Effects of Pet Ownership on Street-Involved Youth in Ontario

by

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ABSTRACT

EFFECTS OF PET OWNERSHIP ON STREET-INVOLVED YOUTH IN ONTARIO

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This thesis is comprised of three studies examining the effects of pet ownership on street-involved youth in Ontario. As a relatively new area of study, issues surrounding pet ownership among homeless youth were first explored qualitatively. The first two studies utilized a series of one-on-one interviews with both pet-owning youth and youth service professionals to determine the major roles, relationships, challenges and effects that pets have in the lives of street-involved youth. The four themes that emerged from both of these interview groups included “pet before self” where youth placed the needs of their pet ahead of their own, physical effects of pet ownership, emotional effects of pet ownership, and the benefits and liabilities of pet ownership. Findings related to these themes, such as the strength of the human-animal bond and pets as drivers of change are discussed.

Information derived from the qualitative interviews with pet-owning youth and youth workers contributed to the development of a questionnaire administered to a convenience sample of 89 pet-owning street-involved youth and 100 street-involved youth who were not pet owners in four urban centres in Ontario. This study sought to validate findings from previous qualitative research, provide descriptive information on the pet-owning
youth population, their pets, and their human-animal relationship, as well as assess pet attachment based on the Lexington Attachment to Pets Scale. Additionally, pet owners and non-pet owners were compared in terms of depression based on the Center for Epidemiologic Studies Depression Scale, shelter use and drug use. The findings include a universally high level of pet attachment among this unique pet owning population, providing opportunity for youth to experience not only beneficial emotional and social support, but also the negative emotional consequences of pet loss. Pet ownership was also demonstrated to be significantly and negatively correlated with regular shelter use. Through logistic modelling and controlling for participant gender and regular drug use (of drugs other than cigarettes, alcohol, and marijuana), pet ownership was found to be negatively associated with depression.

Using both qualitative and quantitative methodologies, this thesis provides evidence of the beneficial as well as the potential negative impacts of pet ownership for street-involved youth. It also provides the first quantitative description of this population and their human-animal relationship, while demonstrating support for further research into the effects of pet ownership on street-involved youth, and consideration for expanded education and service provision to support youth and their pets among youth services.
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# TABLE OF CONTENTS

## CHAPTER 1
**INTRODUCTION, LITERATURE REVIEW AND OBJECTIVES** ...............1

**INTRODUCTION** ..............................................................................2

**LITERATURE REVIEW** .................................................................6

- Effects of pet ownership on human health ..................................6
- Effects of pet ownership on socially marginalized populations ..........9
- Pet ownership among the homeless ............................................12
- Homeless youth in Canada .......................................................14
- Health of homeless youth .........................................................14
- Service utilization by homeless youth .........................................18
- Drug use among homeless youth ..............................................20
- Pets and homeless youth .........................................................21
- Mixed methodology ...............................................................23
- Participatory action research ..................................................23
- Center for Epidemiologic Studies Depression Scale ......................24

**STUDY OBJECTIVES** ...................................................................25

**REFERENCES** ............................................................................26

## CHAPTER 2
**Effects of pet ownership on street-involved youth: A qualitative analysis** ............44

**ABSTRACT** ..................................................................................45

**INTRODUCTION** .........................................................................46

**METHODS** .................................................................................47

**RESULTS** ....................................................................................47

**DISCUSSION** ................................................................................62

**CONCLUSIONS** ............................................................................69

**REFERENCES** ............................................................................75
APPENDIX 1: Interviews with pet-owning street-involved youth .................171
  1.A Consent to participate in research - Street-involved youth ...............172
  1.B Interview guide for pet-owning street-involved youth ..................175

APPENDIX 2: Interviews with youth service professionals .....................176
  2.A Consent to participate in research - Youth service professional ........177
  2.B Interview guide for youth service professionals ..........................180

APPENDIX 3: Survey administration to street-involved youth ..................181
  3.A Questionnaire administered to street-involved youth ......................182
  3.B Recruitment poster .....................................................................205
  3.C Consent to participate in research – Youth survey ........................206
# LIST OF TABLES

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Thematic content from interviews with 10 pet-owning street-involved youth in Ottawa, Toronto, Hamilton, and Kingston, ON: Physical effects of pet ownership on street-involved youth</td>
<td>72</td>
</tr>
<tr>
<td>2.2</td>
<td>Thematic content from interviews with 10 pet-owning street-involved youth in Ottawa, Toronto, Hamilton, and Kingston, ON: Emotional effects of pet ownership on street-involved youth</td>
<td>73</td>
</tr>
<tr>
<td>3.1</td>
<td>Physical effects of pet ownership on street-involved youth as described by youth service professionals</td>
<td>113</td>
</tr>
<tr>
<td>3.2</td>
<td>Emotional effects of pet ownership on street-involved youth as described by youth service professionals</td>
<td>114</td>
</tr>
<tr>
<td>4.1</td>
<td>Number of survey participants by city and location</td>
<td>143</td>
</tr>
<tr>
<td>4.2</td>
<td>Prevalence of regular drug use by drug group</td>
<td>144</td>
</tr>
<tr>
<td>4.3</td>
<td>Risk factor variables tested for their unconditional association with shelter use, depression, and use of non-group 1 drugs</td>
<td>145</td>
</tr>
<tr>
<td>4.4</td>
<td>Sourcing of 121 pets from 89 pet-owning street-involved youth in Ottawa, Toronto, Hamilton and Kingston, ON</td>
<td>146</td>
</tr>
<tr>
<td>4.5</td>
<td>Factors considered important in the decision to have a pet by 89 pet-owning street-involved youth</td>
<td>147</td>
</tr>
<tr>
<td>4.6</td>
<td>Percent of participants in agreement to statements regarding the effects of pet ownership by 89 pet-owning street-involved youth</td>
<td>148</td>
</tr>
<tr>
<td>4.7</td>
<td>Logistic Regression Analysis of CES-D-based Diagnosis of Depression from 189 Street-involved Youth in Ottawa, Toronto, Hamilton, and Kingston</td>
<td>149</td>
</tr>
<tr>
<td>4.8</td>
<td>The observed and predicted frequencies for a CES-D-based diagnosis of depression from 189 street-involved youth with a cut-off of 0.5</td>
<td>150</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

2.1 Thematic map on the effects of pet ownership on street-involved youth ..........71

2.2 Effects of pet ownership on housing demonstrating the substantive theme of “pet before self” .................................................................74

3.1 Thematic map of youth service professionals’ perceptions on the effects of pet ownership on street involved youth ........................................11
CHAPTER 1

INTRODUCTION, LITERATURE REVIEW, AND OBJECTIVES
INTRODUCTION

Homelessness in Canada is on the rise, with children and youth comprising a greater proportion of the total homeless population (Canadian Housing and Renewal Association, 2002; Kelly & Caputo, 2007). Although no current census data exists, it is estimated that on any given day, up to 150,000 youth between the ages of 15 and 24 years are without shelter in Canada (Public Health Agency of Canada, 2006). In the City of Toronto alone, it is estimated that on any given night over 500 youth are homeless (Toronto Shelter, Support & Housing Administration, 2010). One of the issues surrounding homelessness is the ability to define what it means to be “homeless”. Estimates of the number of homeless youth are typically underestimated, due to the large number of individuals who are not publicly visible (the “hidden homeless”), such as those who are “couch surfing”, squatting, engaging in prostitution for shelter, or utilizing other forms of transient or marginal housing (Evenson, 2009; Kelly & Caputo, 2007; Public Health Agency of Canada, 2006). Causes of homelessness among youth are varied, and include termination of foster care when age of majority is reached (i.e., 18 years of age), parental abandonment, escaping sexual abuse and/or physical violence within the home, troubled family relationships, family poverty, and a desire to live independently (Abdalian, 2004; Martijn & Sharpe, 2006; Public Health Agency of Canada, 2006; Sanchez, Waller, & Greene, 2006).

Street-involved youth are a particularly vulnerable sub-section of the homeless population with an identified high prevalence of health problems, addictions, and mental health disorders (Boivin, Roy, Haley, & Fort, 2005; Kelly & Caputo, 2007). Youth have indicated preference for the terms applied to them, preferring ‘street-involved’ vs. ‘at-risk’ (Evenson, 2009). However, within the studied field of homelessness, there is a lack of unification of terms and the terms
'homeless' and 'street-involved' are often used interchangeably. However, a continuum exists in the level of street-involvement in which youth may find themselves. There are youth who still have a connection to home but go between home and the street, those who are chronically homeless, meaning that they are homeless for long periods of time or repeatedly homeless, as well as those youth who are heavily entrenched in the street lifestyle and culture, with no connection to home whatsoever (Higgitt, Wingert, & Ristock, 2003). Some of these youth are pet owners, and in qualitative studies of street-involved youth looking at coping mechanisms of loneliness and perceptions of youth services, benefits of pet ownership by youth have been demonstrated and include providing companionship, emotional support, motivation to take care of themselves and make better choices (Bender, Thompson, McManus, Lantry, & Flynn, 2007; L. Rew, 2002; L. Rew, 2000; S. J. Thompson, McManus, Lantry, Windsor, & Flynn, 2006).

A notable number of street-involved youth appear to have pets. With no published reports on the prevalence of pet ownership in this population, a 2009 study on criminalization of street youth in Toronto found that in a sample of 245 youth, 12.8% of participants reported being a pet owner (B. O’Grady, electronic mail, January 3, 2012). Similarly, a recent study of adult homeless and vulnerably housed in Toronto, Ottawa, and Vancouver, found that 11.5% of their sample population reported being pet owners (S. Hwang, electronic mail, January 15, 2010). These pet owners for whom significant obstacles already exist face additional challenges of providing not only food and care for their pet with very limited means, but also shelter for both themselves and their pet. An internet search for homeless shelters in Canada who advertise as being pet-friendly resulted in only six shelters, one in Halifax, NS, which operated seasonally, one in Toronto, ON and four in Vancouver, BC one of which accepts “small pets only”¹. Given that some services

¹ An internet search conducted on October 4, 2011 using Google search engine, and key words: homeless, emergency, shelter, pet-friendly, pets, welcome, Canada, Vancouver, Montreal, Ottawa, Toronto resulted in 6 hits.
may choose not to advertise as being pet-friendly and that no comprehensive list of pet-friendly agencies exists, it is difficult to assess the accessibility of services or the awareness of the issues surrounding pet ownership among the homeless.
The following literature review will provide an overview of the following topics:

1. Effects of pet ownership on human health
2. Effects of pet ownership on socially marginalized populations
3. Homeless youth in Canada
4. Health of homeless youth
5. Service utilization by homeless youth
6. Drug use among homeless youth
7. Pets and homeless youth
8. Mixed methodology
9. Participatory Action Research
10. Center for Epidemiologic Studies Depression Scale
LITERATURE REVIEW

Effects of pet ownership on human health

In the last 30 years, research into the human health benefits of pet ownership has progressed to demonstrate therapeutic, psychological, physiological and psychosocial benefits for individuals (Barker & Wolen, 2008; A. M. Beck & Meyers, 1996; E. Friedmann, Thomas, & Eddy, 2000; L. A. Hart, 2006; L. A. Hart, 2000; Johnson, 2003; Wells, 2009). The term “zooeyia” was coined by Hodgson and Darling (2011) as the evidence base for the positive benefits to human health from interacting with animals, and seeks to add to the One Health initiative by focusing not only on the negative aspects of zoonoses, but also the positive effects of animals (K. Hodgson & Darling, 2011). For example, the beneficial effects of companion animals on physical health has included pet ownership predicting one-year survival for post-myocardial infarction patients (E. E. Friedmann, Katcher, Lynch, & Thomas, 1980) which has been supported in further studies on the effects of pet ownership on stress reactivity in cardiovascular disease (E. Friedmann et al., 2000; Patronek & Glickman, 1993). Allen (2002) conducted a study looking at the effects of the presence of friends, spouses, and pets on cardiovascular reactivity to psychological and physical stress, and found that relative to people without pets, people with pets had significantly lower heart rate, blood pressure levels and faster recovery. Pet owners were further found to have the lowest reactivity and quickest recovery from the applied stress when a pet was present (Allen, Blascovich, & Mendes, 2002). Another study demonstrated that children who had pets and had high pet attachment were more empathetic and pro-socially oriented than non-pet owners (Vizek-Vidovic, Arambašic, Keresteš, Kuterovac-Jagodic, & Vlahovic-Štetic, 2001).
The effect of pets on their owner’s physical activity and exercise has been demonstrated, among both children and adults (Cutt et al. 2008; Owen et al. 2010). In a cross-sectional survey of 1813 adults, dog ownership was found to be independently associated with physical activity and walking, with the adjusted odds of dog owners achieving sufficient physical activity and walking being 57% to 77% higher compared with those not owning dogs (Cutt et al., 2008). A population-based study of 2065 children between 9 and 10 years of age (10% of whom had family dogs), found that children from dog-owning families spent more time in light or moderate to vigorous physical activity and recorded higher levels of activity counts per minute (Owen et al., 2010).

Pets have also been demonstrated to be motivators of positive change in the lives of their owners. In a one-year prospective controlled weight control study, Kushner et al. (2006) found that overweight companion dogs acted as social support for weight loss and physical activity for overweight or obese pet owners and that this effect was maintained over one year (Kushner, Blatner, Jewell, & Rudloff, 2006). Millberger et al. (2009) found that the danger of second hand smoke exposure to pets was a motivator for pet owners to quit smoking, encourage other household members to quit smoking, and prohibit smoking inside the home (Millberger, Davis, & Holm, 2009).

On a broader scale, Wood (2007) found that pets were facilitators of social contact, interaction, and community participation using both focus groups and quantitative surveys conducted in Australia, and suggested that pet ownership confers social capital at a neighbourhood or community level, with companion animals “acting as a social bridge between people” and contributing to “the "ties that bind" communities together as a civil society." (L. J.
Service animals, animal-assisted therapies (AAT) and animal-assisted activities (AAA) have been utilized with broad applications in a number of populations including those suffering from dementia, autism, psychiatric disorders, as well as reading programs for children and those with special needs, and pet visitation programs with group-living elderly (Adams, 2010; A. M. Beck, 2000; Burrows, Adams, & Spiers, 2008; CrowleyRobinson, Filan & Llewellyn-Jones, 2006; Fenwick, & Blackshaw, 1996; Fine, 2006; Velde, Cipriani, & Fisher, 2005; Muñoz Lasa, Ferriero, Brigatti, Valero, & Franchignoni, 2011; Murtlow, 2009; Rossetti & King, 2010; Walsh, 2009). For example, a study examining the effects of service dogs for families with a child with autism demonstrated that the dog conferred safety and freedom, and therefore enhanced well-being for those families (Burrows et al., 2008). However there is still debate about the role and mechanism of AAT and AAA effects. For instance, a systematic review of the literature on canine-assisted interventions among the elderly, found conflicting results among the published literature indicating that the beneficial results of previous research were inconclusive (Stern & Konno, 2011). Similarly, Winefield (2008) found that when controlling for other variables, neither the effect of pet ownership nor pet attachment were associated with the health or well-being of community–living elderly adults (Winefield, Black, & Chur-Hansen, 2008), demonstrating a need for further research in this area. While research in this field is growing, it is recognized that pet ownership may also have neutral or even negative impacts on human health for certain individuals and populations (Simon, 1984). For example, pet ownership may negatively affect the elderly with mobility issues by posing a physical hazard causing injury and even death (Kurrle, Day, & Cameron, 2004). Qualitative interviews with elderly participants
conducted by Chur-Hansen (2008) found that reasons for not owning a pet included emotional reasons, such as concern about grieving the loss of a pet and concern about the pet grieving the loss of the owner. Another reason identified was competing demands on time and energy. Health concerns (human), cleanliness, hygiene, behaviour of pets, and expense were also reported negative aspects of pet ownership and reasons cited by the elderly for not owning a pet (Chur-Hansen, Winefield, & Beckwith, 2008). The effects of pet ownership on human health and well-being are broad and research has demonstrated that there are significant beneficial effects of pet ownership at both the individual and population level. Indeed, there are also potential liabilities and challenges for some populations of pet owners, as well as areas of inconclusive research that warrant further investigation.

**Effects of pet ownership in socially marginalized populations**

Research into the effects of pet ownership has also included socially marginalized populations, including the homeless, elderly women living alone, the incarcerated, and victims of violence (CrowleyRobinson et al., 1996; Faver & Strand, 2003; Furst, 2006; Holtslander & Duggleby, 2009; A. H. Kidd & Kidd, 1994a; A. H. Kidd & Kidd, 1994b; Kramer, Friedmann, & Bernstein, 2009; Krause-Parello, 2008; Mallon, 1992; Siegel, 1990; Singer, Hart, & Zasloff, 1995; Zasloff & Kidd, 1994). Along with previously mentioned studies of the elderly, Zasloff (1994) found that pet attachment confers support for loneliness among the elderly living alone (Zasloff & Kidd, 1994), and this finding has been supported by evidence that among elderly women living alone in the community, pet attachment support appears to mediate the effect of loneliness on general health (Krause-Parello, 2008; Zasloff & Kidd, 1994). Similarly, Siegel (1990) found that pet attachment (in particular, those with dogs) buffered the effects of stressful
life events on physician utilization among the elderly. In a qualitative study with elderly women who had recently lost their spouse to cancer, participants described pets as providing emotional support, a reason to go out for a walk, and companionship (Holtslander & Duggleby, 2009).

Another socially marginalized population where animal programs are being increasingly implemented is with prison-based animal programs, which are now operating in most states of the United States (Furst, 2006; Ormerod, 2008; Schwartz, 2003). The majority of programs are community service programs using dogs and male inmates, and it has been noted that more empirical study of these programs is needed (Furst, 2006; Ormerod, 2008). However, the research to date has demonstrated positive effects on the rehabilitation of inmates; in a 2007 quantitative study with 48 male inmates in a minimum-security prison in Virginia, the treatment group that participated in a human-animal interaction program demonstrated statistically significant improvements in behavioural and psychosocial outcomes, including social skills and institutional infractions, compared to the control group who received no animal interaction (Fournier, Geller, & Fortney, 2007). Qualitative inquiry into the experiences of inmates in a prison canine program support these findings, with themes of patience, social skills, helping others, normalizing effect and self-esteem, among others emerging from interviews with inmates (Ormerod, 2008; Turner, 2007). Pet-facilitated therapy has also been qualitatively described as having beneficial effects on decreasing illicit drug use of those incarcerated (Lai, 1998) and animal-assisted therapy has been demonstrated to improve the quality of the therapeutic relationship in the treatment of substance dependence, resulting in higher treatment outcomes (Lange, Cox, Bernert, & Jenkins, 2006; Wesley, Minatrea, & Watson, 2009). However, Ormerod (2008) emphasizes that these programs must be carefully planned and consistent in their approach, and with recognized standards (Ormerod, 2008).
The link between animal abuse and interpersonal violence has been well documented (F. R. Ascione et al., 2007; Lockwood & Ascione, 1998; Henderson, Hensley, & Tallichet, 2011; McPhedran, 2009; Miller, 2001; Tallichet & Hensley, 2009; Volant, Johnson, Gullone, & Coleman, 2008), and the effects of pet ownership among victims of violence have demonstrated both benefits and liabilities associated with these human-animal relationships (Faver & Strand, 2003; Fitzgerald, 2007; Flynn, 2000). Pet ownership among victims of violence and concern over the welfare of the animal, have been reported to be a barrier to women seeking safe shelter, and may result in a delay in leaving an abusive situation (Ascione & Arkow, 1999; Faver & Strand, 2003; Fitzgerald, 2007; Flynn, 2000). Flynn (2000) found that pets were also important sources of social support for abused women, with participants indicating a stronger pet attachment if the pet was also abused (Flynn, 2000). Flynn also found that the emotional support from pets was stronger if the woman had no children, and this is supported by Ascione (2007) who found that women who delayed leaving an abusive situation because of concern for their pet were more likely to be women without children (F. R. Ascione et al., 2007), indicating stronger pet attachment with further social isolation in this population. In qualitative interviews with abused women, Fitzgerald (2007) describes the role of the pet as “protectors and fellow sufferers” as both pet and woman are victims of violence, creating a unique bond in which for some participants their pets became an integral part of their "plans of survival" and a reason to not end their own lives (Fitzgerald, 2007), indicating a possible protective effect against suicide among this high-risk population.

Among these socially marginalized populations, pets have been demonstrated to have beneficial effects across a range of psychosocial areas including improving social relationships and self-esteem. Pet attachment appears to play an important role in modulating these effects,
and understanding how high attachment affects the choices pet owners make in their lives may have significant implications to not only understanding motivational contexts for decision-making among the socially marginalized but also potential intervention points and strategies.

**Pet ownership among the homeless**

Of particular interest are those pet owners whom are homeless, and while pet ownership among the homeless population has not been well studied, research to date has found pet ownership to have both benefits, such as increased social, emotional, and physical health, and liabilities, including difficulty finding stable pet-friendly housing for homeless individuals (A. H. Kidd & Kidd, 1994a; Singer, Hart, & Zasloff, 1995). Pet ownership among the homeless has also been demonstrated to contribute to a positive personal identity for homeless pet guardians (Irvine, Kahl, & Smith, 2012). It is unknown how many of the homeless in Canada are pet owners, however in a recent study looking at the barriers for homeless adults transitioning to stable housing in Toronto, Ontario, Hwang et al. (2010) found that 8% of homeless and 11% of vulnerably housed participants were pet owners (S. Hwang, electronic mail, January 15, 2010). A 2009 study of street-involved youth in Toronto similarly found that 12.8% of participants reported being a pet owner (B. O’Grady, electronic mail, January 3, 2012). In the U.S., the National Coalition for the Homeless estimates that approximately 5-10% of the 3.5 million homeless are pet owners. In a study using data from a Homeless Management Information System (an electronic database), Cronley et al. (2009) analyzed 4100 entries from Knoxville, Tennessee and found that 5.5% reported animal caretaking (Cronley, Strand, Patterson, & Gwaltney, 2009). The investigators further found that a significantly larger percentage of homeless people who were animal caretakers reported domestic violence prior to being homeless, compared to those who were not animal caretakers (Cronley et al., 2009).
In one of the first studies investigating the roles of pets in the lives of the homeless, Kidd and Kidd (1994) surveyed 52 adult homeless pet owners in San Francisco, and found that 74% of the male and 48% of the female participants identified their pets as their only source of companionship and love (A. H. Kidd & Kidd, 1994b). The important role that pets play in the lives of the homeless is supported by the themes generated from qualitative research conducted in six urban centres in Canada with homeless women who own pets, which included providing companionship, unconditional acceptance, providing comfort, providing a sense of responsibility, the health and therapeutic value of companion animals, and providing a sense of safety (Labrecque & Walsh, 2011). Dog ownership among eight homeless women in Auckland, New Zealand was demonstrated to not only provide companionship, but dogs were commonly described as family, and participants reported that they would continue to live outdoors if their dogs could not go with them (Bukowski & Buetow, 2011). This is consistent with early work by Singer et al. (1995) who surveyed 66 homeless pet owners in Sacramento regarding re-housing, and found that 93.3% of male and 96.4% of female respondents would refuse housing without their animals (Singer et al., 1995). The British pet charity, The Blue Cross reported from a 2002 survey that 86% of homeless people with pets had been refused accommodation because they owned a pet (Hamilton, 2004). Of the effects of pet ownership on health care use, in a study of 51 homeless adults in Cambridge, UK by Taylor (2004), dog owners were found to use medical care facilities significantly less than non-dog owners (Taylor, Williams, & Gray, 2004). Although lacking details on their methodology, in a report for The Blue Cross, Baker (2001) found drug use to be higher among non-dog owning adult homeless participants compared to dog owning adult homeless (37% versus 49%) (Baker, 2001), Taylor at al. (2004) did not find a significant difference between pet owners and non-pet owners in terms of drug use, indicating a need for further investigation into the effects of pet ownership on drug use among the homeless.
Similar to other socially marginalized populations, pet ownership appears to confer the emotional benefits of companionship and love, however, high pet attachment among the homeless may also lead to additional challenges associated with obtaining housing and accessing services with a pet.

**Homeless youth in Canada**

The target population for this thesis is homeless youth, and it is estimated that on any given day, up to 150,000 youth are without shelter in Canada (Public Health Agency of Canada, 2006). In the City of Toronto alone, it is estimated that on any given night, over 500 youth are homeless (Toronto Shelter, Support & Housing Administration, 2010).

In major Canadian cities, females comprise between one-third and one half of the homeless youth population (Canadian Housing and Renewal Association, 2002; Canadian Mortgage and Housing Association, 2001). Aboriginal youth (especially females), are over represented along with gay, lesbian, bisexual, and transgendered youth (Canadian Housing and Renewal Association, 2002; Canadian Mortgage and Housing Association, 2001). Trends among homeless youth include an increased incidence of chronically homeless, youth entering the street environment at a younger age (especially females), and more youth self-identifying as gay, lesbian, bisexual or transgendered (Canadian Housing and Renewal Association, 2002; Canadian Mortgage and Housing Association, 2001).

**Health of homeless youth**

The consequences of homelessness for youth are dire and include a decrease in both physical and emotional health, increased vulnerability to victimization, criminalization, malnutrition, drug use and other addictions, prostitution and other forms of income generation in order to survive (Boivin et al., 2005; S. Gaetz, 2002; S. Gaetz & O'Grady, 2002; Mallett,
Rosenthal, & Keys, 2005; O'Grady & Gaetz, 2004; Salomonsen-Sautel et al., 2008; Tarasuk, Dachner, & Li, 2005). The length of time on the street has been established as a contributing factor in substance abuse and a decline in health (Kelly & Caputo, 2007; Milburn et al., 2007; Rosenthal, Mallett, Milburn, & Rotheram-Borus, 2008)

Physical Health

In a review of 52 peer-reviewed Canadian epidemiologic studies, Boivin (2005) and colleagues described the health of Canadian street youth from the perspectives of infectious disease, mental health and addiction, pregnancy, victimization, and mortality (Boivin et al., 2005). Increased prevalence of Chlamydia (Ottawa Public Health, 2011) and both hepatitis B and C among street youth was noted compared to non-street youth, and it was found the incidence of HIV infection was rising in this at-risk population (Boivin et al., 2005), a concerning finding supported by other reports (Dematteo et al., 1999; Kelly & Caputo, 2007; Nyamathi et al., 2005). Not surprisingly, street youth have also been identified as nutritionally vulnerable (Tarasuk et al., 2005), exacerbating many other conditions including depression, tuberculosis, hepatitis B, HIV and other sexually transmitted diseases (Dachner & Tarasuk, 2002). In a Toronto-based study, homeless males had lower intakes of energy and all nutrients, while females had lower intakes of most nutrients, with both genders obtaining a greater proportion of energy from alcohol (rather than from food sources e.g. protein, fat, or carbohydrate) (Tarasuk et al., 2005).

Interviews conducted with street youth in Winnipeg, MB support the universal affliction of “street sickness” among this population, described by youth as respiratory infections and a constant feeling of malaise (Winger, Higgit, & Ristock, 2005) due to exposure to the elements, deprivation of sleep, inability to maintain personal hygiene, and nutritional deficit often from food insecurity (Higgit, Wingert, & Ristock, 2003; Kelly & Caputo, 2007). In surveys conducted
with 355 street-involved youth in Calgary, AB, physical conditions and mental health issues were found to be significantly related to level of street involvement, with those currently living on the street or having a history of living on the street having a higher prevalence of physical conditions, mental health issues and learning disabilities compared to those youth who were involved in street culture, but had never lived on the street (Worthington et al., 2009). This supports reports from other urban centres including the 2005 homeless count from Greater Vancouver, where 74% of homeless youth indicated that they had one or more health conditions (Social Planning and Research Council, 2005).

In a Montreal, QC based study conducted between 1995 and 2000, Roy et al. (2004) established a standardized mortality ratio (SMR) of 11 among a cohort of street-involved youth, indicating a mortality rate 11 times the rate expected for housed peers of the same age and sex in the province (É. Roy et al., 2004). This consisted of 26 deaths that included 13 suicides and 8 drug overdoses (É. Roy et al., 2004). A follow-up study, conducted between 2001 and 2006 demonstrated significantly lower SMR (only 5 deaths: 2 overdose; 1 suicide; 1 unintentional injury; 1 unknown), with mortality rates among this population of street youth in Montreal, decreasing by 79% between those time periods, while declining in the general population by only 19% (E. E. Roy, Haley, Boudreau, Leclerc, & Boivin, 2010). The researchers of this study suggest that an explanation for this dramatic decrease could be partially due to implementation of new services for the homeless between 2000 and 2003 that included greater funding for community-based agencies and organizations for social, health, and outreach programs and initiatives, such as suicide prevention, mental health support and social housing (E.E. Roy et al., 2010); suggesting that community and support-based programs can have an influential impact on the mortality of street youth.
Mental health

The emotional distress experienced by youth living on the street has been explored by qualitative researchers (S. A. Kidd & Davidson, 2007; L. Rew & Horner, 2003), and is often the root of or exacerbate existing mental health issues or psychological symptoms (S. J. Thompson, Bender, Windsor, Cook, & Williams, 2010). Highly stressful and/or traumatic experiences in the lives of youth both before and after becoming homeless contribute to this emotional distress. In a study conducted within the maritime provinces of Canada, Coates (2010) reported that youth face on average 11-12 different forms of traumatic events, half of which occur prior to becoming homeless, and half after (Coates & McKenzie-Mohr, 2010). In Canada, it is estimated that 33% or more of homeless youth suffer from Major Depressive Disorder or Post Traumatic Stress Disorder (PTSD), and that multiple diagnoses are present in up to 60% of those with mental illness. In a review of the research on PTSD among street youth, Thompson (2006) found high rates of co-morbidity with PTSD and substance abuse (S. J. Thompson, McManus, & Voss, 2006).

Suicide attempt rates are reported to be between 20 and 40%, while only 9% of youth reported accessing appropriate mental health services (Evenson, 2009). Suicide (along with drug overdose) has been identified as a leading cause of mortality among homeless youth in Montreal, QC (É. Roy et al., 2004). Homeless youth report feelings of low self-worth, isolation, and rejection, which contribute to suicidal ideation (S. A. Kidd & Kral, 2002). Predictors of suicide or suicidal ideation include a history of sexual and/or physical abuse, drug abuse, internalization of stress or disengagement coping, victimization, and having a friend attempt suicide (Molnar, Shade, Kral, Booth, & Watters, 1998; Votta & Farrell, 2009). Length of time on the street has been associated with risk for more severe symptoms of depression and low self esteem (Saade &
Despite this, other areas of research have focused on the coping abilities, resourcefulness and resiliency of street-youth. Along with self-worth and self-confidence, ability to self-care, having determination, interpersonal relationships and spirituality are associated with positive outcomes of coping with street culture and transitioning off the street (Bender et al., 2007; S. A. Kidd, 2003; S. Kidd & Shahar, 2008; Lindsey, Kurtz, Jarvis, Williams, & Nackerud, 2000; L. Rew & Horner, 2003). Homeless youth are not often acknowledged for their “street smarts” and problem-solving abilities to navigate the street culture. Recognition of many of these positive attributes of street-youth support the “strengths-based” model for youth services and interventions. Focusing on youth’s skills and abilities is effective in engaging youth because “it is their strengths in overcoming difficulties that mitigate negative outcomes” (Bender et al., 2007).

**Service utilization by homeless youth**

Accessing services by homeless youth has been researched, with conflicting results (Carlson, Sugano, Millstein, & Auerswald, 2006; Garrett et al., 2008; Sweat, Nyamathi, Christiani, & Mutere, 2008; S. J. Thompson et al., 2006). This indicates that there may be other variables that need to be considered as factors affecting whether youth access services. In the City of Toronto, it has been estimated that 75% of homeless youth do not use shelter services (Community Social Planning Council of Toronto, 1998). In a study involving 229 homeless youth in San Francisco, Carlson (2006) found that only 7% of youth reported accessing shelter services (Carlson et al., 2006), whereas a 2009 survey of street youth in Ottawa found that 18% of participants reported staying in a shelter or hostel in the three months prior to the interview (Ottawa Public Health, 2011). For youth who engage in illicit substance use, it has been reported that shelter rules, including abstinence, and a lack of privacy were sufficient reason for youth to
avoid accessing shelters (Krüsi, Fast, Small, Wood, & Kerr, 2010). This finding is supported by qualitative interviews conducted with street-involved youth, who described a nonjudgmental atmosphere and flexible policies as important for youth to use services (Garrett et al., 2008). The importance of accessing the shelter system is linked to their ability to access other services through that system, including housing support. In a study of 45 homeless/at-risk youth in Halifax, Kisely et al. (2008) found that those in supportive housing self-reported better health and lower rates of substance abuse (Kisely et al., 2008), indicating an obvious need to increase engagement of youth in support services.

Street-involved youth have been traditionally considered difficult to engage, and low rates of service utilization by homeless youth have been generally reported (Auerswald & Eyre, 2002; Carlson et al., 2006; De Rosa et al., 1999). However, a study by Carlson (2006) found that nearly all (99%) of the 229 youth participants utilized some type of service in the preceding three months (Carlson et al., 2006). Similarly, a report of 200 street youth from Ottawa, ON reported that the majority of participants used some form of support service, with 86% accessing services at the Youth Services Bureau (Ottawa Public Health, 2011). As more research focuses on specific areas of service, there is more evidence that factors affecting service utilization are numerous and varied. Accessing shelter services, mental health services, medical services or drug-related services varies by the individual youth, their health and experience, and where they are in terms of transitioning out of street life or how engrained they are in street-life and culture (Carlson et al., 2006). In a mental health assessment involving interviews with 60 homeless youth, Hughes et al. (2010) found that those most in need of mental health support reported significantly less service satisfaction, as well as less hope about the future (Hughes et al., 2010). Among medical services, a report from Ottawa, ON found that 64% of street youth reported
barriers to accessing health services which included transportation to services, long waiting times for service and lack of a health card (Ottawa Public Health, 2011). A Calgary-based report on youth homelessness found that 17% of participants reported not using health services, while 23% reported using hospitals, 66% reported using walk in clinics, and 19% and 13% used doctor’s offices or mobile clinics on the street, respectively (Worthington et al., 2009). Other studies identified that only 50% of youth reported accessing medical care (Carlson et al., 2006). Hughes et al. (2010) study of 60 homeless youth in Halifax, NS found that 51% (n=30) of respondents had utilized emergency services, 44% (n=26) had visited a family doctor, 20% (n=12) had accessed a Community Health Clinic, and 22% (n=13) reported using mental health services (Hughes et al., 2010). Carlson (2006) further found that medical service utilization was highest among youth who were attempting to leave the street, while drug-related service utilization was lowest among youth “most entrenched in street life” (Carlson et al., 2006).

**Drug use among homeless youth**

According to surveillance data from 1999-2003 on street youth, the Public Health Agency of Canada reported that approximately 80% of street youth reported smoking daily, while 40% reported recent alcohol intoxication (Public Health Agency of Canada, 2006). Similarly, in a large-scale report, interviewing 689 street-involved youth in three urban Canadian cities, researchers found that more than 50% of youth reported drug and alcohol abuse and addiction as a coping mechanism for homelessness (Evenson, 2009). These high numbers are supported by municipal reports on homeless youth including the 2009 Calgary Homeless Foundation report which found that 94% of street youth had used a substance in the last two weeks, and a 2011 Ottawa Public Health report which found that 45% of youth reported alcohol binging once or
more per month in the three months prior to the survey (Calgary Homeless Foundation, 2009; Ottawa Public Health, 2011). Even more concerning is the finding that 57% of youth reported starting use of alcohol or drugs between the ages of 12 and 15 years, and almost one third (29%) reported they started using drugs or alcohol before the age of 12 (Calgary Homeless Foundation, 2011; Worthington et al., 2009). Poly-drug use among street youth is also a consistent finding (Bousman et al., 2005; Chen, Tyler, Whitbeck, & Hoyt, 2004; Kirst, Erickson, & Strike, 2009; S. J. Thompson, Rew, Barczyk, McCoy, & Sedhi, 2009), with one study of 113 youth in San Diego finding over half (54.1%) of respondents reporting the use of three or more drugs in the past three months, with alcohol, tobacco and marijuana being most frequently reported (Bousman et al., 2005). Use of intravenous drugs by 25% of homeless youth participants (in the last 3 months) was reported in one study (Carlson et al., 2006).

Significant predictors of substance abuse among street youth include history of early sexual abuse, length of time on the street, depression, involvement with deviant peers and peer modeling (Bousman et al., 2005; Chen et al., 2004), social networks/estrangement, economic factors and future expectancies (Gomez, Thompson, & Barczyk, 2010; S. J. Thompson et al., 2009). Correlations between length of drug (e.g., alcohol, cocaine, amphetamines) use and psychological distress, and type of drug (heroin) use and housing risk have also been demonstrated (Rhule-louie, Bowen, Baer, & Peterson, 2008).

**Pets and homeless youth**

While longitudinal studies are much needed in the field of pet attachment studies to determine temporal associations, it is difficult to achieve with a very transient homeless youth population. The research on pet ownership among homeless youth has thus far been qualitative in
nature, and focused on issues surrounding coping mechanisms and housing, including Rew (2000) who found that pet ownership played a role among homeless youth in coping with loneliness and depression and provided a reason for youth to make better choices for themselves and their pets, including decisions to avoid incarceration or separation from their pet. This mechanism of coping was supported by further research by Rew in 2002, where 14 of 32 youth participants in focus groups identified making friends or getting a dog or other pet as strategies for feeling less lonely (L. Rew, 2002). Thompson et al. (2006) conducted focus groups with 60 homeless youth in Texas on their perceptions of youth services, and found that the pet-owning participants described feeding their pets before themselves, that pets provide emotional support, love and safety, as well as a motivator to take better care of themselves and “stay out of trouble”, and that they would purposely seek out pet-friendly services (S. J. Thompson et al., 2006).

Further focus group-based research examining the strengths of homeless youth supported these findings that pets provide a source of stability, responsibility, and pride (Bender et al., 2007). These effects of the human-animal bond support findings that allowing space for pets can improve service engagement by homeless youth (L. Rew, 2000).

As previously mentioned, the study of homeless youth has largely been qualitative in nature, lending itself appropriately to qualitative inquiry. As researchers in the field note, homeless youth are a difficult population to study both quantitatively and longitudinally because of their transiency, the heterogeneity of the population, varying cultural factors, sexual orientation, personal circumstances, reasons for being on the street, and level of entrenchment which complicate the numerous confounding variables and risk factors that are present (Bender et al., 2007; Karabanow, 2003; Kelly & Caputo, 2007; S. A. Kidd & Davidson, 2007; S. J. Thompson et al., 2006; Ulager et al., 2005). With both the known and potential benefits of pet ownership as
well as the greater challenges that youth face as pet owners, there is a need to investigate further the role of pet ownership among homeless youth and explore ways to engage and support these youth and these unique human-animal relationships.

**Mixed Methodology**

A mixed methodology of both qualitative and quantitative methods was used in this thesis to research the effects of pet ownership on street-involved youth. In the current study, mixed methods were used to provide a form of “triangulation” in which a combination of more than one research strategy were used to confirm as well as ensure completeness of findings (Speziale & Carpenter, 2007). The forms of research that were utilized for triangulation in this investigation, include the literature review as a form of historical and secondary data, followed by acquisition of primary data through qualitative inquiry using one-on-one interviews with key informants, then quantitative methods via survey administration.

As pet ownership among street-involved youth is a relatively new area of research, it lends itself well to qualitative inquiry, where descriptions of the lived experiences from those who are the intended targets of the research are sought. Through the narratives and descriptions of participants’ experiences of being both street-involved and a pet owner, this phenomenological approach produces rich data that builds hypotheses vs. tests them. From here, administration of a survey to quantitatively test those hypotheses contributes to the triangulation process.

**Participatory Action Research**

Participatory Action Research (PAR) has been described as “including those who are intended as the subject of the research in all aspects of the research, including the design, implementation and analysis of the project.” (S. Gaetz & O'Grady, 2002; O'Grady & Gaetz, 2004). While PAR is practiced on a continuum, PAR also offers the opportunity for the
participants to become empowered and become vehicles of change and action in their circumstance through full engagement in the research and its outcomes. PAR has been used particularly with marginalized populations, as this form of research uniquely gives the participant researcher(s) a “voice” in which to inform the study on their perspectives and experiences, and “act on their own behalf” as key stakeholders (Speziale & Carpenter, 2007), and was used in the final chapter of this thesis.

**Center for Epidemiologic Studies Depression Scale**

The Center for Epidemiologic Studies Depression Scale is a validated (Li, M. & Rodin, G., 2011) 20-item self-report measure based on the individual’s experiences in the past seven days. Each item includes four response categories (<1 day; 1-2 days; 3-4 days; 5-7 days), scored from 0 to 3. In order to quantitatively assess the current emotional health of youth participants, and compare pet owning with non-pet owning street youth on the outcome of depression, the CES-D was used (Ayerst, 1999; Radloff, 1977).
OBJECTIVES

The objectives of the following thesis were to:

1. Characterize the roles and relationships between homeless youth and their pets
   
   (Chapter 2)

2. Explore the challenges associated with pet ownership among homeless youth
   
   (Chapter 2)

3. Explore youth’s perceptions of the effect that pet ownership has had in their lives
   
   (Chapter 2)

4. Explore the perceptions among youth service providers of the roles and relationships between street-involved youth and their pets, the challenges youth face as pet owners, and their unique service needs and support (Chapter 3)

5. Contribute to development of a more broadly applied survey instrument (Chapters 2 and 3)

6. Describe the pet owning street-involved youth population in Ontario and their pets
   
   (Chapter 4)

7. Compare homeless youth who are pet owners and those who are non-pet owners in terms of drug use, shelter access, and depression (Chapter 4)

8. Explore further the roles, relationships and effects of pet ownership among street-involved youth, including pet loss (Chapter 4)
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CHAPTER 2

Effects of pet ownership among street-involved youth: A qualitative analysis

Prepared in the style of the *Journal of Sociology and Social Welfare*
Abstract

In Canada, it is estimated that there are 150,000 homeless youth on any given night, many of whom are pet owners. The limited research on pet ownership among those who are homeless has demonstrated both benefits and liabilities. Even less is known about the impact of pet ownership on homeless youth, who are often considered more difficult to engage. This descriptive qualitative study explored the issues and effects of pet ownership among street-involved youth from the perspective of the youth themselves, through a series of one-on-one, semi-structured interviews. “Pet before self” emerged as the substantive theme, with first level sub-themes of both “physical” and “emotional” effects. Physical sub-themes included effects on housing, income generation activities, drug use and arrests, while emotional sub-themes included added stressors, roles of pet and the human-animal relationship. Second level sub-themes were “benefits” and “liabilities.” The findings of this research include previously unidentified benefits that pet ownership may have for street-involved youth, such as creating structure and routine, and decreasing their use of drugs. In contrast, a number of negative effects such as the impact of pet loss were also identified. Youth consistently reported making choices to stay with their pet regardless of the liabilities pet ownership has for their own health or success. Therefore, in order to engage and successfully serve homeless youth for whom a significant human-animal bond exists, understanding and support of this relationship from youth service providers are needed.

Keywords: homeless, pets, street-involved, youth
Effects of pet ownership among street-involved youth: A qualitative analysis

It is estimated that in Canada there are 150,000 youth who are homeless on any given night (Public Health Agency of Canada, 2006), and this number shows no sign of declining. A 2009 City of Toronto report on homelessness identified that from 2006 to 2009 the number of youth using shelter services increased by 16.2% (Toronto Shelter, Support & Housing Administration, 2010). Most homeless counts are considered underestimated, in particular youth will commonly “couch surf” (moving from place to place), squat (staying in abandoned or unoccupied buildings), sleep rough outdoors, engage in prostitution or other activities in exchange for shelter, or use other forms of transient or marginal housing. Therefore, it is difficult to obtain a truly accurate count.

Many homeless people, including youth, are pet owners. In a recent study looking at the transition of homeless individuals to stable housing in Toronto, Ontario, 8% of homeless and 11% of vulnerably housed individuals were found to be pet owners (Stephen Hwang, electronic mail, January 15, 2010). Pet ownership among the homeless population has been found to have benefits, such as increased social, emotional, and physical health, as well as liabilities, including difficulty finding stable pet-friendly housing for the human partner (Kidd & Kidd, 1994; Singer, Hart, & Zasloff, 1995). Dog ownership has also been linked to decreased access to healthcare services among homeless populations (Taylor, Williams, & Gray, 2004).

Limited research specific to homeless youth and pet ownership has shown that pet ownership plays an important role in the lives of homeless youth by helping them cope with loneliness and depression, as well as providing a reason for making better life choices, such as avoiding incarceration to prevent separation from their pet (Rew, 2000).
The aim of this study was to explore the effects of pet ownership among street-involved youth from the perspective of the youth themselves. Perspectives on the roles and relationships between homeless youth and their pets, the general provision of care for these pets, their needs and the challenges that exist for pet-owning homeless youth were explored. This study also provided information for the development of a more broadly applied survey instrument.

Methods

The study design was descriptive and qualitative, using a phenomenological approach, in which the “lived experience” of a phenomenon is described. This study obtained ethical clearance from the University of Guelph Research Ethics Board (REB ID# 10MY024). Informed consent was obtained in writing or verbally from the participants, via signature of the participant or verbal acknowledgement that they understood the content of the consent form (Appendix 1A). The consent form also explained that the decision of the youth to take part or refuse to take part in the research would not affect the provision of service. This information along with the consent form was presented both verbally and in writing and a copy was provided to each participant. The necessity of only written consent was not required by the Ethics Review Board for street-involved youth. If participants chose not to sign the consent form but still wished to be part of the study, verbal consent and acknowledgment was sufficient. All the interviews were conducted by the author.

It has been shown that youth have preferences for the terms applied to them (e.g. ‘street-involved’ vs. ‘at-risk’) (Evenson, 2009). However, within the studied field of homelessness, there is a lack of unification of terms; therefore, within this paper, the
terms ‘homeless’ and ‘street-involved’ will be used interchangeably. In research of this nature, ‘youth’ are generally considered to be 16-24 years of age. This range is accepted in Canada, by way of the legal age in which a youth can leave home without parental consent (16 years) to the age at which individuals are generally required to seek shelter and other support services for adults (25 years). Minors (<16 years of age) do contribute to the homeless youth population, and although these individuals would be considered emancipated minors, there are ethical issues involving minors in research. Therefore, for the purposes of this study, a youth was defined as between the ages of 16 and 24.

Purposive sampling was used to obtain participants who were pet-owning street-involved youth from three urban drop-in centers, one in Ottawa and two in Toronto, Ontario. Street-involved youth were recruited by handing out business cards with time and date of possible future interview times or by sending cards to drop-in centers, and by direct recruitment by the researcher while at the drop-in center. Youth were made aware of the purpose of the study and the compensation to be provided for participation ($20 CAD), at the time of recruitment.

This purposeful sample consisted of 10 street-involved youth (seven male and three female), who owned or previously owned a pet while living on the street. Eight of the ten youth currently owned dogs (6 male; 2 female), and two of the youth (2 male) had dogs previously while on the street and at the time of the study were cat owners. At the time of the interviews, two of the youth (both male) interviewed were living on the street, one female youth was couch-surfing, four (all male) were transiently or vulnerably housed (including squatting, staying with friends or family, or couch-surfing), at the time of the interviews and three (1 male; 2 female) considered themselves to be in stable
housing. All names of participants and their pets presented in this report are pseudonyms assigned to the participants by the first author. Hard brackets within the quotations from participants are used to either de-identify location or to clarify context or meaning of the narrative.

Semi-structured individual interviews were conducted using an interview guide (Appendix 1B) that began with a broad request to the participant to “tell me about yourself and your current situation”, followed by “tell me about your pet and the relationship you have with him/her”. Further questions elicited data on the role the pet played in the youth’s life, the effects or differences that the pet has played in their life, their concerns as a pet owner, how they were able to provide for their pet and the types of services or programs that would be helpful for youth who have pets.

All interviews were audio-taped (Zoom H2 Handy Recorder, Zoom Corporation) and transcribed verbatim. Accuracy of the transcriptions was insured by listening to the audio-recording while reading the transcript and errors in transcription were corrected. Both manifest and latent content analysis (Holsti, 1969; Patton, 1990), were used to analyze the data. Manifest content was obtained from the direct answering of questions from the interview guide, while latent content was obtained from deriving interpreted meanings of the responses to these questions. First level coding of data was initiated by reading over the interviews several times to identify key words or phrases provided in response to the questions asked. Through an iterative analytical process of repeated readings of the text, substantive themes then emerged that described the effects of pet ownership on street-involved youth through the participant’s experiences and perceptions. As analysis progressed, related sub-themes were grouped into broader themes, where the
experiences and perceptions were grouped into subthemes and each was determined to be a benefit or a liability.

**Results**

The findings of this study are presented as themes and subthemes identified from the narratives that constitute the data for this study. The substantive theme that emerged from the data was one of “Pet before self”, where the needs of the pet were placed ahead of the youth’s own needs. First and second level subthemes of “physical” and “emotional” effects, and “benefits” and “liabilities”, respectively, were then further developed. Figure 1 provides a “map” of the major themes that emerged from the interview data with the street-involved youth. Within this report, the first and second level sub-themes will be discussed first, followed by the substantive or overarching theme of “Pet before self”.

**Physical Effects**

These findings include the physical effects that pet ownership have on homeless youth seeking, finding or maintaining shelter or housing, income generation, effects on their freedom and activities, and use of drugs and number of arrests (Table 1.)

**Housing.**

The physical effect of pet ownership on shelter and housing emerged in various ways. Three male participants described sleeping on the street in order to be with their pet. For various reasons, the description of the decision to not seek shelter services by pet-owning youth was multi-factorial. Often it was because of a “no pet” shelter policy, not allowing them to sleep inside with their pet, but other considerations included a general dislike of shelters (e.g. lack of personal space or privacy), and the weather or
climate, when youth preferred to be outside. Youth may elect to sleep outside regardless of pet ownership, however two of the youth described how it was harder for both them and their pets during times of inclement weather when they would have sought pet-friendly shelter if available, and that their health has been affected by having to sleep outside.

..I was stuck sleeping outside with Mackenzie [dog]. I didn’t mind it, I prefer that than living in the shelters here in this city, but on days like this where it’s horrible out and I’ve come down with this chronic cough, all that garbage from sleeping outside in this weather, but other than that it was good cause it kept Mackenzie happy cause of the breed he was, the Husky/Wolf that he is, he loved it outside, he didn’t care.” – Sam, 23 year-old male

Similarly, three male youth described how dog ownership made it more difficult to find stable housing. The breed of the dog owned was described by one male youth as decreasing his ability to find housing, because legislation in Ontario has singled out particular breeds as “dangerous”.

It made it very difficult [finding housing with a dog], cause it was a pit bull… I definitely stayed in the streets because of my dog. – Michael, 24 year-old male

One male youth described how he and his mother and brother, all of whom were unemployed and homeless, were forced to leave his grandmother’s apartment because of
their dog. Relinquishment of the family dog, whom he explained “had helped him through some horrible things”, was never considered even though it would have been easier for his family to find housing.

In contrast, the reason and motivation described by one male youth (housed at the time of interview) for finding stable housing was for his dog, not himself.

I love him and I get a place for him. Really, like if it wasn’t for him I’d be on the streets. – Jeff, 24 year-old male

Additionally, two young women, one who was couch-surfing, and one youth who was housed at the time of interview, reported that they tried to remain sheltered or housed for their dogs. Furthermore, if they themselves had to stay on the streets, they described how they would not allow their pet to do so.

If I had to stay on the street, I would definitely give my dogs to somebody else who could take care of them, I wouldn’t want to do that. I wouldn’t want to put my dogs in those situations. – Karen, 23 year-old female, couch surfing with 2 dogs

Income.

The physical effect of pet ownership on the ability of youth to find employment was described by five male participants. These youth reported that having a pet impaired their ability to find and maintain stable employment. With no housing where they could
leave their pet or reliable and safe pet care, pet-owning youth described being restricted in their ability to find and/or maintain employment.

When you have a dog and you’re living on the street, you can’t go to work because you have to look after the dog. … Trying to find a friend that’s actually constant to look after your dog while you’re at work, I mean, when you’re living on the streets you can’t find anybody that’s actually reliable… I found one guy that lasted a week and then he just disappeared and I was never able to find him for my next shift, I ended up losing my job… – Sean, 24 year-old male

Almost half of the participants (3 female; 1 male) perceived that the use of pets for panhandling is exploitation of the animal. However, two male participants, who engage in panhandling for income generation, acknowledged that pets often improved earnings from panhandling, particularly when their pet was younger.

I use my dog because he’s my dog. He goes everywhere I go. So if I’m panhandling and sitting there… he’s sitting there too… while he was between 16 weeks and 6 months old I can almost guarantee as $100 day every day… in Vancouver and I’d normally have 2 or 3 panhandlers before me and I could still make a $100 every day. – Brian, 24 year-old male

**Drug Use & Arrests.**
When the youth were asked an open-ended question on whether pet ownership made any difference or created change in their lives, four of seven male youth reported that their use of drugs decreased with dog ownership. They reported either a reduced amount of drug or alcohol consumed and level of intoxication experienced, or shifted the type of drugs consumed (e.g. from “hard” drugs). Two of these youth also reported that they have avoided arrest and incarceration since becoming a pet owner.

Before when I wasn’t a pet owner, my life was one of like try to make myself more liking the city meaning the drugs, alcohol, all the bad things, the crime. Like I was in and out of court, I was in and out of jail, like life didn’t matter to me. Once I got Mackenzie I settled down and my life actually had meaning to it. Like I actually quit the drugs for a while, I haven’t gone back to jail yet. Like it’s been at least 2 years since I’ve actually gone to jail. I don’t do heavy drugs anymore; I still smoke weed but like I don’t do heavy drugs anymore. – Sam, 23 year-old male

Because I have Zeus I have to think of now, if I go to jail who can look after him without sending him to the pound. [My priors of] assault, arson, mischief, B&E [break and enter], possession of marijuana, times 10… Possession of a weapon, concealed weapon …[Having a dog] changed my life for positiveness…I’m not doing anything stupid, I’m not doing hard drugs, I’m not going to jail every other day anymore. – Brian, 24 year-old male
Two male youth described their own experiences of having their dog removed from them during arrest and/or incarceration. With no social support to help retrieve and care for the dogs, both dogs were euthanized at the municipal animal shelter. This risk of removal and/or euthanasia of the pet were described by the participating youth as being reasons to avoid incarceration and/or to have support and/or friends who can take care of the pet if those situations arise.

Two of the other male youth had been formerly involved with gangs while on the street with their pet, and while they discussed their involvement with the dealing of drugs, they didn’t describe personal drug use. These youth reported no difference in their participation in illegal activities, such as drug dealing, due to pet ownership. The female youths did not discuss drug use or any involvement in illegal activity.

*Activities.*

Another physical effect of pet ownership described by participants was on their freedom to participate in activities. Two male youth reported that owning a pet restricted them from participating in activities that were not pet-friendly or where they could not take their pet with them, such as entertainment venues or other establishments.

There’s things I could’ve went to do that I couldn’t because I couldn’t with my dog…I couldn’t go into a bar or anything – Michael, 24 year-old male

Three participants (2 male; 1 female) also described how they were more likely to return to the same place where they were sleeping or living than before they had a pet, as
well as return more regularly to take the pet out to eliminate, feed, or some other aspect of care for the pet.

There are things I gotta do…I gotta take care of my dog. I love him…I don’t sleep out and never come back to the place I originally lived – Jeff, 24 year-old male

I have to get used to coming back so she can have somebody to feed her, take her out for walks and what not…[otherwise] I’d be out all the time with friends and what not. – Ashley, 24 yrs.

**Emotional Effects**

The emotional effects of pet ownership included the added stressors that arise from pet ownership, the experiences from a human-animal relationship, and the roles that pets played in their lives (Table 2).

**Stressors.**

Seven of the ten youth interviewed described their concerns as a pet owner, expressing worry about maintaining the health of their pet, and their ability to provide food and veterinary care if their pet became ill or injured. Lack of affordable veterinary care for their pets and worry about losing their pet were the primary stressors.

It’s really hard taking care of them because I can’t always get them food…I’m worried that something might happen to them. They might be taken away from me.
which would probably be the worst thing that ever happened and it’s hard… [what would be helpful is] having anywhere I can stay with my pets and they can help provide food, water, and health care for my pets. – Karen, 23 year-old female

Having experienced the loss of a pet or worry about the loss of their pet was described by seven participating youth as having a significant effect on their lives. An actual loss or fear of loss could be in the form of death, a pet stolen or lost, as well as the pet being removed from the youth by police, animal control officers, or as a result of their own incarceration. Pets taken away due to arrest of the owner resulting in their pet being euthanized at the local animal shelter was experienced by one male youth, while two others described this experience happening to peers. No matter how the loss of the pet occurred, depression and change in behaviour were described by two youth following the death of their pet, demonstrating the effect that such a loss can have on the emotional health of these youth.

I had a dog on the street in Montreal…he got ran over by a car while I was sleeping…I didn’t get any more dogs after that..I missed him a lot…he was a good dog…I didn’t want to have that loss again because it was so hard…I got depressed after – Michael, 24 year-old male

[After he passed] it made me more of a beast. – Ryan, a 21 year-old male, on the death of his dog
Another stressor identified by one male youth, was the negative perception that the general public had about being homeless with a pet. He reported that individuals passing by while he was panhandling with his dog made comments suggesting he could not adequately care for his dog or that he shouldn’t have a dog if he couldn’t even take care of himself.

The people that come up to me every f***ing day and are like ‘how do you feed your dog?’ I’m like, you know what - I **feed** my dog. I save up $9 and I go to the store. – Brian, 24 year old male

**Relationship and role.**

All the participating youth described their pets as a source of comfort and non-judgmental, consistent companions that they could confide in.

My relationship with Mackenzie…is the best I ever had…having my dog around I find it more comforting than having my girlfriend around…cause he always knows when I’m feeling bad…I don’t always have to sit around explaining to him what I mean cause he already seems to know…having Mackenzie is easy cause I can talk about my problems to him and he doesn’t judge me. – Sam, 24 year-old male

He was a friend. Always there…My best friend pretty much…in times of solitude he was there to keep me company. – Michael, 24 year-old male
Youth described the relationship they have with their pet and the roles that they play in their lives. Half of the youth interviewed used the word “love” when they described their relationship with their pet.

He’s the love of my life. I love him to death – Karen, 23 year-old female

I love her. She’s the best pet ever… She is the best thing I have and I hope that she stays healthy forever. – David, 18 year-old male

Among street-involved youth, pets played diverse roles. Six of the ten youth interviewed described the relationship with their pet as child-like.

He was my kid…I treated him like he was my kid…he was a big part of the family I was developing. – Sam, 23 year-old male

He’s like my son. He is my son. – Brian, 24 year-old male

Similarly, the same number also described their pet as their “best friend”, and a constant as “always there”. One youth eloquently expressed that one of the many roles of his dog, was a way of allowing people to see his “good side”.

59
He was my best friend. Loyal. Companion, when no one else was there. He was my shadow. Always there…that was my way of displaying my good side, you know? By having that dog around me, people could see a better side of me than they usually would. – Ryan, 21 year-old male

“Interdependence” emerged as an interpretation of data from two youth (1 male; 1 female) who described their relationship with their pet as reliant on one another to meet each other’s needs. This relationship was seen as a positive effect by youth, in that they felt needed and depended upon, but also that the pet was always there for them when the owner needed them. In one case, this interdependence impaired the youth’s ability to find employment, as the dog became anxious when left with anyone other than his owner.

It was sort of I needed him there at all times or he needed me there at all times…because we lived so long together, our connection was beyond what any other pet-owner’s connection with their pets would be. – Sam, 24 year-old male

**Pet before self**

From above findings, the “Pet before self” theme, where youth described placing the needs of the pet ahead of their own, manifested itself in many ways. First, youth described foregoing opportunities for their own health and success, because they were unable to do so with their pet. This effect was seen prominently in the physical sub-themes of housing or shelter, employment and income. Second, the youth interviewed appeared to accept the added responsibilities, challenges, and stressors that came with pet
ownership, as demonstrated in the emotional effects of pet ownership, despite the often negative impact that it may have for their already difficult lives. Finally, pet ownership was a driver for change for several of the youth interviewed. This kind of change was demonstrated profoundly in the physical effects of pet ownership, for those youth who described a decrease in drug use and number of arrests since becoming a pet owner.

Similarly, those youth who described pet ownership as a willing responsibility accepted the limitations on their freedom or activities as necessary, and something they “have to do” for their pet. Indirect benefits of pet ownership for homeless youth include not only drivers for change, but also implementation of structure and routine, and a commitment to responsibility.

Not only was the “Pet before self” theme apparent in both sub-themes, but also within categories. As an example, Figure 2 represents the effect of the “Pet before self theme” on housing, and how it can manifest itself in different ways, depending on the individual youth. In the top left circle, a male youth describes the difficulty finding housing with his dog resulted in him sleeping outside to be with his dog. The top right circle demonstrates a very different manifestation of “Pet before self”, with this youth’s dog being the primary reason for him to seek housing. Finally, the bottom circle quotes a female youth, who describes how she would not want to let her dog sleep on the street, if she herself had to.

The “Pet before self” theme is represented throughout the findings of this study, and gives a strong indication for how many of the choices that the youth interviewed made due to their pet. As previously discussed with the physical and emotional sub-
themes, pet ownership carries both benefits and liabilities for those youth place who their own needs secondary to those of their pet.

Discussion

The findings of this study support previous studies demonstrating the emotional and social support pet ownership provides for homeless youth. Pets serve as a vehicle for youth to learn about unconditional love, trust and constancy in a relationship, for many of whom may be experiencing this for the first time. With such strength of attachment, it is not surprising that youth will consistently make choices to forego opportunities for shelter, housing, and employment in order to be with their pet. Although these choices may often be to the detriment of their own health and success in getting off the street, for some youth, this “Pet before self’” theme has previously unrecognized and beneficial effects, including reducing their use of drugs and hence number of arrests, as well as beneficially affecting their daily activities by creating structure and routine.

Most commonly recognized are the physical effects of pet ownership affecting sheltering, housing and employment. The findings of this study revealed that there may be indirect benefits for these pet-owning youth, where pets are motivators to seek and/or maintain housing for some youth. While for other youth, pet ownership is a liability and barrier to short-term shelter where pets are not allowed and to finding stable housing. As most shelters in Canada have a “no pet” policy, youth have few alternatives except to sleep rough in the street or couch surf to stay with their pet. Consideration of pet-friendly sheltering services is needed. The search for stable housing is also impaired by having a pet, with many leases having a “no pets” or “small pets only” clause. Due to a lack of
affordable housing in urban centres, many cities, including New York City and Toronto, are adopting the “housing first” model, whereby housing the individual is the first priority followed by provision of additional services to support the homeless, such as mental health support or addictions counselling (Power, 2008). However, for programs to be successful with this population of pet owners, this study suggests that housing must allow pets, including large dogs.

The homeless youth population in general are largely excluded from earning income from the formal economy, and in order to survive are often left to make money via short-term or odd jobs, panhandling, prostitution, petty crime, and drug dealing (Gaetz & O'Grady, 2002). Not only are homeless youth at a severe disadvantage when competing for even the most basic minimum-wage jobs, less than 15% of homeless youth are reported to receive social assistance (Gaetz & O'Grady, 2002). This study suggests that within the formal economy, paid employment is even more challenging to find and maintain for homeless youth who are pet owners due to a lack of consistent pet care. Therefore, panhandling by youth who have pets may be one of the few methods of income generation that youth can participate in that allows them to be with their pets. However, if the goal of society is for youth to enter the more formal economic arena, then an understanding and acceptance of the child-like relationship that many of these youth hold for their pets is required, and support in the form of consistent pet care may be necessary.

Regardless of the liabilities of pet ownership for street-involved youth, youth participants described placing the needs of their pets before themselves. In order to support this sub-population of homeless youth, services and programs could consider
allowing well-behaved pets into services with their owner, or accommodation for pets with a safe place where pets could be temporarily placed while youth access services. Agencies that are designing new facilities could consider a kennel or pet boarding area in their design plans that meet local public health requirements. Incorporating companion animals into shelter services can provide significant benefits to the residents (Labrecque & Walsh, 2011), and the American Humane Society has created a start-up guide for organizations who wish to create this service (Phillips, 2008). Although developed for women’s shelters, this resource could be broadly used across a range of services. Ideally, a form of pet day-boarding or “dog daycare” would be available for youth to be able to safely leave their pet while they attend job interviews, school, or employment opportunities. Other ways to support youth include the provision of pet food and pet supplies. Specific areas of pet education for youth should include an understanding of the rights of tenants, specifically as it refers to pet owners, specific breed legislation (if applicable), and consequences of removal of a pet by local animal control or by-law services in the event of charges of animal neglect or owner arrest.

The effect of pet ownership on drug use among the male participants in this study was a particularly interesting finding. Insights on drug use among the pet-owning homeless population have been reported with conflicting results. A 2001 report conducted for the Blue Cross, a charity for pets in the UK (Baker, 2001) found that more non-dog owners took drugs than owners (however details on research methodology was lacking), while a study conducted by Taylor in 2004 found no statistical difference, although the trend was towards less drug use by non-pet owners (Taylor et al., 2004). Pet facilitated therapy has been described as having beneficial effects on illicit drug use of those
incarcerated (Lai, 1998) and animal-assisted therapy has been demonstrated to improve the quality of the therapeutic relationship between the patient and the counsellor in the treatment of substance dependence, resulting in better treatment outcomes (Lange, Cox, Bernert, & Jenkins, 2006; Wesley, Minatrea, & Watson, 2009). Among the street-involved youth interviewed for this study, decreased drug use was a consistent finding among the male youth. In particular, this information was provided freely without direct questioning or prompting regarding drug use. This finding is significant in that the majority of criminal offences by street-involved youth are addiction-driven (Pernanen, Cousineau, Brochu, & Sun, 2002; Public Health Agency of Canada, 2006). With crimes monetarily supporting addiction, it is no surprise that with a decrease in drug use, reduction in arrests subsequently follows.

Many of the emotional effects of pet ownership described by youth in this study are beneficial, and support previous research (Rew, 2000), where pets helped youth to cope with loneliness and depression, and provide youth with a positive and giving relationship that some have never experienced. The protective effect of pets against suicide has been described in women in abusive situations (Fitzgerald, 2007), and could prove to have similar protective effects in other socially marginalized populations, such as the homeless. A negative consequence of this emotional attachment is the impact of pet loss on youth. A study of adolescent-pet bonding and bereavement demonstrated that highly bonded adolescents experienced more intense grief following the loss of a pet than those less bonded to their pets, and that the degree of bonding and intensity of bereavement is greater for girls than for boys (Brown, 1996). Support in the form of bereavement counsellors may be needed, although work by Kryda and Compton (2009)
suggests that youth may not feel secure enough to discuss this kind of emotionally sensitive issue and the impact of this loss with a counsellor. While complicated grief has been found to occur in 20-30% of the pet owning population with significant pet attachment following the loss of a pet (Adams, Bonnett, & Meek, 2000; Adrian, Deliramich, & Frueh, 2009), homeless youth, who often lack differentiated coping strategies and support may be at higher risk of experiencing significant grief and/or depression that could require crisis intervention. Concern for the emotional health of this vulnerable population due to pet loss is warranted as youth with few coping skills may resort to previous coping mechanisms, such as addictions, or other maladaptive behaviours to deal with the loss. In addition, the absence of the pet in their lives means that they no longer have the structure and responsibilities that may have been keeping them from self-destructive activities.

Another stressor described by one youth was the negative comments made by the public and stigmatization regarding his adequacy as a pet owner. The effects of encounters with pet-owning homeless individuals and the public were qualitatively explored by Irvine et al. (2012), and it was found that of those interviewed, the majority of homeless pet owners were able to successfully “redefine” what constitutes responsible pet ownership and refute many of the public’s negative comments, creating a positive sense of self-identity (Irvine, Kahl, & Smith, 2012). These participants described this “redefining” as their ability to provide constant companionship and a freedom that few domiciled pets experience (Irvine, Kahl, & Smith, 2012), challenging the social convention that one needs to be housed in order to provide a good quality of life for a pet.
Thus far, the physical and emotional effects of pet ownership among homeless youth have been discussed, with further categorization into those effects which may be beneficial and those which may be liabilities for these pet owners. The significant role that pets play in these participant’s lives and the deep level of attachment described when discussing their relationship with their pet perhaps provides insight on the motivation for “Pet before self”.

While pet ownership among those who are street-involved presents obvious issues with one’s ability to obtain the needs such as shelter and food for one’s self, let alone another, the youth in this study described making choices to keep and stay with their pet despite the added stresses it may put on themselves. Knowing this information warrants support for these individuals and their pets regardless of society’s opinion on whether these individuals should have pets. One of the most profound implications of the findings of this study is the possibility that pets may have, at some level, a protective role against the two leading causes of death among street-involved youth in Canada; suicide and illicit drug intoxication (Roy et al., 2004; Unger, Kipke, Simon, & Johnson, 1998), and it is worthwhile to consider how support of the human-animal relationship could reduce deaths in this population.

Limitations

As a qualitative inquiry into pet ownership among street-involved youth, themes were derived from the narratives of these individuals purposively selected. As such, generalizations about these themes to the target population are difficult. The population of street-involved youth is heterogeneous in terms of demographic, descriptive and
experience-based factors and transiency. Being vulnerable and having had negative experiences with adults, there is potential for respondent bias. For pet owners especially, the attachment that they have for their pet may result in a respondent bias regarding the interviewer’s perception of this relationship. Youth may fear that negative portrayals might suggest that they do not adequately care about their pet or that there may be some consequence if they described socially unacceptable or criminal behaviour regardless of the guidelines set forth in the informed consent form. Selection of the youth was performed through youth service providers, and as such, the narratives of non-service using youth may differ from those youth who participated in this study.

Finally, data saturation may not have been achieved, in particular with female and gang-involved youth, in that consistent repetition of the data from these two groups was not achieved; therefore, indicating a need for further interviews. The two male gang-related youth interviewed did not discuss personal use of drugs, but were open regarding their activity in the dealing of drugs. Gang culture has its own form of street culture and may demonstrate unique effects of pet ownership among those youth. A gang culture may provide more peer social support in the form of a street family improving their ability to care for the pet. Alternatively, the gang dogs may be used for fighting, particularly with dogs bred for that purpose and their choice in dog breeds may be associated with status and/or function, such as for intimidation and protection. For example, the two previously gang-involved youth had both owned a pit bull breed, a breed that is now banned by provincial legislation. Therefore, the role(s) of the pet and the relationship may be quite different from other homeless youth, and further investigation is warranted among this unique population.
Although the sample size was small, gender differences appeared to be a factor in this study, not only in the approach to housing but also in the responses regarding changes that pet ownership has made in their lives. With regards to housing, our findings support previous reports indicating that homeless males outnumber females by two to one, with females more likely to seek shelter or housing due to their vulnerability on the street (Hagan, 1997; O'Grady & Gaetz, 2009). Information on drug use or criminal activity was not elicited from the three female participants. The reason for this may be multi-factorial. Females are reported to use fewer substances and are significantly less likely to be involved in drug dealing than males (Kirst, Erickson, & Strike, 2009). Additionally among homeless youth, females have been reported to purposely self-censor information provided to health care workers, as well as being sensitive to other areas of discussion such as prostitution (Ensign & Panke, 2002). A social desirability bias may also be a factor particularly with sensitive topics such as drug use and criminal activity, and a possible general distrust by youth of unfamiliar adults (Ulager et al., 2005). Further investigation into pet ownership among female street-involved youth is also warranted.

**Conclusion**

The liabilities for pet-owning youth are clear, with few shelters, programs or services accepting of pets, the youth interviewed in this study described foregoing the benefits of these services rather than give up their pet. When homeless, lack of sleep, contact address, clean clothes and a shower are limitations that impair finding employment, and with a pet, it places the added burden of care for the pet, similar to that of having a child. With a lack of housing, social support such as family, or pet care
services, regular employment is exceedingly challenging for these youth. Stressors are multiplied for youth with pets in obtaining adequate care for their pet and themselves, and concern over the future if the animal becomes ill or injured and requires veterinary care. Loss of a pet also has a substantial impact on the emotional health of the youth interviewed, for whom many the pet is considered their best friend, child and only family. Previously unrecognized benefits of decreasing drug use and number of arrests was notable among the youth interviewed. To engage them in the structure and responsibility of taking care of a living being other than themselves is purposeful to moving forward and leading a healthier lifestyle. Homeless youth, who are reported to experience lower levels of self-worth (Votta & Farrell, 2009), may seek out shelter and subsistence for their pet, leading to an improved view of self and healthier lifestyle for themselves as well. To assist these youth, youth services and programs may need to accept pets and understand the strength of these human-animal relationships and the benefits pet ownership can offer youth.
Figure 1 Thematic map on the effects of pet ownership on street-involved youth
Table 1 Thematic content from interviews with 10 pet-owning street-involved youth in Ottawa, Toronto, Hamilton, and Kingston, ON: Physical effects of pet ownership on street-involved youth

<table>
<thead>
<tr>
<th>Housing</th>
<th>Income</th>
<th>Drug Use &amp; Arrests</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay on street because of pet</td>
<td>Difficulty finding employment</td>
<td>Decreased freedom</td>
<td></td>
</tr>
<tr>
<td>Difficulty finding stable housing because of pet</td>
<td>Difficulty maintaining employment</td>
<td>Decreased access to services and venues</td>
<td></td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease in amount of drug consumed</td>
<td>Decrease in level of intoxication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation to seek shelter or housing for both owner and pet, in order to shelter the pet</td>
<td>Increased income from panhandling with pet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remain housed because of pet</td>
<td>Decreased number of arrests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shift from using “hard” drugs</td>
<td>Returning to the same place (vs. moving around)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 Thematic content from interviews with 10 pet-owning street-involved youth in Ottawa, Toronto, Hamilton, and Kingston, ON: Emotional effects of pet ownership on street-involved youth

<table>
<thead>
<tr>
<th>Stressors</th>
<th>Role</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health of pet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to feed and care for pet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of pet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public perception of homeless youth as pet owners</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Love</td>
<td></td>
<td>“Best friend”</td>
</tr>
<tr>
<td>Comfort</td>
<td></td>
<td>Child-like</td>
</tr>
<tr>
<td>Companionship</td>
<td></td>
<td>“Constant companion”</td>
</tr>
</tbody>
</table>
If I had to stay on the street, I would definitely give my dogs to somebody else who could take care of them. I wouldn’t want to do that. I wouldn’t want to put my dogs in those situations.

– Karen, 23 year-old female

I love him and I get a place for him. Really, like if it wasn’t for him I’d be on the streets.

– Josh, 24 year-old male

It made it very difficult (finding housing with a dog), cause it was a Pit bull... I definitely stayed in the streets because of my dog.

– Michael, 24 year-old male

Figure 2 Effects of pet ownership on housing demonstrating the substantive theme of “Pet before self”
References


Footnote:

1 An internet search conducted on October 4, 2011, using key words: homeless, shelter, pet-friendly, pets, welcome, Canada resulted in 6 hits, some of which accept small pets only or seasonally accept pets.
CHAPTER 3

Youth service professionals’ perceptions on the effects of pet ownership on street-involved youth

Prepared in the style of the *Journal of Sociology and Social Welfare*
Abstract

Youth homelessness is on the rise in Canada, and youth shelter and service providers struggle to meet increasing needs of this growing population. Pet-owning youth represent a unique subsection of the homeless youth population, with their own unique needs. In this qualitative study, seven youth service professionals (three male, four female) were purposively sampled to participate in one-on-one semi-structured interviews at one youth drop-in centre and one community health centre, in Ottawa, ON and two drop-in centres in Toronto, ON Canada. Youth service professionals were asked about their perceptions and experiences involving pets and youth, the perceived roles and relationships youth have with their pets and the effects of these human-animal relationships, as well as their perception of the well-being of the pets belonging to street-involved youth. Interviews were analyzed using latent and content analysis. Substantive themes of “Physical and emotional effects”, “Benefits and liabilities of pet ownership”, and “Pet before self” emerged, with physical sub-themes of effects on housing, employment and education, service and support needs, drug use, and daily structure and routine. Emotional sub-themes that emerged included the roles of pet and the human-animal relationship, added stressors, and responsibility and pride of ownership. Among the findings, a pet was identified as both an obstacle for youth to access shelter and services, as well as a vehicle for youth service professionals to engage youth in support services. Pet ownership was described as providing youth an opportunity to experience unconditional love, non-judgmental support, and responsibility. However the additional stressors placed on pet-owning youth were also well recognized by youth workers, demonstrating a need to provide support for these youth, their pets, and the human-animal relationship.

Keywords: homeless, pets, service, street-involved, youth
Youth service professional’s perceptions on the effects of pet ownership on street-involved youth

With youth homelessness on the rise (Toronto Shelter, Support & Housing Administration, 2010), youth shelter and service providers strive to meet the needs of this vulnerable population. In Canada, it has been estimated that there are 150,000 youth on the street on any given night (Public Health Agency of Canada, 2006), and while it is unknown how many street-involved youth have pets, a 2009 study on criminalization of street youth in Toronto found that in a sample of 245 youth, 12.8% of participants reported being a pet owner (B. O’Grady, electronic mail, January 3, 2012).

Among homeless youth, pet ownership has been demonstrated to help youth cope with loneliness and depression, as well as providing a reason for making better life choices, such as avoiding incarceration to prevent separation from their pet (Rew, 2000). Consistent with previous findings, qualitative interviews conducted with ten street-involved youth who owned pets revealed that youth describe their relationship with their pet as “best friend” or child-like, and described putting the needs of their pet before their own needs, including not accessing shelter services because they don’t allow pets (Chapter 2). Because of these effects, accessibility, engagement and intervention strategies for pet-owning youth may be dramatically different than for those who do not own pets. How much youth service professionals recognize these differences could be important in developing strategies to provide services to these youths. There is little research to date examining the experiences of homeless youth from the perspective of youth workers (Kidd, Miner, Walker, & Davidson, 2007). However, with their experience working with this vulnerable and heterogeneous population, youth workers provide a
valuable perspective on how pet ownership may affect not only service provision, but also the lives of youth in general. The current study sought to obtain the perspective of youth service professionals, from various service areas, on the effects of pet ownership on street-involved youth including the roles and relationships between homeless youth and their pets, the general provision of care for these pets, their needs and the challenges that exist for pet-owning homeless youth. There are multiple roles among youth services, and while all are professionals in their field, there is varied terminology for their positions, including case or social worker, housing worker, manager or director, to name a few and as such, the term youth “worker” is used interchangeably with youth service professional in this report.

**Methods**

The study design was descriptive and qualitative in line with a phenomenological approach. This study obtained ethical clearance from the University of Guelph Research Ethics Board (REB ID# 10MY024), and informed consent was obtained in writing after the consent form (Appendix 2A) was presented to participants both verbally and on paper by the author. All the interviews were conducted by the author.

Purposive sampling was used to recruit participants who were youth service or health workers and have experiences with youth with pets. Sampling was from two locations in Ottawa, one community health centre and one drop-in center, and two locations, both drop-in centers in Toronto, Canada. Only one location was pet-friendly, allowing pets into the drop-in as well as all of their other youth services and programs. Youth service workers were recruited by advanced phone call or email, or directly on site
at the drop-in center. At the time of recruitment, youth workers were made aware of the purpose of the study and the $20 (CAD) honorarium for participation.

The sample consisted of seven youth service workers (four females; three males), including one community health nurse practitioner, one executive director, two front-line drop-in center workers, one housing worker, and two drop-in center managers. The names of the youth service professionals used in this report have been changed to ensure confidentiality of the participants. Hard brackets within the quotations from participants are used to either de-identify location or to clarify context or meaning of the narrative.

Semi-structured, informal, one-on-one interviews were conducted with each service worker at their service location. Youth service workers were initially asked to “tell me about yourself and your role working with the youth”, followed by “tell me about your experiences working with youth who have pets”. Further questions provided information about the worker’s perceptions of the roles that animals have in the lives of homeless youth, any differences they have experienced between youth who have pets and those who do not, and services or programs that would be beneficial to support these youth (Appendix 2B). All interviews were audio-recorded (Zoom H2 Handy Recorder, Zoom Corporation) and interview notes were written by the author during and following each interview.

Interviews were transcribed verbatim by a professional transcriptionist, cleaned for accuracy by simultaneous reading of the transcript and listening to the audio recording, and identified errors corrected. Manifest and latent content analysis (Holsti, 1969; Patton, 1990) were used to analyze the data, whereby manifest content was obtained from the direct answering of questions from the interview guide, while latent
content was obtained from deriving interpreted meanings of the responses to these questions. Key words or phrases contributed to first level coding of the data, then via an iterative process or re-reading the texts, themes emerged that consistently described the perceptions of pet ownership on street-involved youth through the youth workers’ narratives of their experiences. As analysis progressed, related sub-themes were grouped into broader themes.

Results

The findings of this study are presented as themes and sub-themes identified from the narratives that constitute the data for this study. The substantive theme that emerged from the data was “Pet before self”, where workers described youth placing the needs of their pet ahead of their own needs. Sub-themes of “Physical” and “Emotional” effects of pet ownership for youth also emerged. “Benefits and liabilities” were additional effects of pet ownership and became sub-themes of both physical and emotional effects. Figure 1 provides an outline of the major themes that emerged from the interview data with youth-service workers.

Physical Effects

The physical effects described by youth-service workers regarding pet ownership among street-involved youth included the effects on housing, employment and education, accessibility of services, service and support needs, effects on daily structure and routine, and drug use (Table 1).

Housing, Employment and Education.

Pet ownership was clearly described by five of seven youth workers as having a negative effect on a youth’s ability to find housing, seek and maintain employment, and
further their education. Along with a shortage of affordable housing, a youth’s lack of knowledge regarding pets and the provincial Landlord and Tenant Board or the Residential Tenancy Act, and a lack of self-advocacy by youth themselves and their rights as pet owners were considered barriers by the service workers for street youth to find housing.

…it’s really hard to find a place when you have a dog… even as somebody who’s housed and stable when I’ve been looking for places with two dogs. The landlords are just like, no way. So you add on the marginalization of being on social services or Ontario Works and then you get stigmatized for being a street kid and you have a dog. – Sarah, Housing worker

Along with the difficulty of finding stable housing, difficulty finding responsible and consistent pet care was identified by these workers as a barrier for youth in seeking or maintaining employment as well as continuing their education, in that youth may choose to be with their animals over going to work or school.

They have to find someone to look after their dogs so that they can go for a job interview and that, you know, who to leave your child with that you trust and that becomes an issue. – Vanessa, Front-line worker
The housing and one front-line drop-in center worker also described the necessity of educating youth on their rights as a tenant with a pet and of workers themselves having to advocate more strongly for these youth in order to obtain housing.

**Accessibility of services.**

From the perspective of four of the workers (from non-pet friendly agencies), pet ownership was seen as a barrier to accessing services by youth, including shelter. Additionally, one of the participants, a nurse practitioner described how access to community health services in her community is through the shelter system. Since there are no shelters that are accepting of pets in her area, youth with pets were unable to access the shelter system and the associated health services. These participants felt services and programs that do not allow pets are not being accessed by this population of youth. For example, a housing worker describes a youth leaving a shelter because he had a puppy.

…pets aren’t allowed in shelters … I worked in a transitional house slash shelter… so no pets there…we had someone sneak a puppy in once but it didn’t last very long… the guy sent it to live with a friend and then he ended up moving out so he could be with the puppy… He left the shelter so that he could have his puppy. – Sarah, Housing worker

By comparison, the Executive Director participant from a pet-friendly organization, in part attributed their high success rate in helping youth transition off the
I think that, you know, the fact that we allow pets here is a positive thing because the kids are happier if they have their pet here; they don’t have to worry about that so it’s not just yet another stressor for them to be concerned about. If they can bring their pet then they’re more likely to be able to receive the services they need sooner rather than later which in some ways could result in more preventative measures that need to be taken with these kids especially if it’s a health concern or a mental health concern or an addictions concern, you know. There aren’t very many health centres – I’m sure there are none – that will allow you to bring your pet if you need to speak to a psychiatrist for example or you need to get a referral to detox or whatever it is. And so the barrier with pets is that when they really do need some serious help they’re not likely to get it because they can’t bring the pet. And the same would go for, for example, getting uh, you know, um overnight treatment for an addiction. - Ellen, Executive director (Pet-friendly agency)

Although workers from this one agency allow pets, and indicated that they have had few issues arise from this policy, two of the other agencies represented in this study found it to be not feasible to allow pets, citing concerns of health and safety, liability, and limited space, resources and funding.
While owning a pet presented an obstacle to accessing services, pets were also identified by two workers as a vehicle to access youth. A healthcare worker participating in the study described how pets could be conduits to establishing a positive relationship with these youth:

Youth traditionally are very hard to engage in services and well, from a health care perspective… I find if you have a pet and if you compliment their pet, you talk to their pet, then you’re like, “Oh and by the way I notice you have a gigantic wound” or, you know like, “that you’re carrying like an insulin pump”…it’s a way of engaging them…so I find them easier to interact with as a whole… the ones that have pets I have had better experiences being able to kind of find a, an ‘in’ with them…[if it’s] important in engaging with that person then if we need to, you know, help their animal first and then let’s start with that – Jennifer, Nurse practitioner

Asking about the pet and being kind to the pet were identified by three participants as ways of initiating dialogue with youth, who without a pet may have been difficult to establish a rapport. These youth workers described experiences with youth seeking pet food, supplies, services, or help for the pet through a pet-friendly worker or agency, and thereby through an indirect motivation, established a relationship with the worker/agency and possibly accessed other services beneficial to the youth.
…the whole point of, especially in engaging with youth is that they got to feel safe and that’s the whole reason why a lot of these guys have pets is that it’s the first safe thing they’ve had right. So establishing that relationship is crucial and so you have to have some alternatives and it’s not just about safety but trying to find the best fit. You know nobody ever got off the street on their own and the studies show that anybody getting off the street has had one or two concrete contacts. It’s not just an agency. It’s not just, so the amorphous social service. It’s one or two people who got them off the street and that personal relationship. And so the chances of forming that, you’ve got to make the opportunities there and if that’s through their pet or having been pet friendly then that’s what you do. – Mark, Drop-in centre manager

While pet ownership was believed to physically limit accessibility to shelter, youth programs and services, and health services, pets were seen by some workers as away to connect with youth emotionally, thereby engaging these youth in dialogue and developing a relationship that increase their willingness to access services.

*Service and support needs.*

All of the youth service professionals interviewed identified unique and often extra support and service needs for this population of youth. For example, one healthcare worker identified that pet ownership may negatively affect the compliance of individuals to certain recommendations, such as showing up for further appointments due to lack of pet-friendly services and/or no point of care for their pet while they are there. It was noted by the participant that one way to increase compliance and draw more clients to
community health services would be to accept pets into the community health facility during off-hours in order to provide health service to those pet owners.

I think we make it very difficult cause we just assume, okay I want you to go get your blood work, I want you to pick up your prescription and I want you to come back in two weeks and then you just think, you know, for people with pets…I’ve got to think strategically like who can look after their pet, like can they come? Can they wait outside? Is the weather okay? – Jennifer, Nurse practitioner

Support of the human-animal bond was also recognized as critical to helping youth by two of the participants from the pet-friendly agency. This support included allowing pets into all their programs and services. The executive director of this organization described its mandate as being strength-based and aims to decrease stressors. Pets are included in this mandate and recognized as youth’s social support. Therefore, allowing pets into their programs and providing support for their pets are ways to meet that mandate; it has become part of the culture of that organization.

The types of kids that are coming to [Center Name] have significant challenges and so rather than add to the list of challenges, we try to take some of those away and so our philosophy here is what I would call a strength-based delivery model so we’re more interested in what the kids can do… you’ve got to engage them and in order to do that, we have to accept their pets with them. - Ellen, Executive director
Other areas of need for pet-owning youth identified by the majority of workers, in particular front-line, drop-in managers and the housing worker were pet-friendly housing and shelter, dog daycare, and behavioural training. If met, these needs were described as being able to decrease the number of stressors that pet-owning youth experience and improve the health and welfare of both the pet and their owners.

We need a food program, we need a doggie day care, we need, you know volunteers, you know… even I’ve wanted to uh, a lot of our youth sometimes don’t know how to train their dog and there’s a – if you ever see a street youth train a dog it’s like hit the dirt. – Vanessa, Front-line worker

Veterinary care and education were also identified as specific service needs that would be greatly beneficial for these youth, improving the emotional health of the youth by reducing stressors which included improving the health and welfare of the pet.

It’s hard to see an animal you know in distress which you see at some point as a pet owner but you know these guys are living, guys and girls are living like pretty chaotic lives right so that they don’t have always the stability to be taking care of a pet. They don’t always have the resources. Sometimes they’re going out to panhandle for dog food because you know they can go eat at a soup kitchen but they’re panning for their dog’s food. They’re stressing over it um and then when their dog needs vet, veterinary care it’s not accessible which has probably been my
biggest frustration in dealing with people with their dogs and just like emotionally
hard and even just kind of like wondering why in somewhere like [city name] is
there no services…I think that we need low cost or free clinics. Like ideally free
where they could get their shots. They could get either spayed or neutered… the
preventative health stuff, ah free dog training ah information sessions for youth
around breed specific legislation and what that means for them. Like what would
happen, workshops around what would happen if they get incarcerated? What
happens to their animals?” – Sarah, Housing worker

From the perspective of youth-service professionals working with street-involved
youth with pets, the extra support and service needs are often difficult to meet, and often
lead to frustration for both the youth and the service workers, and can have a negative
emotional impact on the worker when they are not able to provide what they feel is
needed for their client and animal. The extra services needed to support the human-
animal relationship were considered to be a liability of pet ownership because resources
to provide such support are often limited, if existent at all.

*Structure and routine.*

Five of the seven workers interviewed described how pet ownership created
structure and routine in the lives of youth. This effect came from a root of responsibility
for taking care of another.

Youth that have pets have a responsibility, ‘where’s my dog?’, you know or
‘Gotta feed my dog ‘or ‘Do you wanna do something later?’ ’No, I have to
panhandle to feed my dog’ so they have that responsibility that as a mother would a child. – Vanessa, Front-line worker

The physical effect of pet ownership on creating structure and routine in the lives of youth was seen by those who described this as a beneficial effect, as in most cases, such consistency in schedule is typically lacking for street-involved youth.

**Drug or alcohol use.**

Three workers described their experiences with how pet ownership has had an effect on decreasing drug and/or alcohol use. These participants felt the daily responsibility of a pet and the important role that the pets play in their lives requires that youth make a choice to engage in less risky behaviours such as binge drinking or drug use.

…there’s one guy that comes to the drop-in that just got a puppy like a few months ago. Like him and his roommate got two puppies from a litter and he was prepared, it was awesome because he was preparing for this puppy. He knew the puppy was coming and he cut down on his drinking …He was looking for a reason to stop drinking or at least cut down on his drinking um and so he felt like having that responsibility was a good catalyst for that. So he was coming in when he was trying not to drink before he got the puppy. He was coming in and asking to do work around the drop-in. So he would clean up and he was just like, “tell me to do stuff. I just need something to do. I’m preparing for my puppy so I can’t, I can’t be drinking. I can’t, I have to be responsible”– Sarah, Housing worker
The youth workers identified that the decreasing use of drugs and/or alcohol was a choice that youth made based on their relationship with their pet and the important role that pet ownership played in their life.

You have to think about structure. You have to think about who is taking it for a walk and getting it out and picking up its poop and all that sort of stuff and just the all round care of the animal, the daily sort of stuff which I think in a lot of ways if you didn’t have that, you wouldn’t have that structure. There’s also the sort of party element. If this is an important piece of their lives, they’re not necessarily going to engage as much in risk behaviour, binge drinking, binge drug using if they have to make sure that their pet is taken care of as well and so if they find that’s difficult, they’ll make the choice. – Mark, Drop-in centre manager

**Emotional Effects**

All the youth-service professionals who participated in this study recognized the significant emotional role that pets play in the lives of homeless youth. Five of the seven workers described the relationships that they have witnessed between youth and their pets, as well as the added stressors that pet ownership placed on youth. They also identified the effect that having the responsibility of pet ownership made for many of these youth. Table 2 summarizes these emotional effects of pet ownership as perceived by the youth-service workers.

*Relationship and role.*
When asked what roles pets play in the lives of street-involved youth, youth-service workers described roles of unconditional and reciprocated love (n=5), and protection and security (n=4).

Unconditional love. I think that they’ve just been so broken and especially with the horror stories that I’ve heard over the years and I think one of the bridging gaps back into society is that they’ve lost all trust with people. They’ve seen the dark side of humanity and I think that when you have a dog or a cat that just wants to love them for who they are, protect them, give them unconditional love, a hug, a warm body when it’s cold. So they also act as heaters in the winter time in [location name]… So it’s, I think we were just saying before, the worse life throws at you, the better friend you have in a dog. - Dan, Front-line worker

The human-animal relationship was described by three workers each as companion or friend and family or child.

they’re family, they’re stability, they’re a source of inspiration of how they’re going to get through the next day.” – Jennifer, Nurse practitioner

a lot of our youth have been abused, abandoned, grew up in extremely unstable environments, kicked out, have no sense of self, so people would say why would someone who’s homeless or street-involved get a dog?...because they want to love someone, they want someone to love them back and this gives the owner and the
pet a sense of family, a sense of compatibility, a sense of love…trust-love-companionship.

– Vanessa, Front-line worker

Two male workers described their experiences in observing and supporting these relationships, and the positive effects that pets can provide for marginalized youth.

…there was one guy we were working with… he did a job training program with us … he got himself a dog … and the one thing that sticks out in my mind is he came in and um he loves his dog and he just, he was talking - that for the first time he understood what unconditional love was. And so that because his dog loved him no matter who he was or what he was about and all that sort of stuff and so he tried to show that same kind of compassion back to his dog. So it was really kind of a cool, it was a cool moment. – Ben, Drop-in centre manager

All of the workers also described the human-animal relationship as one area of the youths’ lives where they experienced something positive, possibly for the first time.

I think that the dog or pet has given a bit of something that they’ve never seen in their foster home, in their group home or their biological parents. It just gives them a feeling that they’re part of I guess something good. – Dan, Front-line worker
…for a lot of these kids this is the only relationship they’ve had that’s worked, that’s provided them the emotional satisfaction that they’ve ever wanted or had. – Mark, Drop-in centre manager

Participants of the study were empathetic to the roles and relationships that develop between youth and their pets, and described understanding the challenges and choices that youth with pets face.

*Added stressors.*

The physical stressors of pet-ownership and its effects on housing, employment, and service access, impact both the physical and emotional health of youth. Additionally, the financial stress of feeding and caring for another being was identified by three workers who participated.

Sometimes there’s the fact…they have barely enough money to cover their own costs and so that’s an extra financial stress of feeding an animal … but if it comes to the animal needs care or [youth] run into problems when [the animal] needs to get spayed or when they need to get their shots - when something happens … that becomes a challenge for them and they’ll focus on that at the expense of everything else. You need to focus on getting that money which I understand in one sense and in the other sense it kind of can set them back in some areas. – Sarah, Housing worker
Animal welfare concerns were described by five of the participants where they have had experience with youth not being able to care for a pet, as well as observing aversive training methods. In a case of not being able to take care of the pet, a worker described helping the youth re-home the dog. Another participant described witnessing one incident where a youth was using physical punishment when his dog misbehaved, and the agency notified the local humane society. Youth experiencing stress and frustration over behavioural issues was identified as a concern by two workers who witnessed aversive training or punishing of a pet. While effect of pet ownership on the worker was not the focus of this study, one worker described the “chaotic state” and “mental health crisis” a youth was in when his dog tried to bite him which was cause for concern for the welfare of both the pet and owner:

I did come across this situation a few months ago where a guy got a dog that was a rescue and the dog was biting him um but he was getting really frustrated and he was in a chaotic state and dogs just feed off your energy, right? So it’s like he was in kind of like a bit of a mental health crisis um and he um the dog bit him, so he tied up his mouth with a scarf, tight and you know it wasn’t good

Loss of a pet was also identified as a significant emotional stressor for youth by two workers who had experiences with clients losing a pet. One worker interviewed best described this effect on youth as “its worse to lose your pet than never have had it.”
One worker also identified negative public perception as another stressor for pet-owning youth, recognizing how uninformed opinions and judgement negatively affect the emotional health of the youth.

I think the negative affects come from the police and even just from innocent pedestrians walking by and you always hear it. It’s like, “You’re homeless. You can’t even take care of yourself. Why would you have a dog?” You hear that time and time again [from the youth]. - Dan, Front-line worker

**Responsibility and pride of ownership.**

Youth service workers described numerous positive effects that they perceived to be of the strong relationship between an animal and a youth. Pet ownership providing an emotional sense of responsibility was described as motivation for youth to effect the physical change of maintaining a daily schedule, routine, or structure, was a recurring theme that emerged from interviews with the majority of workers. Youth experiencing this sense of responsibility was seen by all workers as a beneficial emotional effect.

…it gives them something to look after… it gives them some responsibility and a commitment and it puts them on a certain regimented schedule because they have a pet. - Ellen, Executive director
As well, over half of the youth service professionals described the pride that youth have for their pet, as similar to that of a child, where youth will bring their pet for workers to see, and “show it off”.

So we’ll talk about it [their pet] and you know they are usually really proud. Like they’ll come by and like I said we have a worker here who really helps that. [Service worker’s name] really helps that along because they’ll come by and they’ll want to show [service worker’s name] their dog. Because he talks about his pets and all that sort of stuff and so when they get a dog it’s like, “Hey [service worker’s name]. I got a dog. Come see it.” And you know but they want to show it off. It’s almost similar to when you know some of our youth have a baby … It’s like they come in with the baby and they’re so happy and proud of the baby and when they get their pet you know they want to stop by and let us know that they’ve got one. – Ben, Drop-in centre manager

Responsibility for a pet was at the root of many of the positive emotional effects described by youth service professionals.

Pet before self

The overarching theme of the effects of pet ownership among street-involved youth was “Pet before self” from the perspective of those youth service professionals interviewed. Care of the pet became priority over self-care as observed by the majority of participants and was described as a loss of focus by the youth on themselves and their own needs in order to serve the needs of the pet.
Youth frequently who have pets are focused very much on how their pets are doing. It gives them something else to worry about which is a double edged sword sometimes. They’ll often neglect their own health and neglect their own feeding and that sort of stuff too, to give their animals something to have and sacrifice elements of their own success…I mean we talked about this earlier about employment. And I think that’s a really valid piece is they won’t engage in employment opportunities or housing opportunities or a number of different facets that they may need - to be off the streets - because they don’t have somewhere to keep their dog or a safe place to [keep their dog] or they’d have to be parted from their pet for a significant amount of time. - Mark, Drop-in centre manager

All of the workers interviewed identified the powerful role that a pet can play in showing youth unconditional love and responsibility, yet this strong relationship was often to the detriment of the youth’s own health and success, contributing to the physical effects of pet ownership. While workers reported the liability the theme of “Pet before self” has for youth, they also acknowledge some benefit of this form of altruism, including decreasing drug or alcohol use, and acceptance of responsibility.

Well I think yeah it forces them to think outside themselves and to you know be empathic to another creature and I think that can be really powerful and it helps them I think work out a lot of their own stuff. – Mark, Drop-in centre manager
Overall, youth service professionals interviewed recognized both benefits and liabilities of pet ownership for street-involved youth, and acknowledged that the emotional and social support that pets provide is a driver for accepting the challenges that come with this relationship.

Discussion

This study represents findings from interviews with youth-service professionals that were conducted concurrently with pet-owning street-involved youth, the results of which are reported separately (Chapter 2). The themes emerging from the current study are consistent with those that emerged from separate interviews conducted with pet-owning homeless youth. This indicates that the managers, directors, and front-line youth workers involved in the current study were “tuned in” to their clients and recognize the challenges they face as well as the importance of these human-animal relationships for youth. The youth service professionals, many of whom were also pet owners themselves, appeared to have empathy and understanding for the difficult circumstances pet-owning youth face. For those participants who were not pet owners, understanding and empathy of this relationship seemed to develop from their experiences with pet-owning youth. Additional themes emerged from the data relating to the “effect on the worker”, where youth clients who owned pets had an effect on the physical and emotional experiences of the youth worker as well as their role and job duties. This effect was described more by workers who were pet owners themselves. Because the focus of this study was the effects of pet ownership on youth, the theme of “effects on the worker” was considered beyond the scope of this study, however, the “effect on the worker” theme had sub-themes of
“worker attachment”, “increased workload” and “animal welfare concerns”, and which are still relevant and worthy of further study.

While themes and much of the content on workers’ perceptions of the effects of pet ownership on street-involved youth were similar to those of the interviews with the youth themselves, descriptions by youth workers focused more heavily on the liabilities of pet ownership, while in many instances recognizing the profound relationship many youth have with their pets. Similar to findings from interviews conducted with youth, physical effects of pet ownership on housing were described by youth service professionals, with workers stating that pet ownership appeared to negatively affect a youth’s ability to obtain and/or maintain housing, employment and education. Specifically, housing and front-line service workers identified the struggle to find housing for youth with pets, including the need to educate youth on their rights regarding tenancy with pets and advocating for these youth to secure housing with their pet (Ontario Landlord and Tenant Board). It was also recognized that employment and education are primarily affected by lack of reliable care for the pet while job searching or at work or school, and that having consistent and reliable dog care in the form of temporary boarding or dog daycare would be beneficial for youth.

Not surprisingly, youth service providers recognized that pet ownership limited the access youth have to programs and services intended to support them. Often not being able to access the shelter system with a pet and therefore the associated health services accessible only through the shelter system, was identified as a major barrier to physical and mental health support. While it may seem simple to suggest that youth shelters and services should be accessible to pets with their owners, social service
organizations for the homeless in Canada struggle for funding (Hulchanski, 2009). With limitations of space, staff and resources it is logistically difficult to be pet-friendly, while remaining sensitive the needs of those youth who are not comfortable around animals. Inclusivity and safety for all youth, both pet owners and non-pet owners, may be difficult to achieve. Some services such as meal programs prohibit pets due to public health regulations, allergies and liability are also issues that are difficult to resolve with limited space and funding. Pet-friendly organizations like the one where two of the participants work seem to develop a culture of pet acceptance, where both workers and clients interact freely with the pets within the space. For shelters which are designed to be pet-friendly, food preparation and eating areas are separated from areas where pets allowed.

Services or supports that youth workers perceived to be needed for pet-owning youth included pet-friendly housing, shelter and services, dog daycare, veterinary care, a consistent pet food supply, pet education, dog obedience and behavioural training. Participants reported that provision of these types of services would greatly reduce the stresses of pet ownership on youth. Similarly, dog daycare was identified by service workers as necessary for youth to seek and maintain employment or their education while also looking for housing. A number of youth service professionals felt dog obedience and behavioural training is important in educating youth on how to raise a well-socialized animal using positive reinforcement and other non-aversive methods. Workers identified that many youth lack the proper knowledge or experience in training an animal and were themselves victims of abuse. Further investigation into animal health and welfare of those belonging to street-involved youth and other homeless and marginalized populations is warranted. Still, several workers also identified that pets may act as a vehicle to engage
Another physical effect identified in the interviews with youth (Chapter 2) and the current interviews with service workers was the role that pet ownership played in decreasing drug and/or alcohol use among some youth. Research to date on the relationship between pet ownership by homeless adults and drug utilization has produced conflicting results (Baker, 2001; Taylor, Williams, & Gray, 2004), however pet-facilitated therapies have been demonstrated to have beneficial effects on both illicit drug use for those who are incarcerated (Lai, 1998) and higher treatment outcomes for substance dependence for those in a therapeutic relationship (Lange, Cox, Bernert, & Jenkins, 2006; Wesley, Minatrea, & Watson, 2009). This potential effect of pet ownership is worthy of consideration as a vehicle and driver for youth to reduce drug use and requires further investigation.

Despite the positive and often beneficial emotional effects of pet ownership including the opportunity for youth to experience unconditional love, trust and responsibility in a relationship, youth service professionals consistently recognized the significant challenges and stressors that pet-owning youth face. Unable to access the human shelter system with their pet, youth not only can be denied access to health support services which may negatively affect both their physical and mental health, but also experience increased monetary strain to feed and care for their pet and additional emotional stresses that come with pet ownership including behavioural concerns and pet loss. These additional stressors for street-involved youth, who already face significant
challenges, are liabilities of pet ownership and are reasons to provide additional support for both the pets and youth in these relationships.

Although loss of a pet was described as almost worse than never having had a pet by one participant, death or loss of a pet was not a recurrent theme among these interviews, nor were concerns regarding youths’ ability to cope with the loss of a pet. It would be understandable that the loss of a pet, many of whom are considered child-like, family, or best friend (Chapter 2), could cause significant emotional trauma for street youth. It is possible this sample of youth-service workers lack experience with youth who have lost a pet and/or reluctance in youth exists to discuss this issue with workers. Death of a pet, even among financially and socially supported individuals, is often not recognized for its impact on the bereaved (Adams, Bonnett, & Meek, 2000). This suggests that service workers may need more training on the potential effect of pet loss among this highly pet-bonded and emotionally vulnerable population of street-involved youth.

Consistent with interviews conducted with pet-owning homeless youth (Chapter 2), youth service professionals described youth placing the needs of their pet ahead of their own needs (“Pet before self”). This emerged as the overarching theme in the current study, and was represented in the many “physical” and “emotional” effects of pet ownership. Forgoing shelter, services, and opportunities for housing, education and employment in order to be with their pet was seen by the participants of the current study as a considerable sacrifice of the youths’ success. Youth workers appeared to be more willing to discuss the negative consequences and liabilities of pet ownership than youth perceived them to be in their concurrent interviews. While thematic content from the
youth interviews demonstrated youth’s awareness of the different choices they made because of their pet, it was rarely described as a negative consequence (Chapter 2), but rather an accepted responsibility that a pet owner takes on. There appeared to be no resentment or blame towards the pet for the youth’s situation by the youth themselves. Feeding their pet before feeding themselves, an example of “pet before self”, has been described by homeless pet guardians to be an important aspect of being a good pet owner, particularly by those who are often stigmatized by the public for owning pets (Irvine, Kahl, & Smith, 2012). Youth service professionals however, described experiences where pet ownership limited youth’s ability to access the support and services needed for them to transition off the street. This is not a surprising finding, as there are significant challenges that youth workers already face in providing service to this population. History of abuse, addictions, mental and physical health issues in the youth are significant obstacles that workers have to overcome to succeed in helping homeless youth (Gharabaghi & Stuart, 2010). Pet ownership understandably contributes additional challenges. Despite this, all of the participants in this study demonstrated sincere empathy for both youth and their pets. As many of the participants were pet owners themselves, they understood both the benefits and liabilities of this human-animal relationship; however, the lack of resources available for pets and their homeless owners was a source of frustration for youth service professionals as it was for homeless youth in another study (Chapter 2).

**Limitations**

Inherent to qualitative inquiry, research and purposive sampling of participants, generalization of the findings of this study to the larger youth service population is
difficult. In particular, participants in this study held varied positions within their organizations (i.e. executive director, drop-in manager, front-line workers, housing workers, and community health nurse practitioner), and therefore had various experiences and interactions with youth and their pets. As well, each individual organization has its own mandate and policies, may provide different services and programs, and may have more or less experience with street-involved youth who have pets. It should be noted that the author has prior relationship with two of the youth workers interviewed, one front-line worker and one community health nurse practitioner, with whom the author has worked with to provide pro bono preventive veterinary health care services for their clients, and as such a respondent bias is possible. To minimize this form of bias, a standardized interview guide of open-ended questions was followed with all participants. The inclusion of a pet-friendly organization was considered to be important to gather information on their experiences with pets within services, as well as having a greater number of experiences to draw on working with pet-owning youth. Despite these limitations, this study provides a first-time in-depth look at pet ownership among homeless youth from the perspective of those working with the youth.

**Conclusion**

The youth service professionals interviewed for this study identified a number of benefits and liabilities for street-involved youth who own pets. In particular, pets were regarded not only as restricting some youth from accessing services but also as a vehicle to engage youth in services. For those youth for whom their pet may be the only way to engage them in support services, this effect of pet ownership is worthy of practical consideration. Furthermore, specific and unique support and service needs were identified
for pet-owning youth, including pet-friendly shelter for those who are homeless, dog
daycare, pet food and supplies, veterinary care, pet and pet-owner education, and
behavioural training. The challenge lies in convincing funding agencies of the value of
pet ownership in order to make the funding of these services a priority in the face of
chronic underfunding by our social system for homeless people.
Figure 1 Thematic map of youth service professionals’ perceptions on the effects of pet ownership on street involved youth
Table 1 Physical effects of pet ownership on street-involved youth as described by youth service professionals

<table>
<thead>
<tr>
<th>Housing, Employment, &amp; Education</th>
<th>Accessibility of services</th>
<th>Service &amp; Support needs</th>
<th>Drug Use</th>
<th>Structure &amp; Routine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pets decrease chances of obtaining housing, employment &amp; education</td>
<td>Pets decrease accessibility to services</td>
<td>Pet owners have specific needs</td>
<td>Pet ownership creates structure and routine via responsibility</td>
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<tr>
<td>Pets decrease opportunities to services</td>
<td>Pets as a vehicle to establish rapport &amp; engage youth in services</td>
<td>Pet ownership may decrease drug and/or alcohol use</td>
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**Liabilities**

- Pet owners have specific needs
- Pet owners require extra support services

**Benefits**

- Pets as a vehicle to establish rapport & engage youth in services
- Pet ownership may decrease drug and/or alcohol use
Table 2 Emotional effects of pet ownership on street-involved youth as described by youth service professionals

<table>
<thead>
<tr>
<th>Role &amp; Relationship</th>
<th>Added Stressors</th>
<th>Responsibility &amp; pride of ownership</th>
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<tbody>
<tr>
<td></td>
<td><strong>Liabilities</strong></td>
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<td></td>
<td>Emotional stressors (e.g. pet loss)</td>
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<td>Physical stressors (e.g. on youths’ health)</td>
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<td>Financial stressors (e.g. pet food &amp; vet care)</td>
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<td>Negative public perception</td>
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<td>Pet behavior concerns/stresses</td>
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<td></td>
<td><strong>Benefits</strong></td>
<td></td>
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<tr>
<td>Pets provide unconditional love, trust &amp; non-judgmental support</td>
<td>Pet ownership teaches responsibility</td>
<td></td>
</tr>
<tr>
<td>Pets are child-like &amp; family</td>
<td></td>
<td>Pride of ownership</td>
</tr>
<tr>
<td>Pets are companions &amp; friends</td>
<td></td>
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<td>Pets provide security &amp; protection</td>
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References


CHAPTER 4

Pet ownership among street-involved youth: A cross-sectional study

Prepared in the style of the *Journal of Sociology and Social Welfare*
Abstract

Street-involved youth represent a particularly vulnerable sub-section of the homeless population, and are at increased risk of health problems, substance abuse, and depression. To date, qualitative studies on pet ownership with street-involved youth have demonstrated that the effects of this unique human-animal relationship have both liabilities, such as impairing youth’s ability to seek housing and employment, as well as benefits, including providing non-judgmental love and support, and a reason to behave more responsibly. The objectives of this study were to describe the pet owning street-involved youth population and their pets, to compare homeless youth who are pet owners and those who are non-pet owners in terms of drug use, shelter use, and depression, and to explore the effects of pet loss on pet owning street-involved youth. In this quantitative study, a convenience sample of 89 pet owning and 100 non-pet owning street-involved youth were surveyed in four cities in Ontario, Canada. Logistic regression models were developed to assess the effects of pet ownership on drug use, shelter use and depression. As the first quantitative study of street-involved youth and pet ownership, findings include support of a strong human-animal relationship between street-involved youth and their pets, and negative effects on youth following the loss of a pet. It was also demonstrated that pet owners were less likely to make regular use of shelters, and when controlling for gender and regular use of drugs (other than cigarettes, alcohol, and marijuana), pet ownership demonstrated a negative association with depression in this population. Increased awareness among youth service providers of the potential effects of pet ownership, and provision of support for these relationships are recommended. Further investigation into the effects of pet ownership for street-involved youth on their physical and mental health, including drug use is warranted.

Keywords: depression, pets, human-animal bond, homeless, youth
Pet ownership among street-involved youth: A cross-sectional study

Youth homelessness in Canada is on the rise, and many of these youth are chronically homeless, going for long periods of time without a home and/or repeatedly homeless (Canadian Housing and Renewal Association, 2002; Kelly & Caputo, 2007). Some of these youth are pet owners, and while there are no published numbers of youth who have pets, based on unpublished data from a 2009 study of street youth in Toronto, 12.8% (29/227) of participants reported being a pet owner (B. O’Grady, electronic mail, January 3, 2012). This is similar to findings of a recent study of adult homeless and vulnerably housed in Toronto, Ottawa, and Vancouver, that found that 11.5% of their sample population were pet owners (S. Hwang, electronic mail, January 15, 2010). Pet-owning youth face unique challenges in having to provide food and care for their pet as well as themselves, and with a general lack of pet-friendly services, homeless pet owners also have increased difficulties accessing shelter and other support services (Chapters 2 & 3; Taylor, Williams, & Gray, 2004). Pet ownership also impairs youth’s abilities to seek housing, and employment or education opportunities due to a lack of reliable pet care (Chapters 2 & 3; Thompson, McManus, Lantry, Windsor, & Flynn, 2006; Bender, Thompson, McManus, Lantry, & Flynn, 2007).

Despite this, the human-animal relationship that develops for many street-youth also has benefits, including helping youth cope with loneliness, providing them with a source of companionship, unconditional love and non-judgmental support, and motivating youth to act more responsibly and make better choices to avoid being separated from their pet (Chapters 2 & 3; L. Rew, 2000; Thompson et al., 2006; Bender et al., 2007). Qualitative interviews conducted with pet-owning youth and youth service professionals have demonstrated the strength of the human-animal bonds that develop between youth and their pets, with an overarching theme of
“pet before self” being described as a primary effect of pet ownership among street-involved youth (Chapters 2 & 3). “Pet before self” was described as youth placing the needs of their pet ahead of their own. This could manifest itself in a variety of ways, including physical effects on sheltering or housing, where youth reported refusing shelter that did not accept pets and sleeping on the street in order to be with their pet. Similarly, for some youth, pet ownership resulted in reducing their drug and/or alcohol use so that they could better take care of their pets and avoiding arrest so as not to be separated from their pet. Youth and youth service workers also described how because of a pet, youth developed more structure and routine in their lives. Emotional effects included establishing a routine, sense of responsibility and pride of ownership by taking good care of their pet. In the previous qualitative study of street-involved youth, participants described their relationship with their pet as child-like, “best friend”, or constant companion. It was this relationship that seemed to be the driver for “pet before self” outcomes among these highly attached youth (Chapters 2 & 3). These two qualitative reports demonstrated a need for further exploration of the role and effects of pet ownership for street-involved youth, including a better understanding of youth’s attachment to their pets as well as the effects of pet ownership on the mental health status of street-involved youth, their utilization of shelters and use of illicit drugs. In the current study, we sought to explore and further understand the findings from the two qualitative reports among a larger population of pet-owning street-involved youth.

Methods

This study obtained ethical clearance from the University of Guelph Research Ethics Board (REB ID# 10MY024).

Survey development
Survey questions regarding the nature of the human-animal relationship were developed for the purposes of this thesis and based on information provided from the qualitative interviews previously conducted with pet owning street-involved youth and youth service workers (Chapters 2 & 3). Questions regarding youth’s drug use were adapted from previously administered surveys conducted with street-involved youth (S. Gaetz, 2002). To determine sourcing of pets by street-involved youth, participants who owned a pet at the time of the survey were asked where from where their pets were obtained from, with the options of breeder, family pet, stray, pet store, advertisement, street friend or family, or other. To assess the human-animal relationship and roles of pets, pet owning participants were also asked to indicate from a list of factors provided which were important in their decision to have a pet, and some of the effects of pet ownership on street-involved youth by asking participants their level of agreement with the statements provided (Likert scales), many of which were derived from themes described in previous qualitative interviews with pet-owning youth and youth service professionals (Chapters 2 & 3). Youth’s attachment to their pets was assessed with the previously validated Lexington Attachment to Pets Scale (Johnson, Garrity, & Stallones, 1992). Depression scores for each youth participant, both pet owning and non-pet owning, were established based on the Center for Epidemiologic Studies Depression Scale (CES-D) (Ayerst, 1999; Radloff, 1977), a validated 20-item self-report measure based on the individual’s experiences in the past seven days. Each item includes four response categories (<1 day; 1-2 days; 3-4 days; 5-7 days), scored from 0 to 3. Based on an established cut point (Frerichs, Aneshensel, & Clark, 1981; Needham & Crosnoe, 2005), participants totalling a score of 16 or more were classified as ‘depressed’.

The survey was initially piloted with six street-involved youth in Ottawa, ON, to assess survey length, the personal sensitivity of the questions, and ensure clarity of language, appropriate use of
terminology and expressions, as well as completeness. Feedback from these youth was used to further refine the survey and establish the face and content validity of the questionnaire (Appendix 3A).

**Peer-youth outreach workers**

A Participatory Action Research (PAR) approach was used for the current study, which involved “including those who are intended as the subject of the research in all aspects of the research, including the design, implementation and analysis of the project.” (S. Gaetz & O'Grady, 2002; O'Grady & Gaetz, 2004). Peer-youth outreach workers, considered to be stakeholders and integral to assessing the issues of youth homelessness and pets, were recruited to assist with the study. One peer street-involved youth was hired in each of three cities (Toronto, Ottawa, and Kingston) where the study was conducted and trained to administer the questionnaire. In total, three youth were hired, one female and two males, of which the one female and one of the males were current pet owners. The questionnaire was also administered at a fourth location (i.e. Hamilton); however, due to the limited time spent administering surveys at this location a peer youth worker was not enlisted. The peer-youth workers recruited by the author were identified to be current or recently street-involved youth. One of the peer-youth workers aided in all stages of developing the survey instrument including editing and pretesting the questionnaire prior to the pilot. The other two were recruited after being a participant in the study who had completed the survey themselves. Attempts were made to ensure that they were representative of the study population and were still considered at-risk with various levels of street-involvement. Peer-youth workers received both one-on-one training by the author and written materials on interview techniques to minimize bias, to ensure participants’ informed consent, to protect participants’ confidentiality and anonymity, and to maximize the accuracy of data recording by the peer-youth
workers. The peer-youth outreach workers aided the author in both survey administration and also recruiting street-involved youth to participate in this study.

**Sampling and recruitment**

Street-involved youth were recruited via posters indicating that “a study on pet ownership among street-involved youth” was being conducted and that youth did not have to be a pet owner to participate in the study (Appendix 3B). These posters were placed in drop-in centres and shelters in Ottawa, Toronto, Kingston, and Hamilton. To participate, the youth needed to be 16 to 24 years of age. This age range was chosen because 16 years is the age at which youth may leave home without parental consent, and 25 years is the age at which youth are no longer accepted into youth services, and therefore must utilize adult shelter and support services. Although emancipated minors do contribute to the street-involved youth population, they were not included in this study due to the ethical issues surrounding use of minors as participants in research. Sampling of comparable numbers of pet owners and non-pet owning youth was purposive in order to compare these two populations, however all youth who participated self-selected themselves to take part in the study. The peer-youth outreach workers and word-of-mouth between street-involved youth also played a role in recruiting participants for this research. These three methods were used to reach youth who had various degrees of service use and street-involvement. Surveys were administered to youth one-on-one by the author or by the local peer-youth outreach worker within seven youth service locations in Ontario; five drop-in centres, one transitional (or passage) home and one youth shelter. Of these, four were in Toronto, and one each in Ottawa, Kingston, and Hamilton (Table 1). Two of the drop-in centre locations were also youth shelters (one each in Hamilton and Toronto). Survey administration took place
between March and June of 2011. Youth were compensated for their participation ($20 CAD) in this study.

Informed consent was obtained in writing or verbally from the participants, via signature of the participant or verbal acknowledgement that they understood the content of the consent form (Appendix 3C). The necessity of written consent was not required by the University of Guelph Research Ethics Board for street-involved youth. If participants chose not to sign the consent form but still wished to be part of the study, verbal consent and acknowledgment was sufficient. The consent process included informing the youth that their decision to take part or refuse to take part in the research would not affect their provision of service at the drop-in centre. This information along with the consent form was presented both verbally and in writing to potential participants. A copy of the consent form was provided to each consenting participant.

Data handling

Likert scale data.

Five-point Likert scales were used to assess participant’s level of agreement to various statements relating to the role of their pet, the relationship they have with their pet, and the impact of pet loss. Data were reduced to nominal levels of “agree” and “disagree” and presented as “percent agreement” (cumulative percentages of participants who responded to statements at either “strongly agree” or “agree” categories) with median and mode provided.

Drug use data.

While survey data collected categorical frequency of use of individual drugs, the number of responses in each category was considered too low to analyze. Therefore, to improve data handling, individual drugs were first collapsed into four categories (Table 2) then finally into two groupings the first representing commonly used drugs (i.e., cigarettes, alcohol, and marijuana –
category 1) by the majority of participants (95.2%) and the second group representing a combination of the other three drug categories (i.e. all other drugs – categories 2 to 4). In this paper, the two groups are referred to as “drug group 1” and “non-group 1 drugs” (Table 2).

Similar to data handling for previous research on drug use, the categorical frequency data collected were dichotomized into “regular use” and “non-regular use” (Baron, 1999), where “regular use” was determined when a participant indicated using a substance more than 6 times a year. This cut point was based on previous reports and research on drug use among adolescents (Smith et al., 2005; Tang, Wong, & Schwarzer, 1996).

**Shelter use data.**

Since there is no universal definition of “homeless”, and no consensus on any time element associated with determining when a person is considered homeless, the definition is often regional or municipally-derived. As such, utilization of shelter services every 30 days or less was used as a cut point in the current dataset and deemed “regular shelter use”.

**Statistical analysis**

All statistical analyses were conducted using IBM SPSS Statistics 19 (IBM Corporation 2010), except where noted. Descriptive statistics (means, medians, modes, standard deviations, and ranges) were calculated. The Pearson’s Chi-square test was used to assess associations with pet ownership and participants being both housed and staying in a shelter, at the time of the study. An independent samples t-test was used to compare means between genders for pet attachment. Three models using binary logistic regression were used to test factors associated with shelter use, depression and use of non-group 1 drugs (i.e. drugs other than cigarettes, alcohol, and marijuana). A similar model-building approach was taken for each of the three models. Initially a number of variables were considered for inclusion in the model building.
process based on the existing research, and their potential for confounding. A variable was considered a confounder if its’ inclusion in the model resulted in changing the coefficient of any of the retained variables by more than 20%). For each model, univariable analyses were performed initially to screen for an unconditional association with the dependent variable (Table 3); eight variables were tested at this stage for the shelter use model, 15 variables for both the depression model, and the model evaluating use of non-group 1 drugs (Table 3). All predictor variables for which the P value in univariable analyses was < 0.20 were incorporated. The potential effect of clustering was assessed by including city and agency as fixed effects in the model and if either variable was observed to be statistically significant or inclusion resulted in improvement of model fit based on Likelihood Ratio Test, clustering was deemed present. Significant continuous variables were assessed graphically for linearity based on Lowess curve (Stata© 10 for Windows, College Station, TX, USA). Consideration to categorize a continuous variable was based on the goodness of fit using Akaike and Bayesian Information Criterion (Stata© 10 for Windows, College Station, TX, USA). Collinearity was assessed using correlation matrices and Variance Inflation Factor (>10).

Each model was further developed using a manual backward elimination technique (based on greatest p-values). Independent variables with p-values <0.05 were considered significant and were retained. Following this process, all possible two-term interactions, using the retained main effects, were tested. Each final model was evaluated using the Wald chi-square statistic (p<0.05) and goodness of fit was inferred by the Hosmer-Lemeshow test (p>0.05) (Hosmer D.W. & Lemeshow, S., 2000). Where a significant interaction term existed, linear combinations were created to examine the effect of the interaction on the outcome (Stata© 10 for Windows, College Station, TX, USA). Outliers were identified using studentized residuals >2.0 (Belsley, D.A., Kuh, E., & Walsh, R.E., 1980) and assessed. Influence of outliers was assessed
by leverage and Cook’s influence statistic. Predictive ability of the depression model, and sensitivity and specificity of the CES-D were calculated based on the observed and predicted frequencies for a CES-D-based diagnosis of depression (cut-off of 0.5).

Results

Participants

There were a total of 190 youth who volunteered to participate in this study. One participant was removed from the study due to low completion of questions (<50%) on the questionnaire. Responses to questions on the questionnaire were on average 99.8% complete (range 97 to 100%). The three peer-youth workers administered a total of 74 surveys (39.2%) at a service location in their respective cities; 36 from Ottawa (19%), 29 from Toronto (15.3%), and 9 from Kingston (4.8%). The remainder of the surveys were administered by the author. The participant’s age range was 16 to 24 years (mean 20.86 years; SD 2.42; median 20.89). Gender distribution of participants was 121 males (64%), 66 females (35%), and 2 self-identified as transgender or transsexual.

The majority of participants (67.2%) were of Caucasian descent (n=127: 87 male; 38 female; 2 transgender/transsexual), followed by African or Caribbean descent (19.6%; n=37: 19 male; 18 female), and First Nation or aboriginal (6.4%; n=12: 6 male; 6 female). Four participants were each of South Asian and Latin American descent; three West Asian or Arab; and 1 each of Southeast Asian and other. Approximately 62% (117/189) of participants had a Grade 11 education or lower.

Living situation

The age at which participants reported leaving home or foster care, ranged from 10 to 24 years of age (mean 15.7; SD 2.4; median16). Of the total youth participating, 48 out of the 66
females (72.7%) and 78 of 121 males (64.4%) left home at or before the age of 16 years. Of the two transgender/transsexual youth participants, one left home at 14 and the other at 17 years of age.

At the time of the study, 35.4% (n=67) of the 188 responding participants (one missing response) were sleeping in shelters, 30.1% (n=57) reported to be housed, 19% (n=36) were couch surfing, staying with friends or family, 4.2% (n=8) were sleeping outside, and 10.6% (n=20) reported as “other”, which included staying in a passage house or transitional group home, renting an illegal dwelling, or “moving around a lot”. The participants who indicated that they were housed at the time of the study were also asked to indicate the length of time they had been at their current place. This ranged from 1 week to 3 years, with a median of 4 months (mode=3 months).

Of those who were pet owners (n=89), 41.6% (n=37) reported being housed at the time of the study (median time at current housing = 5 months; mode=3 months), 19.1% (n=17) couch-surfing with friends or family, 21.4% (n=19) were staying in a shelter, and 4.5% (n=4) of participants reported sleeping outdoors at the time of the survey. The remaining 13.4% (n=12) of pet owners reported “other” living arrangements. In comparison, of the responding non-pet owning participants (n=99), nearly half were staying at a shelter (48%), 20% reported being housed (median time at current housing = 4 months; mode=4 months), 19% were couch-surfing, 4% were sleeping outside, and 8% reported “other” sleeping arrangements at the time of the survey. Among this sample, a significant association between pet ownership and being housed at the time of the survey (chi-square=10.13; p=0.001) and pet ownership and currently staying in a shelter (chi square= 15.05; p<0.0001), was noted.
Pet Owners

Of the 89 participants who were pet owners, 52 were male, 35 were female, and 2 transgender or trans-sexual. A total of 121 pets were owned at the time of the study; 52 dogs, 60 cats, and 9 “other” species (2 rats; 3 rabbits; 2 bearded dragons; 1 chinchilla; 1 fish). There was a relatively equal distribution of species (the majority of which were dogs and cats) by participant gender with 54% of the dogs and 56.5% of cats being owned by males, and 44% of dogs and 42% of cats owned by females, and 1 dog and 1 cat each owner by a transgendered/transsexual individual. Of the “other” species, 55% (5/9) were owned by males, 33.3% (3/9) were owned by females, and one of the nine was owned by a transgendered/transsexual individual.

The pet gender ratio was almost equal (63 male: 58 female) and 69% (n=84) of the pets were reproductively intact, with 31% (n=39) of animals having been spayed or neutered at the time of the survey. When asked if the pet had ever bitten anyone (defined as to cause bruising or puncturing of a person’s skin), of the 89 youth reporting, only 11 of their pets (9%) were identified with a bite history. Sourcing of pets by street-involved youth is presented in Table 4.

Previous pet ownership and pet loss

Of both pet owning and non-pet owning participants at the time of the study, 55 youth reported being previous pet owners while on the street, with a total of 67 pets being owned in the past. Of those responding (n=52) to further questions regarding a) what happened to their pet(s) (n=63) and b) the effect of this pet loss, almost half of the pets were reported by their owners to be re-homed (n=33), while 9 were reported to have died of natural causes. Four each were reported to have died of unnatural causes, have been put to sleep at the owner’s discretion or have been put to sleep by an enforcement agency. Three each were reported to have been lost or ran away, stolen or taken away during arrest of the owner.
The majority of youth (88.7%; n=47) who had lost pets due to any of the above reasons agreed that they felt depressed following the loss of their pet; 63.5% of youth felt angry (n=33). Almost half reported that they blamed themselves for the loss (45.1%; n=23), and 46.2% agreed that the loss of their pet had made their life harder. Over one third (34.6%; n=18) of respondents reported using alcohol and/or drugs to cope with the loss of their pet.

**Human-animal bond and pet attachment**

From a list of factors provided, pet owning participants were asked from a 5-point Likert scale (from very important to not at all important) which factors were important in their decision to have a pet; the results are presented in Table 5. In describing the relationship with their pet, 95.5% (n=85) of the pet-owning participants indicated agreement with the statement “My pet is my family”; 91% (n=81) of respondents agreed to the statement “My pet is my best friend”; and 83.1% (n=74) indicated agreement to “My pet is like my child”.

Assessment of some of the effects of pet ownership on street-involved youth are presented in Table 6, including self-reported agreements by the majority of youth participants to the statements: “I am proud of being a good pet owner” (97.8%); “Having a pet has taught me about responsibility” (93.3%); “Having a pet has made my life better” (89.9%); “Despite the added difficulties for me being a pet owner, I would never give up my pet” (87.6%).

Almost half of the pet-owning youth (47.2%) reported that they had decreased their use of drugs and/or alcohol because of their pet, and 60.7% agreed that they avoid getting arrested because of their pet. Almost half the youth (46.1%) agreed or strongly agreed that having a pet has saved their life.

Pet owning participants’ scores to the Lexington Attachment to Pets Scale (LAPS) demonstrated strong attachment to their pets with a mean score of 58 (SD 9.5). A LAPS score of
54.9 or higher is considered “very attached” based on previous research within the general population (Johnson et al., 1992). While LAPS scores for both male (mean=56.1) and female (mean=61.1) participants indicate a strong level of attachment, the mean LAPS score for males was 4.95 points lower than for females ($t(85.0) = -2.44, p < .05, 95\% \text{ CI} -8.98- -9.17$).

**Drug use**

Based on cut-off values for “regular drug use” of more than 6 times per year, 83.6% of participants were regular users of cigarettes; 74.1% were regular users of alcohol; and 73% were regular users of marijuana. Combined (Table 2), 95.2% of youth were regular users of cigarettes, alcohol and/or marijuana (Drug Group 1), compared to 31.9% of youth regularly using other forms of illicit drugs (Drug Groups 2-4).

**Depression**

The prevalence of depression among all participants based on the CES-D was 64.5% (n=120). A significant association between depression and gender (male vs. female) was noted (chi-square=8.35; $p<0.005$), with 57.6% (61/118) of male participants being classified as depressed compared to 78.8% (52/66) of females. Based on the observed and predicted frequencies for a CES-D-based diagnosis of depression in this sample (cut-off of 0.5), a sensitivity of 85.8% and specificity of 54% were calculated (Table 7).

**Factors associated with shelter access, depression and drug use among street-involved youth**

The model building process for shelter use resulted in a final model containing pet ownership as the only variable significantly associated with regular use of shelter services. The odds of an individual making regular use of shelter services was 2.5 times higher for non-pet owners than those who owned pets ($p<0.005; 95\% \text{ confidence interval, 1.37 to 4.48}$).
The model for depression is presented in Table 7, and it was found that when controlling for gender, non-group 1 drug use and time since youth left home, found non-pet owning youth to be 3 times the odds (p<0.005; 95% confidence interval 1.4-6.2) of being depressed than youth who owned pets. Taking into account gender, non-group 1 drug use and pet ownership, there was a negative association between the time since youth left home and the likelihood of depression (OR 0.88; p<0.05; 95% CI 0.777-0.997). Controlling for pet ownership and time since youth left home, a significant (p<0.01) interaction term involving gender and regular use of non-group 1 drugs was found. In exploring the interaction, for regular users of non-group 1 drugs the odds of being depressed are 2.2 times greater for males than females (p=0.36; 95% CI 0.09-2.44). For non-regular users of non-group 1 drugs, the odds of being depressed were found to be 5.7 times greater for females than males (p<0.0001; 95% CI 2.36-12.73). For females, the odds of being depressed were 1.5 times greater for those who are regular users of non-group1 drugs than those who are not regular users of non-group1 drugs (p=0.574; 95% CI 0.37-5.93). For males, however, the odds of being depressed were observed to be 18.4 times greater for those who are regular users of non-group 1 drugs, than those who are not regular users of non-group1 drugs (p<0.0001; 95% CI 5.01-68.01). The overall predictive ability of this model was 74.9%, an improvement over 65.6% in null model (Table 8). A model testing potential associations with the use of non-group 1 drugs was developed; however, the only remaining significant variable after univariable analysis was the participant’s classification of depression based on CES-D scores.

**Discussion**

The negative association between pet ownership and regular shelter use was not surprising, given the level of attachment that exists between animal and owner in this population, and that the majority of shelters do not accepts pets. Qualitative interviews conducted with pet-
owning homeless youth have reported similar findings (Chapters 2 & 3), and Singer (1995) reported that 93.3% of the 35 male and 96.4% of the 31 female adult homeless respondents in Sacramento, CA would refuse housing without their animals (Singer, Hart, & Zasloff, 1995). While 31% of all participants in this study reported to be housed at the time, a recent surveillance report from Ottawa, ON similarly found that 24% of the 200 street youth interviewed were housed in the previous three months (Ottawa Public Health, 2011). Among our sample population of pet owners, we found that more pet owners were housed at the time of the survey compared to non-pet owners. In this cross-sectional study, we are unable to determine causality with regards to housing and pet ownership, and as such we propose three possible reasons for the high prevalence (41.6%) of housed pet-owning street-involved youth: 1) youth who are housed are more likely to own a pet; 2) pet-owning youth seek out housing more than those who do not own pets; 3) the manner of recruitment for this study, at youth service locations, predisposed for a selection bias toward housed pet-owning youth since housed youth could access services without their pet. The possible effect of pet ownership on finding housing is supported by previous research that interpersonal relationships, including those with pets, serve as a source of motivation for youth to transition off the streets (Bender et al., 2007). Further, in Canada, defining “homeless” includes sub-categories of chronically, cyclically and temporarily homeless. Chronic homelessness, is defined as long-term or repeated homelessness, whereas cyclical homelessness, often results from a change of circumstance, such as having been released from an institution. Temporary homelessness, is considered when a person’s living situation is relatively short in duration, sometimes caused by natural disasters or a house fire (Begin, Casavant, Miller Chenier, & Dupuis, 1999). Although 41.6% of pet owners reported being housed at the time of the survey, the median housing time for pet-owning participants was five months which is consistent with a 2007 review of Canadian research on homeless youth which
identified trends in the street youth population of not only an increase in the incidence of youth homelessness, but also an increasing number of chronically or repeatedly homeless young people on the streets in Canada (Canadian Housing and Renewal Association, 2002; Kelly & Caputo, 2007). While participants reported to be housed at the time of survey administration, given the median length of time at their current location, it is quite possible that many of these youth could be considered “chronically” homeless. Being housed may have an influence on a youth’s choice to acquire a pet. It is also possible that currently housed street-involved youth were more likely to access the services where the study was conducted resulting in them being overrepresented in the sample. It has been found that having a pet limits youth ability to not only access shelters and employment opportunities, but also access to services (Chapters 2 & 3), and as such, it is possible that many of the housed and pet-owning youth who participated in this study more easily accessed the drop-in centres where the survey was being administered.

The relatively high prevalence of housed pet-owning youth could also explain the unexpected species distribution with cats outnumbering dogs owned by those street-involved youth participating in this study. Still, the reason for the significant number of housed pet-owning youth in the current study is unclear and further investigation is warranted to develop a better understanding of the service use patterns and living situations among pet-owning street-involved youth.

In this study, the questions used to assess the role and relationship that pets have with their street-involved owners were developed based on previously conducted qualitative interviews (Chapters 2 & 3). The findings are consistent with the previous qualitative reports on the effects of the human-animal bond on the lives of street-involved youth including the impact of this bond on their routine, sense of responsibility, pride of ownership, and “pet before self”. It
also offers a simple validation of the positive and often beneficial emotional support that pet ownership provides for these youth and the potential impact that animals have on the health and well-being of homeless youth. By comparison, among a school-based population of adolescents, Mather (2010) found that owning a pet and time spent caring for/playing with a pet was not associated with adolescents' health or well-being (Mathers, Canterford, Olds, Waters, & Wake, 2010). The difference seen in street-involved youth could be attributed to street-youth being the sole provider and caregiver for the pet, lacking the typical family support to share this responsibility. Similarly, as the primary care giver for their pet, homeless youth demonstrated great pride of ownership that comes from taking good care of their pet.

Similarly, the high level of pet attachment based on LAPS scores among street-youth was not surprising because of youth’s previous descriptions of the relationships they have with their pets in this and other qualitative studies (Bender et al., 2007; Chapters 2 & 3; L. Rew, 2000; Thompson et al., 2006) . The LAPS findings of the current study support previous reports, including a recent Canadian study on homeless women which reported that pets provide companionship, unconditional acceptance, comfort, and a sense of responsibility (Bukowski & Buetow, 2011; Labrecque & Walsh, 2011), and others that pet attachment is higher among females (Johnson et al., 1992).

Of particular interest is that almost half of the youth self-reported that they have decreased their use of drugs and/or alcohol due to pet ownership. While a significant association between frequency of drug use and pet ownership was not demonstrated in this study, it is worthy of further study with a larger cohort of youth. Also of interest is the finding of almost half of the youth reported that having a pet has “saved their life”. Among homeless youth, suicide attempt has been reported by 30-60% of youth studied (Salomonsen-Sautel et al., 2008; Slesnick, Kang,
& Aukward, 2008), and suicide has been cited as the leading cause of death among Canadian street youth (Roy et al., 2004). Further investigation of the relationship between pet ownership and suicide attempt or suicidal ideation is also warranted.

The investigation in the current study into the effects of pet loss on street-involved youth demonstrates a need for pet loss support and further understanding of the impact on the emotional and physical health for an already vulnerable population. With 89% of previous pet owning youth having reported feeling depressed following the loss of their pet and over a third reporting using alcohol and/or drugs to help cope with this loss, the grief associated with pet loss among this population is concerning. Complicated grief has been found to occur in 20-30% of the pet owning population with significant pet attachment following the loss of a pet (Adams, Bonnett, & Meek, 2000; Adrian, Deliramich, & Frueh, 2009). Street-involved youth may lack even fewer adequate coping strategies or support to manage these situations; therefore it is important for those working with this population to understand that pet loss could be a challenging time for a youth including a greater dependence on alcohol and/or drug use as a coping mechanism, possibly exacerbating existing addictions. Furthermore, the negative effects of pet loss are not limited to only the death of a pet, but also may arise following relinquishment or re-homing, lost, stolen, or ran away, and removal by enforcement agencies.

Although attempts to identify factors contributing to drug use among participants were unsuccessful, the descriptive data validates the representativeness of the sample population with the target population. The prevalence of regular drug use from drug group 1 (i.e. cigarettes, alcohol and marijuana) among study participants was found to be high compared to the general youth population. For example, 73% of street-involved youth participants compared to 12.9% of Ontario students (Grade 7-12) reported using marijuana six times or more in the past year.
(Paglia-Boak, Adlaf, & Mann, 2011). These findings are consistent with previous reports of drug use among street youth (Adlaf, Zdanowicz, & Smart, 1996; Baron, 1999; Bousman et al., 2005; Kirst, Erickson, & Strike 2009; Ottawa Public Health, 2011; Smart & Walsh, 1993).

The prevalence of depression identified in our sample population is also consistent with previous reports (Unger, Kipke, Simon, Montgomery, & Johnson, 1997). One of the main outcomes of this study was that pet ownership was found to be negatively associated with CES-D-based depression scores. A higher prevalence of depression among street-involved females compared to their male counterparts is also a consistent finding in the literature (Adlaf et al., 1996; Unger et al., 1997). Another study found that a previous mental health diagnosis among females was predictive of poly-substance abuse and suggested that self-medication among females may be greater than for males (Kirst et al., 2009). In this same study, “living with friends” was found to be significantly and positively associated poly-substance abuse for female youth suggesting peer influence to use drugs may be a factor in poly-substance abuse (Kirst et al., 2009; Tang et al., 1996). To the contrary, a pet as a form of social support does not hold the same risk of peer influence to consume drugs, and pets have been demonstrated to provide motivation for youth to make better and more responsible choices (L. Rew, 2000; Thompson et al., 2006; Bender et al., 2007) including decreasing their use of drugs and avoiding separation from their pet due to arrest or incarceration from drug-related crime (Bender et al., 2007; Chapter 2).

High levels of social support have been demonstrated to be negatively correlated with depression among street-involved youth (Smart & Walsh, 1993), therefore it is possible that pets may confer a similar protective effect. Kidd and Kidd (1994) surveyed 52 homeless pet owners and found that 74% of male and 48% of female participants identified their pets as their only
source of companionship and love (A. H. Kidd & Kidd, 1994). In this study, gender was found to be significantly associated with depression. As non-regular users of drugs (other than group 1 drugs) and controlling for pet ownership and time since youth left home, females were more likely to be depressed than males. This, along with pet ownership demonstrating a negative association with depression may indicate the modulating effect pet ownership may have for these females. This association between depression and pet ownership and gender has been demonstrated in the general population, with women without partners who live with a pet having fewer depressive symptoms (Tower & Nokota, 2006) and dog ownership has been found to be associated with greater well-being for women (Cline, 2010).

In this study, when pet ownership and time since youth left home were controlled for, males who were regular users of non-group 1 drugs had significantly greater odds of being depressed than those who were not regular drug users, and this finding is supported by previous evidence that depressive symptoms are associated with increased risk of drug disorder (Unger et al., 1997). Other studies have also identified an association between drug use and depression (Baron, 1999; Hadland et al., 2011). In this study, gender was part of a significant interaction term, and further investigation into the effects of gender on outcomes such as depression and drug use are warranted.

Although results of this model suggest that “time since left home” is negatively associated with depression, further study is needed in this area to understand this finding. Given the consistency in findings of the current study and other studies in finding associations between depression and both participant gender and drug use, the effect of pet ownership on depression is considered a valid finding. Depression among both individuals and populations is complex, however among street-involved youth this study provides the first quantitative evidence that pet
ownership may play a protective role against depression for street-involved youth. While these findings have implications for service provision and support for those youth who own pets and have a strong attachment to their pet, it should be emphasized here that pet ownership should not be considered a method of intervention and rather that further investigation into the roles pets play in the lives of street-involved youth is warranted.

**Limitations**

Limitations of this study are primarily based on the sample size required to detect more subtle differences between pet owners and non-pet owners. Self-selection by pet owners to participate in this study, and a possible bias towards housed pet owners may exist; however, being housed was not found to be a confounding variable within the depression model, and therefore the measure of association was not biased by this in the selection process. While categorizing both dependent and independent variables was necessary for ease of handling, this process resulted in a loss of information. Pet roles and relationships were assessed using Likert scales, and may be prone to social desirability biases, as is information obtained regarding illicit drug use. Although the outcome measures of drug use were self reported and response bias possible, self-reported use of drugs has been considered valid when there is no motivation by respondents to inaccurately report their use (Babor, Stephens, & Marlatt, 1987), which in this study included assurance of strict confidentiality of the information collected, the right of the participant to refuse to answer any question, and the provision of privacy during survey administration. While a standardized clinical interview may be preferred in order to diagnose depression, the CES-D is a validated measure of depression, and within this study a sensitivity of 85.8% was achieved indicating correct classification of “depressed” in the majority of cases. However, as the CES-D is based on experiences from the past 7 days, the false positive rate
(22%) may include those who are mildly or transiently depressed. As a cross-sectional study, causality and temporal associations are not able to be determined; however, this approach was selected for its efficiency, descriptiveness and ability to detect associations in this new field of study. Finally, since surveys were conducted at drop-in centres, selection bias towards those participants who access services is possible. Attempts to control for this bias included hiring of peer outreach workers to help with recruitment outside of service locations via direct recruitment by peer-worker and word of mouth to develop a representative sample. To minimize bias by peer-youth workers in recruitment, training and materials were provided to educate the workers on potential biases in research. Although this sample of participants was self-selected, there was no increased incentive for participants to falsely identify themselves as pet owners, as the compensation was equal, and in fact, the survey required a greater length of time to complete for pet owners. Despite these limitations, we believe that our sample population is representative of the Canadian street-involved youth population with a demographic profile of street-involved youth consistent with those described in the literature. The gender distribution in the current study was representative of the street-involved youth population with males outnumbering females by two to one and consistent with previous reports (Canadian Mortgage and Housing Association, 2001; Public Health Agency of Canada, 2006; Smart & Walsh, 1993) with females more likely to seek shelter or housing due to their vulnerability on the street (Hagan, 1997; O'Grady & Gaetz, 2009). The reported mean age of youth participants leaving home of 15.7 years is consistent with previous reports from other Canadian cities (Adlaf et al., 1996; Hwang, 2001), as was the distribution of the youth participants by ethnicity (Ottawa Public Health, 2012). The level of education among our sample with 61.9% having a Grade 11 education or lower is consistent with reports from Ottawa and Toronto where the number of homeless youth who have
not completed high school ranges from 63% to 90% (Canadian Mortgage and Housing Association, 2001).

**Conclusion**

In this study, we sought to validate and demonstrate quantitatively the previously reported qualitative findings of the potential benefits of the human-animal bond among the homeless youth population. The emotional health benefits of pet ownership were demonstrated not only by the negative association with depression, but also in the sense of pride and responsibility that pet ownership confers to youth. This improved sense of emotional health and self may translate to self-worth and self-confidence, which have been shown to be associated with positive outcomes for transitioning off the street (Bender et al., 2007; Fitzgerald, 2007; S. A. Kidd, 2003; S. A. Kidd & Davidson, 2007; S. Kidd & Shahar, 2008; L. Rew & Horner, 2003). In caring for their pet and placing the needs of their pet ahead of their own needs (“pet before self”), some youth may recognize the need to care for self. For youth experiencing this, it may be a critical point of service intervention and support, and is worthy of further consideration and investigation.
Table 1. Number of survey participants by city and location

<table>
<thead>
<tr>
<th>City</th>
<th>Location</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td>Location 1</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Location 2</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Location 3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Location 4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Sub-total</td>
<td>114</td>
</tr>
<tr>
<td>Ottawa</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td>Kingston</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Hamilton</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>189</strong></td>
</tr>
</tbody>
</table>
Table 2. Prevalence of regular drug use by drug group

<table>
<thead>
<tr>
<th>Drug Group</th>
<th>% Regular Users (6x/year or more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug Group 1</td>
<td>95.2%</td>
</tr>
<tr>
<td>Cigarettes, Alcohol, Marijuana</td>
<td></td>
</tr>
<tr>
<td>Drug Group 2</td>
<td></td>
</tr>
<tr>
<td>Prescription drugs: Oxycontin, other Non-prescribed prescription drugs</td>
<td>31.9% Non-Group 1 Drugs</td>
</tr>
<tr>
<td>Drug Group 3</td>
<td></td>
</tr>
<tr>
<td>Amphetamines/Hallucinogens: Acid, Speed, Ecstasy, Crystal Meth</td>
<td></td>
</tr>
<tr>
<td>Drug Group 4</td>
<td></td>
</tr>
<tr>
<td>Opiates/Stimulants: Crack, Cocaine, Heroin, Methadone</td>
<td></td>
</tr>
</tbody>
</table>

1Drug groups are not mutually exclusive
Table 3. Risk factor variables tested for their unconditional association with shelter use, depression, and use of non-group 1 drugs.

<table>
<thead>
<tr>
<th>Shelter Use Model</th>
<th>Depression Model</th>
<th>Use of Non-group 1 Drugs Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet ownership¹</td>
<td>Interviewer⁷</td>
<td>Interviewer⁷</td>
</tr>
<tr>
<td>Study city²</td>
<td>Study city²</td>
<td>Study city²</td>
</tr>
<tr>
<td>Study location³</td>
<td>Study location³</td>
<td>Study location³</td>
</tr>
<tr>
<td>Participant age</td>
<td>Pet ownership¹</td>
<td>Pet ownership¹</td>
</tr>
<tr>
<td>Participant gender⁴</td>
<td>Previous pet ownership</td>
<td>Previous pet ownership</td>
</tr>
<tr>
<td>Participant ethnicity⁵</td>
<td>Participant age</td>
<td>Participant age</td>
</tr>
<tr>
<td>Education level</td>
<td>Participant gender⁴</td>
<td>Participant gender⁴</td>
</tr>
<tr>
<td>Use of non-group 1 drugs⁶</td>
<td>Participant ethnicity⁵</td>
<td>Participant ethnicity⁵</td>
</tr>
<tr>
<td></td>
<td>Education level</td>
<td>Education level</td>
</tr>
<tr>
<td></td>
<td>Having child/children</td>
<td>Having child/children</td>
</tr>
<tr>
<td></td>
<td>Age which left home</td>
<td>Age which left home</td>
</tr>
<tr>
<td></td>
<td>Time since left home</td>
<td>Time since left home</td>
</tr>
<tr>
<td></td>
<td>Gang involvement</td>
<td>Gang involvement</td>
</tr>
<tr>
<td></td>
<td>Use of non-group 1 drugs⁶</td>
<td>Current living situation</td>
</tr>
<tr>
<td></td>
<td>Current living situation</td>
<td>Depression classification⁸</td>
</tr>
</tbody>
</table>

¹ Current pet ownership vs. no current pet ownership  
² Ottawa vs. Toronto vs. Kingston vs. Hamilton  
³ Drop-in center/shelter location  
⁴ Male vs. female  
⁵ White vs. Black vs. South Asian vs. Arab/West Asian vs. Southeast Asian vs. Latin American vs. First Nation/Inuit/Metis/Other Aboriginal vs. Other  
⁶ Regular use of non-group 1 drugs vs. non-regular use of non-group 1 drugs  
⁷ Interviewer 1-4 (author and 3 peer workers)  
⁸ Based on CES-D scores: scores >16 classified were as “depressed” vs. scores<16 were classified as “not depressed”
Table 4. Sourcing of 121 pets from 89 pet-owning street-involved youth in Ottawa, Toronto, Kingston and Hamilton, ON

<table>
<thead>
<tr>
<th>Source</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other(^a)</td>
<td>32</td>
<td>(26.4%)</td>
</tr>
<tr>
<td>Street friend/family</td>
<td>23</td>
<td>(19.1%)</td>
</tr>
<tr>
<td>Rescue or stray</td>
<td>18</td>
<td>(14.9%)</td>
</tr>
<tr>
<td>Family pet</td>
<td>16</td>
<td>(13.2%)</td>
</tr>
<tr>
<td>Newspaper/Advertisement</td>
<td>16</td>
<td>(13.2%)</td>
</tr>
<tr>
<td>Pet store</td>
<td>8</td>
<td>(6.6%)</td>
</tr>
<tr>
<td>Breeder</td>
<td>8</td>
<td>(6.6%)</td>
</tr>
</tbody>
</table>

\(^a\) Other sources included from a neighbour, a friend’s pet who had a litter, a stranger, friends who were housed, or other family members. One youth described obtaining his pet rat by saying “I paid $3 for him from a drug dealer”.
Table 5. Factors considered important in the decision to have a pet by 89 pet-owning street-involved youth

<table>
<thead>
<tr>
<th>Factors</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A love of animals</td>
<td>88 (98.9%)</td>
</tr>
<tr>
<td>To give the animals a better life</td>
<td>86 (96.6%)</td>
</tr>
<tr>
<td>Company/companionship</td>
<td>79 (88.8%)</td>
</tr>
<tr>
<td>To feel happier</td>
<td>78 (87.6%)</td>
</tr>
<tr>
<td>To make a positive change in my life</td>
<td>71 (79.8%)</td>
</tr>
<tr>
<td>Warmth while sleeping</td>
<td>41 (46.1%)</td>
</tr>
<tr>
<td>Protection while asleep</td>
<td>41 (46.1%)</td>
</tr>
<tr>
<td>Protection while awake</td>
<td>32 (36%)</td>
</tr>
<tr>
<td>To increase money from panhandling</td>
<td>5 (5.6%)</td>
</tr>
</tbody>
</table>
Table 6. Percent of participants in agreement to statements regarding the effects of pet ownership by 89 pet-owning street-involved youth

<table>
<thead>
<tr>
<th></th>
<th>% Agreement</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Having a pet has made it more difficult to find housing</td>
<td>42.7 (n=38)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>b) Having a pet has made my life harder</td>
<td>14.6 (n=13)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>c) I am housed because of my pet</td>
<td>13.5 (n=12)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d) Having a pet has made my life better</td>
<td>89.9 (n=90)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>e) Having a pet taught me how to accept love from another being</td>
<td>61.8 (n=55)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>f) Having a pet has saved my life</td>
<td>46.1 (n=41)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>g) Having a pet has made it more difficult to find a job</td>
<td>15.7 (n=14)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h) Having a pet has created more routine and structure in my life</td>
<td>83.1 (n=74)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>i) Having a pet has added to the stresses in my life</td>
<td>27 (n=24)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j) I have to stay on the street because I have a pet</td>
<td>11.2 (n=10)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>k) Having a pet has taught me about responsibility</td>
<td>93.3 (n=83)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>l) I would use more services and programs if I could bring my pet in with me</td>
<td>69.7 (n=62)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>m) I avoid getting arrested because of my pet</td>
<td>60.7 (n=54)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>n) Having a pet gives me a reason to live</td>
<td>59.1 (n=52)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>o) I make sure my pet is fed before I am</td>
<td>86.5 (n=77)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>p) Having a pet helps me to open up and relate to other people</td>
<td>62.9 (n=56)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>q) I have decreased my use of drugs &amp;/or alcohol because of my pet</td>
<td>47.2 (n=42)</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>r) Having a pet restricts my freedom</td>
<td>21.4 (n=19)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>s) I am proud of being a good pet owner</td>
<td>97.8 (n=87)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>t) I depend on my pet and my pet depends on me</td>
<td>87.6 (n=78)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>u) When I am with my pet, people can see a better side of me</td>
<td>76.1 (n=67)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>v) I won’t use youth services or programs if I can’t bring my pet</td>
<td>32.6 (n=29)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>w) Despite the added difficulties for me being a pet owner, I would never give up my pet</td>
<td>87.6 (n=78)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>x) I know what “love” is because of my pet</td>
<td>62.9 (n=56)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>y) Having a pet helps me cope with loneliness</td>
<td>83.1 (n=74)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>z) I wish I didn’t have a pet</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^a\): % Agreement is the cumulative percentage of categories “strongly agree” and “agree”

\(^b\): 1= strongly agree; 2=agree; 3=neither agree nor disagree; 4=disagree; 5=strongly disagree
Table 7. Logistic Regression Analysis of CES-D-based Diagnosis of Depression from 189 Street-involved Youth in Ottawa, Toronto, Hamilton, and Kingston.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β</th>
<th>SE</th>
<th>Wald’s $\chi^2$</th>
<th>df</th>
<th>p</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet ownership (0=pet owner; 1=non-pet owner)</td>
<td>1.086</td>
<td>0.378</td>
<td>8.250</td>
<td>1</td>
<td>0.004</td>
<td>2.962</td>
<td>1.412-6.213</td>
</tr>
<tr>
<td>Gender (0=male; 1=female)</td>
<td>1.739</td>
<td>0.450</td>
<td>14.952</td>
<td>1</td>
<td>&lt;0.001</td>
<td>5.689</td>
<td>2.357-13.734</td>
</tr>
<tr>
<td>Time since left home</td>
<td>-0.128</td>
<td>0.064</td>
<td>4.058</td>
<td>1</td>
<td>0.044</td>
<td>0.88</td>
<td>0.777-0.997</td>
</tr>
<tr>
<td>Regular use of drugs other than cigarettes, alcohol, &amp;/or marijuana (0=not regular user; 1=regular user)</td>
<td>2.915</td>
<td>0.665</td>
<td>19.195</td>
<td>1</td>
<td>&lt;0.0001</td>
<td>18.457</td>
<td>5.009-68.011</td>
</tr>
<tr>
<td>Gender*Drug use Interaction</td>
<td>-2.518</td>
<td>0.958</td>
<td>6.904</td>
<td>1</td>
<td>0.009</td>
<td>0.081</td>
<td>0.012-0.527</td>
</tr>
</tbody>
</table>
Table 8. The observed and predicted frequencies for a CES-D-based diagnosis of depression from 189 street-involved youth with a cut-off of 0.5

<table>
<thead>
<tr>
<th>Predicted</th>
<th>Observed</th>
<th>Yes</th>
<th>No</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>103</td>
<td>17</td>
<td>85.8%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>29</td>
<td>34</td>
<td>54.0%</td>
</tr>
<tr>
<td>Overall % correct</td>
<td></td>
<td></td>
<td></td>
<td>74.9%</td>
</tr>
</tbody>
</table>

Sensitivity = 85.8% of cases are correctly classified as depressed (103/17+103)%
Specificity = 54% of cases are correctly classified as not depressed (34/29+34)%
False positive = 22% (29/29+103)% - 22% of cases are misclassified as depressed
False negative = 33.33% (17/17+34)% - 33.33% of cases are misclassified as not depressed
The overall predictive ability of model is 74.9% (improvement over 65.6% in null model)
References


Kidd, S. A., & Davidson, L. (2007). "You have to adapt because you have no other choice": The stories of strength and resilience of 208 homeless youth in New York City and Toronto. *Journal of Community Psychology, 35*(2), 219-238.


CHAPTER 5

CONCLUSIONS
The benefits of pet ownership to human health have been demonstrated in the last 30 years, with positive effects for both physical and emotional health (Allen, Blascovich, & Mendes, 2002; Barker & Wolen, 2008; Beck & Meyers, 1996; Friedmann, Thomas, & Eddy, 2000; L. A. Hart, 2006; L. A. Hart, 2000; Johnson, 2003; Millberger, Davis, & Holm, 2009; Patronek & Glickman, 1993; Vizek-Vidovic, Arambašić, Keresteš, Kuterovac-Jagodic, & Vlahovic-Štetic, 2001; Wells, 2009). The psychosocial effects of pet ownership have been shown to not only positively impact the individual but also neighbourhoods and communities, facilitating social interaction and community participation (L. Wood, Giles-Corti, & Bulsara, 2005; L. J. Wood, Giles-Corti, Bulsara, & Bosch, 2007; L. J. Wood, 2011). It is not surprising then that among socially marginalized populations, including those who are homeless, pet ownership conveys not only the same benefits, but that these psychosocial benefits may be even more profound.

Research into the effects of pet ownership on the homeless is a relatively new field of study, and to date has been largely qualitative in nature (Bukowski & Buetow, 2011; Irvine, Kahl, & Smith, 2012; Kidd & Kidd, 1994; Labrecque & Walsh, 2011; Singer, Hart, & Zasloff, 1995). Even less studied are the roles, relationships and effects of pets for street-involved youth. For this particularly vulnerable group, pets have been shown to be motivators for positive change in the lives of street-entrenched youth (Bender, Thompson, McManus, Lantry, & Flynn, 2007; Rew, 2000). Understanding the motivational context for which pets can affect change for youth has critical and practical application for youth services and support helping youth transition off the street. However, more research is needed to further explore these effects and be able to confirm and generalize them to the greater street-involved youth population.

This thesis served to expand upon and contribute to existing knowledge about pet ownership among street-involved youth through the eyes of both the youth themselves, as well as
youth service professionals. It also provides the first quantitative evidence of an association between pet ownership and depression among street-involved youth, supporting other descriptive findings on the beneficial effects that pets can have for the lives of youth and further demonstrating the strength of the human-animal bond between homeless youth and their animal companions.

**Summary of findings**

Three studies were conducted and presented in this thesis. In order to explore the roles, relationships and effects of pets for homeless youth, the first two studies consisted of one-on-one qualitative interviews conducted with street-involved youth who owned pets and youth service professionals. The themes and findings from these interviews served to inform a cross-sectional study that sought to further explore and validate the findings from the qualitative studies. The interviews conducted with pet-owning street-involved youth exploring the effects of pet ownership revealed four themes. The overarching theme was one of “pet before self”, where youth described placing the needs of their pet ahead of their own needs. Sub-themes of “pet before self” were “physical effects” and “emotional effects”. Physical effects included the negative effect having a pet made for youth in accessing shelter and housing, employment and generating income, as well as restriction on their activities and accessibility to services and other non-pet-friendly locations. Regardless youth indicated they would not give up their animals. Emotional effects of pet ownership included the role that pets played in the lives of youth, including a source of love and companionship, and the relationships that they described, such as “best friend”, “constant companion”, and child-like. For each of “physical effects” and
“emotional effects”, second-level sub-themes of “benefits and liabilities” were found making up the fourth identified theme.

Many aspects of both the physical and emotional effects were demonstrative of the “pet before self” theme. Some of the liabilities youth described enduring in order to retain their relationship with their pet included coping with the additional stressors of feeding and caring for their pet, worry over their inability to provide veterinary care for their pet, and concern about pet loss. Negative comments made to youth by members of the public and their perception of the youth as unable to properly care for their pet were also stressors for many youth, and is consistent with reports from homeless pet guardians interviewed by Irvine et al. (2012) on this kind of stigmatization by the public. Youth participants described not seeking shelter themselves and choosing to stay on the street because of their pet, feeding their pet before themselves and foregoing employment opportunities due to a lack of reliable pet care when the owner is at work. Because of the strength of this human-animal bond, many youth chose to stay with their pet and forego opportunities for their own success.

An important finding from the qualitative study involving street-involved youth was the previously unrecognized effect of pet ownership on drug use and arrests. Of note is that this effect was independently and consistently raised by male youth participants. Consistent with other findings that pets may be a driver for change (Bender et al., 2007; Millberger, Davis, & Holm, 2009; L. Rew, 2000), pet ownership may also be a motivator for decreased drug and/or alcohol use among street-involved youth, and warrants further study.

The second qualitative study involving youth-service professionals served to further inform on the issues and effects of pet ownership for street-involved youth, from the perspective of the service provider. Thematic analysis revealed identical themes to those from the youth
interviews. While the themes of “pet before self”, “physical effects”, “emotional effects”, and “benefits and liabilities” each remained the same, the content and focus on these themes varied from that of youth. Service workers strongly recognized the negative effects of pet ownership on service utilization, housing, employment and education, and therefore the potential success of pet-owning youth to exit the street (“pet before self”). However, the youth service professionals interviewed were also very aware of the strong roles and relationships that pets play in the lives of these youth, and described experiences with youth where they have witnessed the powerful emotional effects of unconditional love and non-judgmental support that pets also provide. The youth worker participants confirmed findings from the street-youth interviews describing youth who had decreased their use of drugs and/or alcohol because of their pet. Finally, the youth workers also recognized how pet ownership was a driver for some street-youth to establish structure and routine in their lives, and provided them with both a sense of responsibility and pride. The results of this study confirmed and validated those from the youth interviews, and demonstrated the strong role that youth service professionals have the potential to play in supporting not only the youth but also their chosen pet companion.

The final study was quantitative in nature, serving to further examine and validate the findings from the previous two qualitative studies. This cross-sectional study sought to describe the demographic characteristics of street-involved youth who are pet owners, further explore the roles, relationships and effects of this human-animal relationship and assess associations between pet ownership and youths’ shelter use, drug use and depression. The survey was developed in part from findings from the interviews with youth and youth workers, and also incorporated validated scales for depression (Center for Epidemiologic Studies Depression Scale (CES-D)) and pet attachment (Lexington Attachment to Pets Scale (LAPS)).
Following survey administration to 89 pet-owners and 100 non-pet owners who were all street-involved, a high level of pet attachment was found among the pet-owning participants, with stronger attachments identified for the female participants. The vast majority of pet-owners indicated that they regarded their pet as family, child-like, and/or best friend. Other impacts of pet ownership were examined based on a Likert scale, and some of the more profound findings include 47.2% of participants reporting that they had decreased their use of drugs and/or alcohol because of their pet; 60.7% agreed that they avoid getting arrested because of their pet; and almost half the youth (46.1%) either agreed or strongly agreed that having a pet has saved their life.

Pet ownership was further shown to be negatively associated with regular shelter use with the odds of an individual making regular use of shelter services being 2.5 times higher for non-pet owners than those who owned pets (p<0.005; 95% confidence interval, 1.37 to 4.48). While modelling drug use in this study did not find a difference in frequency of drug use between pet owners and those who do not own pets, use of “hard” drugs (drugs other than cigarettes, alcohol, or marijuana) along with participant gender, and pet ownership were found to be significantly associated with depression among participants. Females (compared to males) were demonstrated to have higher odds of depression among the non-regular users of “hard” drugs, whereas males who are regular users of “hard” drugs were found to have higher odds of depression than those who are not regular users. Pet ownership was found to have negatively associated with depression, with youth not having a pet having 3 times the odds of being depressed than pet-owning youth.

The positive effects of pet ownership among street-involved youth demonstrated in this study may be attributable to the high level of pet attachment and social support that pets provide.
While this study is the first to quantitatively establish an association between pet ownership and depression among the street-involved youth, a greater understanding is needed of the complex relationships that pet ownership may have among street-involved youth.

**Limitations**

The study design chosen for these three studies, as well as the population of study have their inherent limitations. Findings of qualitative inquiries cannot be generalized to the broader target population and saturation was unlikely achieved in research areas including pet ownership among female and gang-involved youth. Qualitative research also has inherent biases in the form of purposive sample selection, and both interview and respondent biases. Street-involved youth themselves are a difficult population to study due to their heterogeneity, and often transiency. Further, cross-sectional studies represent one point in time where temporal or causal associations cannot be made.

**Key recommendations**

Based on the findings of this thesis, the following recommendations are put forth:

1. Awareness and education among youth-service professionals regarding
   - The strength of the human-animal bond
   - Potential beneficial effects of pet ownership as well as liabilities
   - Challenges and stressors pet-owning youth face
   - Pets should be considered as a vehicle for engaging pet-owning street-involved youth in services and support

2. Support for pet-owning youth in the form of
• Pet food and supplies
• Pet loss support
• Temporary pet boarding or “dog daycare”
• Pet health education
• Dog training and behavioural consultation
• Veterinary care
• Education and advocacy for youth on tenancy rights with a pet, by-laws associated with pet ownership, breed ban legislation, and consequences of animal neglect or abuse, and consequences of pet removal during arrest or incarceration.

3. Support for delivery of a strength-based model of service provision, focusing on individual youth’s skills, abilities, talents and strengths that they have acquired as a pet owner, rather than their deficits; such as their ability to responsibly and properly care for their pet, and the pride they develop in themselves and their pet.

4. Consideration for pet-friendly policies within youth service locations

5. Inclusion of pet ownership among those independent variables commonly researched in studies of street-involved youth.

**Future directions for research**

The study of pet ownership among street-involved youth is a relatively new area of research, and as such, there is much that is yet to be investigated. Street-involved youth are a difficult population to study, and examining the effects of pet ownership is complex. Further quantitative research is needed to confirm and support the findings of the current thesis in the areas of pet ownership on depression, drug use and housing, with a specific focus on longitudinal studies to
establish temporal associations. Furthermore, investigation into the health, welfare, sourcing and retention of the animals belonging to street-involved youth is warranted. Among the heterogeneous population of street-involved youth, further study of the effects of pet ownership among female, gang-involved, and travelling youth is needed. Further, to drive policy change, the perspective of service providers on the barriers for pet-friendly services is an imperative area of future research.
References


Interviews with pet-owning street-involved youth

1. A Consent to participate in research - Street-involved youth

1. B Interview guide for pet-owning street-involved youth
CONSENT TO PARTICIPATE IN RESEARCH

Pet Ownership among Street-Involved Youth

You are asked to participate in a research study conducted by Dr. Jason Coe, Dr. Bill O’Grady, Dr. Derek Haley, and Dr. Michelle Lem (Graduate Student), from the Department of Population Medicine, Ontario Veterinary College at the University of Guelph. This research will contribute to a Master’s thesis.

If you have any questions or concerns about the research, please feel free to contact Dr. Jason Coe (Faculty Advisor) by phone at (519) 824-4120 Ext. 54010 or by email at jcoe@uoguelph.ca

PURPOSE OF THE STUDY
The purpose of this study is to understand the effects and roles of pet ownership among street-involved youth, assess the health and welfare of the animals in these relationships, and to assess the unique needs of pet-owning street-involved youth.

PROCEDURES
If you volunteer to participate in this study, we would ask you to do the following things:

- Interviews with pet-owning street-involved youth
- Participate in a one-to-one interview with the graduate student.
- In these semi-structured informal interviews, we will be discussing the experiences, effects, and roles of pet ownership in the lives of street-involved youth, what services or programs would benefit this relationship, and explore any concerns or obstacles youth face as pet owners.
- These interviews will be audio-taped and transcribed.
- Each interview is expected to take about an hour
- You will be asked to participate once
- Interviews will be conducted within a youth shelter or service provider location.

If you would like to participate in confirming our findings, or to know the findings of the research, you will be asked to provide a contact method of your choosing, including through a shelter or agency.

POTENTIAL RISKS AND DISCOMFORTS
A potential risk exists that, if subpoenaed, the researcher may be required to divulge the research results. As well, should a participant mention experiences with domestic violence, including physical and sexual abuse, or if there is risk of harm, to themselves or others, in any way, the researcher will be required to report this to the necessary authorities.
Discussion about the topic of this study may be emotionally difficult or socially uncomfortable for some, as experiences associated with homelessness, drug use or other potentially sensitive or personal experiences are discussed.

If this occurs, you are free to leave at any time, without explanation. There will be a qualified individual who is not associated with the study, will be identified and present at each location where the interviews will be held, to provide help, support or referral, if necessary. A list of community resources will also be provided (i.e. crisis help lines, youth support services) before starting.

**POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

Potential benefits of this research are to develop programs and services to help support the human-animal relationship, and may demonstrate the need for shelters and other service providers to adopt policies that are more accepting of pets.

**PAYMENT FOR PARTICIPATION**

A $20 compensation will be provided to each participant at the end of the interview.

**CONFIDENTIALITY**

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

Identifying information will not be collected, and code names will be assigned instead of participant's names. Information collected will be in the form of audiotape CD, paper transcript, and the researcher’s notes. This data will be seen by only the above-named researchers and will be kept for 7 years then destroyed. It will be secured in a locked filing cabinet within a locked office.

During the write-up of findings, however, the researcher will be using code names instead of using participant names to ensure the confidentiality of the participants is maintained. If the researcher decides that a direct quote will be useful to the research project write-up, any information from the quote which identifies the participant will be changed or removed. Audiotape or transcript of the participant’s interview will be made available only to the researchers listed above and may be reviewed by the participant upon request. Additionally, participants will be permitted to withdraw any comments at any point during the research process, and the methods of protecting the data mentioned above will be observed.

**PARTICIPATION AND WITHDRAWAL**

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.

**RIGHTS OF RESEARCH PARTICIPANTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:
SIGNATURE OF RESEARCH PARTICIPANT

I have read the information provided for the study “Pet Ownership among Street-Involved Youth” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study and to the use of verbatim quotes in publications or presentations (all identifying information removed and code names used). I have been given a copy of this form.

____________________________________
Name of Participant (please print)

____________________________________
Signature of Participant

____________________________________
Date

SIGNATURE OF WITNESS

____________________________________
Name of Witness (please print)

____________________________________
Signature of Witness

____________________________________
Date
Pet Ownership among Homeless Youth

Interview Guide

Pet Owning Homeless Youth

1. Could you tell me about yourself
2. Tell me about your current situation
3. Tell me about your pet and the relationship you have with him/her.
4. What role does your pet play in your life?
5. What effect, if any, does your pet have in your life? (e.g. decision-making, housing, etc.)
6. What are your concerns as a pet owner?
7. How do you provide food and care for your pet?
8. What would help (services/programs) you as a homeless youth pet owner?
9. What difference is there in your life since you have been a pet owner?
APPENDIX 2

Interviews with youth service professionals

2.A Consent to participate in research - Youth service professional
2.B Interview guide for youth service professionals
CONSENT TO PARTICIPATE IN RESEARCH

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- These interviews will be audio-taped and transcribed.
- Each interview is expected to take about an hour
- You will be asked to participate once
- Interviews will be conducted within a youth shelter or service provider location.

If you would like to participate in confirming our findings, or to know the findings of the research, you will be asked to provide a contact method of your choosing, including through a shelter or agency.

POTENTIAL RISKS AND DISCOMFORTS
For youth shelter/service providers, rare but potential discomforts, may arise from discussion on emotional and/or personal experiences with street-involved youth.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Potential benefits of this research are to develop programs and services to help support the human-animal relationship, and may demonstrate the need for shelters and other service providers to adopt policies that are more accepting of pets.
PAYMENT FOR PARTICIPATION
A $20 compensation will be provided to each participant at the end of the interview or questionnaire.

CONFIDENTIALITY
Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.
Identifying information will not be collected, and code names will be assigned instead of participant’s names. Information collected will be in the form of audiotape CD, paper transcript, and the researcher’s notes. This data will be seen by only the above-named researchers and will be kept for 7 years then destroyed. It will be secured in a locked filing cabinet within a locked office.
During the write-up of findings, however, the researcher will be using code names instead of using participant names to ensure the confidentiality of the participants is maintained. If the researcher decides that a direct quote will be useful to the research project write-up, any information from the quote which identifies the participant will be changed or removed. Audiotape or transcript of the participant’s interview will be made available only to the researchers listed above and may be reviewed by the participant upon request. Additionally, participants will be permitted to withdraw any comments at any point during the research process, and the methods of protecting the data mentioned above will be observed.

PARTICIPATION AND WITHDRAWAL
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You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Research Ethics Coordinator
University of Guelph
437 University Centre
Guelph, ON N1G 2W1

Telephone: (519) 824-4120, ext. 56606
E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236

SIGNATURE OF RESEARCH PARTICIPANT

I have read the information provided for the study “Pet Ownership among Street-Involved Youth” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study and to the use of verbatim quotes in publications or presentations (all identifying information removed and code names used). I have been given a copy of this form.

____________________________________
Name of Participant (please print)

____________________________________
Signature of ParticipantDate
SIGNATURE OF WITNESS

________________________________________________________________________
Name of Witness (please print)

________________________________________________________________________
Signature of Witness                     Date
Pet Ownership among Homeless Youth

Interview Guide

Youth Shelter/Service Professionals

1. Tell me about yourself and your role working with youth
2. Tell me about your experience with homeless youth who have pets
3. What roles do you think pets have in the lives of homeless youth?
4. Have you experienced any differences between homeless youth who have pets compared to those who do not?
5. What effect, if any, do you think pets have on the lives of homeless youth?
6. What support, if any, in terms of programs/services do you think pet owning homeless youth could benefit from?
7. Do you have any concerns with regards to the pet’s health or welfare in these relationships?
APPENDIX 3

Survey administration to street-involved youth

3.A Questionnaire administered to street-involved youth

3.B Recruitment poster

3.C Consent to participate in research – Questionnaire with street-involved youth
Survey

1. a) Do you currently own a pet? □ Yes □ No

b) While on the street, did you have any other animals in the past?
□ Yes □ No

If NO to Q1a) and Q1b), please go to question 21.
If YES to Q1a) and NO to Q1b), please go to question 4.

2. If YES to Q1b).

   a) What was (were) your pet’s name(s) and species?

   Pet 1 Name:___________________ Species:___________________
   Pet 2 Name:___________________ Species:___________________
   Pet 3 Name:___________________ Species:___________________

   b) How long ago did you have your pet(s)?
   (If more than 3 pets, please list the most recent pets)

   Pet 1:_______yrs _________months ago
   Pet 2:_______yrs _________months ago
   Pet 3:_______yrs _________months ago

   c) How long did you have him/her for?

   Pet 1:_______yrs _________months _________weeks
   Pet 2:_______yrs _________months _________weeks
   Pet 3:_______yrs _________months _________weeks
d) What happened to him/her?

<table>
<thead>
<tr>
<th>Pet 1</th>
<th>Pet 2</th>
<th>Pet 3</th>
</tr>
</thead>
</table>
| ☐ Re-homed  
Reason: ___________________  
☐ Lost or ran away  
☐ Stolen  
☐ Taken away by humane enforcement or by-law officer  
☐ Taken away during arrest or incarceration  
☐ Put to sleep by owner’s choice  
Reason: ___________________  
☐ Put to sleep by enforcement agency (humane or bi-law)  
☐ Died of natural causes  
☐ Died of unnatural causes  
Reason: ___________________  
☐ Other: ___________________ | ☐ Re-homed  
Reason: ___________________  
☐ Lost or ran away  
☐ Stolen  
☐ Taken away by humane enforcement or by-law officer  
☐ Taken away during arrest or incarceration  
☐ Put to sleep by owner’s choice  
Reason: ___________________  
☐ Put to sleep by enforcement agency (humane or bi-law)  
☐ Died of natural causes  
☐ Died of unnatural causes  
Reason: ___________________  
☐ Other: ___________________ | ☐ Re-homed  
Reason: ___________________  
☐ Lost or ran away  
☐ Stolen  
☐ Taken away by humane enforcement or by-law officer  
☐ Taken away during arrest or incarceration  
☐ Put to sleep by owner’s choice  
Reason: ___________________  
☐ Put to sleep by enforcement agency (humane or bi-law)  
☐ Died of natural causes  
☐ Died of unnatural causes  
Reason: ___________________  
☐ Other: ___________________ |

If you have lost a pet in the past (due to any of the reasons in Q2d), please indicate your level of agreement or disagreement with the following:

<table>
<thead>
<tr>
<th>“When I lost my pet, ...”</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>...I felt depressed</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...I was angry</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...I had no one to talk to about this loss</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...I blamed myself</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...it didn’t have any effect on me emotionally</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...I used drugs and/or alcohol to cope with the pain of the loss</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...I didn’t know what to do</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>...it made my life harder</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>... it made my life easier</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
3. A) Please tell us about the pet(s) you currently have:
   a. Name: ________________________________________
   b. Species:  □ Dog  □ Cat  □ Ferret  □ Rodent
       □ Other: (please specify) _________________________
   c. Breed: _________________________________________
   d. Current Age: ________Yrs________Mo._________wks
       □ Don’t know
   e. Age obtained at: _______Yrs________Mo._________wks
       □ Don’t know
   f. Sex:  □ Male  □ Female
   g. □ Neutered  □ Not neutered
   h. Where did you obtain this pet?
       □ Breeder  □ Family pet  □ Stray  □ Pet store  □
       Newspaper/Ad
       □ Street-friend/street-family
       □ Rescue: _______________________________________
       □ Other: _________________________________________
   i. Has this pet ever bitten anyone?  □ Yes  □ No  □ Don’t know
      (“bitten” meaning to cause bruising or puncturing of a person’s skin vs.
      “mouthing”)

B) If you have more than one pet:
   a. Name: _________________________________________
   b. Species:  □ Dog  □ Cat  □ Ferret  □ Rodent
       □ Other: (please specify) _________________________
   c. Breed: _________________________________________
   d. Current Age: : _______Yrs________Mo._________wks
       □ Don’t know
   e. Age obtained at: : _______Yrs________Mo._________wks
       □ Don’t know
   f. Sex:  □ Male  □ Female
   g. □ Neutered  □ Not neutered
   h. Where did you obtain this pet?
       □ Breeder  □ Family pet  □ Stray  □ Pet store  □
       Newspaper/Ad
       □ Street-friend/street-family
       □ Rescue: _______________________________________
       □ Other: _________________________________________
   i. Has this pet ever bitten anyone?  □ Yes  □ No  □ Don’t know
C) If you have more than 2 pets:
   a. Name: ________________________________________
   b. Species: □ Dog □ Cat □ Ferret □ Rodent □ Other: (please specify) __________________________
   c. Breed: _______________________________________
   d. Current Age: _______ Yrs _______ Mo. _______ wks
      □ Don’t know
   e. Age obtained at: _______ Yrs _______ Mo. _______ wks
      □ Don’t know
   f. Sex: □ Male □ Female
   g. □ Neutered □ Not neutered
      Where did you obtain this pet?
      □ Breeder □ Family pet □ Stray □ Pet store □ Newspaper/Ad
      □ Street-friend/street-family
      □ Rescue: __________________________
      □ Other: __________________________
   h. Has this pet ever bitten anyone? □ Yes □ No □ Don’t know

4. How important were the following points in your decision to have a pet?

<table>
<thead>
<tr>
<th></th>
<th>Very Important</th>
<th>Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Company/Companionship</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>b) Protection while awake</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>c) Protection while sleeping</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>d) Warmth while sleeping</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>e) To feel happier</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>f) To give the animal a better life</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>g) To try and increase income potential from panhandling</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>h) To make a positive change in my life</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>A love of animals</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>j) Other: ____________________</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>
5. How would you describe your relationship with your pet(s)?

Please indicate your level of agreement or disagreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) My pet is my best friend</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>b) My pet and I are not a good match for each other</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>c) My pet gives me security</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>d) My pet is my family</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>e) My pet causes conflict with my other relationships</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>f) My pet is like my child</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>g) Other:</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

6. Please indicate your level of agreement or disagreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>aa) Having a pet has made it more difficult to find housing</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>bb) Having a pet has made my life harder</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>cc) I am housed because of my pet</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>dd) Having a pet has made my life better</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>ee) Having a pet taught me how to accept love from another being</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>ff) Having a pet has saved my life</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>gg) Having a pet has made it more difficult to find a job</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>hh) Having a pet has created more routine and structure in my life</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>ii) Having a pet has added to the stresses in my life</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>jj) I have to stay on the street because I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kk) Having a pet has taught me about responsibility</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>ll) I would use more services and programs if I could bring my pet in with me</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>mm) I avoid getting arrested because of my pet</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>nn) Having a pet gives me a reason to live</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>oo) I make sure my pet is fed before I am</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>pp) Having a pet helps me to open up and relate to other people</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>qq) I have decreased my use of drugs &amp;/or alcohol because of my pet</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>rr) Having a pet restricts my freedom</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

**Strongly agree** | **Agree** | **Neither agree nor disagree** | **Disagree** | **Strongly disagree**

| ss) I am proud of being a good pet owner | A | B | C | D | E |
| tt) I depend on my pet and my pet depends on me | A | B | C | D | E |
| uu) When I am with my pet, people can see a better side of me | A | B | C | D | E |
| vv) I won’t use youth services or programs if I can’t bring my pet | A | B | C | D | E |
| ww) Despite the added difficulties for me being a pet owner, I would never give up my pet | A | B | C | D | E |
| xx) I know what “love” is because of my pet | A | B | C | D | E |
| yy) Having a pet helps me cope with loneliness | A | B | C | D | E |
| zz) I wish I didn’t have a pet | A | B | C | D | E |
Please tell us about your current pet's health and well-being:

7. On a scale of 1 to 5 (1 being NEVER healthy; 5 being ALWAYS healthy), how would you rate the health of your pet(s)?

<table>
<thead>
<tr>
<th>Very ill; Never been healthy</th>
<th>Healthy; Never been sick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
</tr>
</tbody>
</table>

8. On a scale of 1 to 5 (1 being NOT happy most of the time; 5 being having the best life possible), how would you rate the quality of life of your pet(s)?

<table>
<thead>
<tr>
<th>He/She is not happy most of the time</th>
<th>He/She has the best possible life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
</tr>
</tbody>
</table>

Please tell us more about your pet’s health and care.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have you, as the owner, had any concerns about your pet’s well-being in the past 6 months?</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b) Do you currently have any concerns about your pet’s health?</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c) Has your pet received veterinary care in the past 6 months</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d) Have you felt that your pet has needed veterinary care in the last 6 months?</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Please tell us about your experiences as a pet owner:

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Have you had trouble getting food for your pet(s) in the last 6 months?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) Has anyone (e.g. worker, enforcement, member of the public) made any negative comments to you about your pet’s health or well-being in the past 6 months?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) Has anyone (e.g. worker, enforcement, member of the public) made any positive comments to you about your pet’s health or well-being in the past 6 months?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) Are you able to easily get veterinary care for your pets?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) Do you feel comfortable taking your pet(s) to a veterinarian?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) Do you have someone who could help you support the cost of veterinary care for your pet if it becomes sick or injured?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) If your pet was in need of veterinary care, would you consider committing a crime to get the money?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Comments:

9. Please tell us more about how your pet spends his/her day (per 24hrs):

<table>
<thead>
<tr>
<th>Time spent per day (per 24hrs)</th>
<th>less than 30 min</th>
<th>30 min-1hr</th>
<th>1-2 hrs</th>
<th>2-4 hrs</th>
<th>4-8 hrs</th>
<th>8-12 hrs</th>
<th>more than 12 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) How much time do you play with your pet per day (per 24hrs)?</td>
<td>Pet A 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet B 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet C 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) How much exercise does your pet receive per day (per 24hrs)?</td>
<td>Pet A 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet B 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet C 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) How much time does your pet spend sleeping or resting per day (per 24hrs)?</td>
<td>Pet A 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet B 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet C 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) How much time does your pet spend alone per day (per 24hrs)?</td>
<td>Pet A 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet B 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pet C 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Has your pet shown any of the following health issues in the *past 6 months*?

<table>
<thead>
<tr>
<th></th>
<th>NEVER</th>
<th>1-2 times</th>
<th>2-4 times</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Daily</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Vomiting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>b)</td>
<td>Diarrhea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>c)</td>
<td>Not eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>d)</td>
<td>Worms in stool or vomit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>e)</td>
<td>Weight loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>f)</td>
<td>Limping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>g)</td>
<td>Open or bleeding wound</td>
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<td>h)</td>
<td>Worn foot pads or nails</td>
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<td>i)</td>
<td>Frostbite</td>
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<td>k)</td>
<td>Swellings</td>
<td>Pet A</td>
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<tr>
<td>l)</td>
<td>Infections or abscesses</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>E</td>
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<td>Pet B</td>
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<td>E</td>
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<tr>
<td>m)</td>
<td>Drinking or peeing more than usual</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>E</td>
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<td>n)</td>
<td>Teeth or mouth problems</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
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<td>Pet C</td>
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<td>o)</td>
<td>Pain:</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
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<td>E</td>
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<td></td>
<td>Pet C</td>
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<td>E</td>
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<tr>
<td></td>
<td></td>
<td>NEVER</td>
<td>1-2 times</td>
<td>2-4 times</td>
<td>Monthly</td>
<td>Weekly</td>
<td>Daily</td>
</tr>
<tr>
<td>p)</td>
<td>Other:</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pet B</td>
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<td>E</td>
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<tr>
<td></td>
<td></td>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

For exotic species, please tell us about any health concerns you may have:

________________________________________________________________________
________________________________________________________________________
10. Please tell us about your pet’s social life:

<table>
<thead>
<tr>
<th></th>
<th>&lt;30 min</th>
<th>30 min-1 hr</th>
<th>1-2 hrs</th>
<th>2-4 hrs</th>
<th>4-8 hrs</th>
<th>8-12 hrs</th>
<th>&gt;12 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) How much time does your pet socialize with other people per day? (per 24 hrs)</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>b) How much time does your pet spend socializing with other animals per day? (per 24 hrs)</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>c) How much time does your pet spend playing with other animals per day? (per 24 hrs) (not housemates)</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>d) How much time you spend with your pet each day? (per 24 hrs)</td>
<td>Pet A</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Pet B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td></td>
<td>Pet C</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

11. How often is your pet exposed to new environments or situations?

<table>
<thead>
<tr>
<th></th>
<th>Occasionally</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

Please tell us about your pet’s behaviour:

12. Have you received any formal/professional advice on training or behaviour for your pet?

☐ Yes    ☐ No
13. If you have a dog, what commands does your dog know, and how well?

<table>
<thead>
<tr>
<th>Command</th>
<th>Perfect</th>
<th>Usually OK</th>
<th>Needs work</th>
<th>Doesn’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Sit</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>b) Stay</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>c) Lie down</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>d) Come</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>e) Wait</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>f) Heel</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>g) Fetch</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>h) Drop it</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>i) Other:</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

14. Has your pet ever shown any behaviour problems?

- Yes
- No
- Not sure

Comments:

15. Has your pet shown any of the following in the past 6 months?

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growling at strangers</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Growling at you, the owner</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Biting or nipping at familiar people, including you</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Biting or nipping at strangers</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Aggression to other</td>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
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<tr>
<td>dogs</td>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>Pet C</td>
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<td>C</td>
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<td>E</td>
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<table>
<thead>
<tr>
<th>Aggression to other animals</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
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<td>Pet B</td>
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<tr>
<td>Pet C</td>
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<td>G</td>
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<table>
<thead>
<tr>
<th>Fear of places</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>F</td>
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<td>Pet C</td>
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<table>
<thead>
<tr>
<th>Fear of people</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>F</td>
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<td>Pet C</td>
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<table>
<thead>
<tr>
<th>Fear of noises or sounds</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>G</td>
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<td>G</td>
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<td>Pet C</td>
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<td>E</td>
<td>F</td>
<td>G</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Anxiety: barking, whining, house soiling, &amp;/or destructive</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<tr>
<td>Pet C</td>
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<td>B</td>
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<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anxiety from being left alone</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
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</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anxiety when left with a different person (not owner)</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circling or tail-chasing</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excessive licking, chewing of a body part</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pacing</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>House soiling</th>
<th>Never</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet A</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet B</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet C</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>Pet</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>C</td>
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<tr>
<td>D</td>
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<tr>
<td>E</td>
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<tr>
<td>F</td>
<td></td>
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<td></td>
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<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For exotic species, please tell us about any behavioural concerns you may have:

________________________________________________________________________________________
16. Lexington Attachment to Pets Scale

Please tell us whether you agree or disagree with some very brief statements about your favourite pet. For each statement, check whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. You may refuse to answer.

<table>
<thead>
<tr>
<th></th>
<th>Agree Strongly</th>
<th>Agree Somewhat</th>
<th>Disagree Somewhat</th>
<th>Disagree Strongly</th>
<th>Don't Know or Refuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. My pet means more to me than any of my friends.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>b. Quite often I confide in my pet.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>c. I believe that pets should have the same rights and privileges as family members.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>d. I believe my pet is my best friend.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>e. Quite often, my feelings toward people are affected by the way they react to my pet.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>f. I love my pet because he/she is more loyal to me than most of the people in my life.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>g. I enjoy showing other people pictures of my pet.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>h. I think my pet is just a pet.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>i. I love my pet because it never judges me.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>j. My pet knows when I'm feeling bad.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>k. I often talk to other people about my pet.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>l. My pet understands me.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>m. I believe that loving my pet helps me stay healthy.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>n. Pets deserve as much respect as humans do.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>o. My pet and I have a very close relationship.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

196
| p. | I would do almost anything to take care of my pet. | A | B | C | D | E |
| q. | I play with my pet quite often. | A | B | C | D | E |
| r. | I consider my pet to be a great companion. | A | B | C | D | E |
| s. | My pet makes me feel happy. | A | B | C | D | E |
| t. | I feel that my pet is a part of my family. | A | B | C | D | E |
| u. | I am not very attached to my pet. | A | B | C | D | E |
| v. | Owning a pet adds to my happiness. | A | B | C | D | E |
| w. | I consider my pet to be a friend. | A | B | C | D | E |
Please tell us about yourself:

17. When were you born? \[\text{Month} / \text{Date} / \text{Year}\]

18. Are you ☐ Male ☐ Female ☐ Transgendered/Transsexual

19. To which ethno-racial group do you belong? (Please check one)

☐ White
☐ Black (AFRICAN/CARIBBEAN)
☐ South Asian (BENGALI, PUNJABI, SINGHALESE, TAMIL, BANGLADESHI, EAST INDIAN, PAKISTANI, SRI LANKANI)
☐ Arab/West Asian (AFGHAN, ARMENIAN, IRANIAN, ISRAELI, KURDISH, TURKISH, WEST ASIAN)
☐ Southeast Asian (CHINESE, PHILIPINO, INDO-CHINESE, INDONESIAN, JAPANESE, KOREAN, MALAY, OTHER ASIAN)
☐ Latin American
☐ First Nation/Inuit/Metis/Other Aboriginal
☐ Other (specify) ________________________________

20. What is the highest level of education you have completed? (Please check one)

☐ Grade 8 or lower ☐ G.E.D. (high school equivalency)
☐ Grade 9 ☐ Some college / University
☐ Grade 10 ☐ College degree/ diploma
☐ Grade 11 ☐ Technical or vocational school diploma
☐ Grade 12 ☐ University degree
☐ Grade 13 ☐ Other ________________________________

21. When did you leave home for the first time?

Age: ___________ years-old  OR  Date: ______(mo)/ ______(yr)
22. How important were the following in your decision to leave home?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th></th>
<th></th>
<th>Not at all important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Freedom to live as I choose</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>b) Turned 16 and left foster care</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>c) Turned 16 and left group home</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>d) Family poverty</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>e) Abusive family environment</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>f) Couldn’t get along with parents/family</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>g) Family gave up on me</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>h) Parent(s) kicked me out</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>i) Legal problems</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>j) Substance abuse within the home</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>k) Personal substance abuse</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>l) Family conflict over sexual orientation</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>m) Street lifestyle &amp; culture</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>n) Other: ____________________</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
Please tell us about the services you use:

23. How often do you make use of the following programs and/or services?

<table>
<thead>
<tr>
<th>Service</th>
<th>Never</th>
<th>Less than 2 times a year</th>
<th>2-6 times a year</th>
<th>Less than twice a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment program</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Education program</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Drop-in Centre</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Overnight Shelter</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Daytime Health or Medical service</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Needle Exchange</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Rehab or Drug treatment</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Meal services</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Street Outreach</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Mental health support</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Hospital Emergency</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Other:</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
</tbody>
</table>

24. What do you think makes it harder for you to get and access services, if any?

_____________________________________________________________________________________________________________________________________________________________________

_____________________________________________________________________________________________________________________________________________________________________
Please tell us about your use of alcohol or drugs, if any:

*ALL INFORMATION IS CONFIDENTIAL*

25. How frequently do you use the following:

<table>
<thead>
<tr>
<th>Substance</th>
<th>NEVER</th>
<th>Less than twice a year</th>
<th>2-6 times a year</th>
<th>Less than once a month</th>
<th>Once or twice a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Alcohol</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Marijuana or hash</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Smoke Crack</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Snort Cocaine</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Shoot Cocaine</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Acid</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Smoke Heroin</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Shoot Heroin</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Oxycontin</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Crystal Meth.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Speed (Ice/Jib)</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Non-prescribed use of prescription drugs or pills</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Methadone</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Ecstasy (“E”)</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Other</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
</tr>
</tbody>
</table>

26. What do you feel contributes to your drug use?

________________________________________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________________________________________
27. Center for Epidemiologic Studies Depression Scale (CES-D)

Below is a list of some of the ways you may have felt or behaved. Please indicate how often you’ve felt this way during the past week. Please respond to all items.

<table>
<thead>
<tr>
<th>Place a check mark (✓) in the appropriate column.</th>
<th>Rarely or none of the time (less than 1 day)</th>
<th>Some or a little of the time (1-2 days)</th>
<th>Occasionally or a moderate amount of time (3-4 days)</th>
<th>All of the time (5-7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) I was bothered by things that usually don't bother me</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>b) I did not feel like eating; my appetite was poor</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>c) I felt that I could not shake off the blues even with help from my family</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>d) I felt that I was just as good as other people</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>e) I had trouble keeping my mind on what I was doing</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>f) I felt depressed</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>g) I felt that everything I did was an effort</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>h) I felt hopeful about the future</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>


28. Are you currently involved with a group that you would refer to as a gang?  □ Yes  □ No  □ Choose not to answer
29. Have you ever been gang-involved?
☐ Yes  ☐ No  ☐ Choose not to answer

30. What is your current situation?

a) Housing
☐ I am stably housed: how long at current place? __________
☐ I am staying with friends/family
☐ I am sleeping in shelters
☐ I am sleeping outside (streets, alleys, parks, rooftops, a tent, a car)
☐ I am squatting
☐ I am couch surfing
☐ Other: _________________________________________________

b) Where does your money come from right now?

All information is confidential

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>Choose not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare/Ontario Works</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Family benefits/Disability (ODSP)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>EI (Employment Insurance)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>PNA (Personal Needs Allowance)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Student loans</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Money from parents/caregivers</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Money from friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Wages or salary from work/job</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Panhandling</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Theft/ B&amp;E</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Drug dealing</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Drug runner</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Selling stolen property</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sex or prostitution</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Odd jobs</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Focus groups/Drug or research studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
c) **What is the main way that you made money in the past 2 weeks?**
   “___________________________________________”

d) **Any other information about your current situation:**
   ____________________________________________________

31.  
   a) **Do you have any children?**
      ☐ Yes ☐ No ☐ Not sure ☐ Choose not to answer

   b) **If YES, how many?** ________

   c) **Are you their biological parent?**
      ☐ Yes ☐ No ☐ Not sure ☐ Choose not to answer

   d) **If YES, where are they living?**
      ☐ With me
      ☐ With their other parent
      ☐ With other family members
      ☐ In foster care
      ☐ Other: __________________________________________

32. **Is there anything else you would like us to know?**
   ___________________________________________________________________

    **THANK YOU** for your time in completing this survey.

    Please be assured that all your responses are confidential.
PARTICIPANTS NEEDED FOR
STUDY ON

PET OWNERSHIP AMONG STREET-INVOLVED YOUTH (16-24 yrs-old)

You do NOT have to be a pet owner to participate in this study.

As a participant in this study, you would be asked to:

- Answer a questionnaire given to both street-involved youth who are pet owners and those who are not pet owners.
- Study will be conducted at a youth shelter/drop-in or youth service location.
- If you have already participated in this study (at any location), thank you, but you cannot participate again

Your participation would involve 1 session, each of which is approximately 1 hour.

In appreciation for your time, you will receive $20 cash at the completion of the questionnaire.

If you are interested in participating in this study, please come by.

We will be at [insert drop-in/service location] on [insert date] from [insert time].

For more information about this study, please contact: [Worker name] at [Drop-in/Service location]

This study has been reviewed by, and received ethics clearance through, Office of Research, University of Guelph.

REB# 10MY024
You are asked to participate in a research study conducted by Dr. Jason Coe, Dr. Bill O’Grady, Dr. Derek Haley, and Dr. Michelle Lem (Graduate Student), from the Department of Population Medicine, Ontario Veterinary College at the University of Guelph. This research will contribute to a Master’s thesis, and is being funded by [Funding Agency].

If you have any questions or concerns about the research, please feel free to contact Dr. Jason Coe (Faculty Advisor) by phone at (519) 824-4120 Ext. 54010 or by email at jcoe@uoguelph.ca

PURPOSE OF THE STUDY
The purpose of this study is to understand the effects and roles of pet ownership among street-involved youth, assess the health and welfare of the animals in these relationships, and to assess the needs of pet-owning street-involved youth.

PROCEDURES
If you volunteer to participate in this study, we would ask you to do the following things:

- Complete an in-person questionnaire with the graduate student and peer outreach worker.
- Questionnaires will be given to both street-involved youth who are pet owners and those who are not pet owners.
- For both, the questionnaire will ask about some personal information, such as age, education level, ethnicity, when youth left home, as well as frequency of drug use and service use.
- For pet owners, the questionnaire will also ask for information about your pet, explore the effects and roles of pet ownership in the lives of street-involved youth, what services or programs would benefit this relationship, any concerns or obstacles youth face as pet owners.
- For pet owners, your pet will be assessed visually for body condition, a physical exam will be performed, and a photo of your pet will be taken.
- The questionnaire will be completed by the graduate student and/or peer outreach worker, with questions being asked verbally.
- Each questionnaire session is expected to take about an hour.
- You will be asked to participate once.
- Interviews will be conducted within a youth shelter or service provider location.

If you would like to take part in confirming our findings, or to know the findings of the research, you will be asked to give us a way to contact you, including through a shelter or agency.
POTENTIAL RISKS AND DISCOMFORTS
A potential risk exists that, if subpoenaed, the researcher may be required to divulge the research results. As well, should a participant mention experiences with domestic violence, including physical and sexual abuse, or if there is risk of harm, to themselves or others, in any way, the researcher will be required to report this to the necessary authorities.

Discussion about the topic of this study may be emotionally difficult or socially uncomfortable for some, as experiences associated with homelessness, drug use or other potentially sensitive or personal experiences are discussed.

If this occurs, you are free to leave at any time, without explanation. There is a qualified individual who is not associated with the study, available at this location, to provide help, support or referral, if necessary. A list of community resources is also available upon request (i.e. crisis help lines, youth support services).

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY
Potential benefits of this research are to develop programs and services to help support the human-animal relationship, and may demonstrate the need for shelters and other service providers to adopt policies that are more accepting of pets.

PAYMENT FOR PARTICIPATION
A $20 compensation will be provided at the end of the questionnaire.

CONFIDENTIALITY
Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

Identifying information will not be collected, and code names will be assigned instead of participant’s names. Information collected will be in the form of paper questionnaire, the researcher’s notes, and data management software. This data will be seen by only the above-named researchers and will be kept for 7 years then destroyed. It will be secured in a locked filing cabinet within a locked office, computer data will be stored on the graduate student’s password protected computer.

During the write-up of findings, however, the researcher will be using code names instead of using participant names to ensure the confidentiality of the participants is maintained. If the researcher decides that a direct quote will be useful to the research project write-up, any information from the quote which identifies the participant will be changed or removed. Information obtained from the questionnaire will be made available only to the researchers listed above and may be reviewed by the participant upon request. Additionally, participants may withdraw any comments at any point during the research process, and the information collected will be protected as stated above.

PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so.

RIGHTS OF RESEARCH PARTICIPANTS
You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:
INFORMED PET OWNER CONSENT (If applicable)

<table>
<thead>
<tr>
<th>Participant ID #:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Animal ID</strong></td>
</tr>
<tr>
<td>Pet A</td>
</tr>
<tr>
<td>Pet B</td>
</tr>
<tr>
<td>Pet C</td>
</tr>
</tbody>
</table>

I, the undersigned, am the owner or agent of the owner of the animal(s) described above and am authorized to make decisions regarding its case.

I hereby acknowledge that the Dr. Michelle Lem has advised me of and explained the following (check off as each one is discussed):

- The general nature of the following proposed procedure(s) which includes a visual assessment of body condition score, and complete physical exam.
- If abnormal findings are noted on physical and/or visual assessment of the animal, the owner should seek appropriate veterinary care should be sought.

My questions have been answered, I have read or had explained to me and fully understand the information on this form, and declare that I understand and voluntarily consent to the above described procedures.

SIGNATURE OF RESEARCH PARTICIPANT

I have read the information provided for the study “Pet Ownership among Street-Involved Youth” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study and to the use of verbatim quotes in publications or presentations with the understanding all identifying information will be removed and code names used. I have been given a copy of this form.

____________________________________
Name of Participant (please print)

____________________________________  ________________________
Signature of Participant                Date
SIGNATURE OF WITNESS

____________________________________
Name of Witness (please print)

____________________________________  ________________
Signature of Witness                  Date