such as thinking outside the box of service delivery, having caregiving skills and living with a healthy pet etc. maintain the large well-being space.
Lack of thinking outside the box of service delivery (e.g. lack of stakeholder collaboration, illness exacerbation, living with an ill pet) increases the unwellness space, thus reducing the well-being space.

**Figure 3-5: The Dynamic Interaction between Pet Ownership, Health and Well-Being**

The contextual category “thinking outside the box of service delivery” consisted of five processes (see Figure 3-6) that could potentially alleviate some of the negative impact of pet ownership on well-being and health. The five contextual processes to mediate positive and negative outcomes are described in the following section.
Facilitating client choices and strengths. Respecting choice and self-determination over prescription was identified as a sign that a mental health agency is working in a client-centered manner. Ida, a mental health provider pointed out that: “we wouldn’t discourage it [caring for one’s own pets]… but we may not at times encourage it enough”. Ida identified mental health services as having degrees of client centeredness that would more or less actively support pet ownership among clients served.

Ida identified several barriers to client centeredness related to pet ownership: the time it takes to offer individualized client-centered services, the numbers of clients served, the high priority given to addressing medication issues, and budgeting and meeting basic needs as identified by the mental health system:

Often it’s lack of workers… if somebody has a client load of 25 people to do something like that with someone… it is going to take a lot of time … to help them explore what they want to do…
it takes time… sometimes you go into the house… if it’s a support worker… you make sure that that person has the meds for the week… talk how you do budgeting… and by the time you get around to talking about pets… there is no time left… it’s not the number one priority! I think if there was more funding… more time… [Ida, peer support worker]

When we think of basic needs we think food, clothing, shelter… you know and someone with a physical or mental illness we think medication… those are basic needs. We don’t think of an animal on that list! But to them that probably is one of their basic needs [C 108]... if somebody loves someone then they are as important as a family member! [Ida, peer support worker]

Ida identified looking at alternative ways to meet clients’ wish to interact with animals. “… I say why don’t you go and volunteer at the Humane Society. You can go spend time with them … take them for walks… some of them have done it”. Ida also suggested that: “What you could do with people with mental illness connect them with a different vulnerable population… take them to see the elderly [with a dog]” [Ida, mental health provider].

**Overcoming areas of tension among key stakeholders.** As it pertains to pets, mental health service delivery consists of three key stakeholders (not including pets): community mental health services, animal care providers, and pet owners living with serious mental illness. Figure 3-7 summarizes key areas of tension between these stakeholders with regards to pet ownership, and these are developed further in the section below.
a.) What is a pet?

Karen, a mental health care provider identified pets’ status as property as a key problem for animal well-being. She identified animal well-being as an added dimension to people’s well-being. She explained:

In Ontario, animals are property… so they [people with mental illness] have the right to acquire property… there is an added dimension of the well-being of the animal and sometimes it works very well for the person and the animal… sometimes it can work well for both if the person is able to accept some help in taking proper care of the animal and sometimes it works out well for the person but very badly for the animal if the person is unable and unwilling… unable to take care of the animal and unwilling to accept assistance or advice around that issue [Karen, mental health care provider]
Similarly, Olga, a former animal care provider pointed to the insignificant status given to pets as a key barrier to obtaining supports and resources for their care. She explained:

People don’t want to put the money out… because oh it is just an animal… until they actually look at it as part of their family and as part of who they are or a reflection of who they are… within the animal… so in terms of funding [for supports] or anything of that nature as a whole that is never going to come… [Olga, human and animal care provider]

b.) What constitutes proper pet care?

The importance of recognizing and preventing animal suffering was an area of agreement among all providers. However, there was tension among providers with respect to what constitutes requirements and standards for pet care:

…I am not as much of a stickler as some of my co-workers about the regular to the vet every year with the regular shots. Because a lot of people never take their cat to the vet… but it lived to be age 20… so they are doing something right… if they didn’t get it fixed that is more of a problem [Mary, animal care provider]

An animal obviously requires food, water and shelter but in terms of… I mean it has to have acknowledgement… animals they like a sense of purpose especially dogs… but at the same time they like affection… they need to be acknowledged… you know what I mean?… I find a lot of people want to put animals in the same position as humans… and they are not! They are in a different category all on their own. They like the affection… yeah they feel pain… they feel agony… they feel sorrow… they feel grief! But the way they conduct that is completely different [Olga, human and animal care provider]

…my dogs would love it if I didn’t work. So for starters if people aren’t working… they [pets] would be happy. They would love it and for that aspect of pet care… maybe they are not getting an expensive food… [but] they are getting fed regularly… they are getting the companionship… for walks… if the people have the time… so as long as the vet care is there and the knowledge of when the animal is suffering or when the animal is sick… [Mary, animal care provider]

A lot of people mean well but… we [Humane Society] do offer euthanasia for people who can’t afford it and we get quite a few people… I don’t know if they suffer from a mental illness but when they bring the animal to us it should have been euthanized ages ago. It’s absolutely suffering. Now whether they just couldn’t see the suffering or they themselves couldn’t bear to euthanize the animal… in some cases I think perhaps a lack of judgment in that respect would cause the animal to suffer [Mary, animal care provider]

The minimum things [for pet well-being] would definitely be nourishment and water… funny enough I have noticed that people forget to water… or put a bowl of water down but I think their nourishment definitely… and a stable pet owner… someone who is able to take care of them. [Sally, mental health care provider]
Disagreements about standards for care could occur between service providers and their clients. Karen, a mental health care provider, and one of her clients disagreed about what to feed a pet. Karen did not approve of her client making her own cat food.

There was one lady who decided… that commercial cat food was not good for some reason or another and that she was going to prepare her own cat food for the animal. And you probably know that cats need special additives so I tried to talk with her about that. I got information to read about that. She was a bright lady. Ahm… but she wasn’t thinking clearly about things so she just didn’t accept it. So I tried and the case manager tried and she just got more and more entrenched in her position the more we tried… [Karen, mental health care provider]

c.) Who should have a pet? Is being able to care for oneself a prerequisite?

There were differences of opinion among providers with regards to personal indicators of capacity to care for a pet. Ida, Karen and Olga argued that being able to take care of oneself is a prerequisite of caring for a pet:

If you are with an ACT team you need somebody to help take care of yourself and if you are not able to take care of yourself then by extension there may be… not necessarily… there may be difficulties taking care of another creature… so there would be concern for how that would work out… because I mean if things go badly for the animal then that’s also going to affect the person” [Karen, mental health care provider]

I do believe that animals help people with mental illness and that they can take care of them… but I think sometimes in more extreme situations they would need support to do so and sometimes the animals can’t be there [Ida, mental health care provider]

I think we all have experienced difficulties trying to help somebody look after an animal when that somebody doesn’t recognize that there is a problem in the first place and then the case manager is living with the burden of knowing something bad is going on… I can’t do anything about it. So I think there is that reservation. [Karen, mental health care provider]

There are some people that are more extreme and no they cannot take care of themselves so of course they cannot take care of an animal you know… ahm but that’s not just people with mental health issues that is everybody… you know! [Olga, human and animal care provider]

Cindy, a nurse and person who has experienced severe depression argued that the phase of illness is important when it comes to pet ownership with people being further along the continuum of recovery being better able to benefit from living with a pet. She stated:
“I think the person needs to be in a certain place in their recovery in order to see the benefits… there are some [mental health] clients where pet ownership puts too much stress... they are not able to handle the responsibility… just the movement, the activity, the pet being there and into things gets too overwhelming” [Cindy, mental health provider]

However, both Larry and Ida challenged the idea that an inability to care for oneself translates into an inability to care for a pet.

They [people in the general public] generalize from if they [people living with serious mental illness] cannot take care of themselves they cannot take care of the animal. I told you already earlier sometimes they take better care of the animals than of themselves. That’s what I saw in my experience [Larry, animal care provider]

There are some people that are very mentally unwell and they are still taking care of their animals. I mean I can think of somebody right now that is not doing well at all and not taking medication… and I saw them out walking their dog… and the dog looks pretty good… they don’t look good but the dog looks good. So you can’t always say that they are not taking care of their dog too [Ida, peer support worker]

Another perspective on considering suitability to be a pet owner was to identify personal features that might be considered fundamental to the role, and through the service enabling and supporting these features. For example, fostering problem sensitivity, or insight, into the needs of the pet was identified as central to client and pet health and well-being. Karen provided an example of the consequences of lacking problem sensitivity (insight) and refusal to accept advice and support for the pet:

…but I think the problem that that bumps up against is the lack of insight… the lack of understanding what the animal needs if I am the pet owner… the animal needs more that I am currently giving it. And if you don’t understand that then you are not going to be accepting of people coming in and giving you advice or even support [Karen, mental health care provider]

I am sure in the general population there are people who think…the person with the dog chained up outside probably thinks this is fine and is not receptive to anybody trying to say hey that’s not OK. But I think with the population that I work with… on an ACT team… with the most severely ill people one of the things that tends to recur is a lack of insight… a lack of understanding that… … I am not saying it couldn’t be done. I am saying there are difficulties… barriers [Karen, mental health care service provider]
d.) Who is responsible for supporting/educating people with serious mental illness about pet related issues?

There was lack of knowledge and agreement about who is responsible for supporting and/or educating people living with serious mental illness about pet related issues. Ida argued that: “… in regards to anybody who takes a pet there should be more public education on what it takes to take care of a pet and I think that people need to understand the responsibility of it” [Ida, mental health care provider]. It was suggested that this could be offered by services in the broader community. There was some difference in perspectives with respect to the extent that this should be integrated within mental health service delivery. One participant noted, that it could be considered akin to helping someone with the role of parenting, while another suggested it should not necessarily be the responsibility of mental health service providers, perhaps particularly where animal and pet-care is outside of their own interest and expertise:

I think that’s an idea to have in the community … a volunteer service that is willing to help and to talk to the people who have the animals… about limiting the amount they have… they don’t need five dogs… There should be volunteer services… maybe that’s things that need to start in smaller communities [Ida, mental health care provider]

If you talk to somebody [community support worker] that doesn’t like animals they are going to be like… no! … no… you can’t force them to do it… [Ida, mental health care provider]

I think the mental health services are ideally the best place to start [51:08] because they are going to have the most influence on it… [C18] The ideal thing is for the mental health services to recognize the significance of the animal… [Olga, human and animal care service provider]

I talk to them about their animals to try to get a sense of what’s going on and whether there are problems and I try to support them… talk about it … and you know if I have somebody that… oh well… he doesn’t use the litter box so I hid it… I try to talk about that and I try to provide literature and suggest other ways to go about that particular problem so they can both end up being happier… so I deal with it when I am with people as a part of their life… just as if they have visits with their children. [Karen, mental health care provider]

I think somebody needs to be appointed… because there is not enough time in the day for the support worker to do it…there is not enough time for those in the vet clinic…or the Humane Society… it is almost like a self-directed… appointed individual… that that would be their job in the mental health community… I think it needs to be somebody where that is their focus! It could actually be a full-time position… it could definitely be!!… The problem is there are so
many cutbacks… in so many areas that the funding is just not there… I think it’s more going to be a volunteer… [Olga, human and animal care provider]

I see community mental health agencies as integral in facilitating the start-up [of human-animal support services]… be part of facilitating it… getting up and going… and running smoothly… and then take a step back as soon as it is running smoothly. So I see us as playing a key role in getting this up and running [Petra, community support worker]

**Fostering human-animal stakeholder collaboration.**

Study participants, specifically mental health care and animal care providers suggested that enabling pet ownership among people with mental illness should be considered across sectors, with a view to establishing collaborations that capitalize on agency goals and missions and expertise. These included collaborations between mental health service providers and the Humane Society, the police, public health, veterinarians and other animal care providers, and social housing services. Such collaborations across sectors were rare, and if they did occur were not formalized:

We do not collaborate with public health. Sometimes people will surrender their animals to the Humane Society but that is more on a case to case basis… sometimes people go to the Humane Society to get an animal and then we get aware of it after the fact. And that is sort of spotty. And with the veterinarian… well, we don’t have anything official! [Karen, mental health care provider].

However, there was consideration given to the potential of such collaborations and some discussion of exemplars for how this arrangement might work in practice:

… if these organizations [mental health agency, humane society, social services, and the police] are working together… what we did in Europe because we had the same things way back too… those organizations working together… then those organizations don’t see the problem anymore because they go hey we can call the Humane Society [Larry, animal care provider]

You know what I would love to see… I would love to see a vet tech who will work in the community as a learning experience… provide free checkups… free service… you know… who is involved with the pet… the pet owner would definitely provide the medication but that would be part of the training… to go into the community with workers… to see animals… that would be a nice thing to see in the rural area … because people are stretched everywhere… the money is different… the transportation is different… [Sally, mental health care provider]
Legitimizing pet care as part of the support worker role. Community support workers often provide pet related services, if only to watch out for the well-being of the animal. Involvement with pet care was viewed as more likely if the service provider has an affinity for animals and pets:

Well, it’s fair to say that the people on the team would be looking out for the welfare of the animal even if you were not particularly an animal lover. It’s part of what people would do when they do home visits… it’s just sort of a quick glance to make sure that there is food and that there is water and that the animal seems to be OK along with the person [Karen, mental health provider]

One of the people on the team who is an animal lover spent some time with him [client] just looking at the set up at home, rearranging the litter box and the food… the food and water bowl and explaining to him you know… what cat behavior typically means… so that he had a better understanding of the cat… so he was more comfortable with it and felt that he was able to keep the cat and wanted to keep the cat whereas before he was thinking this is too much… I can’t do this [Karen, mental health care provider]

However, providing services to enable pet care is not explicitly identified and supported as a requirement within these community mental health services. Pet care support [going above and beyond the call of duty] is currently provided without formal approval from management, and would likely be frowned upon.

I just happen to be someone that knows animal husbandry... It is not actually [my role]… and that is one area that is very lacking... I could march half my caseload in there [to management] and introduce them to the relevance. I think as far as the mental health component… it is being recognized more and more that pets can play a key role in somebody’s mental illness… but they are still not at the point where they are saying if you are a community support worker you need to know that component [Petra, mental health provider]

I think everybody knows that I do it [support people with their pet related issues] and it is not that they don’t appreciate it but it’s not something… if I retire tomorrow it is not going to be part of the job description of the person who replaces me [Petra, mental health provider]

I think what you would find with the front line workers in most agencies… they do above and beyond their call of duty [when it comes to pet related issues]… and they just don’t tend to let their supervisor’s know because are you are supposed to be doing that? [Sally, mental health provider]
Creating pet related community supports and resources.

According to Ida, a mental health worker, creating conditions for transforming clients’ wellness through pet ownership requires “solution talk” and building bridges: “... we problem talk... so I think if you turned that around and you know... what solution... solution talking... and then built a bridge to make things happen... “[Ida, mental health care provider]. Participants offered several examples of initiatives and efforts that might create these conditions including the following:

a.) Workshops about pets for workers

I think if a basic knowledge of mental health and pet ownership becomes [entrenched] across the board then certainly when hiring someone at a mental health agency … you are going to make sure… do you have the workshop offered on this… to me it’s no different than going to a seminar or 2 day conference learning about dual diagnosis… if I didn’t already have my own knowledge from having pets all my life then I would think of the mental health worker wanting to do the best for my client. If I saw an opportunity to attend a conference on this I would attend [Petra, mental health provider]

b.) Funding community support programs

... we are into funding cuts but what you hear is… we need to close hospital beds because that’s where the money is being absorbed at the highest cost. And how do we do that? We do that by maintaining these people in the community… so if you want to maintain them in the community then you have to filter some dollars down to the community programs and you see where the need is… you are taking somebody that has been in the hospital… who is always … forever been in the hospital… you want them to live in the community. What is a good companion? To make them feel less lonely? A cat or a dog!! [Petra, mental health provider]

c.) Support with financial aspects of veterinary care

The key one [support] is probably transporting to the vet. That’s probably key… because transportation is a huge issue… I used to have a cat… so I have a cat carry case … so I was smart enough not to get rid of it when I put my cat down. Because a lot of my clients don’t have a cat carry case. So, they let me know ahead of time…I throw my cat carry case in and away we go… but again this is luck of the draw of the worker [Petra, mental health provider]

I am always a breath away from disaster… if anything major happens… but the vet she is awesome… she knew that I am on the Ontario Disability Support Program and I took X [the cat] in as a stray… she didn’t charge for the boarding. I said I can afford $ 100 this month… so she said you can pay $50 each month… [Ursula, client research participant]

I think there should be some funding… a small amount of funding through ODSP for people who have pets for emergencies and things like that… but I really honestly believe that they should be in return for that … they have to be willing to limit the amount of pets that they have… [Ida, mental health provider]
If you cannot afford a pet don’t think about it – but sometimes if they have a pet – then organizations need to do their work and give them, for example, one spayed and neutered cat… [Larry, animal care provider]

…the Farley Foundation support people on ODSP but it is initiated by the vet … so even for workers to know that this organization exists. They don’t pay for stuff that is routine … but crisis surgery… they can get subsidies up to a $1,000 and I think it is once a year. Even bringing those things together and for everybody to know about [Ida, mental health worker]

d.) Respite – during hospitalization/treatment

I guess it [providing support services such as respite] certainly would be helpful because the workload is increasing and one of the things that does happen is sometimes people go into hospitals and they may have one or two animals at home and they may be in hospital for many months and what our team does is we go in and look after that animal for them while they are in hospital so that’s extra work…. [Karen, mental health provider]

If the person has to go to hospital I say well I take your pet… you know I am the first one to say I take your dog if you can’t find anybody to take your animal… yeah that’s the last thing that’s looked at I guess… the concerns are more on the person themselves [Sally, mental health provider]

e.) Volunteers/supportive network to help with pet care

We can say OK we have a volunteer network that people if they need help I can send once a week or twice a week a volunteer over that can help clean the litter box or can help walk the dog… or can help clip the nails and everything… it’s right away social connection for the people… They can socialize again… there is a check for us… how is she doing… how are the animals doing… of course for us its always how is the animal doing first… and then how is the person doing… I am honest…we are for the animal welfare… and you have always an opportunity to come inside again! [Larry, animal care provider]

I have created within my healthier clients… and of course everything is with everyone’s permission to disclose names and I tried to get them to call each other but there is a small network in my client list who support each other with their pets… [Petra, mental health provider]

f.) Financial assistance for specific pet costs

Unfortunately it [having a pet] does often involve the person sacrificing to take proper care of the animal so I don’t know if we could persuade the government to have an animal allowance or a special dietary allowance or a transportation allowance… [laughing] [Karen, mental health worker]

... if clients stay in Ontario Housing they can’t stay with the pet unless the pet has shots every year …that is part of the rule for them to live there. So that is a yearly layout of money for them. I have known several clients… they want a pet … they can’t afford the spaying and neutering…
it will end up having kittens…they end up getting rid of everything because then they can’t afford the kittens… they can’t afford… ahm… there are certain things… that I really think they need to really look at – the cost of spay/neuter – because people on fixed incomes just can’t afford it… it’s $300 for spay/neuter now [Petra, mental health worker]

3.4 Discussion

Since the 1980s many researchers have focused on the health and well-being benefits of pet ownership. The literature review in this study focused specifically on pet ownership and health and well-being of people with mental illness. Many of the research studies were specifically focused on the psychosocial benefits of animal-assisted therapeutic interventions. Relatively few studies focused on pet ownership as a distinct phenomenon that can impact the health and well-being of people with serious mental illness. The current research focuses on the processes by which pet ownership influences health and well-being. Using a grounded theory approach, the study findings suggest that pet ownership impacts on psychosocial health and well-being via five person level processes and five occupation level processes. Five contextual level processes are identified that can mediate challenges to the negative and positive elements of pet ownership to enable a bond that promotes health and well-being for both humans and animals. The findings highlight that pet ownership among people with mental illness is a complicated occupation on several levels, and one that raises important concerns and debates.

Processes of health and well-being identified at the person-level have been the most well-addressed in the literature, and have been developed in relation to a broad range of health and social conditions. The social connections afforded by pet ownership have received considerable attention. In their review of the evidence of the health benefits of pet ownership, McNicholas and colleagues (2005) found that pet ownership has the potential to act as a type of catalyst to facilitate the development of social contacts with other humans, thus alleviating social isolation and alienation. They suggest that this may be particularly important for people, like those with mental illnesses and other types of disabilities, who are vulnerable to social isolation. This notion of pets as social catalyst was illustrated in a recent case study of a woman living with mental illness that described how she moved past personal and social
stigma as a pet owner to make social connections and participate in her local community (Zimolag & Krupa, 2010).

McNicholas and Collis (2000) conducted two studies to test the robustness of the catalyst for human social interactions effect of dogs. In study 1, a highly trained dog was used to ensure that the dog itself did not solicit attention from passers-by, and data were collected across a range of normal daily activities in which a dog could be included, not confined to conventional dog walking areas as in previous studies. Being accompanied by a dog increased the frequency of social interactions, especially interactions with strangers. In study 2, also using a trained dog, a different (male) participant observer was dressed either smartly or scruffily. Although there were significantly more interactions when he was smartly dressed, the greatest effect was between the Dog present and No Dog conditions irrespective of the handler’s dress. The researchers concluded that the social catalyst effect is very robust, which opens the way for investigating possible consequences of the effect for health and well-being.

Guéguen and Ciccotti (2008) conducted four studies in field settings in order to explore if dogs can facilitate closer relationships. Their results showed that the presence of a dog is associated with a higher rate of helping behavior and compliance with the request to give out one’s phone number for later social contact.

Wood, Giles-Corti, and Bulsara (2005) and Wood, Giles-Corti, Bulsara, and Bosch (2007) conducted a random general population health survey of 339 adult community members from three suburbs and 12 focus groups (86 participants) in Perth, Western Australia. They found that pet ownership was positively associated with social interactions, favor exchanges, civic engagement, perceptions of neighborhood friendliness, and sense of community. Their findings suggest that pets have a ripple effect extending beyond their owners to non-pet owners and the broader community.

Finally, in a study by Wells (2004) the behavior of 1800 pedestrians approaching a female experimenter was recorded as a function of three dogs (Labrador Retriever pup, Labrador adult, Rottweiler adult) and two neutral stimuli (teddy bear, potted plant). The behavior of pedestrians
approaching the woman whenever she was alone (control) was also explored. Information was collected on the passers’ by gender, number of people in the party, type of acknowledgement elicited and length of conversation. More people ignored the experimenter whenever she was alone or with the teddy or plant, than whenever she was walking a dog. The Rottweiler resulted in more non-responses than the puppy or adult Labrador, who in turn elicited more smiles and verbal responses. Females and those alone, elicited more smiles and conversations than males, or those in pairs. Wells concluded that dogs can facilitate social interactions between adults better than other accompaniments; however the social catalyst effect is not generic, but dog specific.

McNicholas et al., (2005) note that the companionship received within the human-animal interaction appears to promote health and well-being through their experience of “intrinsic satisfaction”. McNicholas and colleagues highlight that the non-human nature of the relationship may actually confer some advantage to health and well-being in that it may be experienced as a more emotionally stable and less prone to fluctuations that can produce stress. Similarly, in the current study, the process of unconditional acceptance speaks to a relationship characterized by emotional stability and continuity.

Two prior studies alluded to unconditional love as an important process in health and well-being. In the Wisdom et al. (2009) study, unconditional love by pets was interpreted as “giving more and expecting less than human companions” (p. 433). People with serious mental illness experienced unconditional love by their pet as a resource for building a stronger sense of self confidence. A study on pet ownership by Allen, Hammon-Kellegrew and Jaffe (2000) found that most men with HIV described a reciprocation of unconditional love from their pets.

Unconditional positive regard, as one type of love, is a deep and genuine caring for the person that is uncontaminated by judgments or evaluations of thought, feelings, or behaviors (Fehr & Russel, 1991; Wilkins, 2000). Carl Rodgers (1957) posited that therapists’ provision of positive regard, genuineness, and empathy unconditionally were the necessary and sufficient conditions for therapeutic change. Farber and Doolin (2011) found that positive regard strengthens the sense of self or agency (ego),
and facilitates an individual client’s natural tendency to grow and fulfill his or her capacity as a human being.

Whether unconditional love from animals is experienced by people with mental illness as powerfully as is expected in human interactions is not clear. McMillan (2005) argues that the unconditional love exhibited by pets may be different than that exhibited by humans. McMillan (2005) believes that “it is probably more accurate to say that dogs exhibit unconditional need” (p. 172) and that animals’ emotional need for social companionship may be experienced as (and may serve as) “unconditional love” by humans.

On the negative side, the experience of “unconditional love” has a price and can be costly when faced with decisions regarding expensive medical treatments. Brockman, Taylor and Brockman (2008) found that people who considered their pets as “cherished others” were more willing to keep these animals alive (made decisions based on emotions rather than cognition) regardless of the costs, whereas those who were moderately attached were willing to consider the trade-offs in their decisions. If this is the case, then for people with serious mental illness who have limited close social connections, pet ownership may come with risks that could further compromise their already low social-economic status.

In this study, positive self-affirmation was identified as evolving within the pet-owner interactions. Self-affirmation refers to behavioral or cognitive events that allow people to maintain positive views of self (Steele, 1988, cited in Schmeichel & Vohs, 2009, p. 770), and it is considered crucial to mental health (Carson & Langer, 2006). As an alternative to self-esteem, Ellis (1996 cited in Thompson & Waltz, 2008, p. 120) proposed emphasizing unconditional self-acceptance whether or not people are self-efficacious and whether or not others approve of or love them. Ellis argued that one strategy for achieving unconditional self-acceptance is self-affirmation. Positive self-affirmations gleaned through interactions with pets can strengthen self-efficacy and self-worth of people with serious mental illness (Wisdom et al., 2009).
The experience of “voids” was identified in this study as a troublesome experience in the daily lives of people with serious mental illness. The types of voids experienced by people with serious mental illness create, among other things, loneliness. Loneliness is characterized by psychological discomfort, dissatisfaction with present quantity and/or quality of relationships and a feeling of being unable to increase the quantity and/or quality of relationships to the level the person desires (Elsadr, Noureddine & Kelley, 2009). Prior to the present study, there were no identified empirical studies to investigate the effects of pet ownership on loneliness in serious mental illness. Two empirical studies on human-animal interactions with a population other than mental illness showed contradictory results. Banks and Banks (2002) designed a study to determine whether AAT can objectively improve loneliness of elderly residents in three long-term care facilities in a city in southern Mississippi. Forty-five residents were administered the UCLA Loneliness Scale (UCLA-LS). They were then randomized into three groups (no AAT; AAT once/week; AAT three times/week; n=15/group) and retested with the UCLA-LS near the end of the 6 week study. AAT was shown to have significantly reduced loneliness scores in comparison with the no AAT group. The time with the pet was enjoyable and touching the pet made all residents feel good. Thus, for elderly residents who live in social institutions pets may fill a time and sensory void.

Gilbey, McNicholas, & Collis (2007) administered the UCLA-Loneliness scale to a general population convenience sample of 59 people who were actively seeking to acquire a companion animal at an animal re-homing centre in New Zealand. This was designated as Time 1. When retested 6 month later (Time 2), the 35 individuals who had acquired pets were just as lonely as they were before they got a companion animal. The researchers then compared the difference between Time 1 and Time 2 for participants who did and did not acquire a companion animal. Research participants who got a pet were no happier than participants who had not gotten a pet. However, at Time 1, 30 of the 35 new pet owners did not live alone and in comparison to elderly living in an institution or people with serious mental illness research participants in this study may not have benefitted from the companionship an animal can provide. Indeed, Gilbey et al., (2007) acknowledged this possibility and stated: “it is possible that an
effect does occur, but only amongst specific sub-groups of the population so that, when tested amongst the wider population, any effect of companion animal acquisition becomes diluted to such an extent that it can no longer be detected” (p. 352). The researchers suggest that because those people at risk of loneliness may stand to benefit the most from the companionship and social facilitation an animal can provide, future research should focus on “lonely” (people living alone or housebound) populations.

The notion that pet ownership might contribute in a positive way to illness management has received some attention in the literature, and qualitative studies, in particular, have attended to how this happens. Study participants in De Souza’s (2000) qualitative study of quality of life of people with serious mental illness described how pet ownership prompted their participation in health behaviours directed to staying well and out of hospital in order to fulfill their pet ownership responsibilities. Wisdom and colleagues (2009) note that pets may help to reduce anxiety among people with some forms of mental illness by offering them a sense of protection. It was suggested by some participants in the present study that their pets can recognize when they are unwell, and that this recognition is expressed in their actions. The potential for animals, in particular dogs, to recognize and alert to specific health events such as diabetic (or seizure) episodes; has received support in the literature (Brown & Goldstein, 2011; Dalziel, Uthman McGorray & Reep, 2003; Wells, Lawson & Siriwardena, 2008), but this possibility has not previously been extended to recognition of mental illness.

This research study is unique in that it highlights occupation (i.e. pet ownership as an “activity”) as a key player in human health and well-being. Thus far, very few pet related publications exist that address occupation level processes of pet ownership in health and well-being as it pertains to this population. Much of the research related to occupation, health and well-being and mental illness is found in the occupational therapy and the recovery-related scholarship. These fields have advanced understanding of the occupational lives of people with serious mental illness and in particular the significant disruptions in their activity patterns and what this means for recovery. For example, this research has indicated that, despite the psychological and emotional impacts of mental illnesses, people
experience value from their occupations (Eklund, Erlandsson & Persson 2003) and satisfaction with living (Goldberg, Brintnell & Goldberg, 2002) and that activities become more important as social support declines (Wisdom et al., 2009). Taken as a whole, the scholarship suggests that there is good reason to believe that if people in the general public enjoy, find meaning in and benefit, from pet ownership so too will people with serious mental illness.

Research related to pet ownership suggests that that the specific health promoting elements of engaging in the occupation of pet ownership identified in this study contribute to well-being and health of other populations in difficult social or health circumstances. Examples of this research are provided here.

McNicholas and Collis (2006) conducted interviews with 167 people who were recently widowed. Research subjects were followed at 3, 6 and 11 months after bereavement. Their study indicated that pet ownership and the support derived from pets can be valuable in the early stages of bereavement and that pet support appears to be additional to, and independent from, human support. Similar to the “getting up and out” element of pet ownership identified in the present study, participants in the McNicholas study reported that pets provided vital stability to daily routines, giving “a reason to get up each morning” as well as alleviating a sense of aloneness.

Wisdom et al.’s (2009) qualitative study of people with mental illness indicated that study participants found that, similar to the notion of “running the show”, “the control they were able to have over pets began to empower them, even in a small way” (p. 434). Empowerment and the increased sense of control and autonomy have been identified as important elements of the recovery process (Davidson & Roe, 2007) and pet ownership appears to be an occupation that enables these under conditions that hold meaning for individuals, particularly where they experience both success and satisfaction.

Langfield and James (2009) found that caring for pet fish facilitated routine and structure for Australian owners from the general population. Similarly, in their study of men with HIV/AIDS, Allen et al. (2000) discussed how interviewees’ sense of responsibility for their pets provided motivation to make pet care a priority, which contributed to the structure and routine of everyday life. In their classic study on
one-year survival of patients after discharge from a coronary care unit, Friedmann, Katcher, Lynch, & Thomas (1980) found that social affiliation and companionship with pets improve longevity after myocardial infarction. They suggested that “feeding, toileting, walking, talking to, and petting animals are important and regular daily events’ (p. 310) and that pets may serve as “clocks” by providing a source of order and responsibility for people who are no longer working or have no responsibility for scheduled activity.

In this study, some activities associated with pet ownership were conceptualized as akin to “personal projects”, defined as an “interrelated sequence of actions intended to achieve a personal goal” (Palys & Little, 1983, p. 1223). Scholarship related to personal projects has focused on the identity dimensions of occupation, and the links between these identity dimensions and experiences of well-being (Christiansen, 2000). The findings in the present study are consistent with the heuristic model proposed by Shahar and Davidson (2009), based on the notion that health and well-being of people with serious mental illness can be promoted through personal projects, specifically when they are personally significant, bring and create meaning in life and are action oriented.

In a study on companion animals on the physical and psychological health of older people Raina, Waltner-Toews, Bonnett, Woodward and Abernathy (1999) suggested that pet owners score higher on the Activities of Daily Living Scale (e.g. prepare meals, take medication, bathe and dress oneself) than non-pet owners. Raina et al (1999) concluded “that a care-taking role may provide older people with a sense of purpose and responsibility and encourage them to be less apathetic and more active in day-to day activities” (p. 328). The same may be said for people with serious mental illness who have few opportunities to be caregivers. This latter point may be a particular powerful transformative element of the occupation of pet ownership; pet ownership as an occupation does not merely reflect the execution of a distinct set of organized tasks towards a goal direction, but rather it represents a range of interactions and obligations underlying a complex bond with a sentient being in a guardian role. For the individual for
whom pet ownership holds meaning and significance this guardian role may be considered akin to a parental type role (Prato-Previde, Fallani & Valsecchi, 2006)

This study highlights the potential for service delivery structures in mental health to enable the transformative power of pet ownership. The grounded theory model developed in this study shows that pet ownership optimally transforms the “well-being space” if /when service delivery (a) facilitates client choices and strengths; (b) overcomes identified areas of tension about pet ownership and serious mental illness among key stakeholders; (c) collaborates with animal care stakeholders; (d) legitimates pet care support for community support workers, and (e) creates pet care giving supports and resources.

The role of enabling pet ownership has received remarkably little attention in literature related to health-related service delivery and development. McNicholas et al. (2005) summarize their review of the literature suggesting that pet ownership should be taken seriously in the health field, particularly given broadening definitions of health to include well-being and the mounting evidence of the impact of owning pets. McNicholas and colleagues highlight that pet ownership is not peripheral to decisions people make about their health and in fact will influence take up of health behaviors suggested by service providers. This should make it a priority concern for service providers. In the mental health field, pet ownership is complicated by concerns for capacity for this population to care for pets and concern about management of extreme pet situations. The findings from the current study suggest difference of opinions and few standards with regards to pet ownership, and subsequently exceptionally limited agreement on and guidance related to the integration of supporting pet ownership in community mental health service delivery.

Community mental health services, such as ACT (Ministry of Health and Long-Term Care (2004) and ICM (Government of Ontario, 2005) appear to be in a good position to enable positive pet ownership among the clients they serve, but the study findings revealed many barriers to this happening. These barriers included a lack of legitimacy given to pet-related care, an absence of collaborative, cross-sectoral partnerships with animal care providers, a lack of familiarity of pet-related knowledge and skills among
service providers, the absence of standards or guidelines for pet-related care, concerns for the well-being of pets based on the functional issues of people served, concerns about the deterioration in living conditions should the nature of the human-animal relationship be compromised, and the lack of access to finances that would support pet care. A recent study by Corring and colleagues (2013) added an additional consideration. In their study they found that ACT service providers were themselves experiencing a type of transformation, by discovering the learning potential of the clients they served in the context of horseback riding. Rather than upholding the “inability” stigma pertaining to people with serious mental illness, pet ownership appears to be a complex occupation which can be supported by service providers, perhaps in collaboration with animal care services.

3.5 Summary

The current study examines processes contributing to health and well-being via pet ownership (an occupation) as identified by key persons (key stakeholders), namely pet owners living with serious mental illness and their service providers (ACT, ICM staff), and animal care providers. Pet owners with lived experience of mental illness are stakeholders who engage in pet caregiving activities on a daily basis. Thus, most insight into the main research question pertained to everyday life situations.

Service providers are stakeholders (persons) in pet care and at the highest level they represent the views of the social environment of ACT/ICM including views, beliefs, and opinions regarding individuals with serious mental illness. This social environment of ACT/ICM has the potential to impact on and be influenced by the everyday activities of service providers. In this study service providers inform the research question as persons embedded within the ACT and ICM models of service delivery as their economic and political context. Animal care providers are stakeholders that are primarily interested in mental health and well-being of animals. They represent the views of the Humane Society of Canada (HSC) which works to protect animals from neglect and abuse.
3.6 Limitations

Many steps were taken to ascertain the soundness of this research. Two sets of criteria were used to establish soundness (or rigour) of this research. Qualitative results can be difficult to present in a manner that is usable by practitioners. To offset this limitation, a pictorial representation of processes to positively influence well-being among pet owners with mental health problems was presented. Practitioners in the field can use this research to advocate for support and funding.

Also, the focus of this research was to look at mental health and well-being in the context of pet ownership. The impact of pet ownership on health (physical health) was not discussed (e.g. zoonoses, allergies). However this aspect was not the focus of this research. Readers should be reminded that the purpose of grounded theory is not to generalize findings to all situations, but rather to evolve a substantive theory, or a type of analytic generalization.

3.7 Conclusions

This study points out that pet ownership is a complex occupation, meaning that conditions for optimal transformation need to be created. Person, occupational and environmental processes happen in concert for optimal transformation for health and well-being. Enabling pet ownership may be one concrete way to move the recovery and well-being agenda forward. To this end, it is hoped that the proposed model will guide future mental health practice.
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Chapter 4

General Discussion

4.1 Summary of the Two Phases of the Study

This study was comprised of two phases. Phase one, the concept analysis, explored the everyday occupations of pet ownership as conveyed in the North American print media spanning 1999-2008. Pet ownership is a ubiquitous and everyday occupation among the general population (Grier, 2006) but lacks a conceptualization and operational definition. Researchers also use surrogate (varied) terms (e.g. pet keeping, pet guardianship, pet stewardship, pet parenting, and animal companionship) in place of pet ownership which creates further conceptual ambiguity. As a result, gaps in research in the area of pet ownership might occur. Pet ownership is distinct from animal-assisted therapy/activities in that it is not a goal-directed intervention and is not delivered by a health/human service professional or volunteer (Kruger & Serpell, 2006). Pet ownership is an activity and interaction between a person and his/her pet. It is undertaken by the pet owner in everyday life situations and aims at promoting a pet’s development and well-being. Pet ownership, like caregiving for people (Hermanns & Mastel-Smith, 2012), is facilitated by certain character traits, emotions, skills, knowledge, time and an emotional connection between a pet owner and his/her pet.

Rodgers’ (1989, 2000) evolutionary concept analysis including bestselling books and newspaper articles was used. Rodgers (2000) asserted that “identification of the attributes of the concept represents the primary accomplishment of concept analysis” (Rodgers 2000, p. 91). The analysis revealed seven distinct attributes of pet ownership: responsibility, investment, entrepreneurship, relationships, morality and attitude, with occupational engagement as the central attribute. Attributes were expressed through self-care, other care (caregiving) productivity, and leisure occupations.

While pet ownership is a distinct occupation it shares some similarities with like occupations, specifically “caregiving” and “parenting”. Similar to caregiving and parenting occupations, pet ownership
involves a form of guardianship or stewardship over another living being. Previous concept analyses on caregiving and parenting argue for action/process (or task) as their defining occupational attribute (Brilowski & Wendler, 2005; Swanson, Perry Jensen, Specht, Johnson, Maas, & Saylor, 1997; Virasiri, Yunibhand & Chaiyawat, 2011). Action characteristics of occupational engagement are the nature of action (active-passive), while process characteristics are degree of establishment (novel or longstanding) and competency or performance (novice or expert) (Townsend & Polatajko, 2007, p. 26).

Pet ownership shares several attributes with caregiving to healthy, ill, young or elderly family members including: the attribute of responsibility (Hermanns & Mastel-Smith, 2012; Swanson et al. 1997; Virasiri, Yunibhand & Chaiyawat, 2011), and; attitude and relationships (Brilowski & Wendler, 2005; Virasiri, Yunibhand & Chaiyawat, 2011). Unlike parenting and caregiving, this concept analysis did find direct support for the attributes of investment and morality related to pet ownership. For parenting and caregiving investment and morality emerged indirectly. For example, Hermanns and Mastel-Smith (2012) described attributes like understanding, patience, empathy, communication, selflessness, loving and being a good listener as some of the ways to invest as a caregiver. Swanson et al., (1997) argued that “mutual nurturing behaviors are an important part of caregiving” (p. 68). Virasiri et al., (2011) conducted their concept analysis on parenting based on moral grounds, specifically to shine light on parenting as a public health issue. They argued that parenting is the single largest variable implicated in child abuse, inability to become employed, juvenile crime and mental illness. These distinctions are important; they give credence to the emotional investment and, responsibility associated with pet ownership, while distinguishing it from other care giving roles and identities.

This concept analysis developed pet ownership from a general population perspective. As previously stated, the analysis drew on newspaper reports and books and the attribute of entrepreneurship (e.g. the creation of pet products and services) faired large. Entrepreneurship as an attribute may not typically be present in concept analyses of parenting and caregiving, although clearly, many markets focus on tailoring products and services to the needs of parents and caregivers.
This concept analysis established pet ownership as a meaningful life role. Focusing on caregiving roles, Bowers (1987) included five categories that provide meaning or purpose for the caregivers, each of which could be applied to pet owners based on the findings of this study: anticipatory, preventative, supervisory, instrumental and protective. Anticipatory roles (e.g. taking a pet for a walk to avoid house soiling); preventative roles (e.g. providing vaccinations, cleaning the litter box; general maintenance training); and supervisory roles (e.g. checking to see if the pet ate his food, arranging for boarding prior to vacations, putting up an invisible fence) and instrumental roles (e.g. providing water and food, housing, safety, toys) are all examples that could be applied to caring for pets.

The development of pet ownership as a distinct occupation is important if it is to advance our understanding of pet ownership in health and well-being among community living people with serious mental illness. The concept analysis of pet ownership defined what pet ownership is, what it entails, benefits and social positions. It was a first step to advance our understanding of this occupation among community dwelling people with serious mental illness. Unlike animal-assisted therapy, which is offered to people with mental illnesses as service recipients for therapeutic benefits, pet ownership positions people with mental illnesses as citizens engaging in a common occupation among the general public – an occupation associated with many benefits and meanings.

In phase two, a grounded theory study was conducted to explore how pet ownership impacts (positively or negatively) on health and well-being among community dwelling people with serious mental illness. A literature review revealed that out of twenty-seven research studies conducted with this target population, twenty-three were animal-assisted therapy studies while only four were focused on pet ownership. The grounded theory study was conducted through three mental health service sites in two southeastern Ontario counties. Data collection consisted of primarily individual interviews with 23 stakeholders with knowledge and experience related to pet ownership and serious mental illness. Through the research process a theoretical model was developed that identified “transformation” through pet ownership as the overarching theme organizing the model of health and well-being through pet
ownership. Transformation occurs through distinct processes at three levels; personal (psychosocial benefits), occupation (occupational engagement) and context (thinking outside the box of service delivery). Each main process consists of five subprocesses (e.g. unconditional love and acceptance is a subprocess of psychosocial benefits). Transformation is dynamic, shifting in a positive or negative way over time.

The grounded theory study advances our understanding (and shows the complexities) of health and well-being while engaging in a normal life occupation. Results show that for pet owners with serious mental illness health and well-being occurs through the nature of social interactions. Thus, the potential for pet ownership to foster health and well-being is rich. The grounded theory study points out where pet ownership can impact health and well-being negatively, for instance when grieving for a pet without (or with few) supportive social resources, a common social situation for people living with serious mental illness. Also, the cost of pet ownership and not having respite opportunities during times of hospitalization can impact negatively on health and well-being among a population that is already living in poverty. The cost factor may jeopardize health and well-being of people with serious mental illness as they aim to provide and/or prioritize health and well-being needs of their pet(s).

Lack of money and available respite options spark hesitation among social and health services to encourage pet ownership. These issues are not unique to people with serious mental illness. Economic difficulties, for example have been identified as a common reason for pet relinquishment among the general population (Sharkin & Ruff, 2011), and that relinquishing a pet can have negative effects on the well-being of both the animal and the pet owner. This grounded theory study reveals that potential negative influences of pet ownership can compromise well-being and health but these negative influences can be mediated by contextual factors. Indeed, some service providers in this study argued that they often go above and beyond their call of duty to feed and house pets of their clients even though they are not legally permitted to do so, to support pet ownership among their clients. There is some evidence from the “Wellness Recovery Action Plan” program (WRAP) that peers (which could be employed at a mental
health agency) do help people with serious mental illness plan for what to do with pets during crisis and/or hospitalization (see Canadian Mental Health Association, n.d.). References to feeding and housing pets by mental health staff were not found in this literature, thus there is a need for researchers to further explore types of unsanctioned supports provided by mental health staff.

Among people with serious mental illness, pet ownership as an occupation with recovery-enabling potential has received little attention compared to other occupations. This may be due to its link to negative aspects of living with animals, especially animal hoarding. Since 2013, hoarding disorder has emerged as a new diagnostic category in the DSM-5 (Grohol, n.d.). According to Frost, Patronek and Rosenfield (2011) animal hoarding is different from object hoarding in that it is associated with squalor, is more prevalent in middle age women, and it is hypothesized to be linked to personality, dissociative, attachment, and delusional disorders. Object hoarding, on the other hand, is infrequently associated with squalor, has an earlier onset and is linked to personality disorder, major depressive disorder, generalized anxiety disorder, social phobia, obsessive compulsive disorder and attention deficit/hyperactivity disorder. Animal hoarding can result in impairment in health, safety, and social or occupational functioning of pet owners (Frost, Patronek & Rosenfield, 2011).

In our grounded theory study one case of pet hoarding, characterized by failure to provide minimal standards of care for animals; lack of insight about that failure; denial of the consequences of that failure; coupled with obsessive attempts to maintain and even increase the number of animals in the face of these failures and deteriorating conditions (Patronek, 1999, pp 83-86; Patronek, Loar & Nathanson, 2006) was described by a community support worker as a historical case, not related to people currently receiving services. For the participants in this study animal hoarding did not emerge as a particularly applicable issue. The actual prevalence of animal hoarding among people with serious mental illness served by community support teams is unknown, but this study would suggest that it is not common, and perhaps even rare.
This grounded theory study puts pet ownership onto the mental health and recovery landscape. It points out how little discussion about pet ownership has happened in service delivery. The current study has created a platform regarding how to talk about pet ownership and to pose questions that need to be answered. Pet ownership is a topic which sparks strong emotions among service providers and it is perhaps because of this emotion (without solutions to pet related problems) that it is rarely discussed in the field of mental health. The current study delved into a large and unexplored area with the goal of trying to give it shape. Given the involvement of other living beings - pets - this topic has (like parenting and caregiving) high importance.

In some ways pet ownership is like every other role in need of understanding prior to being able to support it. This grounded theory elicits the critical questions of “how can pet ownership be best enabled and supported among people with serious mental illness”?

**In summary,** this study’s two phases involved a concept analysis of pet ownership and a grounded theory study of how pet ownership impacts (positively and negatively) on health and well-being. Both studies were necessary to provide clarity about pet ownership, what it means to people living with serious mental illness and to stimulate mental health and animal care provider discussion regarding this occupation and how to best enable pet ownership for those people who identify it as a valued current or future occupation and social role. The grounded theory study shows that the social connection (bond) with a pet(s) is not the same as the bond with people; it points out areas where pet ownership is not health promoting, and gives shape to the discussion regarding how to enable it.

**Implications**

**Service Implications**

Mental health services need to identify who may be able to take a leadership role as it pertains to enabling pet ownership as an occupation. Discussion needs to occur pertaining to areas of tension among key stakeholders, in particular: (a) what is a pet; (b) what constitutes proper pet care; (c) who should have
a pet?; (d) and who is responsible for supporting/educating people with serious mental illness about pet related issues? Solutions pertaining to the creation of pet related community supports and resources (funding community support programs, support with the financial aspects of veterinary care, respite options, volunteers to help with pet care, financial assistance for specific pet costs; pet loss support) need to be discussed.

The two phases of this study highlight that pet ownership has a range of associated tasks, and that the performance and experience of these tasks is enabled by a range of competencies, meanings and motivations. These are personal elements that could potentially be supported, if service providers themselves developed foundation knowledge and skills, and if this knowledge and skill base was given legitimacy as a valid community support option.

Finally, while animal hoarding did not emerge as an issue within this study, the extent to which it may bias views regarding the appropriateness of pet ownership among people with serious mental illness means that it requires attention. Animal hoarding is a serious public health problem that has received virtually no attention from the clinical or research communities (Arluke et al. 2002). This public health problem is believed to occur in every community but is poorly understood (Patronek, 1999, cited in Arluke et al., 2002). According to Reinisch (2008), mental health agencies, social services, and public authorities are often unwilling to assist in animal hoarding cases because the animal hoarder’s behaviour is excused as simply a lifestyle choice and, therefore, not a public health issue (p. 1213). Given the negative outcomes of animal hoarding for the pet owner and pet, mental health agencies need to begin to take an active stance in animal hoarding. Administrative procedures, eligibility rules, and bureaucratic procedures that obstruct collaborative efforts need to be surpassed so that the person hoarding animals can receive proper assistance (Reinisch, 2008). “One Medicine” (Mersha & Tewodros, 2012) is a concept which unites medical professionals and bridges the gap between human and animal health (p. 1214). In this regard, Mersha and Tewodros (2012), recommended redesigning training courses for medical and veterinarians and other health providers to take account of, and put to use, integrative possibilities.
Policy Implications

If pet ownership were to be supported by mental health agencies, pet policies may need to be created. For instance, policy related to pet ownership will need to attend to a range of questions and concerns, for example: what will be the definition of “pet”; what services and resources will the agency provide and sanction to enable pet ownership; and how will liability issues (such as injury by a pet) be handled? Policy will clearly need to consider how pet-ownership is associated with the stated vision, goals and objectives of services. For services focusing on supporting people with serious mental illness in their community lives, this will likely include a clear articulation of how pet ownership is related to recovery and recovery-oriented service delivery.

Future Directions

Davidson, Ridgway, Kidd and Topor (2008) have stressed that with the recent shift to a vision of recovery for people with serious mental illness “…it becomes incumbent on investigators to better understand the ways in which mental illness interferes with everyday life and the ways in which people can learn to manage and minimize the illness so that they can pursue their lives to the best of their ability, even in the face of persisting illness” (p. 137). They contend that “qualitative methods are particularly, perhaps uniquely, well-suited for this task” (p. 137). That said, Wilson (2006) proposed that ‘in order for human-animal interaction research to take its place as “best evidence” it must advance in the hierarchy of evidence’ (p. 504). Taking this advice, researchers interested in advancing the field of human-animal interactions, including those interested in its application to the mental health field, are urged to identify and address critical questions using randomized controlled trials (RCT).

This study suggests several avenues for further study. First, the proposed model suggests specific health-promoting features of pet ownership that can be the focus of any study evaluating health and well-being outcomes. Similarly, the study suggests potential features of pet ownership that could potentially be associated with negative outcomes. Second, the study proposes the potential for novel applications of pet ownership, particularly the study of pets as a means to alert individuals with serious mental illness to
changes in well-being. Recent studies have, for example, suggested the potential for animals (specifically dogs) to alerting/responding behaviours in response to seizures (Dalziel, Uthman, McGorray, & Reep, 2003). It may be that responsive pets could provide a powerful way to sensitize individuals to early, subtle changes in their mental and emotional states. Third, the study provides innovative suggestions for the design of delivery of community services to enable pet ownership; any such service interventions should be subject to evaluation research. Current development of community mental health services highlight the importance of developing intersectoral relations and partnerships to ensure that people with serious mental illness can gain full access to the full range of opportunities and resources available to all community members. This study adds to this discussion by highlighting the potential of partnerships between mental health services and animal care providers in enabling pet ownership.
References 4


Appendices
Appendix A: Queen’s University Health Science & Affiliated Teaching Hospitals Research Ethics Board

QUEEN’S UNIVERSITY HEALTH SCIENCES & AFFILIATED TEACHING HOSPITALS RESEARCH ETHICS BOARD

September 17, 2008

This Ethics Application was subject to:

☐ Full Board Review
☐ Meeting Date
☒ Expedited Review

Ms. Ulrike Zimolag
School of Rehabilitation Therapy
Louise D. Acton Building
Queen’s University

Dear Ms. Zimolag,

Study Title: Advancing pet ownership as a health promotion strategy in serious mental illness

Co-Investigators: Dr. Terry Krupa

I am writing to acknowledge receipt of your recent ethics submission. We have examined the protocol, advertisements and consent forms for your project (as stated above) and consider it to be ethically acceptable. This approval is valid for one year from the date of the Chair’s signature below. This approval will be reported to the Research Ethics Board. Please attend carefully to the following list of ethics requirements you must fulfill over the course of your study:

➢ Reporting of Amendments: If there are any changes to your study (e.g. consent, protocol, study procedures, etc.), you must submit an amendment to the Research Ethics Board for approval. (see http://www.queensu.ca/qrpt/reb.htm).

➢ Reporting of Serious Adverse Events: Any unexpected serious adverse event occurring locally must be reported within 2 working days or earlier if required by the study sponsor. All other serious adverse events must be reported within 15 days after becoming aware of the information.

➢ Reporting of Complaints: Any complaints made by participants or persons acting on behalf of participants must be reported to the Research Ethics Board within 7 days of becoming aware of the complaint. Note: All documents supplied to participants must have the contact information for the Research Ethics Board.

➢ Annual Renewal: Prior to the expiration of your approval (which is one year from the date of the Chair’s signature below), you will be reminded to submit your renewal form along with any new changes or amendments you wish to make to your study. If there have been no major changes to your protocol, your approval may be renewed for another year.

Yours sincerely,

[Signature]
Chair, Research Ethics Board

[Signature] Date

Study Code: REH-441-08

➢ Investigators please note that if your trial is registered by the sponsor, you must take responsibility to ensure that the registration information is accurate and complete
QUEEN'S UNIVERSITY HEALTH SCIENCES & AFFILIATED TEACHING HOSPITALS RESEARCH ETHICS BOARD

The membership of this Research Ethics Board complies with the membership requirements for Research Ethics Boards as defined by the Tri-Council Policy Statement; Part C Division 5 of the Food and Drug Regulations, OHRP, and U.S. DHHS Code of Federal Regulations Title 45, Part 46 and carries out its functions in a manner consistent with Good Clinical Practices.

Federalwide Assurance Number: #FWA00004184
#IRB00001173

Current 2008 membership of the Queen's University Health Sciences & Affiliated Teaching Hospitals Research Ethics Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
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<tbody>
<tr>
<td>Dr. A.F. Clark</td>
<td>Emeritus Professor, Department of Biochemistry, Faculty of Health Sciences, Queen's University (Chair)</td>
</tr>
<tr>
<td>Dr. H. Abdollah</td>
<td>Professor, Department of Medicine, Queen's University</td>
</tr>
<tr>
<td>Dr. C. Cline</td>
<td>Assistant Professor, Department of Medicine, Director, Office of Bioethics, Queen's University, Clinical Ethicist, Kingston General Hospital</td>
</tr>
<tr>
<td>Rev. T. Deline</td>
<td>Community Member</td>
</tr>
<tr>
<td>Dr. M. Evans</td>
<td>Community Member</td>
</tr>
<tr>
<td>Dr. S. Irving</td>
<td>Psychologist, Providence Care, St. Mary's of the Lake Hospital Site</td>
</tr>
<tr>
<td>Prof. L. Keeping-Burke</td>
<td>Assistant Professor, School of Nursing, Queen's University</td>
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<tr>
<td>Dr. J. Low</td>
<td>Emeritus Professor, Department of Obstetrics and Gynaecology, Queen's University and Kingston General Hospital</td>
</tr>
<tr>
<td>Dr. W. Racz</td>
<td>Emeritus Professor, Department of Pharmacology &amp; Toxicology, Queen's University</td>
</tr>
<tr>
<td>Dr. B. Simchison</td>
<td>Assistant Professor, Department of Anesthesiology, Queen's University</td>
</tr>
<tr>
<td>Dr. A.N. Singh</td>
<td>WHO Professor in Psychosomatic Medicine and Psychopharmacology, Professor of Psychiatry and Pharmacology, Chair and Head, Division of Psychopharmacology, Queen's University, Director &amp; Chief of Psychiatry, Academic Unit, Quinte Health Care, Belleville General Hospital</td>
</tr>
<tr>
<td>Dr. E. Tsai</td>
<td>Associate Professor, Department of Paediatrics and Office of Bioethics, Queen's University</td>
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<tr>
<td>Rev. J. Warren</td>
<td>Community Member</td>
</tr>
<tr>
<td>Ms. K. Weisbaum</td>
<td>LL.B. and Adjunct Instructor, Department of Family Medicine (Bioethics)</td>
</tr>
<tr>
<td>Dr. S. Wood</td>
<td>Director, Office of Research Services (Ex-Officio)</td>
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</tbody>
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Appendix B: Study Approval from Providence Continuing Care Centre – Site 1

October 21, 2008

Ms. Ulrike Zimolag
School of Rehabilitation Therapy
Louise D Acton Building
Queen’s University

Re: Advancing patient ownership as an illness to wellness promotion activity in serious mental illness

Dear Ms. Zimolag,

The Providence Care Research Review Committee considered the above-named proposal at their meeting on Monday, October 20, 2008.

I am pleased to advise that you have the full support of the committee to proceed with your proposal.

Yours sincerely,

Marcy Saxo-Braithwaite

Dr. John Purdy, Chair, Providence Care Research Review Committee

cc: Ms. Madeline Palladino, Director, Patient Records and Registration
Dr. Terry Kampa, School of Rehabilitation Therapy
Dr. Susan Wood, Director, Office of Research Studies, Queen’s University

one of the university hospitals of kingston

www.providencecare.ca
Appendix C: Study Approval from Frontenac Community Mental Health Services – Site 2

September 18, 2008

Providence Care Ethics Board
752 King Street West
Kingston, ON  K7L 4X3

Subject: Exploring the occupation of pet ownership in serious mental illness, Ulrike Zimolag (PhD Candidate, School of Rehabilitation Therapy)

I have read the study description and recruitment details for the above-named study and I fully support this research proposal.

If you have any questions, please contact my office by phone (613) 544-1356 ext. 2290 or by e-mail at amathany@fcnhs.ca

Sincerely,

Alan Mathany, MSW, RSW, CPRP
Director of Clinical Services

AMlp
Appendix D: Study Approval from Lennox & Addington Community Mental Health Services – Site 3

Lennox and Addington
Addiction and Community Mental Health Services

June 30, 2008

Dear Ms. Zmolak,

I am writing on behalf of Lennox and Addington Addiction and Community Mental Health Services. I would like to thank you for your presentation of your study proposal about exploring the occupation of pet ownership in serious mental illness. Being a pet owner myself and working in this agency, the study sounds very interesting and worthwhile area of focus. After discussing the study proposal with some of the staff, I am pleased to inform you that we would be eager to assist you in this study and offer access to interested staff and clientele and appreciate your inclusion of our services in your project.

We look forward to hearing from you about the project and will await further notice about approval of the study. Perhaps we can arrange to meet later in the summer when you know the timeframe of the next steps. You can contact me through the information below and I look forward to hearing from you.

Sincerely,

[Signature]

David Williams
Director of Services
L&A Addiction and Community Mental Health Services

Road Office
70 Dundas Street, East
Napanee, ON K7R 1H9
(613) 457-7201
Fax: (613) 457-7373
Email: info@healthco.ca

37 Dundas Street West
Napanee, Ontario
K7R 4C1
613-457-6624
1-800-420-9734

20 Minisink Crescent West
Social Services Building
Amherstburg, Ontario
N9S 1J2
613-454-6666
1-800-420-9734

Land O’Lakes
Community Services Building
13 Airport Road
Northbrook, Ontario
613-457-6914
1-800-420-9734
Appendix E: Information Letter and Consent Form for Grounded Theory Study – Client Research Participants

Research Study: Advancing Pet Ownership as an “Illness to Wellness” Promotion Activity in Serious Mental Illness: Exploring how pet ownership influences health and well-being.

BACKGROUND INFORMATION
You are being invited to participate in a research study conducted by myself, Uli Zimolag, which explores the topic of pet ownership in serious mental illness. I am a PhD Candidate in Rehabilitation Science at the School of Rehabilitation Therapy, Faculty of Health Sciences at Queen’s University. My supervisor is Dr. Terry Krupa. I will read through this consent form with you, and describe interview procedures in detail and answer any questions you may have. This study has been reviewed for ethical compliance by the Queen’s University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board.

AIM OF THE STUDY
The purpose of this study is to explore: (1) what pets mean to participants with mental health problems; (2) what individuals do on a routine basis to care for their pets; and (3) how caring for a pet influences the health and wellbeing of individuals with mental health problems.

WHY YOU ARE BEING INVITED TO PARTICIPATE?
You will be invited to this study if you have experienced mental illness, are age 16 or older, are a pet or non-pet owner, are able to give consent, speak English, and live in the county of Kingston, Frontenac or Lennox & Addington.

WHAT IS REQUESTED FROM YOU?
If you consent to be a research participant in this study, you will be asked to take part in one 60-90 minute individual interview. You can choose to have another person with you if you feel that you need this support while answering the research questions. There is a chance that I may seek clarification or have additional questions. In this case, I may ask for follow up. Agreeing to provide this additional information is again entirely optional. Depending on your preference it could occur over the phone or in person.
BENEFITS AND RISKS

While you may not benefit directly from this study, I expect that the study results will inform occupational therapists and scientists, health researchers, other service providers, family and friends, veterinarians, and/or landlords. Better understanding of how pet ownership influences health and well-being could influence future research studies and service delivery. You might find participating in this study enjoyable. There are no foreseeable risks associated with taking part in this study.

CONFIDENTIALITY

Any information that you give for this study will be kept confidential and secure. In this study, you will be asked to pick an alternate name during the interview to assure anonymity. The interview responses will be audiotaped by the principal investigator and then transferred to paper. The digital recording and transcribed interviews will be stored in a locked file and will only be available to the principal investigator, her supervisor, and the Research Ethics Board at Queen’s University. Your name will not be in any publication or reports emerging from this research.

VOLUNTARY PARTICIPATION

Your decision to take part in this study is voluntary. You may decide to withdraw from the interview at any time, for whatever reason, and withdrawal will not affect services to you or your future mental health care at your community mental health agency.

COMPENSATION

Your time in participating in this interview is very much appreciated; therefore you will receive a small gift basket as a token of appreciation. The principal investigator will conduct the interview at a place of your choosing. Any unforeseeable expenses (such as travel and/or parking) related directly to this study will be covered.

LIABILITY

Please note that in no way does signing this consent form waive you (the research participant) of your legal rights, nor does it release the investigators or involved institutions from their legal and professional, responsibilities.
Thank you for considering this invitation to participate in this study. Please feel free to raise any questions or concerns you may have about this study to the principal investigator. If you agree to participate in the study, please read and sign the consent form below. If you are interested in the outcome of this study, you can request a one-page summary from the principal investigator.

Sincerely,

Uli Zimolag, MSc (Rehabilitation Science), PhD Candidate, Principal Investigator

---

**RESEARCH PARTICIPANT CONSENT FORM**

I have read and understood the consent form of this study. I have had the purposes, procedures and technical language of this study explained to me. I have been given sufficient time to consider the above information and to seek advise if I chose to do so. I have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this form. I will receive a copy of this consent form for my information.

If at any time I have more questions, problems or adverse events, I can contact:

Uli Zimolag at 613-533-6000, extension 77850, 4ukz@queensu.ca, OR

Dr. Terry Krupa at (613) 533-6236, terry.krupa@queensu.ca OR

Dr. Elsie Culham who is the Director of the School of Rehabilitation Therapy, at (613) 533-6727, culhame@queensu.ca
If I have questions regarding my rights as a research subject I can contact Dr. Albert Clark, Chair, Queen’s University Health Sciences and Affiliated Teaching Hospital Research Ethics Board at 613-533-6081.

By signing this consent form, I am signifying that I agree to participate in this study in the ways I have indicated below.

I, ______________________________, voluntarily agree to participate in an interview.

___________________________________  ______________
Research participant’s signature              Date

___________________________________  ______________
Signature of Witness                     Date

STATEMENT OF INVESTIGATOR
I have carefully explained to the subject the nature of the above research study. I certify that, to the best of my knowledge, the person understands clearly the nature of the study and demands, benefits, and risks involved to participants in this study.

___________________________________  ______________
Signature of Principal Investigator      Date
Appendix F: Information Letter and Consent Form for Grounded Theory Study – Service Provider Research Participants

Research Study: Advancing Pet Ownership as an “Illness to Wellness” Promotion Activity in Serious Mental Illness: Exploring how pet ownership influences health and well-being.

BACKGROUND INFORMATION
You are being invited to participate in a research study conducted by myself, Uli Zimolag, which explores the topic of pet ownership in serious mental illness. I am a PhD Candidate in Rehabilitation Science at the School of Rehabilitation Therapy, Faculty of Health Sciences at Queen’s University. My supervisor is Dr. Terry Krupa. I will describe interview procedures in detail and answer any questions you may have. This study has been reviewed for ethical compliance by the Queen’s University Health Sciences and Affiliated Teaching Hospitals Research Ethics Board.

AIM OF THE STUDY
As it pertains to people with serious mental illness, the purpose of this study is to explore: (1) what pets mean to this population; (2) what individuals do on a routine basis to care for their pets; and (3) how caring for a pet(s) influences their health and well-being.

WHY YOU ARE BEING INVITED TO PARTICIPATE?
You will be invited if: (1) you are a care or service provider (occupational therapist, community support worker, social worker, psychiatrist, case manager, family member or close friend etc.) and have firsthand experience pertaining to individual(s) with serious mental illness and their pets, and (2) if you work and/or reside in the Kingston, Frontenac, or Lennox & Addington counties.

WHAT IS REQUESTED FROM YOU?
If you consent to be a research subject in this study, you will be asked to take part in one 60-90 minute individual interview. There is a chance that I may seek clarification or have additional questions. In this case, I may ask for follow up. Agreeing to provide this additional information is again entirely optional. Depending on you preference it could occur over the phone or in person.
BENEFITS AND RISKS
While you may not benefit directly from this study, I expect that the study results will inform researchers, service providers, family and friends, veterinarians and/or landlords. Better understanding of how pet ownership influences health and well-being could influence future research studies and service delivery. You may find participating in this interview enjoyable. There are no foreseeable risks associated with taking part in this study.

CONFIDENTIALITY
Any information that you give for this study will be kept confidential and secure. You are asked to choose an alternate name during the interview so that you remain anonymous. The interview responses will be audiotaped by the principal investigator and then transferred to paper. The digital recording and transcribed interviews will be stored in a locked file and will only be available to the principal investigator, her supervisor, and the Research Ethics Board at Queen’s University. Your name will not be in any publication or reports emerging from this research.

VOLUNTARY PARTICIPATION
Your decision to take part in this study is entirely voluntary. You may decide to withdraw from the study at any time, for whatever reason, and withdrawal will in no way affect you.

COMPENSATION
No compensation is provided. However, your time in participating in this interview is very much appreciated. I will conduct the interview at a place of your choosing.

LIABILITY
Please note that in no way does signing this consent form waive you (the research participant) of your legal rights, nor does it relieve the investigators or involved institutions from their legal, and professional, responsibilities.
Thank you for considering this invitation to participate in this study. Please feel free to raise any questions or concerns you may have about this study to the principal investigator. If you agree to participate in the study, please read and sign the consent form below. If you are interested in the outcome of this study, you can request a one-page summary from the principal investigator.

Sincerely,

Uli Zimolag, MSc (Rehabilitation Science), PhD Candidate, Principal Investigator

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**RESEARCH PARTICIPANT CONSENT FORM**

I have read and understood the consent form of this study. I have had the purposes, procedures and terms explained to me. I have been given sufficient time to consider the above information and to seek advice if I chose to do so. I have had the opportunity to ask questions which have been answered to my satisfaction. I am voluntarily signing this form. I will receive a copy of this consent form for my information.

If at any time I have more questions, problems or adverse events, I can contact:

Uli Zimolag at 613-533-6000, extension 77850, 4ukz@queensu.ca, OR

Dr. Terry Krupa at (613) 533-6236, terry.krupa@queensu.ca OR

Dr. Elsie Culham who is the Director of the School of Rehabilitation Therapy, at (613) 533-6727, culhame@queensu.ca
If I have questions regarding my rights as a research subject I can contact

Dr. Albert Clark, Chair, Queen’s University Health Sciences and Affiliated Teaching Hospital Research Ethics Board at 613-533-6081.

By signing this consent form, I am signifying that I agree to participate in this study in the ways I have indicated below.

I, ______________________________, voluntarily agree to participate in an interview:

__________________________   _________________
Research participant’s signature   Date

__________________________   _________________
Signature of Witness   Date

STATEMENT OF INVESTIGATOR
I have carefully explained to the participant the nature of the above research study. I certify that, to the best of my knowledge, the person understands clearly the nature and demands, benefits and risks involved to participants in this study.

__________________________   _________________
Signature of Principal Investigator   Date
### Appendix G: Initial Interview Protocol for Grounded Theory Study – Clients Research Participants

**Advancing pet ownership as an illness to wellness promotion activity in serious mental illness: Exploring how pet ownership influences health and well-being**

Date: 
Name (Code): 

<table>
<thead>
<tr>
<th>Question</th>
<th>Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Questions</td>
<td></td>
</tr>
<tr>
<td>❑ Age?</td>
<td></td>
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<tr>
<td>❑ Gender?</td>
<td></td>
</tr>
<tr>
<td>❑ Type and number of pets?</td>
<td></td>
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<tr>
<td>❑ Housing type?</td>
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<tr>
<td>❑ Pet or non-pet owner?</td>
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<tr>
<td>❑ For how long have you been a pet owner?</td>
<td></td>
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<tr>
<td>❑ Diagnosis?</td>
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<tr>
<td>❑ How long have you been a client at your agency?</td>
<td></td>
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<tr>
<td>❑ Are you on ODSP? Main source of income?</td>
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<tr>
<td>❑ What is your definition of health and well-being (wellness)?</td>
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<tr>
<td>Tell me about your life with pets and what pets mean/have meant to you?</td>
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<tr>
<td>1. Tell me about how you came to be a pet owner? What prompted you?</td>
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<tr>
<td>2. What position/does your pet play in your life?</td>
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<tr>
<td>3. How would you describe the type of investment you have in this relationship?</td>
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<tr>
<td>4. How do other people respond to you as a result of being a pet owner? What does this mean to you?</td>
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<tr>
<td>Can you describe some of the activities you do?</td>
<td></td>
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<tr>
<td>1. <strong>Key Activities:</strong> Can you describe activities that you most commonly do because your pet requires them?</td>
<td></td>
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<tr>
<td>2. <strong>Optional activities:</strong> What activities do you do that are not necessary to your pet but that you enjoy doing with your pet?</td>
<td></td>
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<tr>
<td>3. <strong>New age (online) activities:</strong> What activities do you do because you have a pet that you otherwise would not do?</td>
<td></td>
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<tr>
<td>4. What activities do you struggle with? Why?</td>
<td></td>
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<tr>
<td>How do your pets impact on your health and well-being? (positively or negatively)</td>
<td></td>
</tr>
<tr>
<td>1. How do your pets impact positively on your health and well-being?</td>
<td></td>
</tr>
<tr>
<td>2. How do your pets impact negatively on your health and well-being?</td>
<td></td>
</tr>
<tr>
<td>3. As you look back on your pet ownership history are there transition points or events in health and well-being that stand out where your pet helped or didn’t help you get well?</td>
<td></td>
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<tr>
<td>4. Could you describe the most important lessons you have learned in your journey, which you could contribute to being a pet owner?</td>
<td></td>
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<tr>
<td>5. What supports and resources do you feel you need to do the best you can as a pet owner?</td>
<td></td>
</tr>
<tr>
<td>Ending Questions</td>
<td></td>
</tr>
<tr>
<td>1. Is there anything that you might not have thought about before that occurred to you during this interview?</td>
<td></td>
</tr>
<tr>
<td>2. Is there anything else you think I should know to understand the impact of your pet(s) on your health and well-being?</td>
<td></td>
</tr>
<tr>
<td>3. Is there anything you would like to ask me?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix H: Initial Interview Protocol for Grounded Theory Study – Service Provider Research Participants

Advancing pet ownership as an illness to wellness promotion activity in serious mental illness: Exploring how pet ownership influences health and well-being

Date:
Name (Code):

<table>
<thead>
<tr>
<th>Question</th>
<th>Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care/Provider Information</td>
<td>❑ Gender?</td>
</tr>
<tr>
<td>❑ What is your profession?</td>
<td></td>
</tr>
<tr>
<td>❑ What is your job title?</td>
<td></td>
</tr>
<tr>
<td>❑ Length of working with the population?</td>
<td></td>
</tr>
<tr>
<td>❑ Length of working in mental health?</td>
<td></td>
</tr>
<tr>
<td>❑ Are you a pet owner?</td>
<td></td>
</tr>
<tr>
<td>❑ What is your definition of health and well-being (wellness)?</td>
<td></td>
</tr>
</tbody>
</table>

Tell me about your experience with the population as it pertains to pet ownership

1. Tell me about how in your opinion your clients came to be a pet owner?
2. In your opinion what prompted your clients to become pet owners?
3. In your opinion, what position does the pet play in your clients’ life?
4. How would you describe the type of investment clients have in this relationship?
5. Do you have a chance to observe how the community responds to pet owners vs. those without pets? If yes, how would you describe people’s responses to clients with pets vs., without pets

Can you describe some of the activities you observe people doing as pet owners?

1. **Key Activities:** Can you describe pet related activities that you most commonly observe people do?
2. **Optional activities:** What activities do clients do that are not necessary to the pet but that you observe people doing with their pet?
3. **New age (online) activities:** What activities do you see people engage in because they have a pet that you think they would not do if they did not have a pet?
4. What activities do people struggle with? Why?

How do pets impact on health and well-being?

1. How do you see pets impact positively on health and well-being of your clients?
2. How do you see pets impact negatively on the health and well-being of your clients?
3. As you look back on your clients’ life are there transition points or events that stand out where a pet helped or hindered well-being of your clients?
4. Have you witnessed any pet abuse, neglect or hoarding with this population?
5. What agencies collaborate with one another to best enable pet ownership?
6. What supports and resources are needed to enable pet ownership among this population --who is responsible for providing them?

Ending Questions

1. Is there anything that you might not have thought about before that occurred to you during this interview?
2. Is there anything else you think I should know to understand the impact of pets on your clients’ health and well-being?
3. Is there anything you would like to ask me?
Appendix I: Diagramming of Main Codes for Grounded Theory Data Analysis

Client Data

Interview #23
- Willy, Age 65
- Dx: Depression, Two Suicide Attempts in past (age 16)
- County Y - rural (since 5 years)
- Lives alone with 3 Lab retrievers (2 of them 8 month old)
- on ODSSP (no job history)
- Lives in a country home (rented)

Opting to have a pet even if no mental illness

Having more patience for animals than people

Preferring to live with dogs rather than people if given a choice (21)

Teaching - Teaching dogs things (like parents to their children)

Molding pets based on how I bring them up

Being part of the pack when playing together

Having influence over how dogs see the world

Having energetic puppies

Linking routine to being comfortable with each other

Attachment - Being willing to sacrifice food or save money in order to keep the dogs - they are half of me

Feeling whole with pets (completed) (79)

Distraction from thinking

Well-being
- Having something active to do
- Being in control of mental illness (depression)
- Doing what I want even if it is mental illness
- Distraction from worries
- Companionhip
- Being comfortable with life situation
- Having certain amount freedom - being able to do what one wants to do
- Decreased sadness

Maintaining (protecting) mental health with dogs = Health Promoting Role (but also transforming experience e.g. boredom) of pets which in turn assures being able to keep pets

Appreciating what you can do with pets - running, playing

Well-being (pet)
- Having something to do
  - Companionhip
  - Predictability
  - Leadership

Un-wellness
- Lack of control over the illness
  - Discontentment, unhappiness, being controlled by mental illness
  - Lack of freedom to do what I want to do
  - Boredom
  - Lacking money (on ODSSP)
  - Dependence (with getting groceries, going to the psychiatrist, vet) as no car (had a car accident in past)
  - Having a sick dog, not being able to read people
Care Provider Data

Interview #11 Karen

Having always worked with people who have had serious mental illness

Working with the most severely ill people & seeing lack of insight and understanding as reoccurring barriers to pet ownership - C109

Sharing the view that having an animal around is very positive for the person if one enjoys and likes animals

Sharing that there is an added dimension of animal well-being to consider - giving "proper" care

Stating that in Ontario animals are property - people with a mental illness have a right to acquire pets

Prerequisites: insight, clear thinking, understanding of issues (signs of pet illness), willingness to accept help, money

Conditions where pet ownership could work well: (a) pet ownership can work well if the person is able to accept some help in taking "proper" care of the animal; (b) sometimes it works out well for the person but very badly for the animal if person is unable to take care and unwilling to accept assistance or advice, and (c) if the person has money to take care of the animal - especially as they get older and need veterinary care - C12-16

Stating that "most people who are seriously ill...sickly...are living in poverty. But they need money for pet care..."

Severity of illness --- Assertive Community Treatment (ACT) clients are most severely mentally ill

Always inquiring about dependent children and/or animals while working in acute psychiatry

Having a role

Having company

Assumptions - mentally healthy people can take care of pets - while ACT clients cannot

Being aware of positive (devotion & sacrifice) stories C85

Emotional support: Relieving loneliness

Giving and receiving love (C95)

Giving the pet what it needs. Benefits the person with SMI (C90)

Seeing clients taking the pet to the vet via taxi

Seeing clients devoting time to the pet

Finding out about the fact that person got pet from Humane Society - is it bad? BUT vet checks by Humane Society - is pet protected - C102

Well-being (person)

Health = physical
Things that would make life worth living beyond health

Something positive

Meaningful things in one's life that make it worth getting out of bed for in the morning and struggling through

Has the added dimension of pet's well-being

Being receptive to mental health provider suggestions re pet care

If people with MI understand the need for guidance (C74)

Who asks about pets well-being? C41

Unwellness (person)

- Not having meaningful things in your life
- Nothing that makes it worthwhile getting out of bed for in the morning
- Loneliness
- Loss of ability to care for children
- Signs: Not thinking clearly and not accepting help with pet issue (C92)

Who should provide support - e.g. person who can't authorize pet? Lack of insight or something else? Fear of being alone?

Well-being of pet means

- Not treating the animal as property
- Having owner with insight into pet problems
- Having an owner (client) who accepts help from providers
- Providing treatment or euthanasia when pet is suffering (C41)
- Humane Society can intervene if needed
- Freedom from abuse

Facilitators of pet ownership: Creating supports

- (with care giving skills, volunteerism, and problems sensibility) and resources to support well-being
- (animal allowance, dietary allowance, transportation allowance) C88

Seeing a client not being able to take the next step for either treatment or euthanasia (pet with cancer)

Reservations/burden of case manager burden if pet suffers C123

Spotty issue - Lack of collaboration with veterans - having same with the Humane Society - C103 vs muddy issues (C104-108)

Not having dealt with pet hoarding (OCD) but pet neglect C79

Providing "proper" support for pets

Tensions: Role of providers - whose job is it? Everyone on ACT team? OT referral? Lack of knowledge about what FTEs do (C101), respect for how clients give care (making own pet food) unless it constitutes neglect; Feeding pets while person is in hospital = extra work. Being an ally or posing a threat to clients

Addressing the consent issue if human-animal provider collaboration

Giving an example where pets property status meant public guardian and trustee could intervene to authorize the animal = C46 - impact on client? What supports

Tension: guiding vs. controlling (C74 & 75)
Appendix J: Interview Accuracy Check Form

Dear ________________

This letter is to provide you with a copy of your interview transcript pertaining to the research study: *Advancing our understanding of pet ownership as a well-being promotion activity among community dwelling people with mental illness*. You have the option of reading your interview to make sure that it is correct (please do not add new information as data collection is complete).

Currently, I am in the planning stages for a presentation of preliminary research results. I am aiming for giving this presentation at your agency/county in the spring of 2011. The presentation will give you the opportunity to comment on my interpretation, degree of coherence, and completeness. I will incorporate your input into my thesis dissertation and resulting publication(s).

Please provide me with the following information and return it in the prepaid envelope:

1. The interview transcript content accurately represents my experience at the time of the interview
   - Yes
   - Opted not to read it because __________________________
   - No
   
   (If no, please explain or make corrections by referring to page numbers or return pages with corrections)

2. I would like to be informed about the date, place, and time of this presentation
   - Yes
   - No
   
   (Please make sure I have a current phone number or email address so I can contact you)

3. I am interested in receiving a package of analysis materials to review the author’s interpretations for their degree of accuracy, coherence, and completeness
   - Yes
   - No

Please Note: Part one of this research: *An evolutionary concept analysis of caring for a pet as an everyday occupation* has been accepted for publication in the “Journal of Occupational Science”. The release of this publication is scheduled for the fall 2011. It will be sent to participating Community Mental Health Agencies. If you have a computer – feel free to contact me for a copy. My email is 4ukz@queensu.ca.
Appendix K: Member Checking of Data Interpretation PowerPoint Document

February 17, 2012

Dear Research Participants:

RE: Advancing our understanding of how pet ownership influences mental health and well-being among community dwelling people with serious mental illness

The analysis of this grounded theory study (individual interviews) is nearing conclusion! You volunteered to read my interpretation of this data. Thank you again for doing this!

This package contains a document of the emerging theory (in the form of diagrams), a sample of analysis materials for your information, and a stamped envelope for you to return your comments. When reading the document please feel free to focus on the areas of most interest to you. I would like for you to answer the following questions:

Please remember that the analysis emerged from the research participant’s data and represents various experiences and viewpoints. You may not agree with some points!

- **Do you find the document (including the drawings representing the theory) to be:**
  - Understandable Yes ___ No ___
  - Meaningful Yes ___ No ___
  - Complete Yes ___ No ___
  - Logical Yes ___ No ___
  - Anything else? _______________________________________

If no, what is missing? What is too much? Please explain!

|__________________________________________|
| Which slides did you focus on? |

|__________________________________________|
| o Any other thought or comments? (You may use the back of this page to elaborate if needed) |

Please accept my apologies for taking this long to get back to you. The delay was due to unforeseeable health problems. I look forward to hearing from you! Please respond at your earliest convenience. Thank You!

Sincerely,

Ulrike Zimolag
PhD Candidate
Queen’s University
School of Rehabilitation Therapy
K7L 3N6