Chapter 4
Street-Involved Youth and Their Animal Companions—Stigma and Survival

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Should Homeless People Have Pets?

As a veterinarian who provides pro bono veterinary care for people who are homeless and vulnerably housed, the most common question asked by members of the public and media is "Should homeless people have pets?" Since my work is at the human–animal–environment interface—that is youth and their animal companions living within the street environment—it fits within the One Health model, which describes how the health of "humans, animals and the environment are inextricably linked" (van Helden et al. 2013).

One Health

The Centers for Disease Control and Prevention describes One Health as recognizing "that the health of humans is connected to the health of animals and the environment" (www.cdc.gov/onehealth/). One Health therefore also seeks to bridge historically independent disciplines and professions of human health, animal health, and environmental health. One Health's origins are in zoonoses (diseases transmitted between humans and animals), vector-borne diseases, and risks to human food supply and environmental or ecosystem health. The One Health model is slow to be adopted at the community health level and among the companion animal–human–environment relationship. Yet, the One Health model fits this context well, as the environment

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(e.g. urban vs. rural, housed vs. homeless) is inextricably connected to the health of both humans and animals in the relationship. Gaining an understanding of each of these three sectors and how they interact with each other allows us to fully understand the context in which these human–animal relationships exist. One Health has traditionally focused on disease and threats to the health of each sector; however, it can also be used to model the many beneficial effects of human–animal relationships. Among these are both the physical and psychosocial effects of companion animal ownership, which will be discussed in this chapter as we focus on the impact of the human–animal relationship among homeless youth within the street environment.

Throughout this chapter, we will seek to answer the question posed above. So to begin, let us first briefly review the general profile of homeless youth. In One Health terms, we will examine how youth homelessness is impacted by the interaction of individual factors (human sector) and the environment in which they come from (home, family) and leave to (the street).

Who Are Street-Involved Youth?

In the U.S. the Department of Housing and Urban Development's 2014 Annual Homeless Assessment Report stated that on a single night in 2014, over 194,000 youth and children were homeless, with children under 18 years of age representing 23 % of all homeless, and youth 18–24 years making up 10 % of the overall homeless population (Henry et al. 2014). In Canada, youth (16–24 years) represent 20 % of the over 35,000 homeless on any given night or 235,000 homeless in a year, with a 2:1 ratio of males to females (Gaetz et al. 2013, 2014; Government of Canada 2006). Young people between 18 and 24 years of age are almost twice as likely to report being homeless at some time compared to adults, are more likely to be "hidden homeless", and not engaged with emergency support systems (Gaetz et al. 2014). The number of homeless youth is typically underestimated in homeless and/or shelter counts, as many youth may utilize other forms of transient shelter, such as couch surfing and squatting, or engaging in prostitution for shelter (Evenson 2009; Government of Canada 2006; Kelly and Caputo 2007). The state of homelessness also encompasses those who are provisionally accommodated (e.g. incarcerated, hospitalized, in addictions treatment, or transitional housing), as well as those who are at risk of homelessness (Canadian Observatory on Homelessness 2012). Street-involved youth are described as youth who experience "precarious living conditions, which include poverty, residential instability and emotional and psychological vulnerability" (Government of Canada 2006). In this chapter, both terms "street-involved" and "homeless" are used to describe youth as homelessness is a state of transience, most if not all street-involved youth have experienced homelessness.

Contrary to popular belief, the vast majority of street-involved youth are not spoiled and lazy middle-class kids wanting a life of independence and who "choose" to live on the street. More accurately, street-involved youth represent

a particularly vulnerable and growing subsection of the homeless population, typically between the ages of 16 and 24 years. While each person has their own individual experiences and path to homelessness, it is believed that it is the cumulative impact of structural factors (broad economic and social issues), institutional and systems failures (failures of systems of care and support), and individual and relational factors (circumstances affecting individuals at a personal level or within their family support system) that lead to homelessness (Gaetz et al. 2014).

Youths' path to homelessness is as varied as homelessness itself. Structural factors affecting youth homelessness include economic disparity, family poverty and deprivation (e.g. unemployment, housing affordability crises); institutional and systems failures include a failure to provide support and resources for youth discharged from jail or foster care; and individual and relational factors include youth who runaway, are parentally abandoned or kicked out (e.g. for substance abuse, disapproval of gender identification (LGBQT). Many homeless youth have histories of mental illness, domestic violence, sexual abuse, substance abuse, family and/or parental conflict, and/or parents involved in criminal activity (Kidd 2013; Rukmana 2010). Not surprisingly, predictors for adolescents who runaway include a history of substance abuse and depression (Tucker et al. 2011). In fact, adolescents with substance abuse have been found to have insecure attachments, weak family and social support, and low levels of parental acceptance and involvement (Aydogdu and Cam 2013). Tragically, the longer that youth remain on the street, the more likely they are to further suffer from both medical and mental health disorders, as well as criminalization and street victimization (Gaetz et al. 2010; Tyler and Beal 2010). Indeed, street life may be the cause of and/or exacerbate mental health issues, with many youth experiencing stress, trauma, and distress both prior to and while living on the street. For example, in a Canadian study of 102 homeless youth, the authors found that youth experienced a mean of seven traumatic or stressful events prior to becoming homeless and a mean of six events since becoming homeless, which included bullying (78 %), stressful isolation (63 %), assault (61 %), and fearing being injured or killed (61 %). Prior to becoming homeless, males experienced more physical types of violence (e.g. abuse, assault, muggings), and females experienced more sexual violence which continued after becoming homeless. Physical assault also continued after becoming homeless for both genders (62.7 %) (Coates and McKenzie-Mohr 2010). As the authors of this article state, "Youth left or were forced out of homes where most had experienced extensive trauma, only to find themselves experiencing severe and multiple forms of trauma 'on the street'".

The life of street-involved youth includes navigating street life in search of shelter, money, and safety while facing criminalization and victimization. In one study of 207 homeless or previously homeless youth in California, 75 % of youth reported regular and negative interactions with police (Bernstein and Foster 2008). Although street-involved youth are more likely to be involved in criminal activity than domiciled youth, O'Grady and Gaetz (2007) point out that while crimes are more likely to be committed by male youth, "theft and drug dealing are by no means dominant money-making activities". In the aforementioned California

study, only 8 % of youth reported getting money from theft, 7 % from selling drugs, and 5 % from prostitution (Bernstein and Foster 2008). In the same study, 30 % of youth interviewed had slept outside, on the street, or in a car or vacant building the previous night, 28 % were couch surfing, 10 % were staying at a transitional shelter, and 8 % had spent the previous night in a shelter.

Street victimization includes being a victim of crime while on the street, but also the impact of public and social stigma and this has important implications as perceived social stigma by homeless youth has been found to be associated with low self-esteem, loneliness, and suicidal ideation (Kidd and Carroll 2007). Overwhelmingly, youth report that people's perception of them is negative with words often used to describe street youth that include "worthless", "junkie", "low-life", and "troublemaker", and yet over 90 % of these youth identified aspirations of specific career goals (Bernstein and Foster 2008). Public stigma of street-involved youth often serves to reinforce youth's sense of worthlessness further eroding their self-esteem and confirming their belief that they are "throwaways".

Companion Animals of Street-Involved Youth

Next, we will examine the "animal" component of the One Health model to further our understanding of companion animal ownership among the street-involved youth population. According to Rhoades et al. (2014), up to 25 % of America's homeless are pet owners, and of 398 homeless youth surveyed at two LA drop-in centres, 23 % were pet owners. Of these pet owners, just over 60 % were male, and 53 % of youth owned a dog (Rhoades et al. 2014). In a Canadian study of 89 street-involved youth who owned a total of 121 pets, 58 % were male, and 43 % of the total number of pets owned were dogs. Companion animals were obtained from numerous sources including street friends and street family (19.1 %), found as strays or rescued (14.9 %), adopted via newspaper and other ads (14.2 %), and left home with the pet (13.2 %); 26.4 % of the pets were obtained from other sources that 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" (Lem 2012). In a qualitative study of 25 youth who belonged to a group, of whom over a half of these youth belonged to a gang, Maher and Pierpoint (2011) found that over half of the dogs owned were bull breeds, including Staffordshire Bull Terriers, Bull Mastiffs, American Bulldogs, and crosses thereof.

Those who ask whether homeless people should have animals demonstrate concern for the welfare of the animal belonging to someone who does not likely have the means to care for an animal. Since this is not a chapter on animal welfare, I will not address this in detail. I will say, however, that based on over 12 years of experience in the field, and seeing thousands of animals belonging to those who are homeless and vulnerably housed in our veterinary outreach clinics, these pets are, for the most part, healthy and well-cared for. Anecdotally, I can say that in my

14 years of clinical practice and 12 years of outreach work, I have never seen an animal that has been brought to an outreach clinic that was in any worse condition than an animal owned by someone who is housed and employed and brought to a full service veterinary clinic. In other words, based on my experience the same health conditions and severity of disease (e.g. dental disease) exist in the housed pet population as in the homeless/vulnerably housed pet population.

In some aspects, the welfare of animals of those who are street-involved may actually be better than housed pets. For example, after systematically reviewing the medical records of over 300 of Community Veterinary Outreach patients (to veterinarians, animals are the "patients", and the pet owners are "clients"), we found that 73 % of our patients were in ideal body condition score, compared to the household pets in the U.S. where it is estimated that 52.6 % of dogs and 57.6 % of cats are clinically overweight (2013 National Pet Obesity Awareness Day Survey 2014). In fact, studies have shown that most homeless pet guardians do not have trouble feeding their animal companions (Irvine et al. 2012). In a survey of 332 homeless youth in Los Angeles, only 10.42 % of respondents indicated that it was hard to get pet food (Rhoades et al. 2014). Among the aforementioned Canadian study of 89 street-involved youth and 121 pets, we found that these pets were not left alone for extended periods of time; received a great deal of exercise and play (2–4 h/day for dogs; 1–2 h/day for cats); enjoyed constant companionship; were exposed to novel environments and stimuli; and received regular socialization with people and other animals. What we have observed is that these animals often have richer social and emotional lives, and increased physical activity and play than many housed pets.

Human–Animal Attachment—A Determinant of Health

Among homeless pet owners, a universally high level of attachment to their pets exists (Kidd and Kidd 1994; Singer et al. 1995; Taylor et al. 2004). A validated measure of human-companion animal attachment is the Lexington Attachment to Pets Scale (LAPS), which seeks to quantify attachment via Likert scale responses of agreement to a series of questions on pet owner's views of their relationship with their companion animal (Johnson et al. 1992). For example, LAPS was administered to 89 pet-owning street-involved youth in the Canadian study previously mentioned, and it demonstrated youth's strong attachment to their companion animals with a mean score of 58 (SD 9.5). Based on previous studies among the general population, a LAPS score of 54.9 or higher is considered "very attached" (Johnson et al. 1992). In this study, we found that male youth's LAPS scores were slightly lower than females with mean scores of 56.1 and 61.1, respectively (Lem 2012). Analysis of the LAPS administered to 389 Community Veterinary Outreach clients found a mean score of 61, with no significant difference between pet owner's gender (male/female) or between species owned (cat/dog).

It is important to consider the level of attachment between marginalized humans and animals, for not only the sake of animal health and welfare, as attachment is linked to willingness to care for and spend resources on an animal (Staats et al. 1996), but also for the impact that attachment can have on human health and welfare. A profound example of this is during natural disasters, where loss of human and animal life has been attributed to people failing to evacuate without their companion animals, or returning to retrieve their animal companion (Heath et al. 2000; Leonard and Scammon 2007). Therefore, human–animal attachment may drive decisions that impact the lives of both the human and the animal.

Companion animal ownership among those who are homeless and highly attached has benefits for both the human and animal. Yet it is important not to overlook the liabilities that can be associated with having a pet while being homeless. Among the liabilities, many homeless pet owners will refuse shelter or housing without their animals. Research has also shown that homeless people with pets have increased difficulty finding stable housing and are unable or unwilling to access shelter, healthcare, and other services where pets are not allowed (Lem 2012; Rhoades et al. 2014; Singer et al. 1995; Slatter et al. 2012; Taylor et al. 2004). For example, Rhoades et al. (2014) found that only 4 % of homeless youth with pets ($n = 76$) were staying in a shelter compared to 16.8 % of non-pet-owning youth ($n = 256$). This is consistent with the finding that non-pet owners were 2.5 times more likely to make use of shelter services than street-involved youth who had a pet (Lem 2012). In the same study, 89.9 % indicated that having a pet had made their life better and 87.6 % indicated that they would never give up their pet, despite the added difficulties of being a pet owner ($n = 89$). Youth forego opportunities to move off the streets because they are highly attached to their pet and unwilling relinquish their companion animal for opportunities of shelter and other supports.

Add to this that street-involved youth are typically difficult to engage in services (Carlson et al. 2006; Krüsi et al. 2010). For example in one study, only 50 % of the 229 street-involved youth interviewed had accessed medical care (Carlson et al. 2006), and in another study 57 % of 249 homeless youth interviewed had never received counselling services (Tyler et al. 2012). Through the lens of attachment theory this lack of engagement may be explained, in that "young people's attachment patterns may affect their reactions to offers of support or assistance"—youth who experience insecure attachment may consider service providers/social workers in a similar role as other adults and caregivers from their past experiences, and may not see those trying to help them as trustworthy and reliable (Vaughn Heineman 2010). For example, because many youth have developed attachment patterns stemming from trauma, whether physical and/or emotional, their response to adult figures may be reflected in their experience. For street-involved youth, insecure attachments and trauma often coexist, affecting mood, behaviour, attitudes as well as their capacity to self-regulate and self-sooth (Vaughn Heineman 2010). In a survey of 40 homeless and formerly homeless youth in California, 40 % said they felt safer since leaving home (Bernstein and Foster 2008). A sense of safety and security is paramount for youth who have experienced trauma, and dogs provide both

the vehicle to self-sooth as well as a sense of security both physically and emotionally within the relationship (Kurdek 2009; Lange et al. 2006; Rew 2000; Rhoades et al. 2014; Thompson et al. 2006b). As Bowlby (1982) describes, a safe haven and opportunity for youth to experience consistent, unconditional and non-judgmental support are critical in engaging youth with insecure attachment patterns. The companionship of a dog provides this safe haven, especially for those who have been unable to attain this relationship with another person. Indeed, Zilcha-Mano et al. (2012) reported that pets can provide a safe haven by demonstrating lower participant blood pressure while performing a distress-eliciting activity when physically in the presence of their pet or cognitively thinking about their pet, compared to the control group (participants did not think about their pets and pets were not present). Similarly, in a web-based survey of 975 adult dog owners, males were more likely to turn to their dogs than to their mothers, sisters, best friends or children during times of emotional distress (Kurdek 2009). These human–animal relationships are trusting consistent relationships, without fear of punishment, retaliation or other negative consequences (e.g. abandonment). The following is a narrative from an interview with a Youth Drop-In Centre Manager (Lem 2012):

> 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 he loves his dog and he was talking - that for the first time he understood what unconditional love was…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.

As previously discussed, for many youth with insecure attachment and given their past experiences, self-reliance may have been necessitated by the actions of adults in their lives. Resiliency among inner city adolescents and homeless youth has been negatively associated with social connectedness, suggesting that among marginalized youth resiliency may be attained from being independent and self-reliant (Kidd and Davidson 2007; Rew et al. 2001). The theme of self-reliance has also been shown to negatively impact service utilization (Garrett et al. 2008). In one study, 33 % of youth interviewed ($n = 40$) said that they would rely on themselves rather than parents, caregivers, service providers or other adults (Bernstein and Foster 2008). Among males, O'Neil (2008) describes how restrictive and oppressive North American gender role socialization further promotes this sense of self-reliance and self-sufficiency, and limits men "from being fully functioning human beings" (O'Neil 2008, 2015; O'Neil et al. 1995). Such gender role conflict and stress not only interferes with interpersonal attachments (e.g. parental) (Blazina 2001; Blazina and Watkins 2000) but also greater psychological distress including depression and anxiety, as well as less willingness to seek help, as this may be seen as weakness or vulnerability (Addis and Mahalik 2003; Leong and Zachar 1999; Mahalik et al. 2003).

A lack of resiliency has also been associated with loneliness, hopelessness, and life-threatening behaviours among homeless adolescents (Rew et al. 2001). Companion animal ownership among those who are homeless has been found to mitigate loneliness, provide a sense of responsibility and well-being, with animal companions serving as a source of emotional resilience (Rhoades et al. 2014;

Slatter et al. 2012; Wood et al. 2005). One case worker who refers clients to Community Veterinary Outreach describes the role of pets in the lives of her clients this way:

> All of my clients are living with compromised immune systems, less than 1/3rd of my clients have a pet. I've seen the quality of life change in every client who takes in a pet; I see increased energy, increased engagement in their community and increased quality of life - just by having the unconditional love of a pet. The clients I have who've had pets from before I began to work with them seem to have stronger support networks, greater confidence and more solid housing - having someone who 'needs' them as much as they need the pet seems to give greater meaning to living with a chronic condition.

This is consistent with findings among homeless youth whom describe the relationship with their pet as family, best friend or child-like (Lem 2013). One of Community Veterinary Outreach's youth clients described what his dog meant to him in this way: "I have Aspergers and have issues with relationships with people, and with Petey he is always there for me and I am there for him". Rew (2000) found that while friends/peers helped pass time and assisted in street survival, dogs helped homeless youth cope with loneliness, provided safety, unconditional love, and a reason to live in order to care for the dog. Dog-owning youth also reported feeling healthier because they got more exercise and their dogs kept them warm, and a desire to act more responsibly and make better choices for themselves and their dog (Rew 2000).

With high rates of emotional distress and mental illness, including major depressive disorder, post-traumatic stress disorder, multiple diagnoses, and comorbidity with substance abuse (Thompson et al. 2006), not surprisingly, street-involved youth are also at high risk for suicide. For example, Kidd and Carroll (2007) found that of 208 street-involved youth interviewed, 46 % reported making at least one suicide attempt, 40 % of whom were males; with 78 % of all attempters reporting more than one attempt (Kidd and Carroll 2007). In addition to a history of sexual and/or physical abuse, substance abuse, length of time on the street and victimization, low self-esteem has been found to be a predictor of suicide or suicidal ideation among homeless youth (Kidd and Kral 2002; Saade and Winkelman 2002). Self-worth, self-respect, and self-esteem have been found to be associated with positive outcomes of transitioning off the street, helping youth overcome adversity, and having a protective effect against the impact of fearful attachment on loneliness (Bender et al. 2007; Kidd and Shahar 2008; Thompson et al. 2013).

Despite the many barriers to establishing and/or maintaining self-esteem for street-involved youth, Irvine et al. (2012) have shown that pet ownership by homeless pet guardians helps to create a positive sense of self. Homeless pet owners described challenging public stigma of what good pet ownership looks like by demonstrating their ability to feed, care, and provide for their pets constant companionship and a freedom that housed pets are limited to. Through these confrontations with members of the public, marginalized pet owners established a "moral personal identity" that mitigates the stigma of pet ownership among those who are homeless (Irvine et al. 2012). In the aforementioned Canadian study of street-involved youth, the vast majority of pet-owning street-involved youth we

interviewed (97.8 %) indicated that they were proud of being a good pet owner. Pet ownership may therefore buffer the negative effects of social stigma on mental health by empowering street-involved youth to self-identify as caring and responsible pet owners.

Pet ownership among homeless youth has also been associated with fewer symptoms of depression compared to non-pet-owning youth (Rhoades et al. 2014). Similarly, among the sample of 89 Canadian street-involved youth who owned pets (previously mentioned) and 100 youth who did not own a pet, this cross-sectional study revealed that the street-involved youth who did not own pets were three times more likely to be depressed than pet-owning youth, based on the Center for Epidemiologic Studies Depression Scale (Lem 2016). Among clients of our outreach programme, we ask "What does your pet mean to you?" and responses have included pets described to be therapeutic for depression and anxiety ("He helps keep me calm"), motivators to get outside and exercise ("I suffer from depression and he has changed my life—he has made me go out more and have more energy"), and to help with pain management ("Good company, sharing our lives together, and now that I have him I wouldn't be able to do without him…he knows when I am in physical pain and he comes to give me a kiss"). For some youth, their pets help them to self-monitor, as one of our male youth clients described what his pet means to him this way: "He keeps me grounded, helps me control my temper because if I do something wrong, my pet will be alone. His temperament changes when I am sick so I will admit more that I need to seek help". Indeed, it is this positive effect on human health, both physical and emotional, for which human–animal relationships have demonstrated across socioeconomic levels, and these benefits appear to be even more significant among marginalized pet owners.

Pet Loss

Pet loss, from death, relinquishment, loss, runaway or removal can have profound negative effects on highly attached youth. Loss of animal companions has been identified to be significant negative experiences among homeless pet owners, and is associated with guilt, depression, and anger (Lem 2012; Lem et al. 2013; Slatter et al. 2012). In our study, the majority of youth (88.7 %) who had lost pets agreed that they felt depressed following the loss of their pet and 63.5 % of youth felt angry. Almost half reported that they blamed themselves for the loss (45.1 %). Almost half (46.2 %) agreed that the loss of their pet had made their life harder and over one-third (34.6 %; $n = 18$) of respondents reported using alcohol and/or drugs to cope with the loss of their pet. One male youth in our study said that upon the death of his dog "it made me more of a beast", another male youth described his experience this way: "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" (Lem 2012).

Level of pet attachment has been shown to predict both the severity of grieving symptoms as well as the length of the grieving process among the general population (Wrobel and Dye 2003). Indeed, even among those pet owners who have social support, mourning a pet's loss is not always legitimized by society, and so it is not surprising that high levels of grief from pet loss have also been found to be associated with low social support and additional life stressors (Gosse and Barnes 1994; Sable 2013). Although the occurrences of grief symptoms are higher for females than males, Wrobel and Dye (2003) point out that this does not necessarily reflect the intensity of the individual's experiences. Doka and Marten (2010) describe the pattern of grief more correlated with (but not determined by) the male gender as "instrumental" whereby individuals work through and experience grief in a more cognitive and task-driven manner, expressing less emotion. Individuals who experience this pattern of grief are less likely to reach out for help, and however are still in need of validation and support (Doka and Martin 2010). Social expectations of males' expression of grief play a factor in their experience and expression of grief which may be further exacerbated among already emotionally isolated street-involved youth. Similarly, Risley-Curtiss et al. (2013) found that social workers were less likely to treat people of colour for animal loss, which may be attributed to the misperception that they are less attached to their animal companions (Risley-Curtiss et al. 2013).

It is important to recognize that pet loss can take many forms, not just death of the pet. Grief and/or guilt may be associated with a pet running away, getting lost or stolen, or removed during arrest/incarceration. Similarly, interventions with at-risk or incarcerated youth in which they are paired with shelter dogs may result in similar negative experiences associated with pet loss. Introducing such a relationship and then removing the dog after completion of the programme could be yet another loss for youth for whom many have experienced trauma and abandonment, and warrants further investigation. Acceptance and understanding of human–animal relationships in social work practice may be critical in being able to support highly attached youth through pet loss.

Social Capital and Bonding

Social capital "refers to the social networks, norms and trust that enable people to act together effectively in the pursuit of shared objectives" (Putnam 1995). Research has demonstrated that companion animals contribute to social capital and sense of community, providing increased opportunities for social connection, exercise, helpfulness and reciprocity, and well-being (McNicholas and Collis 2000; Wood et al. 2005, 2007; Wood 2011). Human–animal relationships and therefore dog ownership may be considered social bonds that are important aspects of conventional society, and woven into our social fabric. Bruno et al. (2012) found that gender, conformist aspirations of family, and the type of maltreatment youth had experienced were factors in early conception among

street-involved youth, and suggest that youth attempt to conform to a conventional family ideal and may "view pregnancy as an opportunity rather than a constraint". This study found that male youth who had experienced physical maltreatment were more likely to father a child, as were those who were in a relationship, supporting that strain and social bonding contribute to early conception and familial aspiration (Bruno et al. 2012). If we consider companion animal ownership among street-involved youth through the lens of strain and social bonding theory, parallels can be drawn. Either through a conventional view of family of which often includes a family dog, or as an animal companion as chosen family with unconditional love and support, it is not surprising that they may seek to create their own sense of family over which they exert more control.

A part of this sense of family for street-involved youth, are groups of peers and friends that are often referred to as "street families". Peer support is often their only network these street families develop because of a need for companionship, shared interests and experiences, a sense of belonging, acceptance and security, assistance in navigating street life, pooling of resources, and common interactions in street life, such as panhandling (Smith 2008). Male youth are more likely to establish networks via these street-based ties, and not surprisingly, however, these ties may also often expose youth to deviant behaviours including substance abuse (Wenzel et al. 2012). Still, street families are typically self-supportive and are often seen as an adaptive response to a harsh environment with high rates of victimization for which street families offer protection (Smith 2008). For homeless youth, family has been defined as "people you can count on and trust" and among street families, youth often recreate traditional familial roles often associated with gender, with males seen as making the decisions, enforcing rules, and providing security and protection (Smith 2008). In my experience, dogs often have significant roles within street families, and dog ownership is supported through the street family. It is not uncommon for a dog to have multiple owners within the family and shared responsibility for taking care of the dog. For example, if a youth is arrested, the dog will be cared for by another member of the street family. If the dog has puppies, these puppies are often adopted by other members of the street family. It is another shared connection that increases social bonding. Among the 89 pet-owning youth interviewed 19.1 % obtained their pet from a street friend or street family member (Lem 2012). Viewed through the lens of social bonding theory, street families and dog ownership may be seen as attempts to establish a sense of family and social convention within the street-life environment. Companion animals further contribute to social capital on the street among their owners, extended street family, and community.

Panhandling

For many street-involved youth, panhandling is a survival strategy and their higher visibility and accessibility exposes them to greater risk of both physical and sexual

victimization (Tyler and Beal 2010). Panhandling for cash meets youth's immediate day-to-day needs and is often done in small youth groups (O'Grady and Gaetz 2007). Street-involved youth are largely excluded from employment within the formal job market, given their lack of education, skills, unstable housing and health, and other necessary factors for success. Opportunities for youth subsistence are few, and therefore are often limited to an informal and street-level economy including panhandling, the sex trade, drug dealing/running, gang, and other illegal activities (e.g. shoplifting, pawning stolen property, etc.). It can therefore be challenging for these youth to earn income within the "space, place, and identity" of the street environment (O'Grady and Gaetz 2007). According to a 2007 study from California, over 20 % of homeless and previously homeless youth ($n = 207$) reported making money from panhandling (Bernstein and Foster 2008). However, because of increased public exposure and interactions, panhandling by homeless youth as a primary source of income has been found to be strongly related to youth's perception of social stigma and self-blame (Kidd 2006). Street-involved youth often face public scrutiny for "using a dog" to panhandle, as it may be assumed by some that youth exploit dogs to increase income earned from panhandling. However, dogs may be both social and economic capital, in that panhandling with a dog may increase social interaction with members of the public, as well as the amount of cash or other goods received such as dog food (Irvine et al. 2012). As Irvine (2012) describes, donations of food provided homeless pet owners with "enabled resistance to stigmatizing confrontations". While male youth have described earning more when panning with their dog, this extrinsic reason was not the primary purpose for youth to own a dog, rather they have them because of a love of animals, youth often believe that they are giving the animal a better life and for companionship (Lem 2012).

For those youth who own animals, having nowhere to safely and consistently leave their animal companion while they are at work is a significant barrier to seeking and maintaining conventional employment (Lem et al. 2013). As one male youth describes,

> 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…

Panhandling may be one of the few income-earning activities that youth can participate in with their animal companion.

Gangs and Dogs

Gang culture and structure varies greatly by country and even within countries, states, or municipalities, and by culture. However, youth who are gang-involved are a unique subset of the street-involved youth population with high rates of

delinquency, substance abuse, victimization, and illegal activity (Matsuda et al. 2012; Sanders 2012). Not surprisingly, gang membership is a predominantly male activity (Chettleburgh 2002), and risk factors for gang involvement include the cumulative impact of individual and family characteristics, school engagement, peer group, and community conditions (Howell and Egley 2005). For example, youth who had backgrounds of poverty, social exclusion, racism, dysfunctional families, exposure to violence (e.g. cultural violence, bullying, and family violence), addictions, and leaving school at an early age were found to be at higher risk of being gang-involved. Mental illness, including depression, anxiety disorders and post-traumatic stress disorder, are also common among gang-involved youth (Kelly 2011).

Dog ownership among gang-involved youth is not universal, and there are strong cultural, ethnic, and religious influences that impact interaction, attachment, and perceived roles of animals in general (Risley-Curtiss et al. 2006). For example, Risley-Curtiss et al. (2011) interviewed 12 male companion animal owners and found that participants from indigenous culture reported placing a higher value on animals and demonstrated a greater respect of animals than that of the larger U.S. society, whereas participants who immigrated from nations where the roles of animals were primarily utilitarian, such as sources of food and protection, reported having to learn how animals are treated in American culture (Risley-Curtiss et al. 2011). Nevertheless, Barnes et al. (2006) found that ownership of "vicious" dogs may be a marker for social deviance and, as the authors suggest, a "vicious" dog "is by definition a socially deviant animal" (Barnes et al. 2006). This interpretation of animals as being "socially deviant" should be approached with caution, for it is within the context of our human environment in which this is predicated, not that of the canine. Indeed, there are more human and environmental factors that contribute to aggressive dog incidents, than animal/dog factors themselves. That being said research to date on dogs within gangs shows that dog breed type is a factor in this human–animal relationship, with much of the research coming out of the United Kingdom and United States (Harding 2010; Kalof and Taylor 2007; Maher and Pierpoint 2011).

Dog ownership among gang youth can be interpreted as another form of social capital, as these dogs often confer status, and among some, dogs are considered "weapons" of intimidation and protection. Indeed, use of dogs by gang members for criminal and other illegal purposes, such as dog fighting, has also been reported and bears a larger impact on public safety and society as a whole (Harding 2010; Kalof and Taylor 2007). Despite this, Maher and Pierpoint (2011) found that among 25 gang youth interviewed in South Wales, the most commonly cited role of dogs was for companionship and socialization. Extrinsic roles of dogs were also identified, including security, protection, fighting, and status (Maher and Pierpoint 2011); however, as Kalof and Taylor (2007) point out, "dog fighting and the status it provides among peers are not unique to urban street culture". When asked at a conference I was presenting at why I thought my research did not demonstrate that protection and security were primary reasons for dog ownership among street-involved youth, I replied "I have a German Shepherd, primarily for

companionship for my family and children, but do I appreciate and benefit from her large size, keen hearing and deep bark? Absolutely". The existence of roles for dogs beyond those which are intrinsic is not surprising, as extrinsic values were the starting point of canid domestication by humans. Domestication evolved for extrinsic purposes that served us (as well as the ancestral dogs) for scavenging, hunting, and protection and continues to serve us in similar capacities to this day. This domestication process was followed by our genetic manipulation of the dog with artificial selection and neotenization of dogs for traits that would facilitate cohabitation and companionship (Miklosi and Topal 2013).

For male youth on the street or in a gang, status and therefore resources and even survival may be directly related to the display of masculinity within the street or gang context. In some instances, dogs have saved the life of their owner, such as when they have gotten into a fight with another youth or when a "deal goes down wrong"—in speaking about their dog in this context, youth describe their dog as admirable and loyal, and talk about how in return, they want to show that admiration and loyalty back to their dog. Within a safe and anonymous research environment, a more honest narrative about the role of dogs in youth's lives such may be elicited as this narrative from a male gang youth speaking about his dog:

> 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.

One Health—Leveraging the Human–Animal Relationship

"Strengths-based" models for youth services and interventions focus on youth's skills and abilities, and are effective in engaging youth because "it is their strengths in overcoming difficulties that mitigate negative outcomes" (Bender et al. 2007). Companion animal ownership among street-involved youth has demonstrated that youth develop many skills and strengths as pet owners, including a sense of responsibility, structure and routine, and pride of ownership (Lem et al. 2013). Similarly, in occupational health and psychosocial rehabilitation fields, companion animal ownership among those with severe mental illness has been described as "a meaningful occupation" that confers non-stigmatizing opportunities for social community integration (Zimolag and Krupa 2009). Companion animal ownership as a productive occupation among those experiencing homelessness provides owners with purpose, responsibility as well as the opportunity for person-level interventions to improve cognitive skills including establishing routine, scheduling, and problem-solving (Slatter et al. 2012).

Animals have been shown to enhance rapport, trust, and safety in therapeutic settings and the body of knowledge on the use of animal-assisted therapy (AAT) in counselling is growing (Chandler 2012; Chandler et al. 2010). Dogs have been shown to improve therapeutic relationships among adolescents in group counselling, providing a calming effect, humour relief, feelings of safety, empathy, and as

a motivator to attend (Lange et al. 2006). Providing youth with learning opportunities and resources which focus on strengthening the human–animal relationship may further help youth develop skills that will assist them to integrate into mainstream society. For example, some youth may seek to establish safer and more stable housing for their companion animal, as is demonstrated on this narrative of a male street-involved youth describing his need to find housing for his dog:

> I love him and I get a place for him. Really, like, if it wasn't for him [his dog], I'd be on the streets. That's why I want a place…I don't want him to die. I don't want him to get sick. I want him to eat.

By leveraging the high level of human–animal attachment, service providers can establish rapport with youth through the animal, and this may be more effective than direct interaction between the youth and social worker, especially among youth with insecure attachment. By understanding what the animal means to the youth, we can help uncover the strengths developed through pet ownership and this may be key to engaging street-involved youth in supportive services to aid them in getting off the street.

Motivators for Behaviour Change

Irvine (2013) has described how animals can act as vehicles for redemption among homeless pet owners who "envisioned brighter futures emerging out of their struggles". In this manner, the animal's innocence and dependence served to not only develop the homeless person's sense of responsibility, but also through this commitment and caring for the pet they also positively change their behaviours (such as addictions) and allow them to experience unconditional love without judgement, atonement and salvation (Irvine 2013a).

Among homeless youth, pet owners described putting the needs of their pets before their own needs (e.g. feeding their pet before themselves), how their pets were motivators for taking better care of themselves, making more responsible choices and "staying out of trouble", establishing structure and routine, and provide emotional support, love and safety (Lem et al. 2013; Thompson et al. 2006a). In the interviews with 89 Canadian street-involved youth, 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, 60.7 % avoided arrest because of their pet, and almost half the youth (46.1 %) agreed that having a pet had saved their life (Lem 2012). In qualitative interviews with street-involved youth, it was the male youth who described decreasing their use of drugs when they became a pet owner (Lem et al. 2013):

> Before, my life was one of like try to make myself more liking the city meaning the drugs, alcohol, all the bad things, the crime. I was in and out of court, I was in and out of jail, life didn't matter to me. Once I got Mackenzie [name of dog] I settled down and my life actually had meaning to it. I haven't gone back to jail yet… it's been at least 2 years since I've actually gone to jail. I don't do heavy drugs anymore.

Veterinary Outreach

As an extension of a strength-based model of service delivery, support in the form of veterinary care is a critical component, as it is not easily accessed due to cost. Lack of basic veterinary care compounds the stress of an already stressful life for street-involved youth who own pets. Irvine et al. (2012) described how veterinary support of homeless pet owners can convey "legitimacy" on the homeless person as an animal caregiver. There are also greater implications for society including animal welfare, criminalization of youth for animal neglect (failing to provide necessary veterinary care), and risk of illegal activity to pay for veterinary care. Of the 89 street-involved youth interviewed in the aforementioned study, it was asked "If your pet was in need of veterinary care would you consider committing a crime to get the money?"—40 % responded "yes" and 13 % responded "Don't know".

Although veterinarians have not traditionally been thought of in social support roles, Community Veterinary Outreach is demonstrating that veterinarians and veterinary care can be a direct link to increased social support and health care delivery for marginalized pet owners. Understanding that many marginalized pet owners will reach out for help for their pet, but not necessarily themselves, we can leverage the desire for veterinary care for their animal companion to engage pet owners in care for themselves through embedded social services and health care workers in our veterinary outreach model. An example of a One Health issue affecting the health of both humans and animals is smoking and exposure to secondhand smoke, respectively. An estimated 70–80 % of homeless adults smoke cigarettes (Tobacco Use and the Homeless 2009). Similarly, it has been found that ~70 % of homeless youth smoke, and Tucker et al. (2014) found that of 292 homeless youth in Los Angeles, youth reported smoking an average of 26.6 days/month and 15 cigarettes/day (Tucker et al. 2014; Wenzel et al. 2010).

Research to date on the risk and effects of environmental tobacco smoke on the health of companion animals has suggested that passive tobacco smoke exposure may lead to an increased risk of developing nasal cancer in long-nosed breeds of dogs (e.g. German Shepherd), lung cancer in short-nosed (e.g. Pug) and middle-nosed breeds (e.g. Husky), and malignant lymphoma and squamous cell carcinoma in cats (Bertone et al. 2002; Knottenbelt et al. 2012; McNiel et al. 2007; Reif et al. 1998; Snyder et al. 2004). Additionally, secondhand smoke exposure has been shown to be associated with atopic dermatitis (Ka et al. 2014) and contribute to airway limitation in dogs (Yamaya et al. 2014). In a large web-based survey of 3293 adult pet owners, Milberger et al. (2009) found that 28.4 % of current smokers ($n = 698$) reported that information on the dangers of secondhand smoke to their pet's health would motivate them to try quitting smoking, 11 % would think about quitting, and 40 % would be interested in receiving information on smoking cessation. Of non-smoking participants who lived with someone who smoked ($n = 531$), 16.4 % reported that they would ask smokers to quit, and 24 % would ask them to not smoke inside (Milberger et al. 2009).

The findings of this study were corroborated at a community level via Community Veterinary Outreach clinics in Toronto, Ontario. In these pilot projects, a nurse

practitioner or family physician was embedded into the veterinary outreach clinic serving homeless and vulnerably housed pet owners with free preventive veterinary care, and offered opportunities for clients to discuss their health matters with a human healthcare practitioner, receive information and resources on smoking cessation, and obtain a referral to primary health care while at the veterinary clinic. Veterinarians inquired whether the animal had any environmental exposure to secondhand smoke as part of obtaining the animal's environmental history, and if so and following the veterinary services (e.g. exam, vaccinations, deworming, etc.), the veterinarian educated the owner on the risks of tobacco smoke exposure to their pet's health and offered to connect them with the human healthcare practitioner at the clinic. Over 3 clinics with a total of 71 homeless and vulnerably housed clients, 30 % of clients ($n = 21$) requested information on smoking cessation from the healthcare practitioner, 68 % of clients ($n = 48$) freely engaged with the human health care practitioner regarding their own health matters, and 24 % of clients ($n = 17$) requested referral to primary health care.

Another health issue that marginalized populations experience is low vaccination rates. In one study of the medical charts of 4319 homeless persons from New York City, the influenza vaccination rate was found to be less than 25 %, yet people who are homeless experience high rates of influenza, pneumonia and related deaths (Bucher et al. 2006). In another pilot, Community Veterinary Outreach collaborated with Toronto Public Health to offer an influenza clinic in November of 2014 at one of our veterinary outreach clinics. Of the 35 clients who attended the veterinary outreach clinic, 6 had already received an influenza vaccination (17 %). Of the 29 remaining clients, 17 clients received an influenza vaccination via this collaborative human and veterinary clinic, representing a vaccination rate of 58.6 % among our homeless and vulnerably housed clients. In the fall of 2015, similar results were achieved across Community Veterinary Outreach programs running in 4 communities (Toronto, Hamilton, Kitchener-Waterloo, and Guelph, ON), achieving a flu vaccination rate of 51.4 % among 70 clients attending the veterinary outreach clinics. Leveraging strong human–animal attachment may also include pets as motivators for increased exercise and activity and/or veterinary prescribed exercise for the animal companion (Byers et al. 2014; Kushner et al. 2006).

Indeed, veterinarians may be key community connectors in a One Health model. Below, an outreach nurse describes her experience:

> As a health care provider, I have connected with individuals about health matters, who would have never trusted me before- but by starting with veterinary care for their pet(s), I have engaged [them] in addiction treatment, wound care, housing concerns, and just built trust in using health services again.

Practice Implications

The One Health model proves useful in understanding the context and environment in which human–animal relationships exist and how the health of each sector impacts the other. This model may be effectively used by any health/social/

service professional to better understand and treat the "whole" person rather than the disease or symptoms. In doing so, we move away from the biomedical model of medicine towards the favoured biopsychosocial model. For example, in veterinary medicine, the focus of attention and information typically leans towards the animal, however, equal knowledge of the factors impacting the human owner (e.g. finances, time availability, commitment, sources of support, etc.) as well as the environment (e.g. urban vs. rural, housed vs. homeless) will greatly influence not only diagnostic and treatment options but also compliance and therefore outcome. Similarly, a system-level barrier for homeless pet owners is the lack of pet-friendly shelters and services. In not allowing pets into shelter/services, not only will this fail to engage pet owners in need of support, but even for those accessing the service, front-line workers may not be aware of a human–animal relationship that may heavily influence a client's options, decisions, and motivations for support. In cases of strong human–animal attachment, this relationship can be leveraged using a strength-based approach. Pets are strong motivators for positive health and behaviour change. Knowledge, acceptance, and support of these relationships rather than condemning them will allow those seeking to help reach clients at a deeper personal level to establish rapport, a relationship, and trust.

Future Directions

There is a small but growing body of literature examining the roles of companion animals in the lives of street-involved youth and both the benefits and liabilities of this relationship. However, the role of youth's gender and how this impacts the human–animal relationship has not been explored. Longitudinal studies investigating the trajectory of male youth with animal companions as they move into adulthood, as well as case–control studies examining the effects of pet ownership among male youth, are needed. As a predominantly male activity, further research of the role of dogs in gang youth culture is also warranted. Leveraging these strong human–animal attachments for positive change has been discussed in this chapter, and this is an area of great opportunity in need of research. Incorporation of veterinary medicine into an integrated health and social support model is proving effective to reach difficult to engage companion animal owners in care for themselves through their pet. Within this collaborative service-based context, research investigating the impact of gender on help seeking via their pet is worthy of further investigation.

Conclusion

Street-involved youth face numerous challenges to leading healthy and fulfilling lives, including histories of abuse, neglect, abandonment, substance abuse, and mental health disorders. Add to this system failures, social stigma, criminalization,

and overwhelmed social services systems, the future looks bleak for many youth who face becoming chronically homeless as adults. For many street-involved youth, the adults in their lives have failed to provide them with emotional and physical security, and it is often only through the love of an animal that youth have the opportunity to experience unconditional love and acceptance without judgement. Ironically, for some, it is an animal that teaches youth about compassion, empathy, and humanity. A front-line youth worker describes the roles of animals in the lives of youth:

> 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.

The study of street-involved youth is challenging, as they are heterogeneous population that are often transient, that has its own unique and shifting culture. Roots of and solutions to youth homelessness are multifaceted and require significant shift in public attitude, policy, and funding. The research on the role of companion animals in the lives of marginalized people is starting to grow and there is increasing awareness of many benefits that homeless people derive from their animal companions. In the time that I have been doing outreach work, I have experienced the gradual shift from the condemnation of impoverished pet owners to growing support, with books like "A Street Cat Named Bob" (Bowen and Jenkins 2012) and "My Dog Always Eats First" (Irvine 2013b), and services including VETSOS (www.vetsos.com) in San Francisco, Pro-Bone-O in Oregon (www.proboneo.org), Pets of the Homeless (www.petsofthehomeless.org/), and Dogs Trust's Hope Project (www.moretodogstrust.org.uk/hope-project/hope-project) in the UK, to name a few. There is still much needed research in this field, such as understanding the role of dogs in the culture of gang-involved youth, and the role gender plays on issues affecting youth homelessness. Yet, despite the numerous risks and challenges these youth face, their companion animal may be the one constant.

Coming back to the question "Should homeless people have pets?" and by extension "Should homeless youth have pets?", it should be clear now that the question is inherently flawed, for we should not be asking whether homeless youth should have pets, but rather "Should we have youth who are unwanted, uncared for, and without a home?". If we help the person, we will help the animal, and quite reciprocally, by helping the animal we can reach the person. Over the years, it has become so clear to me that the human–animal relationship is one of reciprocities and symbioses, and among youth and their pets, often a codependence. In order to support the needs of either human or animal, we need support the relationship in the context in which it exists.

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