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Attitudes of Clinical Psychologists
Towards the Reporting of Nonhuman Animal Abuse

by

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A.L.B., Harvard University, 2013
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Submitted in partial fulfillment of the requirements for the degree of
Doctor of Psychology in the Department of Clinical Psychology
at Antioch University New England, 2018

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**ATTITUDES OF CLINICAL PSYCHOLOGISTS
TOWARDS THE REPORTING OF NONHUMAN ANIMAL ABUSE**

presented on July 16, 2018

by

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Epigraph

As a field of study, psychology examines a broad range of research and applied areas. Important parts of such work are teaching and research on the behavior of nonhuman animals, which contribute to the understanding of basic principles underlying behavior and to advancing the welfare of both human and nonhuman animals.

American Psychological Association (2012, p. 2)

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Abstract

Research consistently demonstrates that nonhuman animals are capable of cognition and complex emotions, but their legal status in the United States remains similar to that of property. As such, they are not protected under laws mandating psychologists to report suspicions of abuse of populations that are judged to be vulnerable and unable to protect themselves, such as children, the elderly and people with disabilities (American Psychological Association [APA], 2010). Findings from previous research suggest that animal abuse is a relatively common topic encountered in therapy and the majority of clinicians are in favor of allowing voluntary reporting of nonhuman animal abuse (Nelson, 2002; Schaefer, Hays, & Steiner, 2007). However, few psychologists report inquiring about animal abuse and neglect, with lack of education about animals' welfare and human-animal violence posed as a primary reason for this phenomenon. To fill this gap in the literature, 133 psychologists were surveyed regarding how they viewed animal abuse/neglect, whether they encounter it in professional practice, and how willing they are to report to animal protection agencies or law enforcement. Then, following a brief intervention, participating psychologists revealed their post-intervention willingness to inquire about animals in their clients' lives and their willingness to report animal abuse/neglect to animal protection agencies or law enforcement, as well as the reason that they agreed or disagreed with reporting animal abuse. Results demonstrated that animal abuse and neglect is commonly encountered by participating psychologists although few inquire about it during intake interviews. Further, the brief intervention significantly increased both disposition towards inquiring about animals in their clients' lives and willingness to report animal abuse/neglect to animal protection or law enforcement agencies. These findings have important implications for informing APA guidelines towards including voluntary or mandatory reporting of animal abuse and neglect.

Keywords: ethics code, animals, reporting, nonhuman animal abuse, nonhuman animal research, nonhuman animal cognition, therapists' attitude, education, speciesism.

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Attitudes of Clinical Psychologists Towards the Reporting of Nonhuman Animal Abuse

To facilitate reading, nonhuman animals will most commonly be referred to as animals throughout this dissertation, while human animals will be referred to as humans. However, please keep in mind that humans are one species of animals.

What is Animal Abuse?

First, it is necessary to define the term “animal abuse.” In this dissertation, abuse is defined, in part, as suggested by Nelson (2002):

The act of inflicting or allowing physical harm or injury to be inflicted upon the animal, killing, creating or allowing substantial risk of physical injury or death, neglecting of an animal’s needs for food, water, appropriate shelter, socialization, affection, or medical care, engaging in sexual behavior with an animal, or causing, training, or permitting animals to fight for entertainment and/or profit. (p. 76)

Animal abuse also includes psychological harm resulting from enforced confinement or maternal deprivation (Brown, 1988). This definition is largely based on the definition of child abuse, maltreatment and neglect used by the New York State child welfare service. To maintain this definition in the context of abuse and neglect encountered by clinical psychologists with their patients/clients, this study does not address cases of accidental harm, hunting, euthanasia, or treatment of animals in the food and entertainment industry.

What the Law Says

Though, under U.S. law, animals have the status of objects, legal consequences for animal abuse are getting increasingly severe. The Federal Bureau of Investigation (FBI; 2016) very recently changed its classification of animal abuse from a Group B crime (like trespassing or writing bad checks) to a Group A felony, making it a top-tier federal crime. As of January

2016, the FBI started tracking and quantifying animal abuse crimes in hopes that such data collection will improve enforcement and accountability.

As a result of greater appreciation of animals as sentient and valued beings, new laws regarding animal abuse are also being enforced. Each state in the United States has enacted statutes to punish individuals who engage in abusing animals, though the provisions and definitions of abuse vary drastically from one state to another (Springsteen, 2008; Tischler, 1999). Animal abuse includes, depending on the state, various levels of physical abuse and neglect; at the minimum, it is a misdemeanor and in more severe cases a felony. However, not all animals have equal protection under the law. Animal cruelty laws in the United States tend to provide more aggressive protections for companion animals such as horses, cats, and dogs, in contrast with animals raised for food like cows, pigs, and chickens (Springsteen, 2008). Under the law, people who abuse or neglect animals can be subject to fines (up to \$300,000 for repeated offenders in some states), jail time (up to 10 years in some states), community service, and psychological treatment (Lockwood, 2006; Springsteen, 2008). Animal cruelty laws also allow for animal welfare organizations and agencies to intervene and confiscate animals in abusive situations.

To date, psychologists have no articulated role in reporting animal abuse; indeed, it is deemed a violation of client confidentiality to do so. At this time, the law only mandates veterinarians to report animal abuse to the authorities (i.e., police and/or local humane societies and animal control). It makes sense that veterinarians are tasked with reporting animal abuse. However, it is also likely that the problem is vastly greater than is witnessed by veterinarians. Arguably, people who are abusing and neglecting their companion animals may also be less motivated to undertake the time and considerable expense for the healthcare of their animals.

Thus, the need remains for more professionals, including psychologists to be able to report abuse. Perhaps ironically, too, in some states (i.e., Colorado and Illinois), veterinarians are also mandated reporters when they suspect abuse of children, the elderly or the disabled (Lockwood, 2006). Those veterinarians have a broader reporting mandate than psychologists do, extending their protection to all the vulnerable animals in their care, be they human animal or nonhuman animal.

Notably, also, though not mandated reporters, citizens have the right to report suspected animal abuse or neglect to the police and/or local animal control agency. Large organizations such as the American Society for the Prevention of Cruelty to Animals (A.S.P.C.A.), the Animal Legal Defense Fund (A.L.D.F.), and the Humane Society encourage citizens who witness or suspect animal abuse to report to law enforcement, animal control agencies, and/or humane organizations who have the right and power to investigate such claims. The current A.S.P.C.A. website, for example, indicates the following:

If you think someone you know is abusing animals, please speak up. The best thing you can do is report your suspicions of cruelty to your local law enforcement agency, humane organization, animal control agency or taxpayer-funded animal shelter. Read on for more information about how to recognize and report cruelty in your area. (2017, para. 1)

There have been important changes in reporting laws at the international level as well. The European Union, among others parts of the world, has already updated its laws to reflect the discoveries in the fields of biology and psychology, granting animals the status of sentient beings (Singer, 2012). This shift has been followed by a global transformation of farming and the food industry's treatment of animals, as well as increased legal responsibility for those charged with animal abuse. Switzerland, a leader in animal rights, changed its constitution to grant animals a

status of “beings” in 1992, followed by Germany in 2002, and France and New Zealand in 2015; Quebec followed suit in 2015, though limiting the sentient status to companion animals (Evans, 2010; Hodgson, 2015; Kelch, 2011). In a related reform, in 2007, the Balearic Islands granted legal human rights to all great apes (Waldau, 2011).

The main component of this shift in Europe toward more progressive animal welfare laws has been the recognition of moral status in animals. When animals are seen to have inherent value, they are no longer considered to only have value as property. The recognition of an animal’s ability to feel pain has made an impactful difference in the animal welfare laws in Europe. Laws now exist to minimize unnecessary suffering for the benefit of animals as well as humans.

In the United States, animals continue to legally exist as property, as reflected in the regulations concerning animal welfare. Questions around animal law have, nonetheless, sparked interest in exploring the topic more seriously. In 2000, Harvard Law School (HLS) offered the first course in the United States on animal law; there were more than 150 American law school offering classes on the topic in 2016, reflecting a growing interest in this young and evolving field that is still being defined (Feinberg, 2016). Martha Minow, HLS Dean at the time, noted the following:

Though treatment of animals has always been an issue, only recently has law begun to take it seriously...For anyone thinking about the purpose of law, the legal treatment of animals forces a confrontation with what law is actually about. What are its purposes? What are its limits? Is law only about human beings? ...there’s an opportunity now to contribute to the development of law reform in a way that hasn’t always been the case. (Feinberg, 2016, para. 17)

Indeed, if we recognized that the animals we use for these purposes are living, breathing sentient beings, then using the animals becomes a moral struggle. As machines or tools, animals are seen as having no moral status and, therefore, there is no conflict. Otherwise, awarding animals just one right, the right to bodily liberty for example, opens up more questions and issues. Feinberg (2016), regarding the feasibility of awarding bodily liberty to animals, quotes New York University law professor Richard Epstein, “Which animals? We kill millions of animals a day for food. If they have the right to bodily liberty, it’s basically a holocaust” (para. 24). This is perhaps why companion animals are the first in the United States to be recognized as having a moral status greater than that of property, as reflected in the recent changes to federal animal abuse laws.

Animals in Society

Recent research conducted by psychologists and biologists, exploring the changing role of animals in domestic life, reflects a gradual and persistent societal change in appreciation and valuing of animals as companions, supports, and even members of the family. It is notable that growing numbers of companion animals are adopted at the same time that birth rates are declining (U.S. Department of Health, 2013). Indeed, the 2013 U.S. Department of Health report shows that American women birthed almost 400,000 fewer babies in 2013 than they did six years prior, largely due to a delay in age of starting a human family. Meanwhile, adoption of small companion animals, notably by people in their 20s, has doubled over the same time period following the “pet humanization trend” (Euromonitor, 2016). Although it could simply be a coincidence that young adults in America are birthing fewer babies at the same time as they are adopting more companion animals, the correlation is still quite interesting.

There is also evidence that people are treating their companions with more care than in the past, suggesting “pets” may have a different status in today’s society. According to Mintel Group’s 2016 Consumer Market Research Report:

In 2016 the market for pet products and services is an estimated \$67.5 billion, an increase of 4.3% over the previous year. A majority of households own at least one pet (59%) and as the economy improves, households are more likely to take on the expense and commitment of pet ownership (there has been positive growth in ownership since 2008). The trend of humanizing pets continues to shape the market, creating interest for new products such as pet fitness trackers, video monitors, and specialty food (and drinks). Pet owners demonstrate a desire for offerings that help keep their pet healthy, but also happy, as 87% think of their pet not just as an animal, but a member of the family. (para. 1)

This trend may be a reflection of the research established by a cross-disciplinary group of authors that includes behavioral psychologists, neuroscientists, geneticists, ethicists and veterinarians, regarding the health, developmental, and psychological benefits of personal relationships with animal companions (Freund, McCune, Esposito, Gee, & McCardle, 2016; Marston, 2011).

Human–Animal Interactions

Relationships with animals also have clinical implications, such as animal-assisted therapies for people with disabilities, acute or chronic health conditions, and social or emotional difficulties. Indeed, American Psychological Association (APA)’s Division 17 created a section in 2013 dedicated to issues related to Human–Animal Interactions (HAI; APA, 2017a; Freund et al., 2016). This section, HAI, offers a number of publications on the presence of animals in

clinical work, through animal assisted therapy such as equine-assisted therapy, as well as through animals' status as service and emotional support animal.

Service and support animals. Service animals are animals who have been trained to perform tasks to assist people with disabilities; their status is recognized and protected under the 1990 Americans with Disabilities Act (A.D.A.; U.S. Department of Justice, 2015b). Emotional support animals (E.S.A.) are companion animals who have been determined by a psychology or medical professional to provides benefit for an individual with a mental or psychological disability; these animals need not to have specialized training, unlike service animals. E.S.A.s' special status is recognized and protected under the Fair Housing Act, which protects renters from landlord discrimination against disability, including one requiring an E.S.A. (U.S. Department of Justice, 2015a – Sec. 804, 3 b). Additionally, under the Air Carrier Access Act (A.C.A.A.), anyone with a diagnosis of a mental disability with a letter from a mental health professional verifying the emotional benefit of the animal will be allowed to travel, at no extra cost, with the E.S.A. (United States Code, 1986). If the requirements are met, the airline is not legally allowed, according to the A.D.A., to ask questions about the disability and, thus, cannot restrict E.S.A. owners and their animals from boarding the airplane.

Human-animal relationship. It has become widely accepted that having a companion animal and/or participating in animal assisted therapy and education may have a multitude of positive effects on humans. Beetz, Uvnäs-Moberg, Julius, and Kotrschal (2012) reviewed 69 original studies on HAI and found, among the well-documented effects of HAI in humans of different ages, with and without special medical, or mental health conditions, that interactions with animals provided consequent benefits in the following areas: (a) social attention, social behavior, interpersonal interactions, and mood; (b) stress-related parameters such as cortisol,

heart rate, and blood pressure; (c) self-reported fear and anxiety; and (d) mental and physical health, especially cardiovascular diseases. Beetz et al. (2012) suggested that the release of oxytocin, a hormone and neurotransmitter often associated with bonding, attachment and love, may contribute to explain many of the effects of HAI documented by the studies included in their review. Indeed, the effects of oxytocin and of HAI largely correspond as both HAI and oxytocin were found to promote social interaction and bonding (e.g., Bales et al., 2007; Carter & Keverne, 2002), to reduce stress (e.g., Heinrichs, Baumgartner, Kirschbaum, & Ehlert, 2003; Kirsch et al., 2005; Neumann, Wigger, Torner, Holsboer, & Landgraf, 2000; Petersson, Lundeborg, & Uvnäs-Moberg, 1999), to reduce anxiety and pain (e.g., Guastella, Howard, Dadds, Mitchell, & Carson, 2009; Kirsch et al., 2005; Neumann et al., 2000; Petersson, Eklund, & Uvnäs-Moberg, 2005) and to enhance human health (e.g., Uvnäs-Moberg, 1994; Widstrom et al., 1988). Oxytocin may be released via eye contact and/or tactile interactions, such as petting a dog for example, which seem to play a major role for the oxytocin-mediated decrease of stress levels (Beetz et al., 2012). Oxytocin effects may be triggered in response to single interactions with animals. However, HAI effects tend to be stronger with a familiar dog in comparison to an unfamiliar dog. Furthermore, stable relationships with animals such as animal companionships have shown to have more potent and long lasting effects, due to repeated exposure to oxytocin, strengthening the human-animal bond. Overall, Beetz et. al. (2012) propose that the reduction of subjective psychological stress, such as fear and anxiety, as well as the dampening of physiological stress, likely are a consequence of the release of oxytocin in response to interactions with animals.

To explore how deeply bonded humans and companion animals truly are, perhaps due to the benefits of oxytocin, a group of Harvard-affiliated Massachusetts General Hospital (MGH)

researchers led a small study (Stoeckel, Palley, Gollub, Niemi, & Evins, 2014). Specifically, they investigated how closely the relationship between people and their animal companions mirror the parent-child relationship; they did so by looking at differences in how important brain structures are activated when women view images of their children and their companion dog. The study enrolled a group of women with at least one child aged 2 to 10 years and one companion dog who had shared the household for two years or longer, in order to compare patterns of brain activation involved with the human–animal bond with those elicited by the mother–human child bond. Participation consisted of two sessions, the first one being a home visit during which participants completed several questionnaires, including ones that asked about their relationships with both their child and companion animal. The participants’ dog and child were also photographed in each participants’ home. The second session took place at MGH, where functional magnetic resonance imaging (fMRI), which indicates levels of activation in specific brain structures by detecting changes in blood flow and oxygen levels, was performed as participants lay in a scanner and viewed a series of photographs. The photos included images of each participant’s own child and companion animal, alternated with images of an unfamiliar child and dog belonging to another study participant. After the scanning session, each participant completed additional assessments, including an image-recognition test to confirm she had paid close attention to photos presented during scanning, and rated several images from each category shown during the session on factors relating to pleasantness and excitement. The imaging studies revealed both similarities and differences in the way the women’s important brain regions reacted to images of their own child and dog. Areas previously reported as important for functions such as emotion, reward, affiliation, visual processing, and social interaction all showed increased activity when participants viewed either their own child or companion dog. A

region known to be important to bond formation, the substantia nigra/ventral tegmental area, was activated only in response to images of a participant's own child. However, the fusiform gyrus, which is involved in facial recognition and other visual processing functions, actually showed greater response to the women's companion dog images than child images. That difference, greater activation of the substantia nigra/ventral tegmental area when seeing picture of their child but greater activation of the fusiform gyrus when looking at pictures of their dog, was attributed to the type of communication used in each relationship. Indeed, the relationship between a parent and their child is more likely to rest on verbal communication, while a relationship between humans and animals is more likely non-verbal, which would explain the greater activation in the fusiform gyrus, an area involved in visual processing. Additionally, mothers also rated images of their child and dog as eliciting similar levels of excitement (arousal) and pleasantness (valence), although the difference in the own versus unfamiliar child comparison was larger than the own versus unfamiliar dog comparison for arousal. While this study needs to be replicated with a larger sample to be generalized, the results suggest there is a common brain network important for pair-bond formation and maintenance that is activated when mothers viewed images of either their child or their companion dog.

Why Should Psychologists Care?

To echo former HLS Dean Martha Minow's (Feinberg, 2016, para. 17) thought about law and animals, is psychology also only about human beings? This section details the relationship between psychology and animal abuse. The relationship between animal abuse and interpersonal violence is followed by a review of animal abuse in therapy.

Animal abuse and interpersonal violence. Dogs and cats are the most common companion animals in the United States. It is estimated that 59 to 65% of households in the

United States have at least one companion animal, and 87% of “pet owners” consider these animals to be family members (American Veterinary Medical Association, 2012; Mintel Group, 2016). Apart from questions of abuse, the prevalence and importance of animals in family life suggests that these relationships, too, may be relevant for therapeutic inquiry. People become attached to and form social–emotional bonds with animals (Long, Long, & Kulkarni, 2007). The reciprocal emotional and caregiving role is well exemplified by the important role animals have been given in enhancing the lives of people with disabilities (e.g., Heimlich, 2001; Kruger & Serpell, 2006; Long et al., 2007; McNicholas & Collis, 2006; Virués-Ortega & Buela-Casal, 2006; Walsh, 2009). Research has similarly shown that relationships children develop with their companion animals contribute positively to the child’s development of empathy towards both humans and animals (Ascione, Weber, & Wood, 1997; Poresky, 1996).

There is a well-established link among interpersonal violence, antisocial behaviors, and the abuse and/or neglect of animals (e.g., Arkow, 1996; Ascione, 1998; Ascione et al., 1997; Ascione & Arkow, 1999; Beirne, 2004; Boat, 1995; Currie, 2006; Duncan, Thomas, & Miller, 2005; Flynn, 2000a, 2000b; Merz-Perez & Heide, 2003). Studies in family violence have shown that abused animals often share the home *and* victimization; these animals are also frequently identified as the perpetrator’s pet. Animal abuse might then be seen and referred to as a “different manifestation of the common denominator of family violence” (Tebault, 1999, p. 13). If perpetrators are able to abuse or neglect a animal they have a social and/or emotional bond with, they appear to be at increased risk of also abusing children, elders, and/or their spouse. The correlation appears to be influenced by multiple factors including, for example, the abuser’s substance abuse, lack of emotional regulation, poor impulse control, or victimized children copying violent behavior against weaker family members (Long et al., 2007).

Research further suggests that witnessing violence against animals is also traumatizing to humans; children who have witnessed violence toward animals, particularly the family companion animals, have suffered a negative impact on their emotional and interpersonal lives (Flynn, 1999; Robin & Ten Benseel, 1985; Robin, Ten Benseel, Quigley, & Anderson, 1983). Because an abused pet may be a signal for domestic violence or child abuse in the family, and because witnessing abuse can itself be traumatizing, it follows logically that psychologists should be, at the very least, encouraged to screen for animal abuse in psychosocial assessments (Favor & Strand, 2003).

Animal abuse in therapy. Surveys addressing the issues of animal abuse in therapy suggest that animal abuse and neglect is a relatively common issue encountered in therapy. For example, a 2007 study (Schaefer et al., 2007) on the attitude of therapists regarding disclosure of animal abuse during therapy revealed that 62% of the 174 professionals polled had reported becoming aware of violence against animals while they were providing therapy over the past five years. Thirty-four therapists (or 20% of the sample) reported that animal abuse issues had become a primary focus of treatment, whether it was dealing with reactions to witnessing animal abuse or processing feelings about their role in the abuse.

The Schaefer et al. (2007) study also explored therapists' attitudes about breaking confidentiality in cases involving animal abuse by reporting it to animal welfare agencies. Only 29% of the therapists indicated that they would support a law mandating reporting of animal abuse. However, 49% were favorable to voluntary reporting. Those in favor of reporting, mandatory or voluntary, endorsed several reasons for their choice, including, "it would be cruel to ignore the suffering of animals," "animals are sentient beings with the right to be protected from harm," "the profession should convey an 'ethics of caring,'" and "animal abuse

investigation may uncover human abuse” (Schaefer et al., 2007, p. 534). Those against reporting expressed concerns about the consequences of breaking confidentiality and potential litigation. They also endorsed reasons such as, “animals are property and cannot demand human treatment,” “animal abuse is not as serious as other violence,” and “there is no agency to accept reports of animal abuse” (p. 534).

In another related survey exploring the ethics of reporting of animal abuse, 55% of the clinicians studied reported being in favor of a change in APA’s Ethics Code to allow psychologists to identify and report animal abuse (Nelson, 2002). Younger therapists were notably more favorable to reporting, which might suggest a generational change in attitude towards animals or a greater exposure to research about animals’ sentience. Indeed, studies have shown that increased education about animal cognition in undergraduate and graduate programs has led to decreased support of using animals in research settings (Plous, 1996). Two younger participants even admitted breaking the rules by reporting animal abuse to authorities.

Although 94% of the psychologists polled by Nelson (2002) reported believing there is a link between violence towards humans and violence towards other species, only 14% reported regularly screening for animal abuse. Indeed, therapists currently have little incentive to inquire about it: they are not allowed by the professional confidentiality code to take action.

Psychologists lack sufficient means to protect abused animals even when they understand that animals are worthy of protection. In fact, In fact, two recent large-scale surveys emphasized the lack of education around animal issues in therapy, even though most therapists see animal abuse and neglect as a mental health issue (Nelson, 2002; Schaefer et al., 2007).

Research about Animals

Following is a brief review of the arguments for a more ethical treatment of animals in society and within the field of psychology. For the purposes of this project, the literature on animal cognition and emotions provides an important intellectual foundation for the research.

Consciousness. The question behind the moral and/or legal status of animals has historically been about what makes animals different enough from humans to justify treating them as inferior. Singer (1975), using Bentham's utilitarianism theory, argues that sentience is the most relevant aspect. Sentience is the ability to feel, perceive or experience sensations, including enjoyment and pain. Sentience is at the core of the work therapists do in sessions every day. Historically, animals have been denied moral and legal rights on the basis that they are not sentient beings. However, research in multiple fields, including psychology, has demonstrated that animals experience pain, along with a multitude of other emotions once thought to be specific to humans. Therefore, there is a consequence to animal abuse that animals are aware of and have an "interest" in avoiding: pain. Singer (1975) concluded that humans have an ethical duty to consider this "interest" of animals.

In a similar vein, though controversial, Tom Regan (1983), a philosopher and animal rights activist, goes further, arguing that many animals also possess attributes of consciousness, such as desires, memory, preference, a sense of the future, intentions, perceptions, and the ability to act in the pursuit of a goal. Following this reasoning, animals are therefore psychophysical beings with a life that matters to them. Being the "subjects of a life," they have basic moral rights, including, Regan argues, freedom from needless harm. A large body of animal research supports both Singer (1975) and Regan's claims about animals' ability to experience pain, complex emotions, to reason, think, and learn, to hold desires, to possess short term and long-

term memory, have preferences, a sense of the future, intentions, perceptions, and the ability to act in the pursuit of a goal (e.g., Balda, Pepperberg, & Kamil, 1998; Bekoff, 2009, 2013; Boissy et al., 2007; Pearce, 2013; Roitblat, Terrace, & Bever, 2014; Wynne, 2001).

In July 2012, an international group composed of sixteen of the most prominent cognitive neuroscientists, neuropharmacologists, neurophysiologists, neuroanatomists, and computational neuroscientists gathered at the University of Cambridge to “reassess the neurobiological substrates of conscious experience and related behaviors in human and non-human animals” (Low et al., 2012). These scientists concluded and signed the following statement:

The absence of a neocortex does not appear to preclude an organism from experiencing affective states. Convergent evidence indicates that non-human animals have the neuroanatomical, neurochemical, and neurophysiological substrates of conscious states along with the capacity to exhibit intentional behaviors. Consequently, the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness. Non-human animals, including all mammals and birds, and many other creatures, including octopuses, also possess these neurological substrates.

(Low et al., 2012)

Since then, there has also been compelling evidence to include fish as sentient and conscious beings. The notion that fish do not have the cerebral complexity to feel pain is now antiquated (Brown, 2014; Jabr, 2018). There is a lack of evidence supporting the role of the cerebral cortex as the only area of the brain where feelings could be engendered in humans; indeed, based on anatomical and physiological evidence, subcortical structures and even the peripheral and enteric nervous systems seem to make important contributions to the experience of feelings (Damasio &

Damasio, 2016). Therefore, having a human cerebral cortex may no longer be a prerequisite for a subjective experience of this world.

Numerical abilities. There has been a growing literature on animals' numerical abilities and their ability to have mental representations. At the most basic level, many species have shown the ability to discriminate between two or more sets of objects that are different on the basis of number of objects in each set (e.g., one set with more than the other, a set with fewer than the other). Species capable of showing preference for larger amounts when deciding between two quantities include chimpanzees (Boysen, Bernston, & Mukobi, 2001), orangutans (Call, 2000), rhesus macaques (Hauser, Carey, & Hauser, 2000) bottlenose dolphins (Jaakkola, Fellner, Erb, Rodriguez, & Guarino, 2005), lions (McComb, Packer, & Pusey, 1994), elephants (Irie-Sugimoto, Kobayashi, Sato, & Hasegawa, 2009), newly hatched chicks (Vallortigara, Regolin, Chiandetti, & Rugani, 2010), and horses (Uller & Lewis, 2009), amongst others. Further, competence in ordinality, the capacity to place quantities in a series, is found in a number of species cited above, as well as pigeons (Brannon, Wusthoff, Gallistel, & Gibbon, 2001), crows (Smirnova, Lazareva, & Zorina, 2000), and African grey parrots (Pepperberg, 2006).

Object permanence. One commonly studied subject in humans and animals is object permanence. Object permanence is the ability to understand that something exists even when it is out of sight (Piaget, 1953). Object permanence unfolds in six developmental steps. In stage one, the understanding that hidden objects still exist is established; in stage two, individuals gain the ability to visually track the movement of an object; stages three and four are reached when the subject actively retrieves a partially hidden and fully hidden object, respectively; stages five and six are defined as the ability to track the location of a hidden object after several visible

displacements, and to infer its location after several invisible displacements. Piaget (1964) showed that human babies typically achieve the last stage at about age 2 years. Many animals demonstrate various levels of sophistication in object permanence, with many achieving competence in the final sixth stage (Gomez, 2005). These animals include great apes, monkeys, cats, dogs, and birds. Other animals, such as chickens, and chicks as young as two days old, have been shown to master stage 3 and 4 of object permanence, demonstrating the ability to recognize completely occluded objects (Marino, 2017; Vallortigara & Regolin, 2002).

Time perception. Different animals have different abilities in terms of perceiving time, but many have a sense of time duration, which help them know the time of day in order to predict what events will occur (Gallistel, 1994; Richelle et al., 2013); companion animals often know when the time for their meals and/or bedtime has come, for example. Similarly, domestic pigs have the ability to distinguish between short- and long-time intervals (Spinka, Duncan, & Widowski, 1998) and can anticipate future negative and positive events (Imfeld-Mueller, Van Wezemaal, Stauffacher, Gygax, & Hillmann, 2011). In a similar vein, Bekoff (2013) also writes about how stressed honeybees display an increased expectation of bad outcomes: honeybees, too, can become pessimists.

Chimpanzees and other great apes have also shown the ability to prepare themselves for the future. The fabrication and use of tools is one example of preparation for the future (Beran, Pate, Washburn, & Rumbaugh, 2004; Osvath & Osvath, 2008), with studies showing as much as 14 hours of advance preparation (Mulcahy & Call, 2006). Some species make provisions of food in advance in places where they have learned they will be hungry in the future; going one step further, some animals, western scrub jays for example, have learned to differentiate and store

particular food items in a place in which that type of food will not be available the next morning, suggesting they might be planning for the future (Raby, Alexis, Dickinson, & Clayton, 2007).

Episodic memory. Western scrub jays, in their ability to plan for the future, also showed evidence of episodic memory, the ability to remember highly specific contextual elements (i.e., what, where, and when) after an hour or even two weeks have passed (Clayton, Griffiths, Emery, & Dickinson, 2001). Jays remember when and where they hid a variety of foods that decay at different rates and retrieve those stored foods in the appropriate order. Similarly, most great apes (Martin-Ordas, Haun, Colmenares, & Call, 2010), bottlenose dolphins (Mercado, Murray, Uyeyama, Pack, & Herman, 1998), and dogs (Fugazza, Pogany, & Miklosi, 2016) also show strong evidence of episodic memory in complex tasks, which require them to directly access memories of behaviors they have performed previously.

Communication. The topic of communication, and more specifically language, continues to create debate within the animal research literature, in terms of what constitutes the nature of communication in other animals and how it compares to human languages, which is still seen as relatively unique.

One type of communication, often observed in animals, is called referential communication. Referential communication involves signals such as calls, displays, or whistles, which convey information, usually about specific elements of the environment. This type of communication implies that there is a meaning attached to each signal, whether it is a vocalization or a display of some kind. The fact that there is a meaning behind these signals is similar to the way humans use words for objects and events, suggesting that animals' referential communication has semanticity (Evans & Evans, 2007). Such referential communication has been identified in many mammals, including ring-tailed lemurs (Macedonia, 1990), chimpanzees

(Slocombe & Zuberbuhler, 2005), Diana monkeys (Zuberbuhler, 2000), bottlenose dolphins (Janik, Sayigh, & Wells, 2006), black-tailed prairie dogs (Frederiksen & Slobodchikoff, 2007), and dogs (Gaunet & Deputte, 2011; Polgardi, Topal, & Csanyi, 2000) amongst others. It has also been observed in various species of birds, including ravens (Bugnyar, Kijne, & Kotrschal, 2001), chickadees (Templeton, Greene, & Davis, 2005), and chickens, whose communication consists of a large repertoire of at least 24 distinct vocalizations, as well as different visual displays (Collias, 1987).

Some species have even shown the ability to learn human language. One such example was Alex, the African grey parrot, working with animal psychologist Irene Pepperberg, who had learned more than 100 words of English vocabulary (Pepperberg, 2008, 2012). Dr. Pepperberg used an innovative approach called the two-way communication code, to teach Alex. African grey parrots are social birds and therefore pick up some group dynamics very quickly. In experiments, Dr. Pepperberg would have one person compete with Alex for a small reward, like a grape. Alex learned to ask for the grape by observing what the person was doing to get it; the researchers then worked with Alex to help shape the pronunciation of the words. Other examples of animals learning to communicate using human language include Koko the gorilla, who was trained to use American Sign Language (ASL; Patterson & Cohn, 1990). Koko quickly acquired hundreds of signs and began to independently generate new referential gestures. She was also able to modulate the language to convey slight changes in meaning. She was observed generalizing signs learned to other contexts, in the same manner children learn to generalize use of a new word (e.g., the word “open” is first only used in one context before being generalized to other situations). Additionally, Koko was observed using known vocabulary to create intentional metaphors.

Emotions. The research studying emotion and facial expressions in humans using animal subjects is particularly important to consider. For example, over the course of many studies, Ekman (2007) distinguished among human facial expressions of six basic emotions: (a) anger, (b) fear, (c) disgust, (d) surprise, (e) sadness, and (f) enjoyment. These emotions are said to be basic because they are not socially or culturally constructed, and appear to be adaptive, universal across cultures, and shared with other species, particularly primates (Paar, 2003).

Notably, animals such as rats, monkeys and dogs are commonly used to study human emotions, psychopathology, brain functioning, and drugs-related research, because humans and animals share many similar brain structures and neurochemicals. These include structures associated with basic emotions (Berridge, 2003). Examples of such studies range from how the hormone oxytocin has been shown to facilitate bonding and attachment in humans and other mammals, to how rats' reward system offered insight into both animals and humans' formation of addictions. Some studies have actually identified the identical neurological basis for emotions in humans and other mammals (e.g., Berridge & Kringelbach, 2008; Damasio, 1994; Phelps & LeDoux, 2005; Tangley, 2000). The amygdala, for example, is an important center of emotions in the brain of both humans and other species. Humans and animals demonstrate fear, another basic human emotion, when part of the amygdala is stimulated, and both humans and animals with damaged amygdalae lose the ability to demonstrate normal fear behavior when fear is an appropriate response to a situation (Damasio 1994; Tangley, 2000).

Empathy and emotional contagion. Some animals have demonstrated the ability to feel empathy for others. In humans, the susceptibility to yawn contagion has been related to our capacity for empathy (Romero, Konno, & Hasegawa, 2013). It correlates with the level of attachment in several primate species—humans included. Dogs have also shown the ability to

yawn contagiously (Romero et al., 2013; Silva, Bessa, & de Sousa, 2012). More than a mere modeling behavior, dogs have been shown to yawn more frequently in response to a familiar person's yawning, as opposed to a stranger's, which may indicate their reaction is regulated by the level of emotional proximity. Along with other compelling data suggesting that "man's best friends" are extraordinarily well attuned to their human housemates, these studies suggest empathy is also present in domesticated dogs. Empathy and emotional contagion both provide a way for dogs and other social animals to pick up on social cues about important events and respond accordingly. Similar indications of empathy and emotional contagion have been observed in other socially complex species such as wolves (Romero, Ito, Saito, & Hasegawa, 2014), great apes (Anderson, Myowa-Yamakoshi, & Matsuzawa, 2004; Palagi, Norscia, & Demuru, 2014), pigs (Reimert, Bolhuis, Kemp, & Rodenburg, 2015), ravens (Fraser & Bugnyar, 2010), geese (Wascher, Scheiber, & Kotrschal, 2008), and even chickens (Edgar, Lowe, Paul, & Nicol, 2011).

Inequity aversion. Along with empathy, research has also shown that animals such as dog, different types of primate, rats, as well as corvids, respond to feelings to unfairness. Human beings appear to be hardwired to have a sense of fairness because it is important for humans to be able to help each other (Fehr & Schmidt, 1999). Human cooperation is based on reciprocal altruism (i.e., we help people because they have either helped us in the past or they may help us in the future). This form of cooperation, however, is only possible when individuals are able to keep track of other individuals' efforts and payoffs, and a sense of fairness helps with this. Recent research has revealed that inequity aversion is present in animals as well, with positive results in rats (Oberliessen et al., 2016), dogs (Brucks, Essler, Marshall-Pescini, & Range, 2016; Range, Horn, Viranyi, & Huber, 2009), capuchin monkeys (Brosnan & de Waal, 2003),

chimpanzees (Brosnan, Schiff, & de Waal, 2005), and possibly crows and ravens (Wascher & Bugnyar, 2013). In inequity aversion tests, one test subject received a reward for completing a task, while an experimental partner got a something they did not particularly like. Results showed that when they had to “work” for a reward and could see that their experimental partner received the reward as a “gift,” the animals tended to stop participating, ending the cooperation established. The fact that inequity aversion is present not only in a number of primate species, but also in dogs, corvids, and rats, suggests that this idea of fairness and cooperation is something that cooperative species have in common, enabling them to evolve with greater sociability.

Self-awareness. Self-awareness is another concept that has been used in arguments against moral obligations toward animals. However, some studies have shown clear evidence that some animals do have a notion of “I” (e.g., Bekoff, 2006; Patterson & Cohn, 1994). The common test for self-awareness is the Mirror test, used on animals and human infants. This test is mostly adapted for animals using vision as a primary tool to perceive the world. This unfortunately excludes dogs and cats, the most common companion animals in the United States, as they have limited vision and rely primarily on their sense of smell to navigate. However, apes have passed the test, along with bottlenose dolphins, orcas, elephants, and even the European magpies, demonstrating in all of these species a sense of self-recognition (Kelch, 2011).

Social behaviors. Similar to humans, many animals are highly social animals, whose complex cognitive capacities tend to emerge in social settings, suggesting that some of these abilities may have evolved as adaptations to social living (Evans, 2002). Bekoff (2009), for example, describes how magpies grieve their dead and hold funeral-type gatherings where they lay grass wreaths besides their deceased friend’s body.

One such ability is the capacity to discriminate among individuals, creating hierarchies and social relationships, such as familial relationships versus unfamiliar ones. Many species have demonstrated the ability to discriminate within social groups, including, among mammals, dogs (Molnar, Pongracz, Farago, Doka, & Miklosi, 2009), pigs (de Souza, Jansen, Tempelman, Mendl, & Zanella, 2006; McLeman, Mendl, Jones, White, & Wathes, 2005), elephants (McComb, Moss, Sayialel, & Baker, 2000), vervet monkeys (Cheney & Seyfarth, 1980), dolphins (Sayigh et al., 1999), macaques (Parr, Winslow, Hopkins, & de Waal, 2000), chimpanzees (Parr et al., 2000), as well as numerous others. Birds have also demonstrated this ability, with some discriminating based on visual recognition, notably rooks (Bird & Emery, 2008), pigeons (Nakamura, Croft, & Westbrook, 2003), and white-throated sparrows (Whitfield, 1987), while others discriminate on the basis of odor, such as the Antarctic prions (Bonadonna, Miguel, Grosbois, Jouventin, & Bessiere, 2007). Chickens also show the ability to recognize individuals in their social group, as well as the ability to keep track of the group's social hierarchy and the individuals within it (D'Eath & Stone, 1999).

Another complex social skill is the ability to take the perspective of other individuals, which has been associated with a number of other cognitive capacities, including self-awareness, intentional deception, and empathy in primates (Bulloch, Boysen, & Furlong, 2008; deWaal, 2008; Towner, 2010). A number of highly intelligent species have demonstrated well-developed capacities in terms of perspective-taking, including chimpanzees (Krachun & Call, 2009), dogs (Brauer, Bos, Call, & Tomasello, 2013), pigs (Held, Mendl, Devereux, & Byrne, 2002), chickens (Evans, 2002; Smith, Taylor, & Evans, 2011), and Western scrub jays (Clayton, Dally, & Emery, 2007).

Social species tend to observe others and engage in social learning: they observe others' behaviors and the consequences of others' actions in order to avoid time consuming and sometimes-risky trial and error learning. Many animals engage in such social learning, including, for example, chimpanzees (Yamamoto, Humley, & Tanaka, 2013), capuchin monkeys (Otonari & Mannu, 2001), ravens (Bugnyar & Kotrschal, 2002), quail (Koksal & Domjan, 1998), chickens (Nicol, 2006), and even bumblebees, who have been observed to learn and teach others how to pull strings to obtain rewards (Alem et al., 2016).

Ethics and Values in Clinical Psychology: Reporting Animal Abuse

Steven Behnke (2001), the former director of Ethics of the APA has defined "ethics" as "thinking about reasons in terms of values" (p. 23). Ethics come into play for psychologists when they choose one particular course of action over another because of certain values related to their profession. Confidentiality is an important value in therapy. So is the safety and protection of others from any harm. Standard 5.05 of the APA's ethics code states: "Psychologists disclose confidential information without the consent of the individual only as mandated by law, or where permitted by law for a valid purpose, such as... to protect the client or others from harm" (APA, 2010, p. 7). According to APA, when two values compete, safety takes precedence over confidentiality. For example, psychologists are mandated reporters when they suspect abuse of children, elderly and disabled people. Children, elders, and disabled citizens are thought to have less power in our culture and are often dependent on others for care. They are considered vulnerable and in need of protection when their wellbeing is threatened. Likewise, animals, particularly pets, share this vulnerability and dependence on humans for care and survival. Yet, psychologists are not allowed to extend protection from harm to nonhuman animals species in the United States.

The non-reportability of animal abuse reflects, at least in some part, the value—or lack thereof—that psychology and APA place on the lives of other species. Considering this body of research, much of which is, perhaps ironically, conducted by psychologists, we have ample evidence of animals’ intelligence, experience of pain, and basic and complex emotions. Notably also, APA has an expressed commitment towards “advancing the welfare of both human and nonhuman animals” (APA, 2012, p. 3). It is striking, therefore, that APA and the psychologists working within APA have not yet begun to embrace their ethical duty to protect this voiceless population.

Animals have been shown to be sentient beings, able to experience physical and psychological pain. They should be spared from harm, regardless of any other capabilities they may or may not have. Society severely punishes harm towards humans, especially those incapable of granting consent and defending themselves, and actively seeks to protect these individuals from harm and abuse. Treatment is also offered to both perpetrators and victims. In the absence of morally relevant distinctions between humans and nonhumans, psychologists have a professional obligation also to protect sentient animals from harm. Psychologists in the United States should follow the Ethical Principles of Psychologists and Code of Conduct drafted by the APA (2017b). Amongst its General Principles are principles related to beneficence and nonmaleficence, integrity, justice, and respect for people’s rights and dignity; unfortunately, the vocabulary used in those guidelines is human-centered, excluding animals as a population that could or should be protected by psychologists. However, another ethical consideration for psychologists is competency, and more specifically, continuing education to maintain their competence. Article 2.03, Maintaining Competence, indicates, “Psychologists undertake ongoing

efforts to develop and maintain their competence” (APA, 2017b). Perhaps, more importantly, article 2.01 Boundaries of Competence, item (e), suggests the following:

In those emerging areas in which generally recognized standards for preparatory training do not yet exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect clients/patients, students, supervisees, research participants, organizational clients, and others from harm. (APA, 2017b)

As of now, the large body of research on animal psychology may be enough to make it an “emerging area” for which the standards of care and practice have not yet been delineated. The above item (e) might be an open door for psychology to become about animals too. If psychologists are allowed to rely on the strong body of research “to protect... others from harm,” could this “other” be nonhuman?

APA’s position on animal welfare. Psychology has long played a crucial role in determining normative behaviors and reinforcing social values. APA has substantially influenced the oppression and liberation of groups such as women, poor people, ethnic minorities, and homosexuals, notably within the evolution of the Diagnostic and Statistical Manual (DSM), which has historically contained diagnoses marginalizing these groups before revising its position over the years (American Psychiatric Association, 1975, 1994, 2013). APA has itself been known for taking part in national discussions considering societal topics, including the need for stricter laws regarding reporting child abuse.

Perhaps ironically, APA’s position on child abuse, and the laws governing reporting it lagged by many decades behind the influential work of the animal rights movement (Jalongo, 2006). In 1925, the organization first took heed of persuasive arguments posed by animal-rights activists by creating the Committee on Animal Research and Ethics (CARE). CARE was tasked

with providing guidelines on how to ethically conduct research on animals, including how to obtain animals for studies, minimize discomfort for the animals used in those studies, and limit unnecessary use of animals in research. Notably, however, for the first 50 years of its existence, CARE's stated purpose was to defend and protect animal research, not the involved animals. The explicit protection of animals was not added to CARE's mission statement until 1980 (CARE, 1980). More recently, APA (2012) reiterated its commitment "to contribute to advancing the welfare of both human and nonhuman animals" in its Guidelines for Ethical Conduct in the Care and Use of Nonhuman Animals in Research (p. 3). Nonetheless, the APA guidelines only address one segment of the psychology profession: those engaged in research with nonhuman animal participants. On the topic of animal protection in the domain of clinical practice, APA has seemingly turned a blind eye to extensive research evidence that documents the need for greater education and accountability of therapists.

Surveys on psychologists' attitudes toward animal abuse have revealed a clear lack of education on salient topics including, for example, current animal cognition research, the links between animal abuse and human abuse, including domestic violence, child abuse, and aspects of conduct disorder, and animal assisted therapies (Nelson, 2002; Schaefer et al., 2007). This suggests that the subject of animals might not be sufficiently explored within clinical training programs. This may be a significant oversight given the extensive literature supporting interspecies' similarities and connections.

Speciesism. The ethics at the foundation of the contemporary animal rights movement and the theoretical framework for this dissertation is built on the concept of speciesism. Speciesism refers to the widespread discrimination practiced by humans against other animal species (Ryder, 1975). Speciesism has also been defined as "prejudice or attitude toward the

interests of members of one's species and against those of members of other species" (Singer, 1975, p. 6). Both Singer and Ryder, prominent animal rights advocates, use the term speciesism as parallel to racism and sexism; all three terms refer to the domination and exploitation of members of one group by members of another. They argue persuasively that speciesism may be the next inevitable battle in the fight for liberation and expanded compassion to all sentient beings on this earth.

Psychology has lagged behind the United States' laws, and indeed most of the industrialized world, in its acknowledgement of speciesism. The field of psychology (in both research and clinical practice) operates under the assumption that humans are the most intelligent, the only self-conscious beings, the only ones to possess a capacity for emotional, social, and cognitive complexity. It has used and still uses animals in invasive research, despite the growing amount of evidence showing the extent of animals' intelligence, emotionality, social abilities, and vulnerability to complex psychological trauma (Balda et al., 1998; Bekoff, 2013; Bekoff & Goodall, 2007; Boissy et al., 2007; Bradshaw & Schore, 2007; Pearce, 2013; Roitblat et al., 2014; Wynne, 2001). Therefore, there appears to be significant cognitive dissonance within the field of psychology, and its ethical guide, APA. While research has helped provide rational, scientific reasons to modify beliefs and practices to address animal abuse, psychology and its institutions maintain speciesist positions and behaviors. Although the reasons for maintaining speciesist positions likely are multifaceted, one aspect might be tied to the lack of education psychologists receive on salient animal issues, both throughout their training and career.

Summary of Reviewed Literature

This chapter provided a review of relevant literature regarding animal abuse, the impact of animal abuse on humans, and research on animals, including the cognitive and emotional abilities of animals. Ethics and values regarding animals were followed by the APA's position on animal welfare. Animals are vulnerable, but even though the APA has provisions for reporting abuse of vulnerable humans, the APA does not presently allow for the reporting of animal abuse, in spite of evidence from Nelson (2002) and from Schaefer et al. (2007), indicating that psychologists commonly encounter animal abuse in clinical practice and that a majority favor reporting of animal abuse.

However, no studies to date have been specifically designed to determine whether psychologists might view reporting of animal abuse more favorably if they had received sufficient training. The present study is designed to fill this important gap in the literature by determining if a brief intervention would shift the attitudes of psychologists towards inquiring about the animals in their clients' lives and their favorability towards reporting animal abuse to animal protection and law enforcement agencies.

Methodology

Objectives of the Study

While Nelson (2002) and Schaefer et al. (2007) investigated therapists' attitudes toward reporting of animal abuse, they did not explore whether education on animal issues would impact their attitudes. Thus, in order to examine the possible effects of such education on therapists' attitudes toward reporting, this study included both polling and an intervention.

Research Questions

This study addressed the following research questions:

1. What attitudes do therapists hold regarding mandatory or voluntary reporting of animal abuse uncovered during therapy?
2. How often do therapists encounter issues related to animal abuse in therapy?
3. How often do they inquire about their clients' relationships to animals?
4. Which sociodemographic/clinical factors are the best predictors of a positive attitude toward reporting?
5. What concerns/barriers do therapists have with regards to mandatory or voluntary reporting of animal abuse?

Research Hypotheses

1. The majority of psychologists will indicate that they have had clients report witnessing or perpetrating animal abuse or neglect in the last five years. Rationale: Previous research indicated that most psychologists had encountered animal issues in their clinical practice (Nelson, 2002; Schaefer et al., 2007).
2. Therapists will report little to no education regarding the advances in animal cognition research and interpersonal violence involving animal issues. Rationale: In Schaefer et al. (2007), participants expressed a lack of familiarity with the topic of animal abuse and as well as a lack of understanding of it, suggesting they might not have received sufficient training on animal issues in therapy.
3. Across the 10-item intervention quiz (Appendix E), participants will average more than 80% correct, with the highest scores found on the question, "People who are able to neglect or abuse their companion animal(s) are at increased risk of abusing children, the elderly, the disabled, and/or their spouse." Rationale: The questions in the educational intervention are relatively basic and leading, considering the topic of the study.

Additionally, most psychologists should have some familiarity with the research behind animal abuse/neglect increasing the risk of escalating to violence against humans, notably due to diagnosis criteria for Conduct Disorder (American Psychiatric Association, 2013, pp. 469–475).

4. A small majority of therapists will be in favor of some form of reporting in pre-test.

Rationale: Previous research has shown a small majority of therapists are in favor of some form of reporting of animal abuse (Nelson, 2002; Schaefer et al., 2007).

5. A significantly higher number of therapists will report being in favor of reporting animal abuse post-intervention than pre-intervention. Rationale: Therapists may be reluctant to favor reporting of animal abuse/neglect due to the lack of education about animal issues.

Therefore, an education-based intervention is likely to increase willingness to report animal abuse and/or neglect (Nelson, 2002; Schaefer et al., 2007).

6. Participants will be more willing to inquire about animal abuse following the intervention. Rationale: Therapists may be reluctant to inquire about animal abuse/neglect in clinical practice due to the lack of education about animal issues.

Therefore, it is possible that an education-based intervention may increase the willingness to inquire about clients' relationship with animals. (Nelson, 2002; Schaefer et al., 2007).

7. The most commonly cited reason to report animal abuse will support the strong association between human and animal abuse. Rationale: There is a well-established link among interpersonal violence, antisocial behaviors, and the abuse and/or neglect of animals (Ascione & Arkow, 1999; Duncan et al., 2005; Merz-Perez & Heide, 2003).

Moreover, psychology, as a field, is more concerned about the wellbeing of humans than the wellbeing of animals, as demonstrated in the APA Ethical Principles of Psychologists

and Code of Conduct, in which duty to protect is carefully worded to be limited to humans (APA, 2017b). Therefore, it is likely the most commonly cited reason would be the one involving protecting humans from potential harm, as well as the one psychologists are already educated about due to its impact on humans.

8. The most commonly cited reason to oppose reporting of animal abuse will be related to the impact of breaking confidentiality on the therapeutic alliance. Rationale: Psychologists consistently cited breaking confidentiality as a barrier to reporting in previous studies (Nelson, 2002; Schaefer et al., 2007).
9. More important than the effects of age and level of education, the presence of an animal in the therapists' home will be predictive of therapists' favorable attitude toward reporting. Rationale: Previous surveys have shown that younger clinicians tended to be more likely to favor reporting of animal abuse, perhaps reflecting the changing status of companion animals in society (Nelson, 2002; Schaefer et al., 2007). Additionally, it is hypothesized that individuals sharing their lives with companion animals may have a stronger emotional response to the intervention resulting in higher favorability toward reporting.

Participants

Participants included practicing psychologists and doctoral students with at least one year of experience treating therapy clients. According to the ANZMTG Statistical Decision Tree power calculator (QFAB, 2017), assuming a medium effect size (0.5 standard deviations) and a 95% confidence interval (statistical significance threshold of .05, two tailed), statistically significant results would be found on 80% of occasions (power = .80) with as few as 34 participants for the pre-to-post comparisons, and 128 participants to detect significant differences

between groups. Therefore, to ensure adequate power, the present study methodology was designed to recruit 130 participants. Overall, 133 participants completed the survey and were included in the analysis.

Measures

Demographic questionnaire. The demographic questionnaire (Appendix C) was used to gather demographic information from participants, including years of age, gender, race/ethnicity, type of psychologist, education level, work setting, and the presence, number, and type of animal(s) in the home. The demographic questionnaire also included ratings of agreement with statements regarding having received education or training on animal cognition, animal emotions, and about the link between animal abuse/neglect and violence against humans. The response interface for these items was on a 1–to–5 scale, ranging from strongly disagree to strongly agree.

Pre-intervention attitudes toward reporting questionnaire. The 16-item pre-intervention questionnaire (Appendix D) was adopted from Schaefer et al. (2007). Permission to modify and use the survey was obtained from Dr. Schaefer in September 2016 and again in July 2018 (K. Schaefer, personal communication, September 12, 2016; July 18, 2018). The pre-intervention questionnaire included eight therapy-related experience item and eight items on attitudes regarding animal abuse. Examples of the therapy related experience questions included, “In the past 5 years, have clients, of any age, ever reported witnessing animal abuse and/or neglect?” and “When working with clients who have reported being victimized by witnessing animal abuse/neglect, or being threatened to witness abuse/neglect of their companion animal, do you inquire about the abuse/neglect of the animal(s)?” Examples of questions regarding the attitudes regarding animal abuse included, “Do you agree with the following statement: ‘I think

people who abuse or neglect animals have mental health issues’ and ‘Would you support a state law that gave practitioners permission to break confidentiality in cases of animal abuse and/or neglect, if they chose to do so?’”

Intervention quiz. The intervention (Appendix E) was a 10-item quiz on issues of animal cognition and knowledge of the link between animal abuse and interpersonal violence. Participants were given feedback about their answers and overall score at the end of the quiz; they were then directed to a page presenting them with each of the questions they had previously answered along with a paragraph explaining the correct response. Each paragraph included scholarly references and some explanations also included links to resources that provided greater detail.

Post-intervention attitudes toward reporting questionnaire. The post-intervention survey (Appendix F) consisted of 5 items from the pre-intervention questionnaire, which were related to participants’ attitudes towards reporting animal abuse. Additionally, participants answered a question regarding a possible change in their intent, post-intervention, to inquire about their clients’ relationship to animals in the context of therapy.

Procedure

Permissions and recruitment. Permission was obtained from the institutional review board (IRB) of Antioch University New England prior to the onset of this study.

Participants were recruited by snowball sampling. A recruitment letter (Appendix A) was emailed to prospective participants, including a national random sample of clinicians, APA division members (Division 1- General Psychology, Division 8- Personality and Social Psychology, Division 9- Social Issues, Division 12- Clinical Psychology, Division 18- Psychologists in Public Service, Division 24- Theoretical and Philosophical Psychology,

Division 27- Community Research and Action, Division 32- Humanistic Psychology, Division 42- Psychologists in Independent Practice) as well as to their social media pages, local professional list-servs, and to universities with graduate psychology programs, to be forwarded to their alumni and students.

Data collection. When a potential participant clicked on the link embedded in the recruitment email letter, they were taken directly to the study's informed consent page (Appendix B) at SurveyMonkey.com, the online survey company that hosted the data gathering for this study. The informed consent page provided an overview of the study, informed participants of their rights, and indicated that the survey might take roughly 10 to 15 minutes to complete. If the potential participant clicked the "I Agree" button, they were immediately taken to the next page and began the survey. If the potential participant clicked the "I Decline" button, they were immediately taken to the "Thank you" page at the end of the survey and no data were collected from that individual. The survey began with the demographics section, followed by the pre-intervention survey, the intervention quiz, and the post-intervention survey. At the end of the survey, the "Thank you" page included a message for participants who chose to provide their email address in order to be entered into a raffle for the opportunity to win one of ten \$50 Amazon gift cards. Winners were randomly selected using the RAND function in Microsoft Excel (Microsoft Corp., Redmond, Washington), with the ten highest numbers indicating the raffle winners.

Data management. Study data were downloaded from the SurveyMonkey© website using the researcher's personal password. The email addresses for the raffle were sequestered onto a separate Excel file, so that all data were analyzed with the researchers blinded to the

identification of participants. Data were scored and coded in Excel in preparation for analysis in SPSS statistical software (version 22, Armonk, NY: IBM Corp.).

Design and Analysis

Design. This study incorporated both cross-sectional and pretest-posttest design elements. The demographic information and the intervention quiz responses were cross-sectional in nature, with each participant measured once. The pre-intervention and post-intervention survey elements were the pretest-posttest design components, as these items were identical in construction and each participant provided responses twice, once before the intervention and once following the intervention.

Analysis. For Hypothesis 1, the analysis was a simple percentage, because the hypothesis stated that the majority of respondents have had clients report witnessing or perpetrating animal abuse or neglect in the last five years.

Hypothesis 2 was analyzed using t-tests, contrasting the mean score for each of the three items to the midpoint of the 1-to-5 response scale, as indicated by a statistically significant one-group t-test. While frequencies are provided for each response, Hypothesis 2 could only be supported if the mean score was significantly lower than “3.0,” indicating significant disagreement with that item. The three items for Hypothesis 2 were analyzed in parallel.

Hypothesis 3 was tested by calculating the average of the correct responses across the 10 quiz items. The percent correct is provided for each item. Hypothesis 3 could only be supported if the average percent correct across the 10 items exceeded 80%.

Hypothesis 4 was analyzed using simple percentages, as this hypothesis proffered that a majority of therapists will be in favor of some form of reporting prior to the intervention.

Hypothesis 5 was analyzed using paired t-tests to determine whether there were statistically significant increases in participants favoring reporting from pre-intervention to post-intervention. Voluntary and mandatory reporting to animal protection and to law enforcement agencies were evaluated in parallel analyses.

For Hypothesis 6, Chi-square statistics were used to determine whether, following the intervention, participants reported being more likely than not to inquire about animals in the clients' life during the intake interview. Logistic regression was then used to determine whether level of education, age, gender, having companion animals, or believing that animal abuse is a mental health problem, were predictive of being more likely than not to inquire about animals in the clients' life during the intake interview.

Hypothesis 7 was tested by ordering the reasons for reporting animal abuse, expressed as the percent of respondents, then identifying whether the most common response was that animal abuse can be predictive of violence toward humans and discovery of people being abused.

Hypothesis 8 was tested by ordering the reasons for not reporting animal abuse, expressed as the percent of respondents, then identifying whether the most common response was related to the impact of breaking confidentiality on the therapeutic alliance.

Hypothesis 9 was tested using a series of multiple linear regression analyses. The predictor variables were education, age, and living with an animal companion. The outcome (criterion, dependent) variables were voluntary and mandatory reporting to animal protection or law enforcement agencies, either pre-intervention, post-intervention, on in the change from pre-intervention to post-intervention, each conducted in parallel analyses.

Presentation of results. Data are expressed as frequencies and percentages or as means and standard deviations (SD), as appropriate, in text, table, and figures. For t-test analyses, the

t-value and p-value for determining statistical significance are provided. For logistic regression, the p-values and odds ratios are provided. For multiple linear regressions, the variance accounted for (R^2) for each model is included in text, while the regression coefficient tables display the slope values (β) and the p-values for determining statistical significance. All differences and relationships were tested at the $p < .05$ threshold for statistical significance.

Compliance with Ethical Guidelines

This study complied with the ethical guidelines of Antioch University New England and of the APA (2010). IRB approval was obtained from Antioch University New England. Informed consent was obtained from participants prior to data collection.

Participants' rights to anonymity, privacy, and confidentiality were honored. Data were acquired through SurveyMonkey©. SurveyMonkey© uses encryption and SSL (secure socket layer) protocols for secure data transmission. Further, SurveyMonkey© complies with the EU-U.S. Privacy Shield Framework and the US-Swiss Safe Harbor Network. Additionally, SurveyMonkey© is HIPAA compliant. SurveyMonkey©'s privacy and HIPPA compliance policies can be found at <https://www.surveymonkey.com/mp/policy/privacy-policy/> and at <https://www.surveymonkey.com/mp/hipaa-compliance/>. Lastly, study data were only available for download using the personal, private password of the researcher.

Anonymity was honored in that participation was anonymous and no individuating information was collected (e.g., names, addresses, phone numbers). The one exception was that emails were collected for the raffle. However, it is important to note that the email addresses were kept in a separate file, so that all data were analyzed blind to participant identity.

Privacy and confidentiality were fostered in that participant data were not shared with anyone outside of the study, including the committee. Further, all study data were kept on a

password protected laptop computer in the possession of the researcher. All study data will be destroyed five years after completion of the study, consistent with federal law (Code of Federal Regulations §46.115 IRB records).

Results

This study was designed to assess the efficacy of an intervention for psychologists regarding animal abuse and neglect. Professional psychologists, and graduate students in psychology with at least one-year experience seeing clients for therapy, were surveyed regarding their experience and beliefs regarding animal abuse and neglect. Participants then completed a brief educational intervention followed by a post-intervention survey.

Participants

Participant descriptives include gender, age, types of psychologists, highest level of education, work setting, definitions of animal abuse, living with animal companions, therapy-related experience with animal abuse/neglect, and beliefs regarding whether animal abuse/neglect is indicative of mental health problems.

Gender. Of the 133 participants, 77% were female, 17% were male, and 5% were non-binary. One participant self-reported specifically as cisgender female, and one self-reported as genderqueer.

Age. Participants averaged 36 years of age (median = 31, SD = 12, range: 23 to 74).

Type of psychologists. The majority of participants were clinical psychologists (74%), followed by counseling psychologists (20%). The remaining included three forensic psychologists, one behavioral psychologist, and one health psychologist. Half of participants obtained their highest degree after 2010.

Education / degrees. Overall, 23% of participants held a Ph.D., 20% held a Psy.D., 44% held an M.A. or M.S., 10% held a B.A. or B.S., and 5% listed their highest degree as “other.”

Work setting. Primary work settings included private practice (21%), community mental health (18%), university counseling center (14%), academia (5%), correctional facility (5%), and V.A. (3%). Of the remaining, 9% listed their primary work setting as “other” and 2% did not list a primary work setting. Three indicated a secondary work setting: one listed “post graduate institute,” one listed “Army/V.A.,” and one listed “certified dog trainer.”

Definition of animal abuse. Table 1 shows that the most common definitions of animal abuse among participating psychologists included torture, physical neglect, and dog/cock fighting (each 98% of participants), followed by animal research for chemicals or cosmetics (each 74% of participants).

Animal companions. The majority of participants (84%) indicated that they shared their life/home with one or more animal companion(s) in the last five years. Of those with animal companions, the majority has one (31%) or two (27%), followed by three (14%), four (13%), five (3%), and six (3%). Of the remaining, one each reported having seven, eight, nine, 11, and 13. One participant reported having 23 animal companions. Most participants (72%) reported currently living with one or more animal companion(s).

Across study participants, dogs (55%) and cats (48%) were the most common animal companions. Rabbits and fish (6% each) were the next most common, followed by rats or mice (4%), snakes or lizards (3%), and birds (2%). Two participants had turtles, two had gerbils, and one had a tarantula.

Therapy-related experience: Inquiry regarding animal abuse. Regarding clinical experience, 28% indicated that they routinely inquire about clients’ relationships with animals.

Regarding inquiring about animals in their care, 57% reported inquiring when animal abuse is mentioned, including 35% who inquire about animals in their care if the client reported witnessing animal abuse and 29% who inquire about animals in their care if the client reported perpetrating animal abuse (Table 2).

Belief that people who abuse/neglect animals have mental health issues. Overall, two-thirds (66%) of participants either agreed (46%) or strongly agreed (20%) with the statement, “I think people who abuse/neglect animals have mental health issues” compared to 8% who either disagreed (6%) or strongly disagreed (2%). The remaining 26% were uncertain. The mean value of 3.8 (SD = 0.9) was significantly higher than the midpoint of the 1-to-5 scale, $t(132) = 9.5$, $p < .00001$. These findings indicate that participating psychologists generally believe that people who abuse/neglect animals have mental health problems.

Results from Hypothesis Testing

Hypothesis 1: Clients reporting animal abuse. Hypothesis 1 stated, “The majority of psychologists will indicate that they have had clients report witnessing or perpetrating animal abuse or neglect in the last five years.”

This hypothesis was supported. Table 3 shows that the majority (57%) of participants had at least one client in the last five years report either perpetrated or reported witnessing animal abuse. Almost half (47%) of participants reported that they had at least one client report witnessing abuse within the last five years, while roughly one-third (35%) reported that they had at least one client report perpetrating abuse within the last five years.

Hypothesis 2: Animal cognition and interpersonal abuse education. Hypothesis 2 stated that “Therapists will report little to no education regarding the advances in animal

cognition research and interpersonal violence involving animal issues.” Participants responded to each of three items using a scale ranging from 1 (strongly disagree) to 5 (strongly agree).

As shown in Table 4, the majority (65%) of participants disagreed (30%) or strongly disagreed (35%) that they had received education on animal cognition. Only 8% strongly agreed that they had received education on animal cognition. The mean score of 2.4 ($SD = 1.4$) was significantly lower than the midpoint of “3” on the 1-to-5 scale, $t(132) = 5.2, p < .0001$.

The majority of participants (73%) disagreed (32%) or strongly disagreed (41%) that they had received education on animals’ emotions. Only 7% strongly agreed that they had received education on animals’ emotions. The mean score of 2.1 ($SD = 1.3$) was significantly lower than the midpoint of “3” on the 1-to-5 scale, $t(132) = 7.8, p < .0001$.

Findings were split regarding receiving education on link between animal abuse/neglect and violence against humans. Overall, 45% of participants disagreed (24%) or strongly disagreed (21%) that they had received education on link between animal abuse/neglect and violence against humans, while 47% agreed (31%) or strongly agreed (16%). The mean score of 2.9 ($SD = 1.5$) was not significantly different than the midpoint of “3” on the 1-to-5 scale, $t(132) = 0.5, p = .59$. Combined, these findings indicate that participants received little or no education regarding animal cognition, consistent with Hypothesis 2, while findings regarding the link between animal abuse/neglect and violence against humans were mixed.

Hypothesis 3: Intervention quiz. Hypothesis 3 stated that “Across the 10-item intervention quiz (Appendix E), participants will average more than 80% correct, with the highest scores found on the question ‘People who are able to neglect or abuse their companion animal(s) are at increased risk of abusing children, the elderly, the disabled, and/or their spouse.’”

This hypothesis was supported. Table 5 shows that participants averaged 83% on the post-intervention quiz, consistent with Hypothesis 3. “People who are able to neglect or abuse their companion animal(s) are at increased risk of abusing children, the elderly, the disabled, and/or their spouse” (worded as “Increased risk of animal abusers to abuse people” in Table 5) had the highest scores (98%), along with “Witnessing violence against animals does not impact children negatively” and “Companion animals experience pain.”

The low scores were for “FBI categorizes animal abuse/severe neglect as a crime” (29%), “Countries recognizing animals as sentient” (80%), “Some animals are capable of distinguishing between fairness” (80%), and “Some animals possess self-awareness,” (90%) included four of the five lowest scores. These findings supported Hypothesis 3. Notably, 63% correctly identified that the percentage of “American households with at least one companion animal” was 65%, the second lowest score among study participants.

Hypothesis 4: Pre-intervention favoring of reporting. Hypothesis 4 stated, “A small majority of therapists will be in favor of some form of reporting in pre-test.”

This hypothesis was supported. Pre-intervention, the majority of participants supported (either agreed or strongly agreed) with permission to voluntarily break confidentiality to report animal abuse to animal protection agencies (80%) or to law enforcement (68%). Further, 56% agreed or strongly agreed with mandatory reporting of animal abuse to animal protection agencies and 48% agreed or strongly agreed with required mandatory reporting of animal abuse to law enforcement.

Hypothesis 5: Increase in favoring of reporting post-intervention. Hypothesis 5 stated that “A significantly higher number of therapists will report being in favor of reporting animal abuse post-intervention than pre-intervention.”

Willingness to report trended higher post-intervention than pre-intervention for permission to voluntarily report to animal abuse agencies ($p = .09$). Willingness to report was significantly higher post-intervention than pre-intervention for permission to voluntarily report to law enforcement ($p < .0001$), as well as for mandatory reporting to animal abuse agencies ($p < .001$) and to law enforcement ($p < .0001$). Changes from pre-intervention to post-intervention are displayed in Figure 1. This finding supported Hypothesis 5.

Hypothesis 6: Willingness to inquire. Hypothesis 6 stated that “participants will be more willing to inquire about animal abuse following the intervention.” This hypothesis was supported. Table 6 shows that, pre-intervention, the most common time of inquiry was as soon as the topic emerged. Prior to the intervention, 41% of respondents were not willing to inquire about animal abuse witnessed by victims and 35% did not inquire regarding animal abuse from perpetrators.

However, following the intervention, 70% reported being more likely than not to inquire about animals in the clients’ lives during the intake interview, compared to 16% who were not more likely to inquire and 14% who were undecided. This increase in willingness to inquire was statistically significant, $p < .0001$. These findings supported Hypothesis 6.

To further explore what might be predictive of being more likely to inquire about animals in client’s life following the intervention, logistic regression analysis was conducted. The overall logistic regression model (Cox & Snell $R^2 = .19$, Nagelkerke $R^2 = .27$) was statistically significant, X^2 (5 degrees of freedom) = 26.0, $p < .0001$. Table 7 shows that education, age, and gender were significant predictors of increased willingness to inquire about animals in clients’ lives following the intervention. Living with companion animals and believing that people who abuse animals have mental health issues were not significant predictors.

The exponentiated beta [$\text{Exp}(\beta)$] in Table 7 indicates the odds ratio for each predictor variable. For example, the $\text{Exp}(\beta)$ of 1.1 for age indicates that each year of age increase is associated with a 10% increased odds of being more willing to inquire about animals following the intervention. $\text{Exp}(\beta)$ of 0.22 for sex (scored as females = 1, males = 2) indicates that males are 22% as likely to be more willing to inquire compared to females. By taking the inverse ($1 / .22 = 4.6$), this can also be stated as females were 4.6 times more likely than males to be more willing to inquire about animals in clients' lives following the intervention. Similarly, taking the inverse the $\text{Exp}(\beta)$ of 0.32 ($1 / .32 = 3.2$) for education (scores as BA = 1, MA = 2, PhD = 3) indicated that each step increase on education was associated with 3.2 times lower odds of willingness to inquire about animals in clients' lives following the intervention.

These findings indicate that the intervention had a significantly greater effect on older, female, and relatively less educated participants towards increasing willingness to inquire about animals in clients' lives.

Hypothesis 7: Reasons for reporting animal abuse. Hypothesis 7 stated, "The most commonly cited reason to reporting of animal abuse will be because animal abuse can be predictive of violence toward humans and discovery of people being abused." This hypothesis was not supported. Table 8 shows that the most common reasons for reporting were related to the animals, whether to protect animals, to avoid cruelty, or to care for all living being. These findings were consistent across voluntary and mandatory reporting both pre and post intervention.

Treating the offender was the lowest-ranking reason for reporting animal abuse, followed by the discovery of abused people and that animal abuse can be predictive of violence toward humans. These findings failed to support Hypothesis 7.

Hypothesis 8: Reasons for not reporting animal abuse. Hypothesis 8 stated that, “The most commonly cited reason to oppose reporting of animal abuse will be related to the impact of breaking confidentiality on the therapeutic alliance.”

This hypothesis was supported. Table 9 displays the frequencies of participant responses indicating their reasons for not reporting animal abuse. The most common response was “Breaking confidentiality would threaten the client’s welfare and the therapeutic relationship” for both voluntary reporting and for mandatory reporting, both prior to the intervention and following the intervention.

Hypothesis 9: Presence of an animal in the therapists’ home and animal abuse reporting. Hypothesis 9 stated that, “Above the effects of education and age, and presence of an animal in the therapists’ home will be predictive of therapists’ favorable attitude toward reporting.” Hypothesis 9 was tested using multiple linear regression statistics. Each of the reporting types was tested in parallel analyses.

Voluntary reporting of animal abuse to animal protective agencies.

Pre-intervention. The combination of education, age, and presence of an animal in the therapists’ home accounted for 5% of the variance in permission to voluntarily report animal abuse to animal protective agencies ($R^2 = .04$), which was not statistically significant, $F(3,126) = 2.02$, $p = .11$.

Table 10 shows that education ($p = .21$) and age ($p = .15$) were not significant predictors of permission to voluntarily report animal abuse to animal protective agencies prior to the intervention. Living with an animal companion was positively associated with permission to voluntarily report animal abuse to animal protective agencies, but this relationship did not reach statistical significance ($p = .06$). These findings failed to strongly support Hypothesis 9.

Post-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 5% of the variance in permission to voluntarily report animal abuse to animal protective agencies ($R^2 = .04$), which was not statistically significant, $F(3,126) = 1.64$, $p = .18$.

Table 11 shows that education ($p = .22$), age ($p = .12$), and living with an animal companion ($p = .15$) were not significant predictors of permission to voluntarily report animal abuse to animal protective agencies following to the intervention. These findings failed to support Hypothesis 9.

Pre-to-post-intervention change. The combination of education, age, and presence of an animal in the therapists' home accounted for 1% of the variance in permission to voluntarily report animal abuse to animal protective agencies ($R^2 = .01$), which was not statistically significant, $F(3,126) = 0.32$, $p = .81$.

Table 12 shows that education ($p = .99$), age ($p = .72$), and living with an animal companion ($p = .37$) were not significant predictors of permission to voluntarily report animal abuse to animal protective agencies following to the intervention. These findings failed to support Hypothesis 9.

Permission to voluntarily report animal abuse to law enforcement.

Pre-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in permission to voluntarily report animal abuse to law enforcement ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.51$, $p = .30$.

Table 13 shows that living with an animal companion was not significantly associated with permission to voluntarily report animal abuse to law enforcement ($p = .11$). Education

($p = .38$) and age ($p = .35$) were not significant predictors of permission to voluntarily report animal abuse to law enforcement. These findings failed to support Hypothesis 9.

Post-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in permission to voluntarily report animal abuse to law enforcement ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.34$, $p = .26$. Table 14 shows that education ($p = .29$), age ($p = .29$), and living with an animal companion ($p = .12$) were not significant predictors of permission to voluntarily report animal abuse to law enforcement following to the intervention. These findings failed to support Hypothesis 9.

Pre-to-post-intervention change. The combination of education, age, and presence of an animal in the therapists' home accounted for 0.1% of the variance in permission to voluntarily report animal abuse to law enforcement ($R^2 = .001$), which was not statistically significant, $F(3,126) = 0.05$, $p = .99$.

Table 15 shows that education ($p = .74$), age ($p = .83$), and living with an animal companion ($p = .86$) were not significant predictors of permission to voluntarily report animal abuse to law enforcement following to the intervention. These findings failed to support Hypothesis 9.

Mandatory reporting of animal abuse to animal protective agencies.

Pre-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in mandatory requirement to report animal abuse to animal protective agencies ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.32$, $p = .27$.

Table 16 shows that education ($p = .39$) and age ($p = .55$) were not significant predictors of mandatory requirement to report animal abuse to animal protective agencies. Living with an animal companion was positively associated with mandatory requirement to report animal abuse to animal protective agencies, but this relationship did not reach statistical significance ($p = .08$). These findings failed to strongly support Hypothesis 9.

Post-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in mandatory requirement to report animal abuse to animal protective agencies ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.39$, $p = .25$.

Table 17 shows that education ($p = .29$), age ($p = .18$), and living with an animal companion ($p = .15$) were not significant predictors of mandatory requirement to report animal abuse to animal protective agencies following to the intervention. These findings failed to support Hypothesis 9.

Pre-to-post-intervention change. The combination of education, age, and presence of an animal in the therapists' home accounted for 4% of the variance in mandatory requirement to report animal abuse to animal protective agencies ($R^2 = .01$), which was not statistically significant, $F(3,126) = 1.71$, $p = .17$.

* $p < .05$

Table 18 shows that education ($p = .51$) and living with an animal companion ($p = .47$) were not significant predictors of mandatory requirement to report animal abuse to animal protective agencies following the intervention. Age was significantly predictive of mandatory requirement to report animal abuse to animal protective agencies ($p < .04$), such that the greater the age, the greater the mandatory requirement to report. However, it is important to note that

age was a control variable in this analysis, with no hypothesis associated with age. Living with an animal companion was not significantly related to the outcome variable of pre-to-post change in mandatory requirement to report animal abuse to animal protective agencies, so this analysis failed to provide support for Hypothesis 9.

Mandatory requirement to report animal abuse to law enforcement.

Pre-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 4% of the variance in mandatory requirement to report animal abuse to law enforcement ($R^2 = .04$), which was not statistically significant, $F(3,126) = 1.67$, $p = .18$.

Table 19 (above) shows that education ($p = .38$) and age ($p = .73$) were not significant predictors of requirement to report animal abuse to law enforcement. Living with an animal companion was positively associated with mandatory requirement to report animal abuse to law enforcement, but this relationship did not reach statistical significance ($p = .06$). These findings failed to strongly support Hypothesis 9.

Post-intervention. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in mandatory requirement to report animal abuse to law enforcement ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.25$, $p = .25$.

Table 20 shows that education ($p = .23$), age ($p = .67$), and living with an animal companion ($p = .13$) were not significant predictors of mandatory requirement to report animal abuse to law enforcement following the intervention. These findings failed to support Hypothesis 9.

Pre-to-post-intervention change. The combination of education, age, and presence of an animal in the therapists' home accounted for 3% of the variance in mandatory requirement to report animal abuse to law enforcement ($R^2 = .03$), which was not statistically significant, $F(3,126) = 1.71$, $p = .17$.

Table 21 shows that education ($p = .51$), age ($p = .11$), and living with an animal companion ($p = .41$) were not significant predictors of mandatory requirement to report animal abuse to animal protective agencies following to the intervention. These findings failed to support Hypothesis 9.

Summary of hypothesis 9. Living with an animal companion was not significantly associated with voluntary or mandatory reporting of animal abuse to animal protection agencies or law enforcement above the effects of age and education. However, living with an animal companion trended towards significance in the pre-intervention prediction of permission to voluntarily report animal abuse to animal protective services ($p = .06$), as well as mandatory requirement to report animal abuse to animal protective services ($p = .08$) or to law enforcement ($p = .06$). Combined, these findings failed to strongly support Hypothesis 9.

Exploratory Analyses

Exploratory analyses were conducted to investigate possible relationships that were not included in the planned comparisons. Exploratory analyses included possible relationships between education and duty to care, as well as whether demographics might be predictive of the belief that animal abusers have mental health problems.

Education and duty to care. Exploratory analyses were conducted to determine whether level of education might be related to willingness to report based on duty to care ("As a profession, psychology needs to convey an 'ethic of caring' that includes treating every living

being with respect and empathy”). Table 22 shows that level of education was not systematically associated with either voluntary ($p = .61$) or mandatory ($p = .26$) reporting.

Demographics and belief that animal abuse is a mental health issue. Table 23 shows exploratory linear regression found that education, age, gender, and living with companion animals were not significantly related to the belief that "I think people who abuse or neglect animals have mental health issues." (each $p > .05$).

Summary of Results

This study of 133 psychologists revealed that the majority encounters animal abuse in their practice, but the majority had no formal education regarding animal cognition and emotions.

The intervention was successful. Participants scored greater than 80% correct on the post-intervention quiz. Further, willingness to report animal abuse increased from pre-intervention to post-intervention and the majority of participants reported that, following (that is, because of) the intervention, they were more likely to inquire about animals in their clients' lives during the intake interview. The demographics variables of being older, female, and relatively less educated significantly increased the odds of increasing willingness to inquire about animals in clients' lives following the intervention.

The most common reasons given for reporting animal abuse related to care for the animal rather than treating the offender or because of the link between abuse of animals and abuse of people. The most commonly cited reason to oppose reporting of animal abuse was the impact of breaking confidentiality on the therapeutic alliance.

Living with a companion animal was not significantly predictive of willingness to report, though trends were observed pre-intervention for voluntary ($p = .06$) and mandatory ($p = .08$) reporting to animal protection (.06), as well as for mandatory reporting to law enforcement ($p = .06$).

Exploratory analyses revealed that education was not predictive of duty to care as a reason for voluntary or mandatory reporting, and that demographics were not significantly predictive of the belief that animal abuse is indicative of a mental health problem. These findings are discussed in the following chapter.

Discussion

The purpose of this study was to determine how participating psychologists viewed animal abuse/neglect, whether they encountered it were in professional practice, and how willing they were to report animal abuse/neglect to animal protection agencies or law enforcement. Then, following an intervention, participating psychologists revealed their post-intervention willingness to report animal abuse/neglect to animal protection agencies or law enforcement, as well as the reason that they agreed or disagreed with reporting animal abuse.

The Frequency of Encountering Animal Abuse and Neglect in Clinical Practice

More than half of participating psychologists reported having encountered animal abuse and neglect issues with clients during the past five years. Roughly half of participating psychologists indicated that their clients reported witnessing animal abuse/neglect and more than one third reported having clients who perpetrated animal abuse/neglect. These results were consistent with Schaefer et al. (2007), who also found that the majority of therapists encountered animal abuse and neglect over the recent five years preceding that study. Combined with the findings of Schaefer et al. (2007), present results indicate that encountering animal abuse and

neglect is common in clinical practice.

The Frequency of Inquiring about Animal Abuse and Neglect in Clinical Practice

In spite of the commonness of animal abuse and neglect in clinical practice, and in spite of the observation that two-thirds of participating psychologists consider animal abuse to be a mental health issue, only roughly one-quarter of participants indicated that they routinely inquire about their clients' relationships with animals. This finding was still somewhat higher than found by Nelson (2002), who found that only 14% of therapists routinely screened for animal abuse. It is possible that this difference may suggest that there is an increase in the proportion of psychologists that routinely inquire about their clients' relationships with animals. It is also possible that the advertising for the present study may have attracted psychologists who are more aware regarding issues of animal abuse, which may explain the difference between the present study and the finding of Nelson (2002).

However, few are still asking questions as a matter of course. In this study, only 9% of participants reported specifically inquiring about witnessing animal abuse in the initial intake, while 11% specifically inquired at intake about perpetrating animal abuse. One third inquired only after the client reported witnessing animal abuse, and surprisingly, even fewer inquired after the client revealed perpetrating animal abuse. The majority of those who had worked with animal abuse issues in therapy reported they did not explore the issue until it emerged; this finding of a tendency toward clinical responsiveness rather than a more proactive inquiry is consistent with a study conducted by Schaefer et al. (2007).

The Problem of Not Inquiring about Animal Abuse Issues in Clinical Practice

Waiting for the clients to bring up animal abuse issues is problematic, considering that people are unlikely to spontaneously disclose abuse or neglect when therapists do not inquire

about it (Pruitt & Kappius, 1992; Read & Fraser, 1998). Therefore, it is important therapists specifically inquire about animal abuse/neglect to initiate the exploration of such issues and facilitate clients' sharing on this topic.

However, notably, therapists often have difficulty assessing their clients' abuse histories in general (Thompson & Kaplan, 1999; Wurr & Partridge, 1996); extending an inquiry to include animal abuse may be an even greater step for those who do not feel prepared to take a detailed trauma history. Therapists may be resistant or reluctant to do so for various reasons, for example, feeling they have more pressing issues to address, fearing their clients' distress might be exacerbated, or fearing they might induce false memories (Young, Read, Barker-Collo, & Harrison, 2001). Some studies suggest that men in particular are less likely to be asked about their history of abuse/neglect (Lab, Feigenbaum, & De Silva, 2000). Therapists may not have sufficient education to ask about abuse and neglect of any kind. However, even if a therapist feels confident about taking a good history of human relationships, they may avoid the topic of animal abuse/neglect with their clients because they don't know enough about it.

Lack of Education

Two-thirds of participating psychologists indicated that they had not received education on animal cognition and three-fourths reported a lack of education regarding animal emotions throughout their graduate education and/or continuing education. These findings suggest that a lack of education may be one reason that psychologists are hesitant to inquire about animal abuse.

Consistent with the present study, the literature suggests that therapists seldom inquire about animal issues due to a lack of education about animal issues, a lack of familiarity with how to address the problem in clinical practice, or perhaps some discomfort with the topic (Nelson,

2002; Schaefer et al., 2007). Nelson's 2002 study notably concluded that psychologists lacked education regarding animal issues, noting, "Responses of psychologists speak to the lack of information about animal abuse as both a legal and a clinical issue." Indeed, in her study, Nelson (2002) quotes psychologists erroneously dismissing animal abuse as a legal issue altogether, while others dismissed it as "only a misdemeanor," which, even at the time, was true only in few states. Additionally, some participants in the 2002 study indicated that "there is no formal treatment for animal abuse," despite organizations such as Psychologists for the Ethical Treatment of Animals (PSYETA) having created training manuals (i.e., the Anicare models; see for example, Jory & Randour, 1999; Randour, Krinsk, & Wolf, 2002) with techniques for professionals to apply to the treatment of animal abusers.

While these findings point to problems related to the lack of inquiry regarding animal abuse and neglect in clinical practice, including the lack of education, it is also important to explore why psychologists may be hesitant to report animal abuse and neglect to authorities, such as animal welfare agencies or law enforcement. The next sections details reasons why psychologists may oppose reporting animal abuse and neglect to authorities.

Reasons for Not Reporting Animal Abuse and Neglect to Authorities

Participants who did not support either voluntary or mandated reporting of animal abuse issues were asked to justify their opposition to reporting. The most common responses were to avoid threatening the therapeutic relationship, the lack of a clear definition of animal abuse/neglect, and limited resources.

Threatening the therapeutic relationship. Psychologists were most concerned about the impact of breaking confidentiality on the client's welfare or the therapeutic relationship and the concerns regarding the impact of bringing officials in the client's life as primary reasons for

their opposition to reporting animal abuse and neglect to authorities. This finding was consistent with the findings of Schaefer et al. (2007).

Lack of a clear definition. The lack of a clear definition of animal abuse and neglect was another common reason that participants opposed reporting, despite definitions being provided in the survey. This finding was consistent with the findings of Schaefer et al. (2007), who also found that unclear definitions were a common reason to oppose reporting, in spite of the fact that, as in the present study, their study provided definitions in the survey instrument.

Curiously, when participants were asked to endorse what they considered abuse and/or neglect in the current study, only 3% declared they were not able to judge what constitutes animal abuse. Almost all participants endorsed four core items, with 98% considering the following as abuse/neglect: (a) torture, mutilation, or extreme physical punishment (kicking, hitting) or killing of an animal; (b) physical neglect (not providing for physical needs such as food, shelter, water, vet care); (c) cock or dog fighting; and (d) having sexual contact with an animal. Research on animals for purposes other than medical treatments was considered abuse by 74% of respondents, while 65% reported factory farming (e.g., mass production for economic efficiency such as crating chickens) as being an abusive practice. These findings suggest that although psychologists may largely agree on what constitutes animal abuse and neglect, they may still be unsure regarding official definitions.

Limited resources. Another objection to changing the ethical code of conduct of psychologists to allow for the reporting of animal abuse was that protecting other animals would decrease concern and/or protection for human animals. This objection was first raised in Nelson's 2002 study, then again by Schaefer et al. (2007). The present study also revealed that psychologists who opposed reporting of animal abuse appeared to be concerned about the use of

already limited resources to protect animals, as the item “Limited resources are best used for child abuse” was the fourth most endorsed item.

However, given the known coexistence of child and animal abuse in homes where there is domestic violence (American Humane Association, 2016; DeViney, Dickert, & Lockwood, 1998), the reporting of animal abuse/neglect may actually facilitate the prevention of child abuse, as child protection services often encounter child and animal abuse in the same households. Additionally, providing treatment to perpetrators of animal abuse/neglect may further reduce the likelihood they would escalate to committing acts of violence against other small and vulnerable beings in the home, such as children.

Furthermore, this type of thinking reflects that human animals do not always regard themselves as animals, and that speciesism remains engrained within the field of psychology. Philosopher Thomas Regan’s (1983) concept of “human chauvinism” echoes this type of thinking:

To be “for animals” is not to be “against humanity.” To require others to treat animals justly, as their rights require, is not to ask for anything more nor less in their case than in the case of any human to whom just treatment is due. The animal rights movement is a part of, not opposed to, the human rights movement. Attempts to dismiss it as antihuman are mere rhetoric (p.xiii)... There is a neglected other side to the anthropomorphic coin. This is human chauvinism. The anthropomorphic side reads: “It is anthropomorphic to attribute characteristics to nonhumans that belong only to humans.” The human chauvinism side reads: “It is chauvinistic not to attribute characteristics to those nonhumans who have them and to persist in the conceit that only humans do.” Human chauvinism, that is, like all other forms of chauvinism, involves a failure or refusal to

recognize that those characteristics that one finds most important or admirable in one's self, or in members of one's group, are also possessed by individuals other than one's self or the members of one's group, as when male chauvinists fail, or refuse, to see that they are not alone in possessing admirable qualities... to deny consciousness or a mental life to mammalian animals is an expression of human chauvinism. (p. 31)

In summary, animal issues are commonly brought up in clinical practice, but participating psychologists are hesitant to inquire about animal abuse and neglect. They indicated several reasons justifying their hesitancy regarding reporting abuse and neglect to authorities. Because some of this hesitancy may be due to the lack of education indicated by study participants, an intervention was implemented. The next section details the results of the intervention.

Intervention

It was hypothesized that a brief psychoeducational intervention would result in statistically significant increases in support of reporting animal abuse and neglect to authorities. This hypothesis was supported. Participants average >80% correct on the post-intervention quiz, consistent with a successful intervention. More importantly, following the intervention, 70% of participants indicated that they were more willing to report animal abuse and neglect to authorities.

Further, while voluntary reporting to animal protection agencies merely trended higher post-intervention, statistically significant increases from pre-intervention to post-intervention were observed for voluntary reporting to law enforcement, mandatory reporting to animal protection agencies, and mandatory reporting to law enforcement. Combined, these findings indicate that the intervention, inspired by the works of Nelson (2002) and Schaefer et al. (2007), was successful in increasing support for reporting animal abuse and neglect to authorities. The

success of this intervention also supports the idea that psychologists would do more for animals if they had more education about animal abuse and knew how helpful it would be for both human and nonhuman animals to do so.

Reasons for Reporting

The most surprising finding, both pre- and post-intervention, is that the most common reasons that participants supported reporting of animal abuse and neglect to authorities focused on concern for animals more than on concern for humans. I expected to find that psychologists would maintain a bias toward the superiority of humans; they did not.

Concern for the wellbeing of animals. The most common reason that participants supported reporting was that “Animals are sentient beings and have the right to protection from harm,” followed by “It would be cruel to ignore the suffering of animals” and “As a profession, psychology needs to convey an ‘ethic of caring’ that includes treating every living being with respect and empathy.” These results were consistent across voluntary and mandatory reporting to animal protective agencies and to law enforcement.

These findings were generally consistent with the findings of Schaefer et al. (2007), who found that therapists who supported mandated reporting of animal abuse and neglect commonly endorsed that “It would be cruel to ignore the suffering of animals” and that “Animals are sentient beings with the right to protection from harm.”

Protection of humans. Reasons for supporting reporting of animal abuse and neglect based on the protection of humans (predictive violence towards humans, investigations may uncover human abuse, and possibility for the offender to receive treatment) were less frequent than reasons related to concern for the wellbeing of animals. These results might suggest that the psychologists who support reporting animal abuse and neglect tend to care about animal abuse

and neglect issues, not primarily as a way to protect humans from violence, but truly to protect animals themselves. This finding appears to mirror Nelson's (2002) findings, wherein roughly half of psychologists indicated that "to protect animals from harm is sufficient justification for such a law [reporting of animal abuse], and that this law should be enacted even if there is no direct connection to violence against people (53%)" (p. 118).

Other Observations

Impact of demographics. The demographics variables of being older, being female, and being relatively less educated significantly increased the odds of increasing willingness to inquire about animals in clients' lives following the intervention.

The present study found that women were significantly more in favor of changing the ethical reporting law for psychologists to include the right to report animal abuse. Women were also noted to be 4.6 times more likely to be more willing to inquire about animals in clients' lives than men were, following the intervention. This finding was consistent with the finding of Nelson's 2002 study, as well as with prior findings that women favor animal rights related issues more than do men (Adams, 1994; Peek, Bell, & Dunham, 1996; Peek, Dunham, & Dietz, 1997).

Results from the present study also suggested that the educative intervention may have had a stronger impact on older psychologists, licensed or in training, as they reported being more likely to be willing to inquire about animal issues in therapy post-intervention. Interestingly, however, the intervention also appeared to be more successful with participants who had less education (i.e., graduate students with at least one year experience providing therapy). The reasons for this are unclear. It is possible that more educated psychologists were less likely to be swayed in general; however, this is pure speculation, and does not begin to explain why older psychologists' judgment was still more impacted. Future research will be needed to determine

why younger and more educated psychologists were less likely to be influenced by the intervention.

Impact of living with companion animals. Living with an animal companion trended as a predictor of pre-intervention support for reporting animal abuse to authorities, but these relationships did not reach statistical significance. Against predictions, participants who live with animal companions were not more likely to increase their willingness to inquire about animal abuse and neglect following the intervention. One possible explanation for this finding might be attributable to the fact that participants who live with animal companions were already more likely to routinely inquire about animal abuse and neglect in their clinical practice.

Implications for Practice

The results of the present study have important implications for psychologists, including the importance of awareness, the importance of inquiring, and the importance of education.

The importance of awareness. It is important to underscore that animal abuse/neglect issues were reported by more than half of study participants. Psychologists must be aware that animal abuse and neglect is common; the implications are profound in their own right and especially in light of the strong links between animal abuse and interpersonal violence (Arkow, 1996; Ascione, 1998; Ascione et al., 1997; Ascione & Arkow, 1999; Beirne, 2004; Boat, 1995; Currie, 2006; Duncan et al., 2005; Flynn, 2000a, 2000b; Merz-Perez & Heide, 2003).

Further, given that 65% of households in the United States have at least one companion animal, and given the changing role of these companion animals in people's lives, it is important for therapists to become more aware of the importance of animals in the lives of their clients. The inquiry extends well beyond abuse; it includes healing. The lives of animals in family life are important to consider whether towards helping clients in mourning a loss, processing a prior

trauma, or recognizing an alarming pattern of behavior, like witnessing or perpetrating animal abuse or neglect.

The importance of inquiring. The observation that the majority of psychologists do not routinely inquire about animal abuse and neglect, either at initial intake, or even when the topic of animal abuse and neglect is raised by clients, has clear implications. Psychologists need to inquire about animal abuse and neglect with all clients as a routine part of the initial intake assessment and continually across therapy. Clients are unlikely to spontaneously disclose any type of abuse or neglect experienced or perpetrated, making it that much more important for therapists to inquire about abuse/neglect issues in general, as well as animal abuse/neglects specifically. Therapists may choose to consider adding questions about the presence of animals in the clients' home and the role animals have in the clients' life to their initial intake assessment, whether they tend to do so on paper prior to the first session or face-to-face in session. To foster open dialogue, the focus might initially be on the positive aspects of those relationships, before inquiring about whether any harm or maltreatment of an animal was committed, threatened, or witnessed.

The importance of education. The present study found a lack of relevant education provided to psychologists regarding animal cognition, animal emotions, or on the link between animal abuse and violence against humans. The implication is clear: psychologists need to receive additional, robust education and training to be able to better handle the issues of animal abuse and neglect in their practice, whether through their initial graduate training or through continuing education. Therapists could consider seeking education about animal cognition and emotions by attending continuing education, workshops, or reading literature on the topic. For

those with trauma caseloads, it is even more important to become knowledgeable about the issues related to animal abuse and neglect.

Evidence-based treatment. Notably, there are several evidence-based models and manuals addressing treatment. These include, for example, the AniCare Model of Treatment for Animal Abuse adapted for adults (Jory & Randour, 1999) and the AniCare Child: An Assessment and Treatment Approach for Childhood Animal Abuse (Randour et al., 2002), both of which provide techniques for professionals to apply to the treatment of animal abusers, and may help psychologists be more comfortable addressing such issues in therapy. Additional knowledge should also be sought out to address the trauma experienced by witnesses of animal abuse/neglect, be it by attending continuing education, workshops or reading relevant literature.

Additionally, psychologists may consider deepening their understanding of the link between animal abuse/neglect and interpersonal human violence. Inquiring about animals that might be at risk, when a client presents with a history or current experiences of child abuse or domestic/partner violence, may uncover animal abuse and/or neglect issues. In the context of family or domestic violence, some clients may, notably, be resistant to leaving an abusive home because of threats made against the animals, and/or fear they will be separated from their companion animal if they leave, often due to limited pet-friendly accommodation options. Working with these clients to identify safe, temporary or permanent homes for their companions, or shelters that are willing to work with families with animals is a way to assist clients who are trying to disengage from a violent family system.

Resources. Resources for psychologists are already available through APA's Division 17 (Society of Counseling Psychology) section 13—the Human–Animal Interaction section; it is dedicated to professional and academic activities that promote and advance the understanding of

human-animal interactions within the field of psychology. Additionally, although PSYETA no longer appears to be active, one of its cofounders, Kenneth Shapiro, Ph.D., went on to create the Society and Animal Forum, and is now the founder and editor of *Society and Animals: Journal of Human-Animal Studies*, cofounder and coeditor of *Journal of Applied Animal Welfare Science*, board president of the Animals and Society Institute, and editor of the *Human-Animal Studies* book series, thus continuing working on furthering research and education related to animal studies within the field of psychology (The Humane Society, 2018). Resources regarding the handling of animal abuse/neglect issues in therapy, as well as advances in animal cognition and emotions research, are available through the Animals and Society Institute, accessible through their website, social media (e.g., Facebook), as well as through events and trainings they promote throughout the country.

Community training. Lastly, once having obtaining more extensive knowledge about animal issues, therapists may want to consider helping their community to develop a cross-training and cross-reporting system of animal abuse, child abuse, elder or vulnerable adult abuse, and/or partner abuse. Providing educational training to animal control officers, veterinarians, humane society workers, and child welfare workers to identify the various forms of abuse and neglect may help save animals' lives and provide insights to address family and domestic violence at multiple levels.

Implications for Policy

Present findings have important implications for policy. First, local, regional, and national organizations should emphasize the importance of inquiring about the animal(s) in the lives of clients. Second, it is crucial to foster change in the APA code of ethics regarding animal abuse and neglect policy.

Results from the present study, combined with the results of previous studies (Nelson, 2002; Schaefer et al., 2007) indicate that a majority of psychologists are in favor of some form of reporting regarding animal abuse and neglect. Further, the present study demonstrated that a brief intervention can increase the proportion of psychologists willing to adopt voluntary or mandatory reporting of animal abuse or neglect, suggesting that well-informed psychologists can recognize the importance of a change in the professional code of ethics.

Support towards changing the APA ethical code to allow psychologists to report animal abuse and neglect could be fostered by a campaign of education about animal cognition and emotions, as well as highlighting the link between animal abuse/neglect and human interpersonal violence. The education of already-trained therapists will be crucial. Additionally, graduate programs in psychology could update their curriculum to include education about animal issues in therapy, as the results of the current study showed that the educational intervention was more effective with psychologists who were still in training. Making animal issues a part of future psychologists' education may be highly effective towards updating the APA code of ethics regarding its animal abuse and neglect reporting policy.

Such a change in APA reporting guidelines might challenge beliefs some psychologists have about humans, other species, and scientific methods currently still in use in the field. It might, therefore, create conflict within the field, as psychology remains a social and hard science that has relied heavily upon experimentation on animals. However, contradictions around animal experimentation already exist within the field of psychology and psychology already assumes that other species possess cognitive and emotional functioning similar enough to human animals to generalize findings from experiments on other species to humans. In any event, this is surely an intellectual dispute worth having, with implications for the ethical practice of psychology.

Limitations

The present study was limited by sample, the selected measures, the validity and reliability of the brief intervention, and the study design. Each of these study limitations is detailed below.

Limitations of the sample. This study was limited by the sample size. The sample was modest in size and may not be fully representative of psychologists in general. The sample was predominantly female (77%), which might not accurately represent the whole profession. Additionally, ethnicity was not considered. Less than half of the sample held doctoral degrees and, while clinical and counseling psychology were well represented, there was a paucity of behavioral, forensic, and health psychologists. Further, the survey's topic and the corresponding advertising may have attracted participants who tended to be animal lovers or those otherwise interested in animals. Indeed, 72% of respondents reported currently living with one or more companion animals, compared to 65% of people within the general population. Because of the limitations of the sample, the results of this study should be generalized only with appropriate caution.

Limitations of the measures. This study was limited by the measures. First, there was only one measure for each construct, precluding triangulation of findings using differing measures of those constructs. Second, aside from the intervention quiz, all study measures were self-report of attitudes, with no objective measures or third-party reports to validate the self-report measures. This opens the possibility of bias from socially desirable responding. However, systematic reviews by Dodou and de Winter (2014), Dwight and Feigelson (2000), and Richman, Kiesler, Weisband, and Drasgow (1999) have shown that socially desirable responding is minimized when surveys are anonymous, as in the present study.

Additionally, as with any retrospective study based on self-report, the information gained was potentially constricted by the therapists' recall and clarity of memory. Moreover, the questions within the survey may have missed some important variables. For example, the survey questions only asked about clients the therapist had worked with in the past five years. This timeframe was chosen to stay consistent with previous studies (Nelson, 2002; Schaefer et al., 2007), but may have missed the full experience of psychologists in their practice. The present study did not inquire regarding previous specific trainings regarding animal abuse or about the frequency and severity of client reports regarding animal abuse and neglect. Lastly, the study did not include an assessment regarding the willingness of participants to take action towards changing APA policy regarding the voluntary or mandatory reporting of animal abuse.

Limitations of the intervention. This study was limited by the intervention. The intervention was brief and only focused on animal cognition and emotions, with minimal content regarding the link between animal abuse and abuse of humans. It is possible that the results would have been stronger if the intervention was more comprehensive and included more content regarding the animal abuse–human abuse link.

Limitations of the design. This study was limited by the design. This study did not include a control group, which would have permitted a comparison between participants who received the intervention and those who did not. Such a comparison would have measured whether the change observed post-education was indeed due to the intervention rather than to other factors, like taking the survey twice. In addition, the present study did not include long-term follow up to assess whether changes reported in this study translated into actual behavioral change in psychologists. Thus, although the intervention in this pre-post design may have had an

immediate impact, it was not possible to determine how effective the intervention will be in the future practice of those—or any—psychologists.

Future Research

The most important area for future research is replication of the present study with larger, more diverse, more representative samples, with multiple measures of constructs, and with long-term follow-up to assess whether the intervention translates into increased inquiry regarding animal abuse in the assessment and treatment of clients. It is also important to include either a control group or comparison groups of the present intervention and a more comprehensive intervention that includes deeper exploration of the link between human and animal abuse and neglect.

Towards fostering a safer, more equitable society for all, it is vital that future research is conducted to determine the optimal ways to promote a change in the APA ethical code, which presently is mute regarding the reporting of animal abuse and neglect. In this regard, further research is also warranted regarding the impact, on both human and nonhuman animals, of the exclusion of animal abuse from reporting laws for psychologists. As support for this recommendation, ethnologist Frans de Waal (2002) states,

The time has come to define the human species against the backdrop of the vast common ground we share with other life forms. Instead of being tied to how we are unlike any animal, human identity should be built around how we are animals who have taken certain capacities a significant step further. We and other animals are both similar and different, and the former is the only sensible framework within which to flesh out the latter. (p. 362)

Assessing and publicizing the impact of non-reporting may prove fruitful in promoting positive social change in the form of updating the APA guidelines regarding the reporting of animal abuse and neglect to law enforcement and/or animal rescue organizations.

Conclusion

This study of 133 psychologists revealed that clients report witnessing or perpetrating animal abuse and neglect, but that psychologists do not commonly inquire about animal companions in the lives of their clients. Part of this hesitation may be due to a lack of education. A brief psychoeducational intervention was implemented and post-test revealed an increased willingness to inquire about animal abuse and neglect in clinical practice and towards support for voluntary and mandatory reporting of animal abuse, whether to animal protection agencies and to law enforcement. The present study highlights the importance of education in changing the attitudes and behavior of psychologists and the urgent need to update APA policy guidelines regarding reporting of animal abuse and neglect.

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Table 1

Definition of Animal Abuse

Definition	Percentage
Torture, mutilation, or extreme physical punishment (kicking, hitting) or killing of an animal	98
Physical neglect (not providing for physical needs such as food, shelter, water, vet care)	98
Cock or dog fighting	98
Having sexual contact with an animal	98
Research on animals to evaluate cleaning solutions or other chemicals.	74
Research on animals to evaluate the safety of cosmetics	74
Taunting or teasing an animal	71
Factory farming (e.g., mass production for economic efficiency such as crating chickens)	65
Entertainment practices: (e.g., dog or horse racing, rodeos, circus)	47
Not obtaining yearly vaccinations/check up by a veterinarian	35
Research on animals for medical purposes	35
Research on animals for psychological concerns (e.g. models of depression)	33
Use of animals for food, labor, or materials (e.g., leather)	27
Protecting a person or animal from death or injury due to an attack by another animal (e.g., shooting an animal who is attacking a person or another animal)	14
I am unable to judge what constitutes animal abuse	3
Humanely euthanizing a sick or injured animal	2

Table 2

Therapy-Related Experience Related to Inquiry

Experience	Percentage
Routinely inquire about relationships with animals	28%
Focus of therapy if animal abuse mentioned	19%
Inquire if client reports witnessing animal abuse	35%
Inquire if client reports perpetrating animal abuse	29%

Table 3

Therapy-Related Experience with Clients Reporting Abuse

Experience	Percent of Therapists
Clients reported witnessing animal abuse	47%
Clients reported perpetrating animal abuse	35%
Clients reported witnessing or perpetrating	57%

Table 4

Percent Receiving Education on Animal Cognition, Emotions, and the Animal Abuse – Human Violence Link

Reporting	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean	SD
Animal Cognition	35	30	5	22	8	2.4‡	1.4
Animal's Emotions	41	32	6	14	7	2.1‡	1.3
Link Between Animal Abuse/Neglect and Violence Against Humans	24	21	8	31	16	2.9	1.5

‡p < .0001

Table 5

Intervention Quiz Results

Item#	Item	Correct Answer	% Correct
32	Increased risk of animal abusers to abuse people	True	98%
33	Witnessing violence against animals does not impact children negatively.	False	98%
34	Companion animals experience pain	True	98%
35	Companion animals do NOT experience basic emotions	False	96%
36	Companion animals CANNOT reason, sense the future or intentions	False	92%
37	Some animals possess self-awareness	True	90%
38	Some animals are capable of distinguishing between fairness	True	83%
31	Countries recognizing animals as sentient	All of the above	80%
30	American households with at least one companion animal	65%	63%
29	FBI categorizes animal abuse/severe neglect as a crime	False	29%
Total	Average Score		83%

Note. “All of the above” includes Switzerland, France, New Zealand.

Table 6

Willingness to Inquire about Animal Abuse, Pre-Intervention

Timing of Inquiry	For Victims	For Perpetrators
As soon as topic emerges	44%	39%
When it occurs to me	20%	16%
When clients raise topic of pets	19%	14%
After solid therapeutic relationship established	18%	11%
Initial assessment	9%	11%
I do not inquire	41%	35%

Table 7

Logistic Regression for Prediction of Increased Likelihood to Inquire about Animal Abuse and Neglect Following the Intervention

Variable	β	SE β	Wald	df	p-value	Exp(β)
Education	-1.15	0.43	7.31	1	.007**	0.32
Age	0.09	0.03	9.08	1	.003**	1.10
Gender	-1.52	0.59	6.54	1	.01**	0.22
Companion Animals	0.12	0.59	0.04	1	.84	1.12
Animal Abuse is a Mental Health Problem	0.37	0.25	2.22	1	.14	1.44

**p < .01

Table 8

Reasons that Participants Agreed with Reporting Animal Abuse

Reason for Agreement	Voluntary				Mandatory			
	Pre		Post		Pre		Post	
	Fw	%	Fw	%	Fw	%	Fw	%
Protect Animals	74	69%	51	67%	72	66%	61	75%
Cruel to Ignore	66	61%	50	61%	65	65%	53	65%
Care for All Beings	60	56%	42	51%	55	55%	46	57%
Predicts Violence Against Humans	53	49%	43	48%	51	56%	41	51%
Discover Abused People	36	33%	22	32%	34	29%	27	33%
Treat Offender	28	26%	18	29%	31	23%	27	33%

Note. Values add to more than 100% because participants were asked to identify up to three reasons; 108 agreed with permission to voluntarily report pre (107 post) and 77 agreed with mandatory reporting pre (81 post).

Table 9

Reasons that Participants Disagreed with Reporting Animal Abuse

	Voluntary		Mandated	
	Pre	Post	Pre	Post

Reason for Disagreement	Fw	%	Fw	%	Fw	%	Fw	%
Threaten Therapeutic Relationship	14	64%	10	67%	21	60%	16	53%
Unclear Definitions	8	36%	3	20%	14	40%	5	17%
Bringing Officials into Client's Life	8	36%	5	33%	11	31%	8	27%
Limited Resources	6	27%	4	27%	11	31%	7	23%
No Sanctioned Reporting Agency	3	14%	4	27%	7	20%	7	23%
Imposing My Morality	3	14%	3	20%	6	17%	4	13%
Detract from Therapy	2	9%	4	27%	4	11%	4	13%
Animal Abuse is Not Serious	2	9%	2	13%	2	6%	3	10%
Lack of Expertise	1	5%	2	13%	5	14%	7	23%
Animals are Property	1	5%	1	7%	1	3%	1	3%
Potential Litigation	0	0%	0	0%	2	6%	1	3%

Note. Values add to more than 100% because participants were asked to identify up to three reasons; 22 disagreed with permission to voluntarily report pre (15 post) and 35 disagreed with mandatory reporting pre (30 post).

Table 10

Regression Coefficients for Prediction of Permission to Voluntarily Report Animal Abuse to Animal Protective Agencies Prior to the Intervention

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.20	.16	-.13	-1.26	.21
Age	.01	.01	.15	1.44	.15
Living with an Animal Companion	.37	.20	.16	1.88	.06

Table 11

Regression Coefficients for Prediction of Permission to Voluntarily Report Animal Abuse to Animal Protective Agencies Following the Intervention

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.20	.16	-.12	-1.23	.22
Age	.01	.01	.16	1.56	.12

Living with an Animal Companion	-.30	.20	-.13	-1.46	.15
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Table 12

Regression Coefficients for Prediction of the Pre-to-Post Change in Permission to Voluntarily Report Animal Abuse to Animal Protective Agencies

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	.00	.07	.00	.01	.99
Age	.00	.00	.04	.36	.72
Living with an Animal Companion	.08	.09	.08	.91	.37

Table 13

Regression Coefficients for Prediction of Permission to Voluntarily Report Animal Abuse to Law Enforcement Prior to the Intervention

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	-.15	.17	-.09	-.88	.38
Age	.01	.01	.09	.93	.35
Living with an Animal Companion	.34	.22	.14	-1.60	.11

Table 14

Regression Coefficients for Prediction of Permission to Voluntarily Report Animal Abuse to Animal Protective Agencies Following the Intervention

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	-.18	.17	-.11	-1.06	.29
Age	.01	.01	.11	1.06	.29
Living with an Animal Companion	-.33	.21	-.14	-1.58	.12

Table 15

Regression Coefficients for Prediction of the Pre-to-Post Change in Permission to Voluntarily Report Animal Abuse to Animal Protective Agencies

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	-.02	.07	-.03	-.33	.74
Age	.00	.00	.02	.21	.83
Living with an Animal Companion	.02	.09	.02	.18	.86

Table 16

Regression Coefficients for Prediction of Mandatory Requirement to Report Animal Abuse to Animal Protective Agencies

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	-.16	.18	-.09	-.87	.39
Age	.01	.01	.06	.60	.55
Living with an Animal Companion	.40	.23	.16	1.79	.08

Table 17

Regression Coefficients for Prediction of Mandatory Requirement to Report Animal Abuse to Animal Protective Agencies Following the Intervention

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.20	.19	-.11	-1.07	.29
Age	.01	.01	.14	1.35	.18
Living with an Animal Companion	-.34	.24	-.13	-1.44	.15

Table 18

Regression Coefficients for Prediction of the Pre-to-Post Change in Mandatory Requirement to Report Animal Abuse to Animal Protective Agencies

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.05	.07	-.07	-.66	.51
Age	.01	.00	.21	2.12	.04*
Living with an Animal Companion	.06	.09	.06	.73	.47

Table 19

Regression Coefficients for Prediction of Mandatory Requirement to Report Animal Abuse to Law Enforcement

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.17	.19	-.09	-.89	.38
Age	.00	.01	-.03	-.34	.73
Living with an Animal Companion	.46	.24	.17	1.91	.06

Table 20

Regression Coefficients for Prediction of Mandatory Requirement to Report Animal Abuse to Law Enforcement Following the Intervention

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.23	.19	-.12	-1.21	.23
Age	.00	.01	.04	.43	.67
Living with an Animal Companion	-.37	.24	-.13	-1.53	.13

Table 21

Regression Coefficients for Prediction of the Pre-to-Post Change in Mandatory Requirement to Report Animal Abuse to Law Enforcement

Variable	β	SE β	Standardized Beta	t	p-value
Education	-.06	.09	-.07	-.66	.51
Age	.01	.00	.17	1.62	.11
Living with an Animal Companion	.09	.12	.07	.82	.41

Table 22

Education and Willingness to Report Based on Duty to Care

Education	Total Sample	Duty to Care	
		Voluntary	Mandatory
BA	10%	14%	17%
MA	45%	46%	46%
PhD	45%	41%	37%

Table 23

Prediction of Believing that Animal Abusers Have Mental Health Issues

Variable	β	SE_{β}	Standardized Beta	t	p-value
Education	-.04	.15	-.03	-.25	.80
Age	.01	.01	.09	.85	.40
Gender	-.21	.23	-.09	-.88	.38
Living with an Animal Companion	-.08	.23	-.03	-.36	.72

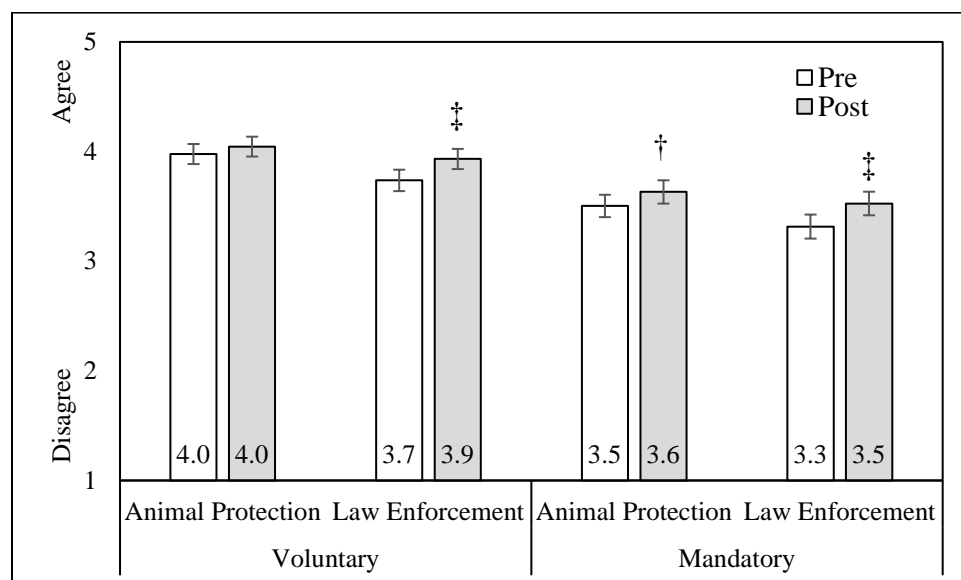


Figure 1. Willingness to report animal abuse pre-intervention and post-intervention.

† $p < .001$

‡ $p < .0001$

Appendix A: Recruitment Letter

My name is Laetitia Geoffroy-Dallery. I am a doctoral student of clinical psychology at Antioch University New England. I am doing research about animal abuse and neglect issues in therapy. I am asking you to be part of this study. To participate, you must be a licensed psychologist, psychology post-doctoral fellow, or a graduate student in psychology with at least one year experience seeing clients for psychotherapy.

This survey should take approximately between 10 and 15 minutes, on average, to complete and includes a brief informative quiz. You will have the option to participate in a raffle to win 1 of 10 \$50 Amazon gift cards.

The goal of this study is to examine attitudes about animal abuse/neglect issues emerging in psychotherapy, psychologists' experience in identifying animal abuse/neglect in therapy, and beliefs about what constitutes reporting of animal abuse/neglect. If you are interested in participating, please click to get to the next page. That is the consent form. Please, read it before starting the survey. Contact information is listed on the consent form. Please, contact me if you have any questions about participation.

To continue, please, click on the following link to read the Informed Consent form and participate in the study: [Link](#)

Your time and participation are greatly appreciated. I hope this survey is interesting for you in addition to supporting research on the human-animal bond.

Appendix B: Informed Consent

Antioch University New England-Department of Clinical Psychology

Project Title: Ethics in Psychology: Reporting of Nonhuman Animal Abuse and Neglect In Clinical Practice

Principal Investigator:

Laetitia Geoffroy-Dallery
Doctoral Candidate
Department of Clinical Psychology
Antioch University New England
40 Avon Street, Keene, NH 03134
Email: XXXX@XXXXX.XXX

Purpose of this Research: This study is designed to examine attitudes about animal abuse/neglect issues emerging in psychotherapy, experience in identifying animal abuse/neglect in therapy, and beliefs about reporting animal abuse/neglect.

Procedures: You will be asked to fill out an electronic survey, which includes the following forms:

- A brief questionnaire about demographic information.
- A brief questionnaire about therapy related experience (8 questions).
- A brief questionnaire about attitudes toward animal abuse and neglect (8 questions).
- A brief quiz on animals' abilities and interpersonal violence (9 Questions).
- A very brief questionnaire about reporting animal abuse/neglect (7 questions).

Benefits & Risks: Aside from an option to enter a drawing for 1 of 10 \$50 Amazon gift cards, there are no direct benefits to you for joining this study. However, research may improve the understanding of animal abuse/neglect issues in psychology and eventually lead to public policy changes and the chance to learn more about the plight of animals in abusive and neglectful situations, as well as animal cognition, emotions, and legal status in the U.S and around the world.

There is very small risk to therapists who take part in this research study. The primary risk is that some questions may cause you to feel sad or distressed. If you become upset you can choose to discontinue.

Confidentiality and Anonymity: You will not be asked to give any identifying information, unless you wish to enter the drawing for a gift card. If you choose to enter the drawing, you will be directed to a separate page where you will be asked to provide an email address. Your email address will be kept during data collection for participation in the raffle only and will be collected separately from the data you contribute through the survey. Your answers will be kept private on the protected Survey Monkey website. Your answers will only be accessible to the researcher. The data will be destroyed once the study is complete. This will be done by deleting the survey website. Information about Survey Monkey's Privacy Policy may be found at <https://www.surveymonkey.com/mp/policy/privacy-policy/>. Additionally, Survey Monkey is HIPAA compliant.

Voluntary Participation: Taking part in this study is voluntary. It is your choice to be involved in this study. You do not have to answer any question you do not want to and can leave the study

at any time, for any reason, without penalty. All the information provided will be kept completely confidential. Only I will see the finished materials.

Questions: Please feel free to contact me at the above phone number and email address. In addition, my research advisor is Dr. Martha Straus, Ph.D.; she can be reached at 603.283.2187. If you have any questions about your rights as a research participant, you may contact Kevin Lyness, Chair of the Antioch University New England IRB, at klyness@antioch.edu and phone (603) 283-2149. You may also contact Barbara Andrews, Ph.D., Interim Provost, at bandrews@antioch.edu.

Thank you for your participation,

Laetitia Geoffroy-Dallery

Appendix C: Demographic Questions

- (1) Age: _____
- (2) Gender: Male___ Female___ Non-binary/ third gender ___
Prefer to self-describe___ Prefer not to respond___
- (3) Race/ Ethnicity: Black or African American ___ Hispanic or Latino___
White Non-Hispanic ___ Native Hawaiian or Pacific Islander ___
American Indian or Alaska Native ___ Asian ___
Other (please specify) _____ Prefer not to answer ___
- (4) What is your primary identification as a psychologist?
Counseling ___ Clinical___ School ___ Other _____
- (5) Highest Degree Obtained and Year obtained (e.g. Ph.D. 1989) :
Ph.D. _____ Psy.D. _____ MS/MA _____ Other _____
- (6) What is your work setting? (indicate “1” for primary setting, “2” for secondary setting if appropriate)
Private Practice___ Community Mental Health ___ V.A. _____
University Counseling Center___ Academia___ Correctional Facility ___
Medical Center/Hospital or Clinic ___ Other : _____
- (7) a) Have you in the past 5 years shared your life/home with one or more companion animal(s) (i.e. pets)? Yes___ No___
b) If so, how many? _____
- (8) a) Do you currently share your life with one of more companion animal(s) (i.e. pets)? Yes___ No___
b) If so, how many? _____
- (9) What species? Dogs ___ Cats ___ Rabbits/Ferrets ___
Mouse/Rat/Guinea pigs___ Snake/lizard/iguana___
Bird___ Fish___ Other_____
- (10) How much do you agree with the following statements:
a) “I have received education about animal cognition during or after my psychology training”? (indicate one number)
- | | | | | |
|----------------------|----------|-----------|-------|-------------------|
| Strongly
Disagree | Disagree | Uncertain | Agree | Strongly
Agree |
| 1 | 2 | 3 | 4 | 5 |
- b) “I have received education about animals’ emotions during or after my psychology training”? (indicate one number)

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

c) “I have received education about the link between animal abuse/neglect and violence against humans during or after my psychology training”? (indicate one number)

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

Appendix D: Pre-Intervention Questions

Survey adapted from the 2007 survey designed by Schaefer, Hays & Steiner, with their permission.

THERAPY RELATED EXPERIENCE

(11) What percentage of your clients live in the following settings?

Rural (pop. < 25,000) _____ Suburban (pop. > 25,000 but < 75,000) _____

Urban (pop. > 75,000) _____

(12) Do you routinely, during the intake interview or at other times, ask clients about their

relationship with animals (companion animals and/or others)? Yes _____ No _____

(13) In the past 5 years, have clients, of any age, ever reported witnessing animal abuse and/or neglect? Yes _____ No _____

(14) In the past 5 years, have any clients, of any age, ever reported being abusive and/or neglectful to an animal?

Yes _____ No _____

(15) Issues of animal abuse and neglect may be a focus in therapy if clients have reactions to witnessing animal abuse/neglect, or have feelings about their own role in abusing/neglecting an animal. In the past 5 years, has animal abuse/neglect been a focus of your therapy with any clients? Yes _____ No _____

The following definitions pertain to the following questions:

- **Being victimized** by some form of animal abuse/neglect refers to: having an animal abused/neglected, being forced to witness animal abuse/neglect, or receiving threats of animal abuse/neglect.
- **Being a perpetrator** of some form of animal abuse refers to: inflicting physical, sexual or emotional harm or neglect (as appropriate to species) on an animal.

You will be asked to share **your thoughts** about what constitutes animal abuse, later in this survey.

(16) When working with clients who have reported **being victimized by** witnessing some form of animal abuse/neglect, or being threatened to witness abuse/neglect of their companion animal(s), do you inquire about the abuse/neglect of those animals and their current safety or lack thereof? (**check one**)

Yes _____ No _____ Uncertain _____

(17) When working with clients who have reported **being a perpetrator** of some form of animal abuse/neglect do you inquire about the abuse/neglect of the animals and their current safety or lack thereof? (**check one**)

Yes ____ No ____ Uncertain ____

(18) At what point in therapy have you inquired about the abuse or neglect of animals?
(**check all that apply**)

For Those For
Victimized Perpetrators

- | | | |
|-------|-------|---|
| _____ | _____ | I inquired as soon as the topic of abuse emerged. |
| _____ | _____ | I inquired about animal abuse when the idea occurred to me. |
| _____ | _____ | I inquired after the client introduced the topic of animals in the home. |
| _____ | _____ | I inquired after developing a solid therapeutic relationship with the client. |
| _____ | _____ | I inquired early in the treatment, as a routine part of the initial assessment. |

ATTITUDES REGARDING ANIMAL ABUSE

This section asks about your attitudes and beliefs about animal abuse issues and therapy intervention.

(19) How would **you** define animal abuse? (**check all that apply**):

- ___ a. Not seeking veterinary treatment for a medical problem
- ___ b. Torture, mutilation, or extreme physical punishment (kicking, hitting) or killing of an animal
- ___ c. Physical neglect (not providing for physical needs food, shelter, water)
- ___ d. Emotional neglect (not providing companionship or play appropriate to species)
- ___ e. Having sexual contact with an animal
- ___ f. Taunting or teasing an animal

- ___ g. Not obtaining yearly vaccinations/check up by a veterinarian
- ___ h. Cock or dog fighting
- ___ g. Entertainment practices: (dog or horse racing, rodeos, circus)
- ___ i. Research with animals for medical purposes
- ___ j. Research with animals for psychological concerns (e.g. models of depression)
- ___ k. Research with animals to evaluate the safety of cosmetics
- ___ l. Research with animals to evaluate cleaning solutions or other chemicals.
- ___ m. Use of animals for food, labor, or materials (e.g., leather)
- ___ n. Factory farming (e.g. mass production for economic efficiency such as crating chickens)
- ___ o. Humanely euthanizing a sick or injured animal
- ___ p. Protecting a person or animal from death or injury due to an attack by another animal (e.g., shooting an animal who is attacking a person or another animal)
- ___ q. I am unable to judge what constitutes animal abuse
- ___ r. None of the above constitutes animal abuse
- ___ s. Other_____

(20) Do you agree with the following statement: "I think people who abuse/neglect animals have mental health issues." ? (**circle one number**)

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

The current APA ethical code permits breaking confidentiality when legal requirements demand it. Most states have identified limits to confidentiality when there is a threat of danger to the client, danger to others or risk of imminent danger to children, to adults who are vulnerable due to disability, or to the elderly. There are no state laws that address the issue of breaking confidentiality when animals are in danger or are being abused.

(21) Would you support a state law that gave practitioners permission to break confidentiality to report animal abuse and/or neglect to animal protection agencies (e.g. local SPCA, American Humane Association, local animal control, Animal Legal Defense Fund) in cases of animal abuse/neglect, if they chose to do so? (**circle one number**)

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(22) Would you support a state law that gave practitioners **permission to break** confidentiality to report animal abuse and/or neglect to law enforcement in cases of animal abuse/neglect, if they chose to do so? **(circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(23) Would you support a state law that **required practitioners to report** animal abuse and/or neglect (i.e. a mandated reporting law) to animal protection agencies (e.g. local ASPCA, American Humane Association, local animal control, Animal Legal Defense Fund) in cases of animal abuse/neglect? **(circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(24) Would you support a state law that **required practitioners to report** animal abuse and/or neglect (i.e. a mandated reporting law) to law enforcement in cases of animal abuse/neglect? **(circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(25) If you answered “Agree” or “Strongly Agree” to Questions 21 and/or 22 supporting **Permission to Report** rank all the reasons why you agreed with that statement in the column labeled **Permission to Report**. (If you did not agree or were uncertain, leave this column blank)

If you answered “Agree” “Strongly Agree” to Question 23 and/or 24 supporting **Required Reporting**, rank all the reasons why you agreed with that statement, in the column labeled **Required Reporting**. (If you did not agree or were uncertain, leave this column blank)

Permission To Report	Required Reporting	
_____	_____	By investigating animal abuse, we might discover people who are being abused.
_____	_____	It would be cruel to ignore the suffering of animals.
_____	_____	As a profession, psychology needs to convey an “ethic of caring” that includes treating every living being with respect and empathy.
_____	_____	An offender could potentially receive treatment if animal abuse is reported.
_____	_____	Animal abuse can be predictive of violence toward humans.
_____	_____	Animals are sentient beings and have the right to protection from harm.
_____	_____	Other _____

(26) If you answered “Disagree” or “Strongly Disagree” to Question 21 and/or 22 regarding Permission to Report, rank all the reasons why you disagreed with that statement in the column labeled Permission to report. (If you agreed with this statement or were uncertain, leave this column blank).

If you answered “Disagree” or “Strongly Disagree” to Question 23 and/or 24 regarding Required Reporting, rank all the reasons why you disagreed with that statement in the column labeled Required Reporting. (If you agreed with this statement or were uncertain, leave this column blank).

Permission To Report	Required Reporting	
_____	_____	I don’t want to impose my morality on my clients.
_____	_____	Breaking confidentiality would threaten the client’s welfare and the therapeutic relationship.
_____	_____	Focusing on animals may detract from the focus of therapy.

- | | | |
|-------|-------|---|
| _____ | _____ | I don't have the expertise to know when to make a report of animal abuse. |
| _____ | _____ | I would not feel comfortable bringing officials into the client's life. |
| _____ | _____ | I am concerned about potential litigation. |
| _____ | _____ | The definitions of animal abuse and neglect are unclear and not everyone would agree on the same definitions. |
| _____ | _____ | Because animals are considered to be property; we have no right to demand that everyone treat them humanely. |
| _____ | _____ | There are limited social resources to deal with child abuse much less animal abuse and/or neglect. |
| _____ | _____ | There is no sanctioned agency to accept reports of animal abuse/neglect. |
| _____ | _____ | Animal abuse/neglect is not as serious as other forms of violence and abuse. |
| _____ | _____ | Other _____ |

Appendix E: Intervention

1. In the United States, the FBI categorizes animal abuse/severe neglect as a Group B crime (like trespassing or writing bad checks).
 - i. True.
 - ii. False.

Answer: False. As of January 2016, the FBI changed its classification of nonhuman animal abuse from a Group B crime (like trespassing or writing bad checks) to a Group A felony, making it a top-tier federal crime., and started tracking and quantifying animal abuse crimes in hopes that such data collection will improve enforcement and accountability.

2. How many American households host at least one companion animal?
 - i. 29%
 - ii. 41%
 - iii. 65%
 - iv. 81%

Answer: 65% of American households share their home with a companion animal. 87% of them think of their furry (hairy, scaly, feathery...) friend not just as an animal, but a member of the family.

3. Under U.S. law, animals have the status of objects. Which country (ies) have granted animals the status of sentient beings?
 - i. Switzerland
 - ii. Germany
 - iii. France
 - iv. New Zealand
 - v. All of the above

Answer: All of the above. Switzerland, a leader in nonhuman animal rights, changed its constitution to grant animals a status of “beings” in 1992, followed by Germany in 2002, and France and New Zealand in 2015; Quebec followed suit in 2015, though limiting the sentient status to companion animals (Evans, 2010; Kelch, 2011; Hodgson, 2015). Additionally, the Balearic Islands went one step further by granting legal human rights to all great apes in 2007 (Waldau, 2011). Moreover, the European Union, as a whole has updated its laws to reflect the discoveries in the fields of biology and psychology, granting nonhuman animals the status of sentient beings, which led to a global transformation of farming and the food industry’s treatment of nonhuman animals, as well as increased legal responsibility for those charged with nonhuman animal abuse. (Singer, 2012).

4. People who are able to neglect or abuse their companion animal(s) are at increased risk of abusing children, the elderly, the disabled, and/or their spouse.
 - i. True
 - ii. False

Answer: True. If perpetrators are able to abuse or neglect a nonhuman animal they have a social and/or emotional bond with, they appear to be at increased risk of also abusing children, elders, and/or their spouse. The correlation appears to be influenced by multiple factors including, for example, the abuser's substance abuse, lack of emotional regulation, poor impulse control, or victimized children copying violent behavior against weaker family members (Long et al., 2007). Studies in family violence have shown that abused animals often share the home *and* victimization; these animals are frequently identified as the perpetrator's pet. Animal abuse might then be seen and referred to as a "different manifestation of the common denominator of family violence" (Tebault, 1999, p.13).

5. Witnessing violence against animals does not impact children negatively.
 - i. True
 - ii. False

Answer: False. Research further suggests that witnessing violence against nonhuman animals is also traumatizing; children who have witnessed violence toward animals, particularly the family pets, have suffered a negative impact on their emotional and interpersonal lives (Flynn, 1999; Robin & Ten Bensel, 1985; Robin, Ten Bensel, Quigley, & Anderson, 1983).

Sentience is the ability to feel, perceive or experience sensations, including enjoyment and pain. Historically, animals have been denied moral and legal rights on the basis that they are not sentient beings.

6. Research indicates that animals, particularly companion animals such as dogs, cats, or birds, do experience pain?
 - i. True
 - ii. False

Answer: True. Humans and nonhuman animals share many similar brain structures and neurochemicals. Humans and nonhuman animals demonstrate fear, another basic human emotion, when part of the amygdala is stimulated, and both humans and nonhuman animals with damaged amygdalae lose the ability to demonstrate normal fear behavior when fear is an appropriate response to a situation (Damasio 1994; Tangle, 2000). Research in multiple fields, including psychology, has demonstrated that nonhuman animals experience pain, along with a multitude of other emotions once thought to be specific to humans. Therefore, there is a consequence to animal abuse that animals are aware of and have an "interest" in avoiding: pain. Singer (1975) concluded that humans have an ethical duty to consider this "interest" of animals.

7. Research indicates that animals, particularly companion animals such as dogs, cats, horses, or birds, do NOT experience basic emotions such as happiness, sadness, anger, fear or disgust.
 - i. True

- ii. False

Answer: False. Over the course of many studies, Ekman (2007) distinguished among human facial expressions of six basic emotions: anger, fear, disgust, surprise, sadness and enjoyment. These emotions are said to be basic because they are not socially or culturally constructed, and appear to be adaptive, universal across cultures, and shared with other species, particularly primates (Paar, 2003). Animals such as rats, monkeys and dogs are commonly used to study human emotions, psychopathology, brain functioning, and drugs-related research because humans and nonhuman animals share many similar brain structures and neurochemicals. These include structures associated with basic emotions (Berridge, 2003). Examples of such studies range from how the hormone oxytocin has been shown to facilitate bonding and attachment in humans and other mammals, to how rats' reward system offered insight into both nonhuman and humans' formation of addictions. Some studies have actually identified the identical neurological basis for emotions in humans and other mammals (e.g., Berridge & Kringelbach, 2008; Damasio, 1994; Phelps & LeDoux, 2005; Tanglely, 2000). Closer to people's heart, dogs have long demonstrated empathy. For example, in humans, the susceptibility to yawn contagion has been related to our capacity for empathy (Romero, Konno & Hasegawa, 2013). It correlates with the level of attachment in several primate species, humans included. Dogs have also shown the ability to yawn contagiously (Romero et al., 2013; Silva, Bessa & de Sousa, 2012). More than a mere modeling behavior, dogs have been shown to yawn more frequently in response to a familiar person's yawning, as opposed to a stranger's, which may indicate their reaction is regulated by the level of emotional proximity. Along with other compelling data suggesting that "man's best friends" are extraordinarily well attuned to their human housemates, these studies suggest empathy is also present in domesticated dogs.

Happy animals:

<https://www.youtube.com/watch?v=WDPihzRI8mE>

<https://www.youtube.com/watch?v=RKBcs9tNWg8>

- 8. Research indicates that animals, particularly companion animals such as dogs, cats, horses, or birds, CANNOT reason, think, and learn, to possess short term and long term memory, have preferences, a sense of the future, intentions, perceptions, and the ability to act in the pursuit of a goal?
 - i. True
 - ii. False

Answer: False. Animal research has confirmed animals' ability to reason, think, and learn, to hold beliefs and desires, to possess short term and long term memory, have preferences, a sense of the future, intentions, perceptions, and the ability to act in the pursuit of a goal (e.g., Balda, Pepperberg & Kamil, 1998; Bekoff, 2009; Bekoff, 2013; Boissy et al., 2007; Pearce, 2013; Roitblat, Terrace & Bever, 2014; Wynne, 2001). Researchers have additionally found that multitude of species are capable of learning, remembering, problem solving, rule and concept formation, perception and recognition (e.g., Pepperberg, 2012).

Examples:

Bumblebees: <https://www.youtube.com/watch?v=gSCr5OxXN1A>.

Parrots: <https://www.youtube.com/watch?v=w8LepYR8v9A>

Dogs: <http://www.npr.org/sections/health-shots/2016/11/23/503072612/your-dog-remembers-every-move-you-make>

Chimpanzees: <https://www.youtube.com/watch?v=ZsSIKj5ULp4>

9. Some animals possess self-awareness.

- i. True
- ii. False

Answer: True. Self-awareness is another concept that has been used in arguments against moral obligations toward nonhuman animals. However, some studies have shown clear evidence that some nonhuman animals do have a notion of “I” (e.g., Bekoff, 2006; Patterson and Cohn, 1994). The common test for self-awareness is the Mirror test, used on nonhuman animals and human infants. This test is mostly adapted for nonhuman animals using vision as a primary tool to perceive the world. This unfortunately excludes dogs and cats, the most common pets in the United States, as they have limited vision and rely primarily on their sense of smell to navigate the world. However, apes have passed the test, along with bottlenose dolphins, orcas, elephants and even the European magpies, a kind of bird, demonstrating in all of these species a sense of self-recognition (Kelch, 2011).

10. Some animals are capable of distinguishing between fairness and inequity.

- i. True.
- ii. False.

Answer: True. Human cooperation is based on reciprocal altruism (i.e. we help people because they have either helped us in the past or they may help us in the future). This form of cooperation, however, is only possible when individuals are able to keep track of other individuals’ efforts and payoffs, and a sense of fairness helps with this. Recent research has revealed that inequity aversion is present in nonhuman animals as well, with positive results in rats (Oberliessen et al., 2016), dogs (Range, Horn, Viranyi, & Huber, 2009; Brucks, Essler, Marshall-Pescini, & Range, 2016), capuchin monkeys (Brosnan and de Waal, 2003), chimpanzees (Brosnan, Schiff, & de Waal, 2005), and possibly crows and ravens (Wascher and Bugnyar, 2013). In inequity aversion tests, one test subject received a reward for completing a task, while an experimental partner got a something they did not particularly like. Results showed that when they had to “work” for a reward and could see that their experimental partner received the reward as a “gift”, the animals tended to stop participating, ended the cooperation established. The fact that inequity aversion is present not only in a number of primate species, but also in dogs, corvids, and rats, suggests that this idea of fairness and cooperation is something that cooperative species have got in common which has enabled them to evolve sociability.

https://www.ted.com/talks/frans_de_waal_do_animals_have_morals

Appendix F: Post-Intervention Questions

(1) After taking this survey and quiz, are you more likely to inquire about animals in your clients' life in therapy (e.g. during the intake interview)?

Yes ____ No ____ Undecided/Unknown ____

The current APA ethical code permits breaking confidentiality when legal requirements demand it. Most states have identified limits to confidentiality when there is a threat of danger to the client, danger to others or risk of imminent danger to children, to adults who are vulnerable due to disability, or to the elderly. There are no state laws that address the issue of breaking confidentiality when animals are in danger or are being abused.

(2) Would you support a state law that gave practitioners **permission to break** confidentiality to report animal abuse and/or neglect to animal protection agencies (e.g. local SPCA, American Humane Association, local animal control, Animal Legal Defense Fund) in cases of animal abuse/neglect, if they chose to do so? **(Circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(3) Would you support a state law that gave practitioners **permission to break** confidentiality to report animal abuse and/or neglect to law enforcement in cases of animal abuse/neglect, if they chose to do so? **(Circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(4) Would you support a state law that **required practitioners to report** animal abuse and/or neglect (i.e. a mandated reporting law) to animal protection agencies (e.g. local ASPCA, American Humane Association, local animal control, Animal Legal Defense Fund) in cases of animal abuse/neglect? **(Circle one number)**

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(5) Would you support a state law that **required practitioners to report** animal abuse and/or neglect (i.e. a mandated reporting law) to law enforcement in cases of animal abuse/neglect?
(Circle one number)

Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1	2	3	4	5

(6) If you answered “Agree” or “Strongly Agree” to Questions 2 and/or 3 supporting **Permission to Report** rank all the reasons why you agreed with that statement in the column labeled **Permission to Report**. (If you did not agree or were uncertain, leave this column blank)

If you answered “Agree” “Strongly Agree” to Question 4 and/or 5 supporting **Required Reporting**, rank all the reasons why you agreed with that statement, in the column labeled **Required Reporting**. (If you did not agree or were uncertain, leave this column blank)

Permission To Report	Required Reporting	
_____	_____	by investigating animal abuse, we might discover people who are being abused.
_____	_____	It would be cruel to ignore the suffering of animals.
_____	_____	As a profession, psychology needs to convey an “ethic of caring” that includes treating every living being with respect and empathy.
_____	_____	An offender could potentially receive treatment if animal abuse is reported.
_____	_____	Animal abuse can be predictive of violence toward humans.
_____	_____	Animals are sentient beings and have the right to protection from harm.
_____	_____	Other _____

(7) If you answered “Disagree” or “Strongly Disagree” to Question 2 and/or 3 regarding **Permission to Report**, rank all the reasons why you disagreed with that statement in the column labeled **Permission to report**. (If you agreed with this statement or were uncertain, leave this column blank).

If you answered “Disagree” or “Strongly Disagree” to Question 4 and/or 5 regarding Required Reporting, rank all the reasons why you disagreed with that statement in the column labeled Required Reporting. (If you agreed with this statement or were uncertain, leave this column blank).

Permission To Report	Required Reporting	
_____	_____	I don't want to impose my morality on my clients.
_____	_____	Breaking confidentiality would threaten the client's welfare and the therapeutic relationship.
_____	_____	Focusing on animals may detract from the focus of therapy.
_____	_____	I don't have the expertise to know when to make a report of animal abuse.
_____	_____	I would not feel comfortable bringing officials into the client's life.
_____	_____	I am concerned about potential litigation.
_____	_____	The definitions of animal abuse and neglect are unclear and not everyone would agree on the same definitions.
_____	_____	Because animals are considered to be property; we have no right to demand that everyone treat them humanely.
_____	_____	There are limited social resources to deal with child abuse much less animal abuse.
_____	_____	There is no sanctioned agency to accept reports of animal abuse.
_____	_____	Animal abuse is not as serious as other forms of violence and abuse.
_____	_____	Other _____

Appendix G: Permissions

Email dated 09/12/2016 from Karen Schaefer, Ph.D. (XXXXXX@XXXXXX):

Hi Laetitia,

Attached is a copy of our survey – there is no fee associated with sending the survey. If you plan to use any part of the survey in your own research, I simply ask that you cite the article and state that you are using an updated version with permission from the authors.

Good luck with your research! Would love to hear back from you about your results...

Sincerely,

Karen

Director

Address: XXXXXXXX

Phone Number: XXX-XXX-XXXX

Email dated 07/18/2018, from Dr. Schaefer (XXXXXX@XXXXXX):

I give permission to Laetitia Geoffroy-Dallery to use and adapt the Animal Abuse Issues in Therapy survey instrument for her dissertation. I also understand and acknowledge that the dissertation (with an adapted version of the survey) will appear in two open access archives: aura.antioch.edu, and [https:// etd.ohiolink.edu](https://etd.ohiolink.edu), plus ProQuest Dissertations & Theses Global and print.

Best wishes,

Karen Schaefer, Ph.D.