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Karen Acheson
Pet Ownership and Perceived
Stress in Social Work
Students and Clinicians

ABSTRACT

This study was undertaken to determine if social work clinicians and students who owned pets had lower rates of perceived stress than those who did not own pets. Secondly, did an owner's level of attachment to their pet play a role in the benefits they might gain in stress reduction due to pet ownership.

A survey was sent to social work clinicians and students which included the Perceived Stress Scale and Lexington Attachment to Pet Scale. Forty-nine individuals responded.

The findings of the research showed that pet owners reported significantly lower stress when compared to non pet owners, and stress decreased with increased pet attachment for the whole sample. Of further significance, when the results were separated by category, as pet attachment increased for divorced and single participants, their perceived stress decreased, while married and committed participants revealed no significant relationship between attachment and stress.

**PET OWNERSHIP AND PERCEIVED STRESS
IN SOCIAL WORK STUDENTS AND CLINICIANS**

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

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2014

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CHAPTER I

Introduction

The purpose of this study is to understand the relationship between pet ownership and the stress level of social work students and clinicians. The topic of stress among social work students in the field has been the subject of much research in recent years. Researchers have determined that the perception of high stress levels in students can lead to poor academic performance, depression, attrition, and serious health problems (Pengilly & Dowd, 2000). Studies have shown that social work students in their field placements experience higher levels of perceived stress compared to psychology students or practicing social workers in the field (Tobin & Carson, 1994). Additionally, according to Zastrow (1985), many social work students have concerns about their ability to handle field placements. They worry about their ability to assist clients without becoming emotionally involved in situations that can be emotionally draining including child abuse, mental illness, and homelessness. Students express anxiety about their own mental resilience and may question whether social work is the correct career choice for them. Social workers, especially those with high caseloads of trauma clients, are considered high-risk for burnout. According to the Center for Health Workforce Studies and Center for Workforce Studies (2006), social workers are facing the demands of increasing paperwork, unmanageable caseloads, problems with difficult clients, staff shortages, and inadequate supervision. Kim and Stoner (2008) have suggested that these job conditions increase the likelihood of social worker

burnout, and “workers who feel burned out and frustrated with their jobs are likely to have higher turnover and be absent from work” (p. 6).

The literature indicates that pet ownership can buffer the owner’s reactivity to stress, as well as diminish their perception of stress (Allen, Blascovich, & Mendes, 2002). The United States military has started utilizing therapy dogs to help soldiers returning from Afghanistan manage their PTSD symptoms (Silvery, 2011), and the Larch Corrections Center in Washington assigns shelter cats to live with inmates “in the hope that the relationship will result in better behavior—in both the felons and the cats” (Sullivan, 2012, para. 3). Currently all 12 of Washington State’s prisons have programs in which inmates interact with animals. Dan Pacholke, director of prisons for the state Department of Corrections (DOC) in Washington, believes that having inmates work with animals makes “the environment of prisons less tense and less violent,” and working with animals “instills empathy, compassion and responsibility” in the inmates (Sullivan, 2012, para. 11). In addition to the prison system, there are programs in which dogs help decrease children’s anxiety about reading (Slavik, 2012), decrease the anxiety of college students during finals (Kaiser, 2012), and most recently, help calm children affected by the Newtown shootings (Fiegl, 2012). Despite considerable research on the effect of pet ownership on individuals who have experienced trauma themselves, no literature has examined the effect of pet ownership on clinicians who work with clients who have experienced trauma. Given the demanding and stressful nature of social work, even experienced social workers are prone to high levels of stress, which can lead to more serious psychological distressors, including secondary trauma and burnout. Given the positive impact of pet ownership in veterans (Thompson, 2010), the elderly (Knight & Edwards, 2008), and chronically ill patients,

determining if these same benefits can be felt by the social workers who serve these populations would be useful to those seeking to decrease the rate of turnover and burnout in the field.

CHAPTER II

Literature Review

The purpose of this study is to understand the relationship between pet ownership and the stress level of social work students and clinicians. To gain an understanding of what stressors social workers experience in the field and how pet ownership may impact that stress, in this review of literature, I examine social worker burnout, the effect of pet ownership on stress levels, and research on pets as selfobjects from a self psychology perspective. The literature is reviewed in three main sections: 1) burnout, 2) pet ownership, and 3) pets as selfobjects. In section one I provide an overview of burnout as well as the particular risk factors for burnout associated with social work. In section two I explore the experimental and qualitative studies conducted to measure the stress levels and overall well-being of pet owners. In section three I review the basic concepts of self psychology and selfobjects, and provide an overview of literature discussing pets as selfobjects.

Overview of Burnout

Burnout has been correlated with vicarious traumatization, secondary traumatic stress, and compassion fatigue. Burnout not only impacts the individual clinician, but can have a larger negative impact on the organizations in which social workers practice. According to Newell and MacNeil (2010), burnout can be defined as “a state of physical, emotional, psychological, and spiritual exhaustion resulting from exposure to (or practice with) populations that are vulnerable or suffering” (p. 58). The majority of studies on burnout have been based on the Maslach (2003)

definition of burnout to include the components of “overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment” (p. 190). Burnout is correlated with depression and anxiety, can decrease social worker effectiveness, and more importantly, can lead to high staff turnover in in social work positions. Individuals working in human service fields are especially prone to burnout since expectations of the field require them to repress or display emotions routinely in sessions with clients, and chronically display empathy, two factors strongly associated with professional burnout (Newell & MacNeil, 2010). Decreased staff effectiveness and inconsistent staffing has been shown to have a negative impact on clients, and has the potential to decrease the overall effectiveness of social work agencies. According to Kim and Stoner (2008), “Social worker turnover negatively affects the quality, consistency, and stability of client services...specifically, worker turnover not only causes psychological distress to remaining staff members or in new and inexperienced workers who fill these vacated position, but leads to client mistrust of the system and financial problems for the organization” (p. 6).

Studies have shown that working with clients who have suffered trauma can have detrimental effects on therapists (Herman, 1992). A large portion of social work practice involves crisis intervention or helping clients work through trauma, and providing these trauma-intervention services can place social workers at risk for traumatic responses of their own (Newell & McNeil, 2012). The three common terms used to describe the psychological reactions social workers may experience when working with traumatized populations are (1) vicarious traumatization, (2) secondary trauma, and (3) compassion fatigue.

Vicarious traumatization refers to the cognitive changes that social workers can experience while working with trauma survivors. According to Newell and McNeil (2010),

vicarious traumatization represents the resulting cognitive shifts in beliefs and thinking that occur in social workers in direct practice with victims of trauma...including alterations in ones sense of self; changes in world views about key issues such as safety, trust, and control; and changes in spiritual beliefs” (p. 60).

Secondary trauma, as defined by Figley (1995), is “the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other—the stress resulting from helping or wanting to help the traumatized or suffering person” (p. 7). Therapists experiencing secondary trauma can find themselves disassociating from themselves and creating distance from others. As therapists hear about their clients’ traumas, they can become cynical and lose their hope and optimism about humanity, leading to emotional numbing. This cynicism can eventually lead therapists to block against feelings of intimacy, thus leading to a decrease in their emotional availability as a result of feeling too emotionally invested in the lives of their traumatized clients (Hesse, 2002). While vicarious trauma and secondary trauma have similar defining features, vicarious trauma is a cognitive change process resulting from direct contact with trauma populations, and secondary trauma is correlated with changes in outward behavior that mirror PTSD symptoms (Newell & McNeil, 2010).

Compassion fatigue has emerged as a more general term described by Newell and McNeil (2010) as the

overall experience of emotional and physical fatigue that social service professionals experience due to the chronic use of empathy when treating patients who are suffering in some way. The chronic use of empathy combined with the day-to-day bureaucratic hurdles that exist for many social workers, such as

agency stress, billing difficulties, and balancing clinical work with administrative work, generates the experience of compassion fatigue” (2010, p. 61).

While organizational features such as bureaucratic constraints, inadequate supervision, lack of resources, and lack of support have all been identified as risk factors for burnout, researchers have suggested that there are individual risk factors which may contribute to the development of secondary trauma, vicarious trauma, and compassion fatigue among practitioners. According to Newell and McNeil (2010), “practitioners with a pre-existing anxiety disorder, mood disorder, or personal trauma history (particularly child abuse and neglect), may be at greater risk of experiencing these conditions” as are “professionals with high caseloads of trauma-related situations” and practitioners who use “maladaptive coping skills in response to trauma work such as the suppression of emotions, distancing from clients, and reenacting of abuse dynamics” (p. 61).

According to Barlow and Hall (2007), social work students are “repeatedly exposed to the brutal conditions of clients’ lives that are often the fallout of oppressive structures in our society” (p. 399). In a study of the emotional impact of field experience, Barlow and Hall (2007) interviewed 35 social work students who had completed a 300-hour field placement the prior semester. The students reported feeling powerless, uncomfortable, and overwhelmed, using expressions such as “over my head” and “out of my league” in response to witnessing client pain, hearing painful stories, and struggling with the challenges of personal values and beliefs (Barlow & Hall, 2007). This study was conducted at a single Canadian university, and given the limited sample size, it is difficult to determine whether this could be considered a universal social work student experience or simply that of students at this particular university. Further research should be conducted to widen the sample to other universities.

Many social work students are experiencing their first exposure to human cruelty and indifference, and respond with strong reactions of grief and outrage in the process of witnessing the pain of others (Barlow & Hall, 2007). Social work students in field placements, however, are less likely than their more seasoned peers to have developed strategies to cope with the stressors brought on by working with vulnerable populations. Tobin and Carson (1994) surveyed 152 undergraduate psychology, education and social work students. They administered the General Health Questionnaire (GHQ-28), the Rosenberg Self-Esteem Scale and Maslach Burnout Inventory to their participants. The GHQ-28 was designed to measure psychological distress, and the study focused on the percentage of high scorers (scores of 5 or more). The most significant findings were those related to the GHQ-28. All three student groups scored high on the GHQ-28 with 64% social work students reporting a high scorer rate. Additionally, 34% of the social work students scored 11 or more on the GHQ-28, which represents an “exceptionally high” level of psychological distress (p. 252). In comparison, previous studies by Gibson, McGrath, and Reid (1989) on practicing social workers only showed a 37% high scorer rate, which suggests that while social work is a stressful profession, the training period may be even more stressful.

Pet Ownership

Many of the studies measuring the impact of animals on human well-being involve laboratory tests where researchers were able to measure the physical impacts of a dog’s presence. DeMello (1998) asked participants to perform cognitive tasks (mental arithmetic, coding) under one of three conditions: pet absent, pet present and visual interaction allowed, pet present and tactual interaction allowed. The results indicated that the presence of a pet can aid in the reduction of blood pressure and heart rate following the termination of cognitive stressors (p. 859). Lafreniere et al. (1999) provided evidence in their study that touching an animal (or

human) can cause a relaxing and comforting emotion, which was backed up by Shiloh's (2003) study which demonstrated that petting an animal for short periods resulted in reduced state-anxiety in a stressful situation. Additionally, research has shown that distraction away from anxiety-causing stimuli is an effective way to reduce anxiety in clients, which Brickel (1982) used to inform his own theory that the ability of the pets to divert their owner's attention away from anxiety-causing stimuli increases owner well-being.

In addition to psychological benefits gained from pet ownership, several experimental studies have endorsed the physiological benefits of the presence of an animal. Allen, Blascovich, and Mendes (2002) examined the cardiovascular reactivity of couples who owned cats and dogs. Participants wore Propaq blood pressure cuffs while their baseline heart rate was measured as they sat quietly for 10 minutes. Next they were asked to undergo 5 minutes of rapid serial subtraction, followed by 15 minutes of rest, during which cardiovascular data were automatically recorded and stored once per minute. Their study determined that pet owners had significantly lower heart rate and blood pressure levels during a resting baseline, significantly smaller increases during the mental arithmetic, and faster recovery. Additionally, pet owners were more likely than non-pet owners to "see stressors as challenges as opposed to threats and to work more effectively and persistently at problem solving tasks" (Allen et al., p. 737, 2002). These findings indicate that pet ownership can buffer owners' reactivities to stress, as well as diminish their perceptions of stress, thereby signifying that pet ownership can have positive effects on owners regardless of the presence of the pet during stressors. However, the study only examined couples with pets, and co-habitation may have been a variable in the participant's cardiovascular reactivity, as partners provide another form of social support.

Several studies have been conducted in the past 10 years in which the researchers sought to measure the impact of pet ownership on owners overall well-being. Using 10 focus groups Knight and Edwards (2008) met with a total of 62 dog owners to identify the positives and negatives of owning and dog and dog walking. The sessions were typically 1.5-2 hours and ended when all the topics had been covered and participants agreed that all the issues they felt were important had been discussed. The researchers intended to qualitatively examine the physical, social and psychological benefits of dog ownership. They found that dog ownership enhances the psychological health of elderly citizens and “promotes a social support network between dog owners” (p. 437). In addition to companionship, dog ownership was associated with regular physical exercise, and dogs were described as the motivation to exercise. Although the researchers presented the physical, psychological, and social factor results separately in the study, they noted that these outcomes were interrelated: “walking enhances physical fitness that in turn can increase a person’s self-respect and self-esteem as one takes pride in his or her state of health” (p. 447). Although the elderly often experience depression stemming from greater social isolation and health deterioration than the general population, the average age of participants in the study was 60 years old, which indicates that most of the participants were at or close to the U.K.’s retirement age and may not have been experiencing the stress associated with full-time employment in the mental health field (Knight and Edwards, 2008).

Cline (2010) sought to find the specific physical and psychological benefits of dog ownership (as opposed to those conferred merely by general pet ownership). Cline (2010) conducted a phone survey with 201 adults using the variables of sex, age and marital status. Women and single adults were the most likely groups to benefit from dog ownership, with those owning dogs reporting greater well-being than those who didn’t own dogs. When separated by

gender, though, dog ownership was associated with greater well-being for women and lower well-being for men. Therefore, dog ownership correlated with greater well-being only for women and unmarried people. The researchers surmised that the positive correlation between single adults and dog ownership could be attributed to “role obligations,” with dog ownership serving as simply one more obligation (and stressor) for married individuals with already busy schedules. They attributed the positive correlation between dog ownership and well-being in women to theories of sex difference in relationships, with women “valuing companionship and emotional relationships, whereas men are viewed as valuing activity based relationships” (Cline, 2010, p. 120). The study indicated that the positive effects on well-being associated with dog ownership may not be the same for all individuals, with only women and single individuals gaining these benefits. Despite the study’s findings that dog ownership leads to greater well-being for single individuals and women, it may be the case that people with greater depression seek out dogs as sources of companionship (Cline, 2010, p. 127).

McConnell and Brown (2011) set out to determine if pet owners enjoyed greater well-being than non-owners using the measures of depression, loneliness, self-esteem, and subjective happiness. The study determined that these measures were significantly correlated with one another, with participants who were more depressed likelier to be lonelier and have lower self-esteem. Additionally, “pet owners had greater self-esteem, greater levels of exercise and physical fitness, and they tended to be less lonely than non-owners” (McConnell & Brown, 2011, p. 1243). The researchers also determined that pet owners were just as close to other human friends as non-owners, which would indicate that pet ownership does not come at the expense of, or replace, human relationships. These findings are important given the results of Cline’s (2010) study that found single individuals benefitted more from dog ownership.

Watson and Weinstein (1993) asked 42 cat or dog owners and 42 non-owners who were employees of the American Medical Association to complete an inventory on depression, anxiety and anger. The researchers also asked the pet-owners to complete a Companion-Animal Attachment Scale (Stallones, Johnson, Garrity, and Marx, 1990) to assess their degree of attachment to their pet. While the study did not support the hypothesis that pet owners would have lower levels of emotional distress compared to non-owners, the authors pointed out several limitations of the study, including the difficulty in determining causality given correlational data. They posited that working women who own pets may be more prone to emotional distress than non-owners, and pet ownership is helpful in alleviating their distress. Additionally, since participants were “essentially normal,” the range on the variables of depression, anger and anxiety were restricted, thereby reducing the degree of correlation that could be obtained. They argued that “people with greater needs for affiliation or nurturance would derive greater benefit from pets” (Stallones et al., 1990, p. 138).

Self Psychology and Pets as Selfobjects

Self psychology provides a unique model for understanding the depth and connectedness found in the relationships between pets and their owners. Unlike Freud’s psychoanalytic drive theory, which focuses on human development and the taming of “drives,” self psychology theorists focus on developing internal structures that “allow for states of well-being” (Donner, 1988, p. 18). Self psychology was developed by Heinz Kohut (1971), who placed the “self” at the center of personality. After practicing Freudian analysis based on psychoanalytic drive theory, Kohut began to question the idea that all human behavior can be interpreted through the lens of “threatening drives, guilt-producing fantasies, and biologically inevitable conflicts around oedipal issues” (Donner, 1988, p.18). Kohut argued that rather than the Freudian “drives”

providing an impetus for growth, it was instead, “individuals striving for particular ‘self states’...These self states include a sense of wholeness, cohesiveness, internal stability, vitality, and well-being” (Donner, 1988, p. 18). In a letter to Jurgen von Scheidt in 1975, Kohut (2011) wrote, “The self is a depth psychological concept and refers to the core of the personality made up of various constituents in the interplay with the child’s earliest selfobjects” (p. 457) and, “A self (nuclear self) consists of a persons nuclear ambitions and ideals in cooperation with certain groups of talents and skills. These inner attributes must be sufficiently strong and consolidated in order to be able to function as a more or less self propelling, self directed, and self sustaining unit which provides a central purpose to the personality and gives a sense of meaning to a person’s life” (p. 452).

According to Kohut (1971), the “self” is developed over time through interactions with selfobjects and selfobject mergers, and he believed “the formation, cohesion, and health of the self actually occurs from taking in the good psychological nutrients from selfobjects” (Flanagan, 2008, p. 170). Kohut (2011) states that “a firm self, resulting from optimal interactions between the child and his selfobjects is made up of three major constituents: (1) one power from which emanates the basic strivings for power and success; (2) another pole that harbors the basic idealized goals; and (3) an intermediate area of basic talents skills that are activated by the tensions arc that establishes itself between ambition and ideals” (p. 454). Flanagan (2008) stated that selfobjects are “experienced intrapsychically as providing functions in an interpersonal relationship that add to or maintain the cohesive self.” (p. 170). “Inherent in each human at birth is a need to extract responses from the environment that enhance feelings of cohesiveness, vitality, and a sense of being continuous in time and space” and “in ongoing interactions with an attuned and responsive environment, the self experiences feelings of well-being, vitality, and

pleasure in the uniqueness of its own goals, values, and ambitions” (Donner, 1988, p. 19). Kohut (2011) states, “There are two kinds of selfobjects: those who respond to and confirm a child’s innate sense of vigor and perfection; and those whom the child can look up and with whom he can merge as an image of calmness, infallibility, and omnipotence. The first type is referred to as the mirroring selfobject, the second is the idealized parent imago” (p. 457).

Modern self psychology took the two selfobjects of the mirroring parent imago and idealized parent imago first described by Kohut and added the third selfobject of twinship. According to Flanagan (2008), mirroring selfobjects “reflect and identify its unique capabilities, talents and characteristics” (p. 172). Also referred to as the “grandiose exhibitionist self,” these are the “normal egocentric needs of the child to experience confirming, accepting, enthusiastic responses from the environment in order to affirm that he or she is recognized, appreciated, affirmed, and accepted in his or her needs, experiences, and creations” (Donner, 1988, p. 20). Through recognition, appreciation and affirmation, and responses from the environment that “demonstrate a shared sense of pride, pleasure and enthusiasm” (Donner, 1988, p. 20), the child builds inner strength and self-esteem.

Idealized selfobjects provide “someone strong, calm, and wonderful to idealize” (Flanagan, 2008, p. 174). Also called the “idealized parent imago,” this selfobject serves to help children protect against their feelings of helplessness and smallness in the world by merging with the physical strength and calmness of their parents. Ideally, over time the child will experience manageable levels of discomfort and learn to “internalize realistically the strengths and virtues of the selfobject so the self develops its own self-sustaining strength, inner calm, and ideals.” (Donner, 2008, p. 20).

Twinship objects provide the feeling that “there are others in the world who are similar to oneself” (Donner, 2008, p. 176). Overall, self psychology places importance on the establishment of a sense of self and the creation and maintenance of relationships that will maintain and strength aspects of the self (Brown, 2007). As Brown (2004) explained, “To maintain a healthy sense of self, people need certain responses from their environment that will promote this sense of self” (p. 69). In each stage of development there are different selfobject needs—but, according to Bronner (1988), “central to self psychology is the belief that individuals live within a matrix of selfobject needs and consequently within a matrix of selfobjects. Part of the self is always merged with the environment. The self is never wholly autonomous” (p. 19). The environment is not only the space in which a person’s self evolves, but essentially part of the self.

In human-animal interactions, the pet is not always the selfobject. Instead, the supportive function the pet provides to its owner (through mirroring, twinship, and idealization) is the selfobject function, and to be considered a selfobject, “the person, animal, thing, idea, or experience must play a crucial role in sustaining the self of the person” and “the person may feel a sense of falling apart or ‘fragmentation’ when the selfobject is lost” (Brown, 2004, p. 70). For instance, a dog who is kept as a watchdog or hunting dog may be appreciated for the functions it serves, but its owner is unlikely to feel a sense of falling apart if the dog goes missing because it was not functioning as a selfobject who “maintained the cohesion of the owner’s sense of self” (Brown, 2004, p. 71).

While extensive research has examined the impact of animals on human stress levels, very little research has examined the nature of the human-animal bond through a self psychology lens. Alper (2003) wrote primarily about children from a psychotherapeutic point of view, but

much of the research conducted can be used to draw attention to the human-animal bond for people of all ages. As discussed earlier, selfobjects come in the form of mirroring, idealization, and twinship. The following passage demonstrates how a dog can function as a mirroring selfobject for its owner:

In the privacy of her room, Hilary conducted poetry readings in which her dog was the enthusiastic audience. The dog sat attentively through the readings and when Hilary enthusiastically asked, “Did you like it?” the dog would wag her tail, lick her mistress, and jump up and down. She responded with enthusiasm and activity, a rough equivalent of the attuned responsiveness her parents were unable to provide. The dog provided Hilary with a positive self-image of herself, reflected back her own natural joy in her creative productions. Her internal experience of excitement was validated, allowing herself to develop an awareness and appreciation of her own creativity. Through her dog, Hilary saw mirrored a worthwhile, interesting, and expressive self, and it was this mirroring response that that made her feelings and actions meaningful. (Alper, 1993, p. 262)

The following passage from Alper (1993) serves as an example of a pet serving as an idealizing selfobject:

As we began to explore more deeply her relationship with her dogs, Hilary revealed that she had spent a great deal of time training them in obedience classes and entering them in professionally judged competitions. This aspect of her relationship, with one dog in particular, was, I believe, central in providing a selfobject function...Showing her dog, an extension of herself, provided Hilary with an avenue for the development of her thwarted narcissism, channeling it into

a form that was given public and familial approval. The dogs provided her with an opportunity to feel proud and worthwhile. (Alper, 1993, pp. 261-262)

Through an examination of clinical examples, work with patients, and discussions with colleagues, Alper (1993) was able to conclude that “pets can play an essential role in preserving potentialities of the nuclear self...aspects of the child’s self that may have otherwise have been thwarted or defensively sequestered may be affirmed and kept alive vis-à-vis this essential selfobject bond” (p. 265). While Alper’s (2003) work focused on children, she suggested the variable of age should be addressed in later work, “Adults do not outgrow their need for selfobjects, and the refueling of selfobject ties is crucial to the maintenance of cohesiveness, vigor, and self-esteem. The bond with animals can be a vitalizing and beneficial attachment throughout the human lifespan” (p. 265).

Brown (2007) attempted to determine the selfobject functions of animals with adults in one-hour interviews with clinical psychologists in which the interviewer scored the responses for selfobject types. The study revealed that 67% of the participants scored as having one primary type of selfobject relationship. Mirroring was the most common type of selfobject type scored, and all the interviews had examples of mirroring. The most typical remark was that the animal loved the owner unconditionally, more than anyone else in the world, and this devotion would be hard for human companions to match (Brown, 2007). Animals make particularly good selfobjects in that they are suited to be silent, devoted, and soothing, and most participants mentioned that their pets made them feel calm and soothed (Brown, 2007).

Attempting to use self psychology to explain the pet-owner relationship is difficult in that selfobject relationships, like many theories, are intrapsychic and not observable from the outside. Instead of measurable events like decreased cortisol levels, selfobject experiences are internal

and direct access to a selfobject experiences is nearly impossible in a one-hour interview (Brown, 2007). Kohut referred to this difficulty in his writings on the self, stating that the self, “is, like all reality...not knowable in its essence. We cannot, by introspection and empathy, penetrate to the self per se; only its introspectively or empathically perceived psychological manifestations are open to us...” He goes on to state that while we can “describe the various cohesive forms in which the self appears, can demonstrate the several constituents that make up the self...and explain their genesis and function,” ultimately, “we will still not know the essence of the self as differentiated from its manifestations” (Kohut, 2011, pp. 449-450). Therefore, theories concerning the selfobject function of pets can be hard to prove and substantiate in comparison to theories with observable scientific phenomena (like resting heart rates, cortisol levels, etc.).

CHAPTER III

Methodology

The purpose of this study was to understand the relationship between perceived stress and pet ownership among social work clinicians and students. Over the course of my first internship at Smith, I was struck by the sheer number of students who adopted dogs or wrote Facebook posts about how much better they felt after spending time with a friend or family member's dog. While I was interested in studying the relationship between pet ownership and stress for all people, the directions for my Smith thesis dictated that I pick a topic related to social work issues. As a result, I chose to focus my sample of social work clinicians and students. In order to maintain continuity of the sample, I decided to limit my sample to social work students and clinicians working at least 32 hours a week in the field. Social work master's programs vary in the number of clinical hours students are required to perform, and I worried that those with 32 clinical hours might be exposed to more stress than those who spent most of their week in the classroom.

General Research Strategy

I chose to conduct a quantitative study and to collect data that would measure participants' levels of stress as well as their levels of attachment to their pets. I chose to perform a quantitative study as opposed to a qualitative study in order to compare two groups of participants and to generate comparable measures between pet owners and non-owners. While a qualitative study would have been helpful in determining how participants felt about their pets,

the quantitative study allowed for a larger sample size and was a means of determining whether pet owners experienced less perceived stress in *comparison* to non-owners. Based on the reading I did, I wondered if participants who lived alone would be more attached to their pets than those who lived with roommates, partners, or family as a result of the selfobject function the pets may serve.

Participants

I used non-probability sampling procedures because my decision to use MSW students and social workers in the field was based on my reliance on available participants, and since I was using a survey to which students could choose to respond, the reasons for inclusion would not be random, due to nonresponse bias. I used snowball sampling with the hope that my network of friends and colleagues would be able to recruit other participants from among their networks that would otherwise be hidden to me. I didn't have access to social work clinicians working at community agencies, or students attending schools other than Smith College, so I hoped that my contacts in each of these groups would generate a snowball effect and widen up my contacts and build my responses. Exclusion criteria were social work students who worked fewer than 32 hours a week and social workers who do not work in clinical settings (i.e., community activists, policy advisors, etc.).

Method of Measurement

I used a 45-question online survey uploaded in SurveyMonkey to collect my data. The survey included questions about the participant's gender, marital status, living arrangements (with a roommate, partner, or alone), and age. Given the companionship benefits pets can provide, I felt determining what social supports (i.e., relationship, roommates) participants relied on in addition to their pets was necessary. Materials included the online survey (see appendix A), an informed consent form (see appendix B), the Cohen, Kamarack, and Mermeistein (1983)

Perceived Stress Scale (PSS) (see appendix C) and the Johnson, Garrity, and Stallones (1992) Lexington Attachment to Pets Scale (LAPS) (see appendix D). The demographic portion of the survey asked for age, marital status, race/ethnicity, living arrangements, and pet ownership. The numbers and kinds of pet ownership were recorded in this demographic section.

In order to assess the symptoms of perceived stress, I chose the Global Measure of Perceived Stress (Cohen, Kamarack, & Mermeistein, 1983) which consists of 10 questions to determine the level of stress the participants perceived themselves to be experiencing. The instrument is considered foremost a measure of perceived stress (Cohen & Williamson, 1988) and consists of 10 questions for which respondents were asked to rate their answers in terms of frequency over the last month. Ratings were 0=Never, 1=Almost Never, 2=Sometimes, 3=Fairly Often, and 5=Very Often. The measure was scored by totaling the ratings, with questions 4, 5, 7 and 8 weighted in reverse order. During reliability data analysis for this survey, the data analyst ran Cronbach's alpha on the PSS, and the scale had strong internal reliability (.920).

In addition, I felt determining the level of attachment that the pet-owning participants felt towards their pets was essential. Participants with low attachments to their pets might be unlikely to gain the same benefits of ownership as those who were highly attached. To determine pet attachment, I included use the 23-question Lexington Attachment to Pets Scale (LAPS) (Johnson et al., 1992). The LAPS is a semantic differential scale where participants are asked to agree, slightly agree, slightly disagree, or disagree with statements formulated to measure attachment to animals. The Smith data analyst ran Cronbach's Alpha on the scale and determined it had a strong internal reliability (.955).

Initially I chose not to include questions about race in the survey, as I felt they weren't relevant to my research question. During the HSR approval stages, however, my survey was

returned with the recommendation that I include a question about race. I opted to include the question, but with permission from my advisor, marked it as “optional” within the body of the survey. I explained that all questions were optional in the informed consent section, but felt special emphasis was needed for this question.

Sample

The total respondents consisted of 62 clinical social workers and students recruited through snowballing through my network of colleagues and friends in clinical placements across the country. Thirteen of these surveys had to be discarded, leaving the total participants at 49. Six surveys had to be discarded because the respondents left consent section blank, and seven surveys were removed because the participants did not answer any questions after consent. There were an additional 3 people who said no to question 1 (“Are you a social work student or clinician working at least 32 hours a week) but continued with the rest of the survey and reported working 25 clinical hours a week. I decided to keep these surveys. Given that only 49 useable responses to the survey were useable, generalizations about the results of this particular study should be limited. Within the sample, only five men responded (as compared to 43 female and one transgender respondent) and 42 of the 49 respondents identified as white.

Data Collection

Social work students and clinicians were contacted by email and telephone to request their permission to send them the full survey. They were advised that the study involved measuring stress levels and pet owner attachment to their pets, and would take approximately 15 minutes to complete. Snowballing collection strategies were used to obtain participants for the study. An email introducing me, what the survey involved, and a link to the survey were sent to all those who agreed to participate. The first page of the survey included a full consent form that

required them to click “I agree” before continuing on to the next question. The second page asked if the reader was a social work student or clinician working at least 32 hours a week. This helped me determine whether my anonymous participants met the requirements for participation.

I chose to include questions about demographic information, including age, gender, race, marital status, and living arrangements. I was particularly interested in understanding whether marital status (single or attached) and living status (lives alone or with others) impacted the perceived stress of participants. I wanted to understand if there was a relationship between increased human contact and stress. After the demographic information questions, the survey asked whether the participant had a dog, a cat, and how many. Participants who reported having dogs or cats then began answering the 23 questions that made up the Lexington Attachment to Pets scale (Johnson et al., 1992). I included the scale to determine how attached the owners were to their pets. I wanted to see if there was a relationship between pet attachment and levels of stress. Participants who did not own a cat or dog were asked to skip this section and move on to the 10-question Perceived Stress Scale (Cohen et al., 1983) which was created to measure a person’s perception of stress over the last month.

I used the non-probability technique of snowball sampling to collect data for this study. I began by writing recruitment emails to my colleagues at the VA and network of friends who were working as social workers in the field, or participating in 32-hour-a-week internships. My hope was that they would pass the survey on to other clinical social workers, who would then pass it on to other social workers, and so on. Unfortunately, the snowballing aspect of the procedure never seemed to take off. I noticed that after sending out several letters, I would receive a flurry of survey response activity. After a few days, however, the response rate would slow down: my colleagues were plainly not continuing to pass along the survey. Instead, it

usually got stuck with the person I knew directly or the person to whom my acquaintance forwarded it. My sample did not seem to grow and snowball beyond the pool of initial participants. While my hope had been to collect data from social workers working in several different agencies through my social network, my participant pool did not grow significantly beyond the individuals to whom I mailed the study. Given the strong Smith alumni network in the Seattle region, as well as my contacts within the Seattle VA, I had hoped to obtain a sample of at least 200 participants. Contact information for social workers at various agencies is not made publicly available, so there was no obvious source for locating participants who fit my study criteria. I had hoped that using a snowballing method would allow me to access individuals to whom I would otherwise not have access.

Data Analysis

The data collected from the PSS and Pet Attachment scales were analyzed using individual scoring measures. Since the PSS had categories ranging from 0 up to 21+, the scoring was done by taking the sum of the questions. PSS scores were obtained for the four positively stated items (questions 39, 40, 42, and 43) using the following scoring: (N = 4, AN = 3, S = 2, FO = 1 and VO = 0). For the six negatively stated items (questions 36, 37, 38, 41, 44, 45), it's reversed (N=0, AN=1, S=2, FO=3, VO=4).

Only responses from participants who answered all the questions in the scale were included, since missing responses would be counted as zero "0." With the PSS scale, a "0" response could indicate a response of either "never" or "very often" depending on whether the question was stated positively or negatively. The ambiguity of the "0" response could be misleading in the data—so any questionnaires with missing responses were excluded.

The Pet Attachment Scale was scored using total point value scores assigned to each of the questions. Questions worded positively (questions 13-19 and 21-32, 34, 35) were coded as follows: 0=strongly disagree; 1=somewhat disagree; 2=somewhat agree; and 3=strongly agree. For the items worded negatively (questions 20 and 33), the coding was reversed. A variable for whether or not the participant owned a pet (dog or cat) was created, and a t-test was run to determine if the participant's ownership of a pet was correlated with a difference in the mean stress score.

CHAPTER IV

Findings

The major findings were that pet owners reported significantly lower stress when compared to non pet owners and stress decreased with increased pet attachment for the whole sample. When the results were separated by category, as pet attachment increased for divorced and single participants, their perceived stress decreased, while married and committed participants revealed no significant relationship between attachment and stress. Before I discuss these findings in greater detail, I will describe the demographics.

Demographics

The participants in the survey were primarily female (n=43, 87.8%) and white (n=42, 85.7%). The mean age for the sample was 30.4, with ages ranging from 19-45. Most were social work students (n=29, 59%). Regarding their marital status, 22.4% (n=11) were married, 34.7% (n=17) were in committed relationships, and 36.7% (n=18) were single. The majority lived with others, whether a roommate (n=13,26.5%), a partner (n=20,40.8%) or their family (n=8,16.3%), while only 16.3% (n=8) lived alone. Respondents who reported owning a dog made up 40.8% (n=20) of the participants, and 26.5% (n=13) reported owning a cat.

Pet Ownership and Stress Levels

Pet owners who took the survey had significantly lower levels of perceived stress compared to participants who did not have pets. During data analysis, the data was divided using the variable of pet ownership to determine whether or not the participant owned a pet (dog or

cat) and a t-test was run to determine if a difference existed in the mean stress scores based on whether or not the participant owned a pet. A statistically significant difference was found ($t(44)=2.167, p=.036$, two-tailed). The pet owners had a lower mean PSS score ($m=17.43$) than those who did not own a pet ($m=22.19$).

Pet Attachment and Stress Levels

The Pearson's correlation between the PSS and the Pet Attachment Scale produced a significant negative correlation between pet attachment and perceived stress ($r=-.395, p=.013$). A negative correlation indicates that as one scale goes up, the other goes down (and vice versa). Since a higher score on the attachments scale indicated greater attachment to their pet, and a higher score in the PSS indicated more stress, a negative correlation indicated that as the participants' attachment scores increased (greater attachment to their pet), their PSS scores decreased (lower perceived stress). The Cronbachs alpha was run on each scale to test internal reliability and both scales had strong internal reliability, so I was confident about combining them into an overall score.

The marital status variable was recoded into two categories: 1=married or committed and 2=single, divorced or separated. These two populations were not significantly different in either their perceived stress or their pet attachment. Further, for married and committed participants, no significant correlation existed between attachment and stress. But for participants who were single, divorced or separated, a significant negative correlation existed between attachment and stress ($r=-.663, p=.007$), which suggests that increased pet attachment and decreased perceived stress were strongly correlated in this category.

CHAPTER V

Discussion

The major findings were that the status of pet ownership is significantly correlated to lower stress when compared to the status of not owning pets, and that, for divorced and single participants, stress decreased with increased pet attachment.

The purpose of this study was to determine the role pet ownership and pet attachment plays in the perceived stress of social work clinicians and students. Theoretical and scientific arguments regarding the effect of pets on stress levels were provided in the literature section of this paper, and the data presented here demonstrated a correlation between pet ownership and lower perceived stress, as well as a correlation between decreased stress and greater pet attachment. The results corroborate the previous research of DeMello (1998), Shiloh (2003), and Allen, Blascovich, and Mendes (2002), which signified that animals, especially pets, can play a role in reducing the stress of their owners.

The positive effects of pet ownership on single, divorced, and separated participants supported the research of Cline (2010), who reported that single adults were more likely to gain well-being from dog ownership than those who are married did.

This study's results are also consistent with role strain and role enhancement theory (Cline, 2010). According to role strain theory, married individuals have more demands than single individuals and pet ownership is simply another demand they must juggle in their schedules. According to role enhancement theory, pets provide an additional source of support to

single individuals, who tend to have smaller, less reliable support networks (Cline, 2010).

In addition, this study supports the theories about pets as selfobject (e.g., Alper, 2003; Brown, 2007), with the data suggesting that owners who have greater attachment to their pets may gain the psychological benefit of decreased stress, which one might explain as a result of the mirroring, twinship, or idealization their pets provide.

The research of Cline (2010) correlated greater well-being with dog ownership when participants were female or unmarried. This study shows a correlation between decreased stress and pet ownership overall, but due to the small sample size of the variables of gender and age, corroborating Cline's (2010) variable of gender proved difficult. The sample only included 5 male participants (10.2% of total participants), one transgender participant (2.0%), and 43 female participants (87.8%). The number of non-female participants was so low that it is impossible to draw a statistically significant correlation between gender and pet ownership. Given that the field of social work is comprised of 80.3% women (Bureau of Labor Statistics, 2013), in order to gain a statistically significant sample size of men and transgender persons, the number of total participants in the survey would need to be substantially increased.

Given the high levels of burnout and turnover in social work, and given the body of research indicating animals can lower the stress levels of humans, the question of whether social workers can gain benefits from pet ownership bears investigation. If animals are being used to help combat the stress and anxiety of the patients that social workers treat, using animals to help combat the burnout many social workers themselves experience would likely be beneficial. The term *self care* is widely used in social work curriculum and within agencies, and social workers are already in the habit of employing the strategies they recommend for patients on themselves.

Social workers engage in yoga and bodywork, visit their own therapists, and many have mindfulness practices of their own.

This study examined the role of a pet in a social worker's life, but future research should examine what the presence of animals in the workplace might do for overall morale and stress in other work environments. Many large companies have pet-friendly policies and allow their employees to bring their animals to work with them. Future researchers may wish to compare the work-related stress of employees in offices where pets are allowed with that of employees who work in offices where they are not.

Limitations of the Study

No research has examined the effect of pet ownership on social workers' stress levels, and my hope was to better understand whether the positive aspects of pet ownership for patient populations would also benefit the social workers who worked with these patients. Therefore, this survey was only open to social workers in the field and social work students working at least thirty hours a week in the field. As a result, many social work students who attend schools with internships that took place two days a week were excluded. With its summer session and focus on a full-time clinical internship, Smith College is unique, and due to the field hours required to participate in my survey, many other social work students were excluded from participating.

Important limitations to this study were the low number of participants and unequal group size among several demographics. Explanations for the low number of participants include the ineffectiveness of snowballing beyond my initial contacts, and an initial misconception about how willing social workers would be to fill out a survey. Given that only 49 surveys were useable, the study should not be generalized beyond the actual sample. Additionally, white

females made up a large percentage of the participants, leaving men and people of color underrepresented in the sample.

In addition to the difficulty in recruiting participants, the research was limited by the decision to use as single stress measure. The Perceived Stress Scale (PSS) only captured a small moment in time (the past month), did not account for life events that may contribute to stress (finishing an internship, finishing a thesis) and did not provide a longitudinal perspective of participant's stress levels. Given the structure of this study, showing causation between pet ownership and reduced stress levels was not possible, though such a demonstration would be beneficial information for the social work community. In order to truly determine causation, an experimental study in which pets were introduced to social workers whose stress levels were already being monitored would need to be conducted.

Another limitation of this study is its generalizability. The sample consisted predominantly of white women. The number of male respondents and women from other racial groups was not large enough to generalize the results. The survey used in this study only included questions in a multiple-choice format. Were I to perform this study again, I would include a short answer portion where participants could comment. Such a portion would be particularly helpful in allowing participants to explain their answers.

Suggestions for Further Research

To increase sample size in further studies, future researchers would be well-advised to identify additional sources for data collection (including directors of community organizations and social work schools) and to reach out to relevant organizations directly instead of relying on snowballing techniques to gain respondents. Since recruiting greater numbers of male and transgender participants would help clarify the relationship between the variables of gender and

stress, future researchers should reach out proactively to male clinicians or male social work organizations (e.g., the student group “Men of Smith”). However, given the disproportionate number of women in social work, trying to recruit equal numbers of men and women would not provide an accurate sample of the social work profession. Instead, creating an overall larger sample would provide a statistically significant number of male social workers, by which comparisons by gender could be made. I would caution against trying to recruit equal numbers of men and women, as this is not representative of the current working social work population. Instead, a study might focus on gender specific categories, such as the pet attachment levels of female social workers.

Given that the results of this study revealed a correlation between increased attachment and decreased perceived stress among single and divorced participants, further researchers may want to focus on the attachment variable. Because this study included non-pet owners as well as pet owners, the number of pet owners in the sample was necessarily smaller than it would be in a study that had the same total number of participants but that focused solely on attachment levels in pet owners. As it was, I simply sent out the survey to all my social work contacts, and did nothing to control for the number of pet owning and non-pet owning respondents. Further research investigating a large sample of pet owners and their varying levels of attachment to their pets would shine a light on the role of attachment in decreasing perceived stress among single and divorced pet owners. Such a study could help to answer whether pets are acting as a substitute for human partnership, or whether something *unique* about the human/animal attachment decreases stress.

Additionally, researchers in the future may wish to measure attachment levels in human relationships as well as attachment levels in human-animal relationships. By doing so, future

researchers may be able to determine the extent to which higher attachment levels between individuals and their pets are correlated with lower attachment levels between members of couples, or with lower attachment levels between parents and their children. Measuring all of these kinds of attachment together could also allow researchers to add the attachments to develop a very rough measure of how attached individuals are to members of their households, and then determine how the sum of those attachments is correlated with stress levels. By breaking out that sum into different kinds of attachments, moreover, researchers may be able to determine which of those kinds of attachments are relatively more capable of reducing stress levels.

Given that pet ownership has its own set of responsibilities (walking, feeding, boarding) that may add additional responsibilities to the already busy lives of social workers, further research should be conducted on the level of burnout and stress in mental health employees at organizations where pets are allowed in the office.

Researchers interested in studying symptom reduction for substance abuse and eating disorders who come from a self psychology clinical orientation (and frame these behaviors as attachment failures) might want to study the increase or decrease in symptomatic behavior following the introduction of a pet. If a researcher frames substance abuse disorders through a self psychology lens, with the substance providing a soothing introject for individuals who have not internalized enough selfobjects in order to self soothe, pets could be introduced as alternative soothing introjects who can replace the role of substances in their lives. A future study should screen participants for the security of their attachments to determine if this correlates to the “helpfulness” of a pet in symptom reduction.

REFERENCES

- Allen, K., Blascovich, J., & Mendes, W. B. (2002). Cardiovascular reactivity and the presence of pets, friends, and spouses: The truth about cats and dogs. *Psychosomatic Medicine*, *64*, 727-739. doi:10.1097/01.PSY.0000024236.11538.41
- Alper, L. S. (1993). The child-pet bond. In A. Goldberg (Ed.), *The widening scope of self psychology: Progress in self psychology* (Vol. 9, pp. 257-270). Hillsdale, NJ: The Analytic Press.
- Barlow, C., & Hall, B. (2007). What about feelings: A study of emotion and tension in social work field education. *Social Work Education*, *26*, 399-413.
doi:10.1080/02615470601081712
- Beck, A. T. (1987). *Beck depression inventory*. San Antonio, TX: The Psychological Corporation.
- Bogo, M., Litvack, A., & Mishna, F. (2010). Emotional reactions of students in field education: an exploratory study. *Journal of Social Work Education*, *46*, 227-243.
doi:10.517S/JSWE.2010.200900007
- Brickel, C. M. (1982). Pet facilitated psychotherapy: A theoretical explanation via attention shifts. *Psychological Reports*, *50*, 71-74. doi:10.2466/pr0.1982.50.1.71
- Brown, S. E. (2004). The human animal bond and selfpsychology: Toward a new understanding. *Society and Animals*, *12*(1), 67-86. doi:10.1163/156853004323029540
- Brown, S. E. (2007). Companion animals as selfobjects. *Anthrozoos*, *20*, 329-343. Retrieved from
http://go.galegroup.com/ps/i.do?id=GALE%7CA174640646&v=2.1&u=mlln_w_smithco1&it=r&p=AONE&sw=w&asid=aa721369793695dc857e715df396ebdd

- Bureau of Labor Statistics. (2013). *Labor force statistics from the current population survey*. Retrieved from <http://www.bls.gov/cps/cpsaat11.htm>.
- Center for Health Workforce Studies, & Center for Workforce Studies. (2006, March). *Licensed social workers in the U.S., 2004*. Retrieved from <http://workforce.socialworkers.org/studies/intro.pdf>.
- Cline, K. M. C. (2010). Psychological effects of dog ownership: role strain, role enhancement and depression. *The Journal of Social Psychology, 150*, 117-131. doi:10.1080/00224540903368533
- Cohen, S., Kamarack, T., & Mermeistein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396. Retrieved from <http://www.psy.cmu.edu/%7Ecohen/globalmeas83.pdf>
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health* (pp. 31-67). Beverly Hills, CA: Sage Publication.
- DeMello, L. R. (1999). The effect of the presence of a companion animal on psychological changes following the termination of cognitive stressors. *Psychology and Health, 14*, 859-868. doi:10.1080/08870449908407352
- Donner, S. (1988). Self psychology: Implications for social work. *Social Casework: The Journal of Contemporary Social Work, 69*, 17-22.
- Dziegielewski, S. F., Roest-Marti, S., & Turnage, B. (2004). Addressing stress with social work students: A controlled evaluation. *Journal of Social Work Education, 40*, 105-119. Retrieved from <http://website.cswe.org/publications/members-only/journal/04-1addressing.htm>

- Fiegl, A. (2012, December 21). The healing power of dogs. *National Geographic News*. Retrieved from: <http://news.nationalgeographic.com/news/2012/12/121221-comfort-dogs-newtown-tragedy-animal-therapy/>
- Figley, C. R. (1993). Compassion stress: Towards its measurement and management. *Family Therapy News*, 24, 3-16.
- Figley, C. R. (1995). Compassion fatigue as a secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.) *Compassion fatigue: Secondary traumatic stress disorder from treating the traumatized*. New York, NY: Brunner/Mazel.
- Gibson, F., McGrath, A., & Reid, N. (1989). Occupational stress in social work. *British Journal of Social Work*, 19, 1-16. Retrieved from: <http://bjsw.oxfordjournals.org/content/19/1/1.full.pdf>
- Herman, J. L. (1992). *Trauma and recovery*. New York, NY: Basic Books.
- Hesse, A. R. (2002). Secondary trauma: How working with trauma survivors affects therapists. *Clinical Social Work Journal*, 30, 293-309. doi:10.1023/A:1016049632545
- Johnson, T. P., Garrity, T. F., & Stallones, L. (1992). Psychometric evaluation of the Lexington attachment to pets scale (LAPS). *Anthrozoos*, 5, 160-175. Retrieved from: <http://www.ingentaconnect.com/content/bloomsbury/azoos/1992/00000005/00000003/art00004?token=004e162411fc7c437a63736a6f7c47355d36666c707023566f644a467c79675d7c4e7247706181>
- Kaiser, J. (2012, December 14). Dogs bring stress relief to studying students in Boston area colleges during finals. *Boston.com*. Retrieved from: http://www.boston.com/yourcampus/news/mit/2012/12/dogs_bring_stress_relief_to_studying_students_during_finals.html

- Kim, H., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy, and social support. *Administration in Social Work, 32*(3), 5-25.
doi:10.1080/03643100801922357
- Knight, S., & Edwards, V. (2008). In the company of wolves: The physical, social, and psychological benefits of dog ownership. *Journal of Aging and Health, 20*, 437-455.
doi:10.1177/0898264308315875
- Kohut, H. (1971). *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders*. New York, NY: International Universities Press.
- Kohut, H. (2011). Four basic concepts in self psychology. In P. Ornstein (Eds.), *The search for the self: selected writings of Heinz Kohut, 1978-1981* (pp. 447-470). London, U.K.: Karnac.
- Lafreniere, K. D., Mutus, B., Cameron, S., Tannous, M., Gianotti, M., Abu-Zahra, H., & Laukkanen, E. (1999). Effects of therapeutic touch on biochemical and mood indicators in women. *Journal of Alternative & Complementary Medicine, 5*, 367-371.
doi:10.1089/acm.1999.5.367
- Maslach, C. (2003). Job burnout: New directions in research. *Current Directions in Psychological Science, 12*, 190-192. doi:10.1111/1467-8721.01258
- Maslach, C., & Jackson, S. E. (1986). *Maslach burnout inventory: manual* (2nd ed.). Palo Alto, CA: CPP/Consulting Psychologists Press.
- McConnell, A. R., & Brown, C. M. (2011). Friends with benefits: on positive consequences of pet ownership. *Journal of Personality and Social Psychology, 101*, 1239-1252.
doi:10.1037/a0024506

- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians. *Best Practices in Mental Health: An International Journal*, 6(2), 57-68. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=27&sid=aa73640e-7f65-4cb5-b0f6-e2765a9eb2%40sessionmgr4003&hid=4205>
- Pengilly, J., & Dowd, T. (2000). Hardiness and social support as moderators of stress. *Journal of Clinical Psychology*, 56, 813-820. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?sid=aa73640e-7f65-4cb5-b0f6-e2765a9eb2%40sessionmgr4003&vid=26&hid=4205>
- Ruzek, J. (1993). Professionals coping with vicarious trauma. *NCP Clinical Newsletter*, 3, 1-5.
- Shiloh, S., Sorek, G., & Terkel, J. (2003). Reduction of state-anxiety by petting animals in a controlled laboratory experiment. *Anxiety, Stress, and Coping*, 16, 387-395. doi:10.1080/1061580031000091582
- Silvery, J. (2011, September 3). Shelter dogs train to aid vets with PTSD. *Army Times*. Retrieved from: <http://www.armytimes.com/news/2011/09/ap-shelter-dogs-train-aid-vets-ptsd-090311/>
- Slavik, R. (2012, August 11). Dogs help youngsters to read. *CBS Minnesota*. Retrieved from: <http://minnesota.cbslocal.com/2012/08/11/dogs-help-youngsters-to-read/>
- Spielberger, C. D. (1983). *Manual for the state-trait anxiety inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Staats, S., Miller, D., Carnot, M. J., Rada, K., & Turnes, J. (1996). The Miller-Rada commitment to pets scale. *Anthrozoos*, 9, 88-94. doi:10.2752/089279396787001509

- Stallones, L., Johnson, T. P., Garrity, T. F., & Marx, M. B. (1990). Quality of attachment to companion animals among U.S. adults 21 to 64 years of age. *Anthrozoos*, 3, 171-176. doi:10.2752/089279390787057595
- Sullivan, J. (2012, May 3). Cats bringing out the softer side of inmates. *The Seattle Times*. Retrieved from: http://seattletimes.com/html/localnews/2018135930_prisonpets04m.html
- Thompson, M. (2010). Bringing dogs to heal. *Time*, 176(21), 54-57.
- Tobin, P. J., & Carson, J. (1994). Stress and the student social worker. *Social Work and Social Sciences Review*, 5, 246-255.
- Um, M. Y., & Brown-Strandridge, M. D. (1993). Discovering organizational “rules” that contribute to student stress in social work field placements. *The Journal of Applied Social Sciences*, 17, 157-177.
- Watson, N. L., & Weinstein, M. (1993). Pet ownership in relation to depression, anxiety, and anger in working women. *Anthrozoos*, 6, 135-138. doi:10.2752/089279393787002295
- Zastro, C. (1985). *The practice of social work* (2nd ed.) Chicago, IL: Dorsey Press.

Appendix A
Online Survey

1. Are you a social work student or clinician working at least 32 hours per week?

YES NO

*** 2. Dear Survey Participants,**

I am a MSW social work student at Smith College School for Social Work conducting a study exploring the correlation between pet ownership and the stress levels of social work students and clinicians. Pet ownership has been linked with increased positive emotions and decreased stress, and social work students have been shown to experience high levels of stress during their field placement. However, no research has been done examining whether pet ownership is a protective factor against the stress experienced by social work students and clinicians in the field. The data from this study will be used for my Smith School of Social Work MSW thesis and possible presentation and publication.

I am asking you to participate in an anonymous 45-question online survey for the purpose of gathering data about social workers' levels of stress in the field and pet ownership. Participants will be social work students and clinicians. Social work students and clinicians with fewer than 32 hours per week are not invited to participate in this study. The ability to read in English is also a criterion for participation. The survey consists of 45 questions and should take between 15-30 minutes to complete.

I will collect demographic data such as gender, marital status, living arrangements, age, race and ethnicity, and pet ownership will be collected at the beginning of the survey. I

will also questions about pet attachment and about your perceived level of stress. Although I anticipate minimal risk from participation, you may experience emotional discomfort reflecting your perceived level of stress. This survey may provide you with insights into your relationship with your pet, or if you are not a pet owner, your perceived stress level, and overall the research will provide valuable information in developing knowledge about the relationship between pet ownership and stress levels in social work students and clinicians.

The survey will be anonymous, and I will not be collecting identifying data, including your IP address through SurveyMonkey. People who will be viewing the data are me, my thesis advisor, and data analysts employed by Smith College to analyze data . In presentations or publications I will present the data as a whole, and no single survey with identifying demographic information will be shown . I will store the data online for a period of three years as stipulated by federal guidelines, after which I will destroy it or continued to maintain it securely.

Participation in this study is voluntary. You may withdraw from the study at any time during the survey and you may refuse to answer any question. Since the study is anonymous, you will not be able to withdraw your data after you have submitted your survey as I will have no way of determining which survey answers belongs to you. You may contact me by email at kacheson@smith.edu before or after you fill out the survey. Should you have any concerns about your rights or about any aspect of the study, you are encouraged to email me or the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

Thank you for your participation!

BY CHECKING “I AGREE” BELOW YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTAND THE INFORMATION ABOVE AND THAT YOU HAVE HAD AN OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGRESS TO PARTICIPATE IN THE STUDY.

Please print a copy for your records.

I agree

3. What best described your current social work position?

- Social work students with at least 32 work hours per week
 Social Work Clinican with at least 32 work hours per week Other (please specify)

4. What is your age?

5. What is your gender?

Male Female Transgender

Other (please specify)

6. What is your race? (Optional)

White Black or African American
 Asian Native Hawaiian or Other Pacific Islander
 American Indian or Alaska Native

Other

7. What is your current marital status?

Married Divorced/Seperated Committed Relationship
 Single

Other (please specify)

14. Quite often I confide in my pet

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

15. I believe that pets should have the same rights and privileges as family members

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

16. I believe my pet is my best friend

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

17. Quite often, my feelings towards people are affected by the way they react to my pet

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

18. I love my pet because he/she is more loyal to me than most of the people in my life

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

19. I enjoy showing other people pictures of my pet

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

20. I think my pet is just a pet

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

21. I love my pet because it never judges me

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

22. My pet knows when I'm feeling bad

☐☐☐☐ 1 Strongly agree ☐☐☐☐ 2 Agree ☐☐☐☐ 3 Disagree ☐☐☐☐ 4 Strongly Disagree

Disagree 4 Strongly Disagree

23. I often talk to other people about my pet

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

24. My pet understands me

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

25. I believe that loving my pet helps me stay healthy

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

26. Pets deserve as much respect as humans do

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

27. My pet and I have a very close relationship

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

28. I would do almost anything to take care of my pet

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

29. I play with my pet quite often

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

30. I consider my pet to be a great companion

1 Strongly agree 2 Agree 3
Disagree 4 Strongly Disagree

31. My pet makes me feel happy

1 Strongly agree 2 Agree 3 Disagree 4
Strongly Disagree

Appendix B

Consent Form

Dear Survey Participants,

I am a MSW social work student at Smith College School for Social Work conducting research exploring the correlation between pet ownership and the stress levels of social work students and clinicians. Pet ownership has been linked with increased positive emotions and decreased stress, and social work students have been shown to experience high levels of stress during their field placement. However, no research has been done examining whether pet ownership is a protective factor against the stress experienced by social work students and clinicians in the field. The data from this study will be used for my Smith School of Social Work MSW thesis and possible presentation and publication.

I am asking you to participate in an anonymous 45-question online survey for the purpose of gathering data about social workers' levels of stress in the field and pet ownership. Participants will be social work students and clinicians. Social work students and clinicians with fewer than 32 hours per week are not invited to participate in this study. The ability to read in English is also a criterion for participation. The survey consists of 45 questions and should take between 15-30 minutes to complete.

I will collect demographic data such as gender, marital status, living arrangements, age, and pet ownership at the beginning of the survey. I will also ask questions about pet attachment and about your perceived level of stress. Although I anticipate minimal risk from participation, you may experience emotional discomfort reflecting your perceived level of stress. This survey may provide you with insights into your relationship with your pet, or if you are not a pet owner, your perceived stress level, and overall the research will provide valuable information in developing knowledge about the relationship between pet ownership and stress levels in social work students and clinicians.

The survey will be anonymous, and I will not be collecting identifying data, including your IP address through SurveyMonkey. People who will be viewing the data are me, my thesis advisor, and data analysts employed by Smith College to analyze data. In presentations or

publications I will present the data as a whole, and no single survey with identifying demographic information will be shown. I will store the data online for a period of three years as stipulated by federal guidelines, after which I will destroy it or continued to maintain it securely.

Participation in this study is voluntary. You may withdraw from the study at any time during the survey and you may refuse to answer any question. Since the study is anonymous, you will not be able to withdraw your data after you have submitted your survey as I will have no way of determining which survey answers belongs to you. You may contact me by email at kacheson@smith.edu before or after you fill out the survey. Should you have any concerns about your rights or about any aspect of the study, you are encouraged to email me or the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

Thank you for your participation!

Survey Link: <https://www.surveymonkey.com/s/WV9T2K5>

Appendix C

Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name _____ Date _____

_____ Age _____ Gender (Circle): M F Other _____

References

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often

4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?.....
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?..
9. In the last month, how often have you been angered because of things that were outside of your control?.....
10. Inthelastmonth,howoftenhaveyoufeltdifficulties were piling up so high that you could not overcome them?

Please feel free to use the Perceived Stress Scale for your research.

Mind Garden, Inc.

info@mindgarden.com www.mindgarden.com

The PSS Scale is reprinted with permission of the American Sociological Association, from Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.

Cohen, S. and Williamson, G. Perceived Stress in a Probability Sample of the United States. Spacapan, S. and Oskamp, S. (Eds.) *The Social Psychology of Health*. Newbury Park, CA: Sage, 1988.

Appendix D

Lexington Attachment to Pet Scale

Lexington Attachment to Pets Scale

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

- a. My pet means more to me than any of my friends.
- b. Quite often I confide in my pet.
- c. I believe that pets should have the same rights and privileges as family members.
- d. I believe my pet is my best friend.
- e. Quite often, my feelings toward people are affected by the way they react to my pet.
- f. I love my pet because he/she is more loyal to me than most of the people in my life.
- g. I enjoy showing other people pictures of my pet.
- h. I think my pet is just a pet.
- i. I love my pet because it never judges me. j. My pet knows when I'm feeling bad.
- k. I often talk to other people about my pet. l. My pet understands me.
- m. I believe that loving my pet helps me stay healthy.
- n. Pets deserve as much respect as humans do.
- o. My pet and I have a very close relationship.
- p. I would do almost anything to take care of my pet.
- q. I play with my pet quite often.
- r. I consider my pet to be a great companion.
- s. My pet makes me feel happy.
- t. I feel that my pet is a part of my family. u. I am not very attached to my pet.
- v. Owning a pet adds to my happiness.
- w. I consider my pet to be a friend.

Appendix E
Human Subjects Review Board Approval Letter



School for Social Work
Smith College
Northampton, Massachusetts 01063
T (413) 585-7950 F (413) 585-7994

February 22, 2013

Karen Acheson

Dear Karen,

Thank you for making all the requested changes to your Human Subjects Review application. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project.

Sincerely,

A handwritten signature in cursive script that reads "Marsha Kline Pruett".

Marsha Kline Pruett, M.S., Ph.D., M.S.L.
Acting Chair, Human Subjects Review Committee

CC: Mary Beth Averill, Research Advisor