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School of Social Work
University of Windsor
167 Ferry Street
Windsor, Ontario N9A 0C5
Email: cswedit@uwindsor.ca

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Recognizing Animals as an Important Part of Helping: A Survey Exploring Knowledge and Practice Among Canadian Social Workers

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Darlene Chalmers¹, Colleen Dell², Betty Rohr², James Dixon², Trisha Dowling², & Cassandra Hanrahan³

¹University of Regina; ²University of Saskatchewan; ³Dalhousie University
Author Note

Correspondence concerning this article should be addressed to Darlene Chalmers, Faculty of Social Work, University of Regina, Saskatoon Campus, The Concourse, Innovation Place, 111-116 Research Drive, Saskatoon, Saskatchewan, Canada S7N 3R3 darlene.chalmers@uregina.ca

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Abstract

The beneficial role of companion animals on human health and wellbeing across the life span is well-documented in the rapidly expanding multi-disciplinary body of literature known as human animal interactions (HAI). Social workers practice at the interface of people and their diverse environments. The presence of human animal bonds (HAB) within client systems, between people and companion animals in particular, are increasingly acknowledged and valued by social workers. Additionally, some social workers incorporate animals in their practice through animal-assisted interventions (AAI). However, there is a paucity of empirical literature on social workers' knowledge about and experiences with the inclusion of animals. We conducted a survey across three prairie provinces in Canada, replicating a study that was first implemented nationwide in the U.S. and later in the Canadian province of Nova Scotia. The survey explored social workers' knowledge of HAI in social work. The results, similar to the Nova Scotia and U.S. findings, suggest that social workers have general knowledge about HAI and the HAB, and

that some do incorporate animals in practice. Social workers seem to have increasing knowledge and skills about HAI. While this is a positive trend, there is nonetheless a need for specialized education and training on the beneficial impact that companion animals can have on social work practice. In this paper, the application of zooeyia within social work is adopted as one approach to understanding HAB. Important implications for human health and wellbeing and social work practice at the practitioner and organizational levels are discussed.

Keywords: human-animal interactions, human-animal bonds, animal assisted interventions, zooeyia, social work

Introduction

The beneficial role of companion-animals on human health and wellbeing across the life course is well-documented in the rapidly expanding multi-disciplinary body of literature known as human-animal interaction (HAI). Social workers practice at the interface among people and their diverse environments. The presence of human-animal bonds (HAB) within client systems, between people and companion-animals in particular, are increasingly being recognized and valued by social workers. Additionally, some social workers also incorporate animals in their practice with animal-assisted interventions (AAI). While there is an active and growing number of social work educators, theorists and practitioners developing “the animal question in social work” in Canada (Hanrahan & Chalmers, 2020), there remain gaps concerning social workers’ knowledge about and experiences with the inclusion of animals both practically and philosophically.

To help address the current gap, our study replicated a survey across the three Canadian prairie provinces of Alberta, Manitoba, and Saskatchewan that was first implemented nationally in the U.S. in 2010 (Risley-Curtiss, 2010) and three years later in Nova Scotia (Hanrahan, 2013). The survey explores social workers’ knowledge and practice of human-animal interactions in social work. Our results, similar to the Nova Scotia and U.S. findings, suggest social workers have general knowledge about human-animal interactions, including human-animal bonds, and that some incorporate animals in practice. For example, despite increasing awareness of the ubiquity of animals within family systems, the majority of Nova Scotia practitioners “are not including animals in practice, and notably, those who are, are doing so without the necessary education or training” (Hanrahan, 2013, p. 63). These findings mirror the U.S. results (Risley-Curtiss, 2010). With minor province-specific variations, the current study came to the same conclusions.

Zooeyia refers to the benefits to human health and wellbeing of interacting with companion animals. Below, we review recent literature on the human-animal bond with specific attention to zooeyia. We focus on social work-specific scholarship addressing companion animals (where the majority of the literature is situated), human-animal bonds, and the benefits of animal-assisted interventions. The aim of this literature review is to contextualize the study and establish foundational knowledge supporting why the social work profession must encompass human-animal interactions within its scope of practice. The subsequent section will review the methods for the current study, followed by a discussion of key findings, both across and specific to each of the three participating prairie provinces. These insights contribute to a

discussion about the potential for zooeyia to add to the social work field, underscoring a significant need for specialized education and training on the beneficial role of companion animals in the lives of social work clients and in social work practice generally. We conclude the paper with a discussion of the important implications for social work at the practitioner and organizational levels.

Literature Review

The Human-Animal Bond and Zooeyia

The human-animal bond (HAB) is “a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and well-being of both” (American Veterinary Medical Association [AVMA], 2017). The importance of human-animal bonds are reflected in their pervasiveness. An example of the HAB can be found in the relationship between humans and companion animals, often referred to as *pet ownership*. Although the terminology pet ownership is used in the literature, we recognize that the relationship between humans and nonhuman animals continues to be defined in legal terms as a proprietorial one, which is reflected in the language of ownership. We purposely do not use the language of ‘pets and owners’ but rather words and phrases that convey nonhuman animal sentience and subjectivity wherever possible.

The latest Canadian Pet Population figures show the cat and dog populations in Canada increased between 2016 to 2018. Cats numbers stabilized with; 8.3 million cats considered household companions in 2018. while dog population figures for 2018 increased, reaching 8.2 million, up from 7.6 million in 2016 (Canadian Animal Health Institute, 2019). The 2017–2018 National Pet Owners Survey reported 68% of U.S. households have a companion-animal; 48% with dogs and 38% with cats. Among the different generations of human companion partners today, 35% are millennials, slightly higher than baby boomers, the previous leader, equating to 84.6 million homes with a companion-animal (American Pet Products Association, 2018). Research has indicated that the majority of people refer to their companion animals as family members (Risley-Curtiss, Holley, & Kodiene, 2011; Risley-Curtiss, et al., 2006) and some consider them children (Volsche, 2019). These examples evidence the importance of the relationship people many experience with their companion animals, the possible strength of the human-animal bond (HAB), and its potential for positively impacting human health.

Physiologically, the HAB stimulates the production of oxytocin (Handlin et al., 2015; Miller et al., 2009; Nagasawa, Kikusui, Onaka, & Ohta, 2009), which is the attachment or ‘feel-good’ hormone that elicits positive feelings. Research has suggested that the HAB produces various other physical health benefits across the lifespan (Maharaj & Haney, 2014; Matchock, 2015; Wells, 2009), including in the prevention and treatment of cardiovascular disease, and treatment of cancer and chronic pain (Horowitz, 2008). For example, a 2017 study of older adults with a dog as a companion found dog walking to be associated with increased exercise, fewer doctor visits, lower body mass index, and that individuals who felt a bond with their dogs were more likely to spend time walking with them (Curl, Bibbo, & Johnson, 2017).

The literature also indicates that the HAB has various psychological benefits for humans, including among those who experience depression and posttraumatic stress disorder (Stern et al.,

2013; Wells, 2009) and children with low self-esteem and self-confidence (Hediger & Beetz, 2015). Additionally, research suggests both adults and children experience increased social capital and other social benefits from having companion animals and experiencing the HAB (Graham & Glover, 2014; Hediger & Beetz, 2015; Wells, 2009; Wood, Giles-Corti, & Bulsara, 2005; Wood et al., 2015). The HAB has been documented as having important cultural and spiritual benefits as well (Adams et al., 2015; Faver, 2009, Hanrahan, 2017). However, Herzog (2011, 2014) notes that, despite these suggested benefits of the HAB, there is still insufficient evidence to definitively claim that companion animals and/or human-animal bonds *cause* an increase in health for people due to inconclusive or negative results in some studies, no improvements in physical or psychological health among some people in other studies, and methodological limitations in the empirical research to date (McCune et al., 2015).

Zooeyia

Hodgson and Darling have labeled the positive impacts on human health from the HAB as “zooeyia” (2011). “Zooeyia is the evidence base for the philosophical construct of the HAB” (Hodgson & Darling, 2011, p. 190) and is understood as the physical, psychological, social, and spiritual health benefits derived from interactions with companion animals. The authors identified four positive outcomes of zooeyia in practice: animals build social capital, are agents of harm reduction, facilitate behaviour change, and can be incorporated into clients’ treatment plans (Hodgson, et al., 2015). Relative to social capital, Hodgson and Darling (2011) asserted that “zooeyia extends beyond the benefits to the individual [person]; companion animals also strengthen communities. Companion animals facilitate social interactions” (p. 190), can create a sense of belonging and inclusion, and combat loneliness (Pikhartova, Bowling, & Victor, 2016; Walsh, 2009).

The second positive outcome of zooeyia is that companion animals can serve as agents of harm reduction for humans (Hodgson, et al., 2015). For example, the authors cited the example of tobacco as a risk factor in human health, and how concern for a companion animal’s wellbeing can motivate people to choose to reduce their tobacco intake in the animal’s presence (National Center for Chronic Disease Prevention and Health Promotion as cited in Hodgson, et al., 2015). They stated that “patients who engage in high-risk behavior can be adamantly unwilling to harm their pets” (p. 528). A study by Lem, Coe, Haley, Stone, and O’Grady (2013) found that homeless youth in Ottawa, Canada put their companion animal’s welfare before their own, which in turn contributed to routine in their lives and decreased drug use.

Third, companion animals can act as motivators for healthy behaviour change (Hodgson, et al., 2015). The HAB is increasingly recognized as a contributor to human psychosocial and physical health (Barker & Wolen, 2008; Rock, Buntain, Hatfield, & Hallgrímsson, 2009; Toohey & Rock, 2011). A Canadian study of a prison-based, canine-assisted learning program in Alberta identified the dogs as motivators for behaviour change. For example, perceived non-judgmental support from visiting dogs facilitated one individual to reinitiate his methadone maintenance program because, as program participants explained, the dogs saw the individuals for who they are rather than judging them by their behaviour (Chalmers & Dell, 2017). Aufderheide and Jalongo (2019) stated that inmate participants in prison dog programs have opportunities to shape new identities and see themselves differently which can also drive meaningful behaviour change. The literature on therapy dogs in U.S. prisons highlights the positive impact of the HAB

amongst a population of individuals who are forced in many ways to disconnect from social interaction (Cooke & Farrington, 2016; Deaton, 2005; Yoon, Slade, & Fazel, 2017).

Last, Hodgson et al. (2015) proposed that companion animals can be incorporated into clients' treatment plans. They share that "incorporating patient activities with their pets as an adjunct to current therapy capitalizes on resources already in place and enhances the patient's perception of normalcy without additional cost" (p. 529). Reflecting on physicians' use of a pet query, they state that a nonthreatening way to learn about a patient's experiences at home should include inquiring about the significance and role of animals. These questions can build rapport during initial visits and add to a patient's history and profile in subsequent health assessments. The pet query uses "simple questions [that] are a practical, nonthreatening way to open a conversation about the patient's home life" (Hodgson et al., 2015, p. 531).

Animal-Assisted Interventions

The International Association of Human-Animal Interaction Organizations (IAHAIO), a global leader in the advancement of human-animal interaction (HAI) research and education, defines an animal-assisted interventions (AAI) as "a goal-oriented and structured interventions that intentionally includes or incorporates animals in health, education, and human service (e.g. social work) for the purpose of therapeutic gains in humans" (Jeegatheesan, 2018, p. 5). Animal-assisted activities, therapy, and education are common forms of AAI. Animal-assisted therapy is a goal-directed therapeutic intervention by a human service provider, animal-assisted activities are informal and focus on visiting, and animal-assisted education has learning goals (Fine, Tedeschi, & Elvove, 2015). In AAI, animals are central to the intervention (Chalmers & Dell, 2015) and is used purposefully to provide beneficial health impacts to all participants. AAI often results in the establishment of a HAB. The role of the HAB is foundational to explaining how AAI works. Interacting with animals in AAI contexts can be therapeutic or beneficial to persons involved in AAI programs, which lends credibility to the idea that AAI may be considered zooeyia in practice.

AAI research suggests there are numerous benefits to diverse participants across multiple contexts. For example, findings from medical studies indicate that physiological benefits of AAI include both reduction in pain and use of pain medication (Bert et al., 2016; Havey, Vlasses, Vlasses, Ludwig-Beymer, & Hackbarth, 2014; Marcus, 2013; Phung et al., 2017; Silva & Osório, 2018). The findings of a recent study were inconsistent with this, showing that AAI did not reduce anxiety to a meaningful extent and pain for hospitalized children. Among other factors, the study participants' use of analgesics was recognized as potentially influencing the results related to pain reduction (Barker, Knisely, Schubert, Green, & Ameringer, 2015).

Findings from studies in psychology, sociology, and other fields related to mental health suggest multiple psychological benefits of AAI, including stress reduction (Barker, Barker, McCain, & Schubert, 2016; Binfet, 2017; Dell et al., 2015; Marcus, 2013; Silva & Osório, 2018; Vagnoli et al., 2015), increased self-esteem (Bert et al., 2016; Lentini & Knox, 2015), and improved social relations (Balluerka, Muela, Amiano, & Caldentey, 2015; Kamioka et al., 2014; O'Haire, Guérin, & Kirkham, 2015; Virués-Ortega, Pastor-Barriuso, Castellote, Población, & de Pedro-Cuesta, 2012). Many studies report associations between AAI and reduction in depressive and anxiety symptoms, and symptoms of other psychiatric and/or mood disorders (Balluerka et

al., 2015; Bernabei et al., 2013; Bert et al., 2016; Crossman, Kazdin, & Knudson, 2015; Grajfoner, Harte, Potter, & McGuigan, 2017; Kamioka et al., 2014; Lentini & Knox, 2015; Maujean, Pepping, & Kendall, 2015; Muñoz Lasa et al., 2015; Phung et al., 2017; Rossetti & King, 2010; Silva & Osório, 2018; Souter & Miller, 2007; Stewart, Dispenza, Parker, Chang, & Cunnien, 2014; Virués-Ortega et al., 2012). A qualitative study seeking to determine how animals (specifically those involved in AAI) benefit human mental health identified several themes. These included that animals provide company and comfort, belonging, social interaction, achievement and role in life, structure, and helping and caring (Jau & Hodgson, 2018).

There have been many research studies documenting positive effects of AAI on symptoms of post-traumatic stress disorder (PTSD), with the majority focused on military veterans and service members (Altschuler, 2018; Germain, Wilkie, Milbourne, & Theule, 2018; Knisely, Barker, & Barker, 2012; Husband, Ahmed, & Dell, 2019; Krause-Parello, Sarni, & Padden, 2016; Mims & Waddell, 2016; O'Haire et al., 2015; O'haire & Rodriguez, 2018; Yount, Olmert, & Lee, 2012). Other research has found benefits for children and youth who have experienced trauma (Hoagwood, Acri, Morrissey, & Peth-Pierce, 2017; Lentini & Knox, 2015; Signal, Taylor, Prentice, McDade, & Burke, 2016). While most studies indicate the positive health benefits, a few report more neutral results. For example, a recent study by Mueller and McCullough (2017) found equine-facilitated psychotherapy reduced overall symptoms of PTSD but was not more effective than traditional treatment options.

For individuals with diverse experiences and demographics, some forms of AAI have been shown to provide benefits. For example, benefits have been observed for children and adolescents with acute mental disorders (Stefanini, Martino, Bacci, & Tani, 2016), autism (Hoagwood et al., 2017; Lentini & Knox, 2015; Maujean et al., 2015; Nimer & Lundahl, 2007), and attention deficit hyperactivity disorder (Schuck, Emmerson, Fine, & Lakes, 2015). Benefits have also been reported for youth in residential care (Balluerka et al., 2015; Lentini & Knox, 2015) including First Nations youth (Adams et al., 2015), and juvenile offenders (Lentini & Knox, 2015). It should be noted that cultural or religious variability in beliefs about various animals are important considerations in determining if and how AAI is implemented and the potential positive or negative impact for both human and animal participants.

Studies on AAI with supportive findings have involved older adults with dementia (Dell, et al., 2018; Yakimicki, Edwards, Richards, & Beck, 2018), elderly adults (Bernabei et al., 2013; Berry et al., 2012; Bert et al., 2016; Holt, Johnson, Yaglom, & Brenner, 2015; Virués-Ortega et al., 2012), and adults with intellectual disabilities (Maber-Aleksandrowicz, Avent, & Hassiotis, 2016) and cognitive impairment (Hu, Zhang, Leng, Li, & Chen, 2018). The benefits of AAI have also been reported through research with adults in corrections (Burger, Stetina, Turner, McElheney, & Handlos, 2011; Dell & Poole, 2015), adults recovering from surgery (Havey et al., 2014), adults and children in varying hospital wards (Bert et al., 2016; Phung et al., 2017; Silva & Osório, 2018; Stefanini et al., 2016; Stempien, et al., 2019), people who use drugs (Burger et al., 2011; Dell, 2015), and university or college students (Barker et al., 2016; Bell, 2013; Binfet, 2017; Binfet & Passmore, 2016; Binfet & Struik, 2018; Crossman et al., 2015; Dell et al., 2015; Grajfoner et al., 2017; Jarolmen & Patel, 2018; Stewart et al., 2014).

Most AAI research incorporates dogs into the intervention (Bell, 2013; Berry et al., 2012; Dell et al., 2015; Havey et al., 2014; Knisely et al., 2012; Yount et al., 2012). However, research

that includes horses is emerging (Adams et al., 2015; Lentini & Knox, 2015; Pendry, Smith, & Roeter, 2014; Pendry & Roeter, 2013; Selby & Smith-Osborne, 2013). Though dogs and horses are the most common focus of AAI studies, Canadian households contain a variety of species of companion animals such as fish, birds, rabbits, hamsters and others (Perrin, 2009) that have not been incorporated into AAI and studied to the same extent.

As our review demonstrates, a growing body of literature and evidence supports the use of AAI. However, in general, the studies lack methodological rigour. Additional, well-designed research is necessary to definitively establish a causal link between the use of AAI and human well-being (Bernabei et al., 2013; Bert et al., 2016; Crossman, 2017; Evans & Gray, 2012; Herzog, 2011; Hoagwood et al., 2017; Kamioka et al., 2014; Lentini & Knox, 2015; Maber-Aleksandrowicz et al., 2016; O'Haire et al., 2015; Rossetti & King, 2010; Signal et al., 2016; Souter & Miller, 2007; Stem & Chur-Hansen, 2013; Virués-Ortega et al., 2012). For example, AAI researchers Binfet and Struik (2018), who focus on dogs, posited that methodological rigour could be partially achieved if studies included assessment of canines as well as handlers in AAI. Recent years have seen an increase in randomized controlled trials – considered the “gold standard” in experimental research – to examine the effects of AAI, with promising results (Binfet, 2017; Crossman et al., 2015; Kamioka et al., 2014; Stefanini et al., 2016).

Some authors have noted potential drawbacks of AAI. For example, Bert et al. (2016) noted potential physiological risks for clients of AAI, termed “zoonosis.” To protect individual clients, they recommend ensuring that animals are up to date on vaccines, receive regular veterinarian health screenings, are adequately trained and supported in their role, are bathed and groomed prior to visits, and that clients are screened for potential allergies and/or phobias (Bert et al., 2016). At the organizational level, adherence to health and safety policies is necessary. A survey in hospitals, care facilities, and therapy animal organizations by Linder and colleagues (2017) revealed that more attention is needed to ensure AAI is conducted in healthy ways for both humans and animals. Facilities surveyed in the study either failed to adhere fully to established guidelines for incorporating animals in their spaces, or had no policies for ensuring the health and wellbeing of both humans and animals in their settings. Surveys from the AAI organizations showed shortcomings in meeting animals’ vaccination, training and diet requirements (Linder, Siebens, Mueller, Gibbs, & Freeman, 2017). Fine, Beck and Ng (2019) provide a critical discussion on the state of animal welfare in AAI, including ethical treatment of animals in AAI practice and programs. For example, a study by Silas, Binfet and Ford (2019), found that dogs did experience stress in a university therapy dog visiting program. Some authors emphasize the importance of implementing animal welfare policies and procedures from beginning to the end of an animal’s AAI work, and argue for the professionalization of the AAI field to enhance ethical practices and the treatment of animals involved (Fine, Beck, & Ng, 2019).

Human-Animal Interaction in Social Work

Social work’s growing interest in the benefits of human-animal interactions, including the HAB with companion animals and within AAI, is indicated by the recent developments in the professional and academic literature (Legge, 2016; Risley-Curtiss et al., 2006). An emerging body of social work scholarship supports this, including the Nova Scotia and U.S. social work surveys (Hanrahan, 2013; Risley-Curtiss, 2010). Authors have explored ethical issues in relation

to social work's anthropocentric orientation (Hanrahan, 2011; Ryan 2011). The limited but increasing attention in the social work profession and literature that has emerged since the turn of the century has largely focussed on calls to incorporate HAI as a moral, ethical and practice imperative (Hoy-Gerlach & Wehlan, 2017; Ryan, 2011). In practice, for example, the emergence of the specialization of veterinary social work is indicative of the importance of the HAB in human health (Holcombe, Strand, Nugent, & Ng, 2016).

To date, the social work literature addressing human-animal interaction has focussed largely on the HAB and companion animals. For example, a link between animal abuse and family violence has been established (Arkow, 2019; Ascione, Weber, Thompson, Health, Maruyama, & Hayashi, 2007) and the safety and safekeeping of companion animals has been identified as a barrier to individuals leaving situations of interpersonal violence and abuse (Gallagher, Allen, & Jones, 2008). The literature suggests social workers' inclusion of questions about companion animals during intake assessments could be beneficial because these offer space for individuals to describe possible important relationships with their animals and may also offer the social worker information about the client's environment (MacNamara & Moga, 2014).

Research from veterinary and family medicine with valuable implications for social work is found in a study by Hodgson, Darling, Freeman and Monavvari (2017). The authors suggest asking animal questions during intake assessments to facilitate rapport between care providers, including social workers, and clients in a nonthreatening manner. A pilot study surveying primary health care providers who had participated in an educational intervention about the use of a *pet query* revealed that asking patients about their companion animals strengthened the therapeutic alliance and improved communication between patients and care providers. In turn, clinically important information was shared by patients which affected their treatment plans (Hodgson, et al., 2017). These findings have implications for social work practice, particularly social worker-client interaction and building rapport in the relationship (Hoy-Gerlach & Wehman, 2017; Tedeschi, Fitchett, & Molidor, 2005).

The benefits of AAI, including for individuals experiencing depression, anxiety, trauma and/or abuse, or for those who are members of marginalized populations, are complementary to the foci of the social work profession. Qualitative research results from Legge (2016) has described the incorporation of AAI in practice and documented its effects in keeping with anti-oppressive social work processes and goals. The congruency between AAI and anti-oppressive social work is indicated by similarities in theoretical underpinnings, and in the barriers to and benefits of both AAI and anti-oppressive social work strategies. However, research findings indicate many social workers are unaware of these possible benefits and are thus not recognizing companion animals or including animals in their interventions with clients (Hanrahan, 2013; Legge, 2016). Additionally, the research conducted by Risley-Curtiss (2010) in the U.S. and Hanrahan (2013) in Eastern Canada found that many of the social worker survey participants who were including animals in their interventions were doing so without adequate training or education. Thus, the implementation of AAI in practice without adequate knowledge can lead to ethical and safety issues for social workers, clients and animals (Buck & Rauscher, 2019; Evans & Gray, 2012; Glenk, 2017; Taylor, Fraser, Signal, & Prentice, 2014). Despite their limited use in the social work profession, Rabbitt and colleagues found AAI provides highly acceptable forms of intervention, and in particular, among parents whose children are social work clients (Rabbitt, Kazdin, & Hong, 2014). The review of the literature highlights the multifaceted

benefits of the HAB. However, a gap exists in understanding social workers knowledge on human-animal interactions and the inclusion of animals in practice. The purpose of our study was to understand the degree of social workers' exposure, knowledge, and the application of HAI and HAB theory to a range of social work issues.

Methods

Participants

We used a convenience sample drawn from the 2015 membership lists of each professional social work association in the three provinces surveyed (Alberta, Manitoba and Saskatchewan). All practitioners registered with their respective provincial prairie social work association were invited to participate, totalling a population of 9,500. Association membership includes individuals who identify as direct or private practice social workers with a BSW, MSW and/or PhD degree.

Procedure

Data collection began in the provinces of Alberta, Manitoba, and Saskatchewan in June 2015 and ended in March 2016. Recruitment notices were issued to all subscribers on the email lists of each of the three professional associations. There were no exclusion criteria. The recruitment notices included a Survey Monkey© hyperlink that connected respondents to a survey tailored to their province of residence. Due to an initial low response rate, recruitment information was subsequently posted on the Facebook pages of local social work branches, in the newsletters of these associations, and shared with university social work programs. A request also was made to distribute the recruitment notice to health regions in each of the three provinces. A draw for a \$1,000 gift card was provided as incentive to participate. Respondents could indicate their interest to be entered into the draw at the end of the survey. A health region in Manitoba required removal of the incentive prior to distribution to its employees. The associated university Research Ethics Boards approved this study.

Measures

The survey instrument used in this study was adapted from those used in the Nova Scotia and U.S. studies. Hanrahan (2013) considered content validity of the original U.S. survey (see Risley-Curtiss, 2010) through a review of the literature, reviews from two international content experts, and a pilot test of the survey with students (p. 68). Following the Nova Scotia study, we reviewed the literature to ensure we captured the most recent, Canadian contributions to the field of human-animal interactions and social work. Hanrahan (2013) found that "there were no benchmarks for the social work population as a whole, but it was possible to separate out those who are actively involved with human-animal considerations in intake and treatment, from those who are not, and measure those classes against a set of behavioural measures" (p. 69). The behavioural measures replicated from her work were (a) whether the respondents currently have or had ever had a companion animal, (b) whether they had made a financial donation to an animal protection or rights organization in the last year, and (c) whether they had volunteered at an animal shelter or rescue group in the last year.

Questions on the survey pertained to exposure to or acquaintance with information on animals in practice (11 items of which nine were Likert scale and two yes/no questions), knowledge of the human-animal bond (six items of which five were Likert scale and one yes/no

question), and animals in assessment and treatment (seven items all yes/no questions) including sub-sections on animal assisted interventions (five items all yes/no questions), and training (10 items of which nine were yes/no questions and one open question). The survey also gathered demographic information from respondents including three questions on academic/education credentials. We added or modified three questions to the 38 in the Nova Scotia study. These included two new questions; one specific to the respondent's knowledge about animal-assisted interventions in their region or province, and the other asked if the respondent had grown up with a pet. We also divided an existing question into two parts, which asked the respondent if they currently had a pet, followed by what type. In total, our survey comprised 41 questions. We adjusted the syntax of several questions to enhance clarity and changed question information to reflect geographic contexts. Similar to the Nova Scotia study, some open-ended questions were included to gain greater depth of understanding, and a final question asked for any additional comments.

Data Analysis

Quantitatively, after considering descriptive statistics, chi-square tests were used to determine whether the distributions of demographic factors differed across provinces. Group tendencies were examined and reported in aggregate for each geographic survey, and for the three provinces combined. Two proportion Z test comparisons were conducted to determine if there were significant differences between provinces. Note that n-size will vary as respondents chose not to answer all questions. With the textual data, comments in "other" responses were summarized and counted along with quantitative data.

Results

Description of Participants

In total, 804 surveys were completed, representing an 8% response rate. The majority of respondents identified as women (92% of 705) and Caucasian (82% of 713). Almost two-thirds of the survey respondents indicated mental health (37%), child protection (18%), and health (17%) as major areas of practice. Most of the participants indicated their primary work function was either clinical practice (40%) or direct practice (29%), and supervision/management (12%). The primary client populations served by respondents were non-elderly adults (50%) and families (44%), with 34% reporting working with adolescents and 33% with children.

The highest proportion of respondents in the sample were from Alberta (44% versus 38% Saskatchewan and 18% Manitoba). Chi-square analysis indicated no significant differences between provinces on average age ($p = .328$). Additionally, the ethnic distribution was similar across provinces ² $p = .248$). One-third of the sample indicated one to nine years of practice followed by 24% indicating 10 to 20 years. Distribution by years of practice was also not significantly different by province ($p = .183$).

The demographics of the targeted population were examined to address for possible sampling bias. Similar to the Alberta, Manitoba, Saskatchewan registered social workers population, the sample consisted of a majority of women with an average age of 43 years. No other benchmark information was available for comparison. Additionally, respondents' interest

in animals was explored by a question in the demographic component of the questionnaire. We included this question to allow for specific analysis as it seemed possible that respondents would self-select to the extent that they were 'lovers of animals.' While there is a small positive effect from 'lovers of animals' in this study, the numbers were small enough so as not to introduce meaningful bias in the results (for example, Pearson's correlation coefficient (r) ranged from 0.11 to 0.21 for section one: 'exposure to information on animal' items). In other words, a love of animals variable had a small positive effect and explained a small percent of the variation within the responses (1% to 4%). Overall, there were few important comparative differences in findings between the three provinces, but when a difference is noteworthy it is commented upon in review of respondents' answers to the section of the survey below.

Respondents' Exposure to/Acquaintance with Information on Animals

The majority of respondents had read or heard *some/a lot* about the link between animal abuse and child abuse (64%), domestic violence (62%), and criminal behavior (73%). Conversely, most of the respondents had read or heard *none/a little* about the link between animal abuse and elderly abuse (65%). By province, responses showed no significant differences related to having read/heard about links to human violence except for the link between animal cruelty and criminal behaviour. Compared with respondents from Saskatchewan and Alberta, a significantly smaller percentage of Manitoba respondents had read/heard *some/a lot* (61% versus 73% overall, $p = .003$).

Regarding acquaintance with treatment of animal-related problems the majority of respondents had not heard much about treating clients who abuse animals (56% *none*, 28% *a little*). Regarding treatment for loss of a companion animal, 41% of respondents in this study had no exposure to information, with fewer or 29% identifying *a little*.

Respondents' Knowledge of Human-Animal Bonds

Respondents were asked to rank five statements about the relationship between humans and other animals. For the purpose of analysis, the categories were collapsed into three groups: *strongly disagree/disagree*, *agree/strongly agree*, and *don't know*. Most of the participants (84% of 727) strongly agreed (correctly) that "More than half of Canadian households have at least one dog or cat," whereas 13% *did not know* the correct response. Twenty-five percent (of 725) *did not know* the correct response to the statement: "One of the two least common fears of young children is of animals," while the same number (26%) correctly *disagreed*. Almost 80% of 724 respondents correctly *disagreed* with the statement: "Bonds with companion animals are simply substitutes for human relationships." Even more respondents (91%) correctly *agreed* that "people who repeatedly and intentionally harm animals are more likely to use violence". Similarly, 91% correctly *disagreed* that "the elderly are the population least likely to benefit from animals in their lives." Responses were similar across provinces.

Respondents' Knowledge of and Practice with Animals

Seventy-three percent of the 804 respondents indicated that they do not include questions about animals in their intake assessments; there was no meaningful difference in this result by

province. A large majority (78% of 792) of respondents reported that they do not include animals as part of their practice interventions.

Among the 27% of respondents (217 of 804) who reported including questions about animals in their intake assessments, 83% (181) ask if their clients have companion animals, 54% (n=117) ask if they have other animals (e.g., farm animals), 38% (83) ask if anyone in the family has hurt their animals, and 60% (131) ask about what place animals have in the client's family. Responses reported in the 'other' category (41%) related to various other issues such as, for example, responsibility for animals within families.

Of the 22% of respondents (n = 172) who reported including animals in their interventions, 35% (n = 60) employ animal-assisted activities, such as visiting the elderly (56%, n = 97) practice animal-assisted therapy (e.g., animal is part of treatment plan), 20% (n = 35), include animals in inpatient residences. Seventy-two respondents (42%) indicated they incorporate animals in "other" ways. The specific "other" ways included referring clients to animal assisted therapists or equine therapy programs, incorporating programs on a regular basis (e.g., St. John Ambulance Therapy Dog or Society for the Prevention of Cruelty to Animals), involving their personal companion animals, allowing clients to attend with their companion animals, including walking with dogs in clients' exercise routines, and/or discussing the potential benefits of companion-animals such as animal adoption programs.

Regarding the primary reason for incorporating animals in interventions, of those who reported that they do include animals (n = 729), 38% (n = 278) selected that animals enable a more holistic approach to practice; 25% chose that clients care about animals (emotional health); 20% thought animals helped clients open up (psychological health); 10% indicated it helps clients think about connections (this finding came from a question added within our survey); 1% said it was because clients need more exercise (physical health); and the remaining respondents (7%) reported uncertainty about why they incorporated animals in treatment.

Regarding the type of animal respondents (n = 158) include in practice, 85% (n = 118) report that they use dogs, 35% (n = 55) use cats, and 30% (n = 48) include horses. Other animals used by small numbers of respondents were reptiles (5%) and farm animals (e.g., goats, pigs, cows, 11%). Sixteen percent of respondents chose the 'other' category and specified animals such as fish and rabbits.

Among the 157 respondents who reported incorporating animals in interventions, the top five reasons for doing so were as follows:

- 34% said they saw positive impacts and benefits for clients
- 26% said it relaxed the clients or contributed to their mental health (e.g., reduced stress, provided mental stimulation for dementia clients, reduced anxiety)
- 25% emphasized that the animal offered clients companionship and unconditional love
- 25% said they included the animals as a therapeutic tool or for skill development as well as to build rapport and encourage client engagement; and
- 19% thought it contributed to a holistic approach to practice

An open-ended question was asked to indicate why respondents did not include animals in their practice (754 responded). The most common reasons respondents provided for not including animals in their practice were as follows:

- 37% said they were restrained by policy restrictions, organization regulations, or that animals were not permitted in settings due to building codes
- 17% cited lack of training and knowledge, or they had not considered or were unaware of including animals in practice
- 17% indicated it would not be appropriate in their workplace setting
- 13% said concern for co-workers or clients' allergies or fears as well as client disinterest
- 12% explained they had no access to therapy or companion animals, or a lack of resources made it prohibitive to access this type of intervention.

About one quarter (166 of 743) of the respondents indicated they have treated clients who abuse animals, while 28% (204 of 734) reported they have treated clients experiencing loss of a companion animal. The rate of treating clients for animal abuse was similar across provinces; however, the treatment of companion animal loss and grief was slightly proportionately higher for Manitoba (35% vs 28% overall, $p < .05$).

Respondents' knowledge of animal-assisted interventions (AAI). Sixty-six percent (490 of 747) of respondents indicated they were aware of AAI programs in their region or province. More specifically, 28% reported using equine programs, 28% reported dogs programs, and 20% reported the inclusion of other pets or animals such as cats, birds, pigs, and rabbits. Approximately 25% of respondents did not specify which type of animal program was used within their practice of AAI.

Respondents' education and training. Ninety-five percent of 747 respondents said they have not had any special training about how to include companion or other animals in their social work practice. Among the 37 respondents who indicated they had specialized training, 30 said they use AAI and 7 indicated they do not use AAI. Among respondents who received content on animals during social work education, 30% reported the content was related to the positive effects of animals on people, 23% said it was about cruelty/abuse, and 19% said it concerned animal assisted activities or therapy. Forty-five percent (340 of 755) indicated they do know of other social workers who include animals as part of intake or as an intervention. Eighty-eight percent (639 of 727) stated they want to know more about the human- animal bond. These proportions were similar across provinces.

Discussion

The measures used in this study included questions related to exposure/acquaintance with information on animals in practice, knowledge of the human-animal bond, and animals in assessment and treatment including subsections on animal assisted interventions, education and training. Overall, the results from the current study are generally consistent with those found in both the Nova Scotia and U.S. studies. Our response rate (8%) was similar to the Hanrahan (2013) study (13%). The U.S. Risley-Curtiss (2010) study had a higher response of 33%.

The section of the survey related to information on animals in practice asked participants how much they had heard or read about the link between various forms of human violence and animal abuse, the positive influence of companion animals on humans, the treatment of clients who abuse animals, and the treatment of clients who have experienced the loss of a companion animal. Similar to the U.S. study by Risley-Curtiss (2010), the majority of respondents had heard or read *some/a lot* across these questions except for the link between harm to animals and abusing elderly people. Similar to the Nova Scotia and U.S. findings, a majority of the respondents had heard or read *some/a lot* about the positive impact of animals on adults (92%), children (91%), and elderly people (87%). The rates were similar across all three provinces.

Regarding exposure to animals in assessment and treatment, our results are similar to the findings of the Nova Scotia survey (Hanrahan, 2013), in particular in the treatment of clients who abuse animals. However, there were differences in results compared to the results of the U.S. study (Risley-Curtiss, 2010) where most social workers reported hearing about the potential significance of the loss of a companion animal. The second measure of knowledge on the human-animal bond, revealed results similar to the Nova Scotia (Hanrahan, 2013) findings as well. In the current study, some social workers reported knowledge about animals and the human-animal bond. Some incorporate AAI in their practice. However, there is evidence of a need for specialized education and training on incorporating animals in social work practice, as the vast majority of survey respondents reported having none. Based on this understanding of the current level of knowledge and practice among a sample of social workers in the prairie provinces of Canada, the inclusion of human-animal interactions and human-animal bond in social work education—curricula and professional training opportunities—warrants further exploration. The inclusion of both human-animal interactions and the human-animal bond needs to be considered in the context of practice approaches and organizational policies that may be supportive or prohibitive of including HAI and HAB.

Failure to recognize the complexities of human-animal interactions broadly and the HAB specifically, whether through companion animals or AAI, is potentially restricting the social work profession's understanding of and response to its clients. Animals are present in a multitude of human contexts and environments. As MacNamara and Moga (2014) stated, it is imperative "that all social workers develop a foundational understanding of the relevance of human-animal relationships to individual, family, and community wellbeing, as well as the shifting values regarding the place and consequence of animals in rapidly changing client populations" (pp. 151-152). The social work curriculum must incorporate both foundational knowledge in the area of HAB as well as specialized training opportunities, and these must encompass the potential benefits of both companion animals and AAI to human health. This study's findings support the incorporation of zooeyia in social work education.

Zooeyia in Social Work Education

We discuss the implications of zooeyia for social work within the context of the findings of this study. As mentioned at the start of our paper, four positive outcomes of zooeyia in practice have been identified (Hodgson et al., 2015): animals as builders of social capital, animals as agents of harm reduction, animals as facilitators of behaviour change, and animals as participants in treatment plans.

Builders of social capital. Our survey provides evidence that social workers have some or a lot of exposure to/acquaintance with information on animals in social work practice, specifically to the positive influence of companion animals on humans and the link between human violence and animal abuse. The majority of study participants have had little to no acquaintance with information on the treatment of clients who abuse animals nor on helping clients who have experienced the loss of a companion animal. It is important for social workers to have this understanding given that companion animals and, for some, AAI have a role in the lives of at least half of the Canadian population. Animals are a conduit for humans to expand social connections. These connections can occur through multiple processes that include not only the development of social supports and networks but also access to resources and untapped opportunities (Hawkins & Maurer, 2012).

Degeling and Rock's (2013) study of dog-walking found that it was not just a physical activity but also a social and caring activity. The authors explained that networks of care are inclusive of companion animals and public spaces. Wood, Giles-Corti, and Bulsara (2005) explored the presence of companion animals in communities and similarly reported that benefits may reach beyond individuals and extend to communities at large. The benefits include opportunities for the development of social connections within neighbourhoods such as increased trust and social exchange. Increased social capital may also serve to potentially enhance individual and community protective factors (Arkow, 2013). AAI also builds social capital for both the individuals visited as well as the volunteer therapy dog and handler team. A common animal assisted activity in North America is therapy dogs visiting students on university campuses. A Canadian study across three universities found that the therapy dogs and handlers provided support to the students (Dell et al., 2015). The findings of a U.S. study demonstrated that therapy dog handlers who visited older persons with dementia experienced their work as a meaningful act of caring (Swall, Ebbeskog, Hagelin, & Fagerberg, 2016).

Agents of harm reduction. The survey findings revealed that knowledge about the human-animal bond was prominent among respondents. They were well-informed about households with a cat or dog, the uniqueness of the HAB, the links between harming animals and violence generally, and the role of animals in the lives of the elderly. Understanding about animals in the lives of young children could be increased (Bona & Courtnage, 2014; Melson & Fine, 2015). This knowledge complements support for harm reduction initiatives that are increasingly a part of social work practice. Social work has a history of considering inequity within populations and societies, including human rights and community health. Canada is in the midst of a public health opioid crisis, and harm reduction initiatives have been identified as "critical first responses" (Tyndall, 2018). A prominent example is supervised drug and alcohol consumption sites. Awareness of the HAB and use of the sites by clients who have companion animals with them should be considered. Therapy dogs may have a potential role in the 29 safe consumption sites currently operating in Canada, given the high rate of stigma attached to drug use and the perceived non-judgmental and unconditional acceptance that can be offered by a dog.

Motivators for health behaviour change. Knowledge of the human-animal bond among social workers is essential to supporting clients whose relationship with their companion animal may be able to serve as a motivator for healthy behaviour change. The HAB may serve as a source of strength for a client in both accessing supports or services and in adherence to

behaviour change (Hoy-Gerlach & Wehman, 2017). Regular schedules for companion animal feeding, exercising, and medical care can support health-related behavior and knowledge among social work clients (Glickman, 1992; Lail, McCormack, & Rock, 2011; Rock & Babinec, 2008). Stats, Pierfelice, Kim, and Crandell (1999) succinctly stated that “pet care may provide a stimulus for human self-care or human self-care may provide a stimulus for pet care” (p. 483). Furthermore, AAI, like AAT, are premised on meeting predetermined goals with the therapy animals as a potential support and motivator.

Potential participants within human treatment plans. There is a wealth of literature specific to therapy dogs working alongside social workers and other human health professionals (e.g., see: Fine, 2015). The vast majority of social work respondents to our survey stated that they do not include questions about animals on their assessments or offer AAI. Those who do ask questions about animals in a client’s family ask a variety of questions, the most common being if they have a companion animal or other animals and the role of the animal in the family. Workers who include AAI in their practice range from offering AAA or AAT and as well referring clients to AAI practitioners. They report doing so mainly to be client-centered and holistic in their practice approach. Those who do not include animals in their practice cite policy restrictions (institutional and individual) and lack of specialized education for this omission. There was also a considerable lack of education among social workers that offer AAI. This is a serious gap in the social work field (Hoy-Gerlach & Wehman, 2017).

Increasing educational opportunities for social workers about human-animal interactions, specifically the HAB and incorporating AAI, is recommended by several scholars (Acri, Hoagwood, Morrissey, & Zhang, 2016; Risley-Curtiss, Rogge, & Kawam, 2013). The studies by Risley-Curtiss (2010) and Hanrahan (2013) indicate that social work education provides inconsistent information about the link between interpersonal violence and animal care, and that limited course content about the HAB is provided in social work training. Appropriate training and mastery of AAI-related skills is necessary for proper practice (Stewart, Chang, & Rice, 2013). As such, researchers suggest the inclusion of education, training and practice workshops about the HAB and AAI in social work curricula and professional education opportunities to benefit current and future social work practitioners and clients alike (Hanrahan, 2013; Risley-Curtiss, 2010).

Social work incorporates inter-professional education as both a curricular and pedagogical focus. Risley-Curtiss (2010) called upon social workers in all areas of practice to incorporate the HAB through an interdisciplinary approach to practice. Fine, Tedeschi, and Elvove (2015) asserted that human relationships with other animals and the natural world are in need of re-examination. They stated that one avenue to do this can be HAI as it provides an “opportunity to establish a respectful, sustainable, and new ethical paradigm for our interactions with other nonhuman animals and ecological systems on the planet” (Fine et al., 2015, p. 23). Inattention to HAI and the HAB, and broader environmental objectives, within social work curriculum and practice, weakens the profession’s relevance at a time when these issues increasingly occupy political, economic, health, and social policy debates (Jones, 2010).

For social workers to integrate HAI into their practice, they first must have access to this information as part of their academic training. One approach is to make necessary changes to

curricula. Contemporizing orienting perspectives is a necessary step in this direction. For example, the person-in-environment (PIE) perspective has been a professional practice and pedagogical mainstay since the early 20th century (Zapf, 2010). However, “many person-in-environment formulations used in current teaching rely on earlier understandings of systems and biology that have not benefitted from the insights of contemporary research” (Green & McDermott, 2010, p. 2428). These formulations do not include the multitude of environments that companion animals inhabit including their role and function within these contexts. We suggest expanding the PIE perspective to include a One Health framework (Rock & Degeling, 2015) because of its foundation in integrative thinking about the interconnectedness of humans *and* animals *and* the environment. One Health has evolved to encompass the interrelationships of humans, animals (HAI) and ecosystems in global health. The broad principles of One Health and more specifically HAI, including zooeyia, can be incorporated within existing courses, such as human behaviour in the environment, practice methods including clinical processes, anti-oppressive practice, social policy, international social work practice, community development, field education and, importantly, ethics including a section on animal and environmental ethics. This could permit innovative approaches to the exploration of parallel health and welfare inequities—social determinants of health—for humans and animals (Card, Epp, & Lem, 2018) and consideration of social justice for other than human beings (Matsuoka & Sorenson, 2014).

Additionally, an area that poses questions for students and practitioners alike is the “how to” regarding integration of HAI in practice. Blazina (2019) states that practitioners need to have both theoretical and practical knowledge on how to incorporate HAI in their work but are often unsure of how to assess and engage the HAI in practice (p. xxvi). Based on our study findings, a specific area of practice incorporated by some social workers is AAI, as many are using this approach but with little to no training or education. Integrating AAI theory and practice in curricula and professional education is paramount and should include the implications for organizational policy development and global standards of practice to ensure the safety and wellbeing of both the animals and the humans involved.

Study Limitations

A key methodological limitation of this study is the low response rate: 8% (804 responses from 9500 invited), which is not too dissimilar from the 13% response rate of the Harahan (2013) study. Generalizability of sample results to the population of social workers must be done with caution. There may be several reasons why people did not respond to the survey. Similar to the Nova Scotia survey, the use of on-line recruitment and an on-line data collection tool may have restrained social workers’ response due to heavy email traffic within busy workloads (Hanrahan, 2013). A high number of requests to participate in surveys can contribute to respondent fatigue. We agree with Hanrahan (2013) that a lack of awareness and education on the HAB may have also contributed to the low response rate as practitioners may have limited understanding on how the topic area applies to them, their clients, and their work. Furthermore, we did have a higher response from those with an interest in animals; however, the ‘love of animals’ variable explained only about 4% of the variation within the responses, which suggests that, while statistically significant, the bias was likely not meaningful.

A second limitation of this study is that it is focused almost exclusively on the positive impacts of companion animals on human health, or zooeyia. Hodgson, et al. (2015) recognized that “pets can present risks to their owners. They are potential sources of zoonotic disease and injury” (p. 526). This same understanding applies to AAI (Waltner-Toews, 1993; Overgaauw & van Knapen, 2013). Further, Hodgson, et al. suggest that “pets can also challenge a family’s prioritization of financial and social resources” (2015, p. 526). Future studies should account for this.

Finally, future studies should account for animal welfare. Social work, at present, is a human-centric profession, as suggested by the findings of this study. A concern expressed in the emerging literature is that as awareness of the beneficial impacts of the HAB on human health is recognized, animals are defined and treated as tools for improving human health. This is similar to how animals are defined in contemporary society as legal property and treated as a commodity that can be exploited. It is worth repeating that the HAB must be “a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and wellbeing of both” (AVMA, 2017).

Conclusion

Companion animals and animals involved in AAI play a beneficial role in human health. Much of the rationale for this statement derives from the mounting evidence of the helpful impacts of the HAB (at least on humans). The findings of our survey add to the baseline evidence confirming that social workers are informed and knowledgeable about the HAB, and some are even incorporating AAI in practice. The results also indicate that social workers require specialized education, training and practice regarding the HAB and AAI. There is also a need for policy development to influence organizational behaviour and allow for AAI. There were similar findings in the prior U.S and Nova Scotia surveys of social workers. In response, we also introduced zooeyia and asserted that attention to this construct be applied within the social work discipline; that is, recognizing the beneficial role of companion animals in the lives of social work clients (i.e., HAB) and therapy animals in social work practice (i.e., AAI). The social work discipline would be advanced by including human-animal bonds and interactions within its signature ‘person-in-environment’ framework.

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