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Animal Abuse and Psychopathy: Examining Psychopathic Personality Traits in both Animal Abusers and Non-Abusers

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ANIMAL ABUSE AND PSYCHOPATHY: EXAMINING
PSYCHOPATHIC PERSONALTY TRAITS IN BOTH
ANIMAL ABUSERS AND NON-ABUSERS

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts

Allison Renee Renegar

College of Humanities and Social Sciences
Criminology and Criminal Justice Department

August 2023

This thesis by: Allison Renee Renegar

Entitled: *Animal Abuse and Psychopathy: Examining Psychopathic Personality Traits in Both Animal Abusers and Non-Abusers*

has been approved as meeting the requirement for the degree of Master in the Arts in College of Humanities and Social Sciences in the Department of Criminology and Criminal Justice.

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ABSTRACT

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Despite the soaring popularity of household pets in America, very little thought is given about the rights of our domesticated animals to exist free from harm and abuse. Little research has been done concerning animal abuse as most studies measured animal abuse dichotomously, providing essentially no contextual information. The purpose of this study was to examine the relationship between psychopathy and animal abuse using the Psychopathic Personality Traits Scale (PPTS; Boduszek et al., 2016) and the Boat Inventory on Animal-Related Experiences (Boat Inventory; Boat, 1994) while accounting for other factors including what types of animals are abused and the methods of abuse. Similarly, this study used three regression models to compare psychopathy scores (using the PPTS) among participants who endorsed a history of hurting, torturing, or killing an animal, and then participants who did not. Overall, the results showed that individuals who had hurt, tortured, or killed an animal did, indeed, score higher on the PPTS than their non-abusing counterparts. More importantly, a history of abusing animals was a significant predictor of PPTS score. The results also provided descriptive data about the abuse, finding that dogs and cats were by far the most abused animal and the most popular abuse method included hitting, beating, or kicking an animal. Finally, three other factors acted as significant predictors across all three models: being female led to a significantly lower PPTS score while both abuse level and full-time employment positively affected PPTS score. Given the

possibility of an important relationship between animal abuse and psychopathy score, more

exploratory research is clearly warranted.

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CHAPTER I

INTRODUCTION

The purpose of this study was to examine the relationship between psychopathy and animal abuse using the Psychopathic Personality Traits Scale (PPTS; Boduszek et al., 2016) and the Boat Inventory on Animal-Related Experiences (Boat Inventory; Boat, 1994) while accounting for other factors including what types of animals are abused and the methods of abuse. The Federal Bureau of Investigations (FBI; 2019) defined animal abuse as "intentionally, knowingly, or recklessly taking an action that mistreats or kills any animal without just cause, such as torturing, tormenting, mutilation, maiming, poisoning, or abandonment" (p. 1). Numerous studies have investigated the associations among animal abuse, intimate partner violence (IPV), domestic violence (DV), and family conflict (Ascione & Shapiro, 2009; Chan & Wong, 2019; DeGue & DiLillo, 2009; Krienert et al., 2012; Long & Kulkarni, 2013; McPhedran, 2009; Newberry, 2017; Sauder, 2000; Trentham et al., 2017; White & Quick, 2019). Research beyond IPV has remained limited and even fewer researchers specifically examined the relationship between animal abuse and psychopathy (Dadds et al., 2006; Ireland et al., 2022; Rock et al., 2021; Schwartz et al., 2012). The aim of this study was to delve into a deeper, more thorough investigation of the association between animal abuse and psychopathy. Similarly, this study captured several aspects of animal abuse largely glossed over in research such as type of animal abuse and methods of abuse and cruelty.

The following paper is divided into several sections. First, the background of the topic is briefly discussed. Next, the need for the study is provided. From there, previous literature

surrounding the topic is examined. For this study, participants from the general U.S. population were recruited through Amazon's MechanicalTurk, an online survey recruiting platform, to participate in a self-report survey. Respondents took the PPTS, sections of the Boat Inventory, and a demographic questionnaire. Once data collection was completed, three parametric *t*-tests were performed comparing psychopathy scores (according to the PPTS) of participants who hurt, tortured, or killed animals against the scores of participants who did not endorse a history of animal abuse. Then, three regression models were run (for each level of abuse: hurt, torture, and kill) to help determine the strength of the correlation between animal abuse and psychopathy scores. Similarly, the regression models provided insight into what factors acted as predictors for psychopathic personality.

Background

According to the American Veterinary Medical Association (2018), more than 50% of Americans have at least one household pet. In fact, the American Society for the Prevention of Cruelty to Animals (2021) found that, in light of the COVID-19 pandemic, nearly one in five households acquired an animal—translating to nearly 23 million households according to the 2019 U.S. Census. According to the American Veterinary Medical Association (2022), individuals who worked remotely were eight times as likely to get a new pet in 2020. Animal abuse encompasses a range of behaviors including hoarding and neglect to the intentional harm, sexual assault, torture, or killing of a non-human animal. With millions of pet owners across the country, research has shown that instances of animal abuse and animal cruelty are bound to occur, often in tandem with domestic and family violence (Chan & Wong, 2019; Dadds et al., 2006; DeGue & DiLillo, 2009; Long & Kulkarni, 201; McPhedran, 2009; White & Quick, 2018). Suffering is not exclusive to humanity but unlike human victims, animals are unable to speak up

or defend themselves. They cannot call for help and report offenders to law enforcement, leaving them to endure further harm. Further, animal abuse is not exclusive to pets. Other offenses include animal abandonment, hoarding, poaching, bull fighting, fur farms, and puppy mills.

According to the Animal Legal Defense Fund (ALDF, n.d.), animals are considered property in the U.S. legal system, though animal rights vary greatly by state and municipality. For example, some states have clear standards for adequate care, protective laws, and a full range of penalties for neglect, cruelty, animal fighting, and torture (e.g., Maine, Illinois). Meanwhile, other states like New Mexico and Wyoming do not have well-defined care requirements, lack provisions for abuse and neglect, and have no laws against sexually assaulting animals (ALDF, n.d.). Indeed, viewing animals strictly as property might be problematic for a number of reasons; however, the most preeminent concern is that animals are often limited in protection under the law—particularly from cruelty and neglect (ALDF, n.d.). Usually, the abuse is perpetuated within a family's dwelling behind closed doors (DeGue & DiLillo, 2009; McPhedran, 2009; Wauthier & Williams, 2022). Thus, the extent of animal abuse and cruelty is difficult to capture with official statistics by police as it is likely more widespread than what comes to the attention of law enforcement. In fact, it was not until 2016 that the FBI (2019) started tracking cruelty to animals in their National Incident Based Reporting System and Uniform Crime Report; at least 1,421 instances of animal cruelty were reported. Although the specifics of each occurrence were not available to the public, the FBI categorized animal abuse as a "Class A" crime against society. Now that law enforcement agencies have started tracking animal abuse, researchers can further investigate its correlates and causes.

One particularly salient predictive factor brought to the attention of researchers in relation to animal abuse is psychopathy. According to the American Psychological Association (2020),

psychopathy is synonymous with antisocial personality disorder, which can manifest in several ways including deficient emotional capabilities, lack of empathy and guilt, poor behavioral control, and chronic disregard for the law and others. Another classic definition was given by Hervey Cleckley, author of *The Mask of Sanity*, in 1941. According to Cleckley (as cited in Boduszek et al., 2016), the typical psychopath would be characterized by the following 16 traits:

> (1) superficial charm; (2) absence of delusions; (3) absence of nervousness; (4) unreliability; (5) untruthfulness; (6) lack of remorse and shame; (7) antisocial behavior; (8) poor judgment and failure to learn by experience; (9) pathological egocentricity; (10) poverty in affective reactions; (11) loss of insight; (12) unresponsiveness in interpersonal relations; (13) fantastic and uninviting behavior; (14) suicide rarely carried out; (15) impersonal sex life; (16) failure to follow any life plan. (p. 9)

Psychopathic individuals are a considerably small part of the United States population. For instance, estimates have placed the prevalence of psychopathy in the general population at under 1% of non-institutionalized men over the age of 18 (Kiehl & Hoffman, 2011). Kiehl and Hoffman (2011) used data obtained from the 2010 Census Bureau to estimate that number to be around 1,150,000 psychopathic men in the U.S. population. That number jumps to 16% (translating to about 1,075,000 men) when estimating the prevalence of psychopathy in adult incarcerated males (Kiehl & Hoffman, 2011). With these estimates, Kiehl and Hoffman suggested that as many as 93% of adult male psychopaths are in some form of corrections (prison, jail, probation, or parole). According to end-of-year data from the Bureau of Justice Statistics (2020) and the Vera Institute of Justice (2022), between 1,215,821 and 1,814,800 individuals are in U.S. prison and jail systems. In 2020, the Bureau of Justice Statistics reported 1,132,767 adult males were under correctional authorities. Assuming Kiehl and Hoffman's

estimates are accurate, the author estimates that around 181,243 adult incarcerated men are psychopaths—a far reach from 1,075,000. It is important to note, however, that the data collection for Kiehl and Hoffman's study occurred the year after the United States hit its prison population peak as incarceration rates have dropped dramatically since 2009 (Carson, 2021).

Ample research demonstrated that animal abuse/cruelty often precedes other types of violence including arson, assault, child and elder abuse or neglect, IPV, and other forms of in-home domestic violence and aggression (Chan & Wong, 2019; Dadds et al., 2006; Kordzek, 2014; Long & Kulkarni, 2013; McPhedran, 2009; Rock et al., 2021; Sauder, 2000; White & Quick, 2019). Numerous studies examined the relationship between animal abuse and other types of abuse and violence (Ascione & Shapiro, 2009; Campbell, 2013; Chan & Wong, 2019; DeGue & DiLillo, 2009; Rock et al., 2021; White & Quick, 2019). Though now over a decade old, DeGue and DiLillo's (2009) study argued that one's exposure to animal abuse—and the degree of severity of that abuse—were associated with domestic violence or child maltreatment. Over half of the respondents (around 60%) in this study who witnessed or participated in animal abuse as a child also reported neglect, mistreatment, or domestic violence in the home. A more recent systematic review by Chan and Wong (2019) evaluated 87 studies and found a significant positive relationship between human-to-animal and human-to-human violence. Additionally, Chan and Wong's meta-analysis found the early onset of animal cruelty might be indicative of subsequent violence and antisocial behavior.

Need for the Study

The aim of this research was to investigate the association between animal abuse and psychopathic personality. Although the concept of psychopathic personality is nothing particularly novel, researchers have failed to agree on what qualities or attributes made an

individual a psychopath. Several researchers attempted to develop a measurement tool for psychopathic personality. For example, Boduszek et al. (2016) developed the PPTS, which included four primary factors of psychopathy: affective responsiveness, cognitive responsiveness, interpersonal manipulation, and egocentricity. Another more recent study by Bergstrøm and Farrington (2022) provided a 'cluster' of three traits—interpersonal factors, affective factors, and impulsive lifestyle factors. Other research, such as the Dadds et al. (2006) study, used callous-unemotional (CU) traits in their examination. Still others use the 'Dark Triad,' a set of three factors (narcissism, Machiavellianism, and psychopathy) in their studies (Flexon et al., 2016). A classic example is the Psychopathy Checklist, originally developed by Hare (1996) and revised into the Psychopathy Checklist-Revised (PCL-R) in 1990 by Hare et al. Today, the PCL-R is considered a highly established measure with consistent validity and psychometric properties (Hare et al., 1990). While there was no shortage of literature surrounding the topic, competing methods of classification remain. The relationship between psychopathy and animal cruelty is not well defined but has been established; additional empirical investigation is warranted if researchers wish to better understand the association.

Similarly, several studies attempted to define what constitutes a psychopathic personality and, in turn, how psychopathology is related to violent crime and aggressive behavior (Bergstrøm & Farrington, 2022; Boduszek et al., 2016; Flexon et al., 2016; Garofalo et al., 2018; Ridder & Kosson, 2018; Rock et al., 2021; Virtanen et al., 2022). Rock et al.'s (2021) study found that individuals who indicated a history of animal abuse scored significantly higher than non-abusers on the Psychopathy Checklist-Screening Version (PCL:SV), and similarly, abusers displayed higher scores on both Factor One (affective and interpersonal) and Factor Two (behavior and lifestyle) of the PCL.

The second psychopathy measurement used by Rock et al. (2021) was the Personality Inventory for DSM-5-Brief Form (PID-5-BF), which included five broad traits: negative affectivity, detachment, antagonism, disinhibition, and psychoticism. Interestingly, the researchers found those with a history of animal abuse did not score higher than non-abusers across the five domains. The DSM-5, however, is a measure for antisocial personality disorder (APD) and is not specific to psychopathy. Put more simply, one could meet the criteria for APD without fitting into the criteria for psychopathy but an individual who met the specifics for psychopathy would fall into the APD category.

Given that Rock et al.'s (2021) results differed greatly based on the instrument of measurement suggested the need for additional research in this area. Although the most recent literature by Rock et al. provided a good model demonstrating the relationship between psychopathy and animal abuse, as with any study, this study was not without limitations or directions for future research. First, the sample was relatively small ($N = 214$) consisting of county jail inmates in the southeast United States, which limited the generalizability of the findings. Second, only a fraction of those inmates (46 individuals or 21.5%) self-reported any animal abuse or cruelty, which limited additional analysis of the frequency, duration, or severity of the individual's exposure (or participation) in the abuse or cruelty.

By improving the sampling strategy and revising and improving the questionnaire used in previous studies, it is possible to achieve a more comprehensive understanding of animal-directed and human-directed violence. If animal abuse is truly a 'red flag' for domestic violence as DeGue and DiLillo (2009) argued, it is imperative that research continues to explore and uncover the nuances of this connection. The further exploration and measurement of the association between animal abuse and psychopathic personality traits, as investigated here,

expanded and addressed limitations of previous studies by obtaining a more representative sample from the population and expanding how researchers measured the many nuances of animal abuse—from type of animal abused to severity and method of abuse.

CHAPTER II

LITERATURE REVIEW

Animal Abuse Laws

Only a few federal-level laws serve to protect animals. The first and arguably most widely recognized is the Animal Welfare Act. Passed in 1966, the original statute mandated that laboratory animals (cats, dogs, rabbits, guinea pigs, and hamsters) are handled humanely and ethically by individuals certified by the U.S. Department of Agriculture (Adams & Larson, n.d.). The original law did not include farm animals or pet owners. Since its creation, there have been several amendments to the Act but even today, it is limited to animals used in research and experiments, animals to be sold, and animals used for exhibition purposes. However, over the last few decades, animal laws have gained much recognition due to the growing popularity of progressive animal rights activist groups and an increasing amount of individuals who consider their pets sentient familial members. Today, anti-cruelty laws are in place across all 50 states and animal abuse/cruelty can be prosecuted accordingly.

New York was the first state to pioneer a statewide anti-cruelty law in 1829, a first step that inspired other states to follow suit in the following decades. Sauder (2000) remarked, "In reality, this statute made destroying property, not animal abuse, a crime" (p. 3). Although drafted with good intentions, the original statute reflected an issue we still have difficulty overcoming today—nearly a century later: animals are still considered property under common law. This classification, along with the varying definitions of abuse and cruelty, makes it difficult to catch, prove, and prosecute offenders of this nature.

A more recent, qualitative inquiry into animal cruelty prosecution in New York interviewed several prosecuting attorneys to gain their thoughts and experiences with these types of cases. Kordzek (2014) shed light on a few important findings, reporting that cruelty cases are uniquely time consuming and face a rather large number of challenges. This was demonstrated by frequent reports of unclear law enforcement procedure/protocols, media uproar, limited resources for seized animals, and perhaps most concerning, many prosecutors experienced indifferent attitudes, dismissal, and uncooperative enforcing agents. While New York originally seemed quite progressive in this endeavor, it is clear that even today it is difficult to get animal abuse and cruelty cases taken seriously. Although all U.S. territories operate under their own animal protection legislation, it often varies by county across the state.

According to the ALDF (n.d.), animal protection laws vary by state jurisdiction. For example, in 2020, the ALDF ranked Maine as the state with the best animal protection laws and New Mexico was ranked at the bottom. Every year, the ALDF ranks each of the 50 states (and six U.S. territories) in their U.S. State Animal Laws Rankings report. States are ranked in one of three categories: top tier, middle tier, and bottom tier. The ALDF ranks states using 20 different categories of animal protection laws, ranging from the state's legal definition of an animal to the state's maximum penalties and statute of limitations. To put this into perspective, Maine's state animal laws provide well-defined care requirements and have animal advocacy programs. On the other hand, New Mexico failed to specify even the most basic standards for adequate care. Second, there are no felony provisions for neglect nor abandonment in the southwestern state. Third, there are no prohibitions in New Mexico on sexually assaulting animals. The disparities among jurisdictions could make it easier for individuals to escape conviction by crossing state

lines (Lynch & Genco, 2018). What is considered neglect in one state might not be considered neglect nor legally punishable in another jurisdiction.

Much like sex offender registries, animal abuse registries (AARs) have recently been implemented in the state of Tennessee (and some counties in New York) to track offenders. The inspiration behind AARs reflects the perceived utility and control of sex offender registries. That is, AARs similarly seek to inform both law enforcement and the public about registered abusers and their whereabouts, and potentially restrict abusers' ability to adopt, purchase, or work with animals (Lynch & Genco, 2018). Currently, only one state (Tennessee) and 17 counties across New York, Ohio, Illinois, and Florida have enacted AAR legislation. According to the National Humane Education Society (2020), nine states have legislation pending to implement AARs including Arizona, Connecticut, New York, Hawaii, Oregon, Pennsylvania, South Carolina, Vermont, and Virginia. As of 2023, legislation for these states is still pending. The support for AARs is largely a push for abuse and cruelty knowledge about known offenders. The use of AARs or cross-reporting systems, if widespread, might be used to prevent offenders from adopting, rescuing, or purchasing any animal, pet or not. Lynch and Genco's (2018) examination into AARs suggested that while the motivation behind AARs is to protect animals and reduce animal abuse, policymakers have not yet agreed on any universal sentence. While AARs might be one way to prevent offenders, another way involves identifying risk factors or personality traits associated with animal abuse and other types of violence. The next section includes a review of the research literature surrounding animal abuse and its relationship with psychopathy and violent crime.

Animal Abuse, Violence, and Psychopathy

One viable concern surrounding animal cruelty is its well-established 'link' or association with other types of violence (Ascione & Shapiro, 2009; Chan & Wong, 2019; DeGue & DiLillo, 2009; Long & Kulkarni, 2013; McPhedran, 2009; Rock et al., 2021; Sauder, 2000; Wauthier & Williams, 2022). An underlying theme present in the literature surrounded the relationship between animal abuse and domestic or interpersonal violence. For example, DeGue and DiLillo's (2009) study assessed 860 college students using self-report measures to record participant exposure to family violence and animal cruelty. Results indicated animal abuse might indeed be a 'red flag' for in-home violence. In fact, around 60% of participants who witnessed or participated in animal cruelty as a child also reported experiencing child maltreatment or domestic violence.

Further, McPhedran (2009) investigated the factor of empathy in aggressive behavior and animal abuse. She found a relationship among childhood exposure to violence, lack of prosocial parental behavior, and the development of a spectrum of violent behaviors. According to McPhedran, empathy levels were not the soul driver of aggression and abuse. She concluded that lack of empathy was only a part of the explanation for violence. In support of McPhedran's findings, Chan and Wong's (2019) meta-analysis ($N = 87$) found a positive relationship between childhood exposure to domestic violence and animal abuse and delinquency. Chan and Wong concluded that childhood exposure to domestic violence led to a higher likelihood of animal abuse and delinquency. Further, early onset of animal cruelty acts might be predictive of subsequent interpersonal violence or antisocial behavior (Chan & Wong, 2019). Overall, Chan and Wong argued that there was a relationship between animal abuse and subsequent human-to-

human violence that should be considered when identifying strategies to prevent further harm to both humans and animals alike.

In 2009, Hensley and Tallichat conducted a self-report study on male inmates incarcerated in two medium and one maximum-security southern prisons. The survey was retrospective and asked participants to self-report both animal abuse and their retrospective methods of the abuse. Although only 112 inmates reported engaging in animal abuse, nearly two thirds (64.3%) of those individuals reported shooting animals and just under half (44.6%) admitted to beating, hitting, or kicking animals. It should be noted here that because inmates could choose more than one method, the resulting cumulative percentage was higher than 100%. Further, Hensley and Tallichat found those who started abusing animals at a young age were more likely to have engaged in multiple acts of abuse. Those who started abusing young, and frequently abused at a young age, were more likely to choke animals. Inmates who reported choking and/or burning animals were more likely to have had sex with the animal. After conducting a multiple regression analysis, Hensley and Tallichat found that two methods— drowning and having sex with an animal—were statistically salient to the model. That is, individuals who drowned or had sex with animals at a young age were more likely to have engaged in and convicted of later acts of repeated interpersonal violence.

A study by Dadds et al. (2006) sought to examine the relationship among animal cruelty, family conflicts, and psychopathic traits in childhood. Childhood cruelty to animals (CCA) was noted in the article as a recognized part of the criteria for conduct disorder. In fact, the authors argued that adult violent offenders had disproportionally high rates of childhood cruelty to animals in their histories, further highlighting the connection between animal cruelty and later violence in adulthood. In their measures, Dadds et al. conceptualized psychopathy as a two-

factor concept: a lack of inhibitory control (i.e., impulsivity) paired with a lack of empathetic or emotional arousal (i.e., callous and unemotional traits). Predictors were assessed in groups. The first group of predictive variables included the number of pets and the child's age. The second group comprised of family variables including family conflict, father's education, and mother's education. The third set examined externalizing behavior and CU traits. The fourth assessed the relationship among those externalizing behaviors and CU traits.

Using the scores from the youth themselves, Dadds et al. (2006) found that among the sample of boys ($n = 67$), significant predictors included the mother's education and the interaction between externalizing behavior and CU traits. Lower levels of maternal education coupled with high CU-externalizing interactions were associated with higher levels of childhood cruelty to animals. For girls ($n = 64$), the only significant predictor was CU traits even when examining all factor variables. The parent reports did differ from the child reports and allowed the researchers to investigate perceptions from both the child and the parent. According to the parent reports, older males with low maternal education, high CU traits, and high externalizing behaviors were more likely to be cruel to animals. For parents of females, it was found that older girls with low-educated mothers, high CU traits, and high number of pets were most likely to be cruel or abusive toward animals. Overall, Dadds et al. found that children exhibiting CU traits were strongly associated with cruelty. Further, the authors suggested that childhood animal cruelty might be an early manifestation of a sub-group of children developing conduct disorders involving callous disregard and low empathy levels (Dadds et al., 2006).

In a similar study to the Dadds et al. (2006) investigation, Schwartz et al. (2012) examined the psychological profile of both male and female animal abusers. Although the sample was small ($N = 29$), the authors measured criminal thinking, illegal behavior, empathy,

bullying, and five-factor personality traits through self-report surveys. Schwartz et al. measured animal-related experiences through the Boat Inventory (Boat, 1994) which included experiences with both domestic and wild animals. The Boat Inventory is perhaps the most detailed measure of animal abuse, covering several areas of pet ownership and interactions. The Boat Inventory asks the participant about losing a pet, having a support animal, coercion and control of an animal, cruelty and killing, sexual interactions with an animal, and even attitudes about roadkill. Further, the Boat Inventory asked the age of the participant during these interactions, how many animals were involved, the type of animal, and prompted further description when necessary. Criminal thinking was measured by Schwartz et al. through the Texas Christian University Criminal Thinking Scales, a 36-item self-report scale assessing maladaptive thinking related to illegal behavior. Criminal behavior was measured using the Illegal Behaviors Checklist, which included a range of criminal actions from status offenses (buying alcohol underage) to violent crimes against other humans. Bullying was examined through the Revised Olweus Bully/Victim Questionnaire, which tested the participants for bullying behavior and victimization. To assess empathy and interpersonal skills, the Interpersonal Reactivity Index was used. Finally, to address personality traits, the Five Factor Model Rating Form was used to measure the five major personality aspects: openness, conscientiousness, extroversion, agreeableness, and neuroticism.

Interestingly, Schwartz et al. (2012) found that college-aged animal abusers scored higher than controls on the criminal thinking subscale of power orientation (i.e., the need to be in control of situations). Contrary to the authors' hypotheses, animal abusers and non-abusers did not differ in empathy ratings. However, animal abusers scored higher than controls in both criminal thinking and illegal behaviors. Further, animal abusers were more likely to be a bully or a bully-victim (i.e., one who has been bullied and bullies others). Finally, when examining

females, the abusers differed significantly in terms of overall criminal thinking and scored higher than female controls on the subscales of justification, power orientation, perspective taking, and empathy. Indeed, female animal abusers more closely resembled male abusers and controls than female controls.

A recent study by Ireland et al. (2022) specifically examined animal abuse proclivity (i.e., interest in, predisposition) in women. The study was conducted in two parts and participants were women from the general population (Study 1 had a total of 162 participants while Study 2 had 159). Few studies have focused on women, more specifically non-incarcerated women, and the results were unexpected. It is important to note the authors only measured animal abuse proclivity and not actual acts of animal abuse. Ireland et al.'s measures included the Animal Abuse Proclivity Scale, which captured the participant's interest in animal abuse, and focused on the individual's thrill, power, propensity to act upon their interests, and enjoying being watched. A second measure was the Reactive-Proactive Aggression Questionnaire, which was designed to measure both reactive (e.g., yelling at someone when they annoy you) and proactive (e.g., gotten others to gang up on someone) aggression. The third measure was the Psychopathic Processing and Personality Assessment, a 29-item scale measuring an individual's psychopathic traits. Next, Ireland et al. measured sadism with the Short Sadistic Impulse Scale. Finally, to address maladaptive personality functioning, the Level of Personality Functioning Scale was used.

Interestingly, in each sample of adult women, between a third and two thirds of the participants reported some interest in animal abuse (Ireland et al., 2022). In the first sample, Ireland et al. (2022) discovered that proactive aggression was associated with sadism, which was found to be associated with proclivity to abuse animals. Further, the authors found that proclivity to engage in animal abuse was more associated with proactive aggression than reactive

aggression, indicating that proclivity is a more controlled and planned form of aggression. Another interesting find was the effect of proactive aggression on animal abuse was predominately siphoned through callous and unemotional traits (unsympathetic and uncaring), but not psychopathic traits. Overall, Ireland et al.'s study demonstrated the importance of sadistic and CU traits, but not psychopathic traits, in relation to proclivity toward animal abuse.

A recent study by Rock et al. (2021) specifically investigated the relationship between animal abuse and psychopathic personality traits in a forensic sample of 214 jail inmates. The researchers used both the PCL:SV and the DSM-5-BF to measure psychopathy. A short self-report questionnaire measured animal abuse with the average age of first abuse at 13.36. Trained students conducted the interviews for the PCL:SV while the DSM-5-BF was a self-report measure. The PCL:SV measured two factors. Factor one focused on interpersonal and affective aspects while factor two focused on lifestyle and behavior properties. Within these two factors, four psychopathy facets were measured: interpersonal, affective, impulsivity, and antisocial. Of the sample, only 46 of the participants (21.5%) endorsed a history of animal abuse. Using both measures on their sample ($N = 214$), Rock et al. found that animal abusers scored higher on the PCL:SV total score than non-abusers; however, the differences in abusers and non-abusers were insignificant when examining the DSM-5-BF. One reason for this inconsistency might be due to the DSM-5-BF measuring for APD and not psychopathy. Although psychopathy falls within the realm of APD, many individuals with APD are not psychopaths. Analysis of the factors and the facet scores of the PCL:SV found significant differences across groups. Abusers scored significantly higher than non-abusers on all four facets of psychopathy. A binary logistic regression demonstrated that the PCL:SV affective facet was the sole, unique predictor of animal abuse.

Measuring Psychopathy

The most well-known measures of psychopathy are Hare's PCL and the PCL-R (Cooke et al., 1999; Hare et al., 1990); a version of it has been used in several studies examining psychopathy (Bergstrøm & Farrington, 2022; Jonason & Webster, 2010; Ridder & Kosson, 2018; Rock et al., 2021). The PCL and the PCL-R are both known for their sound psychometric properties and reliability. The PCL consists of both personality and behavioral items; it is important to note that the PCL measures psychopathy through two factors. Factor one reflects interpersonal and affective facets of psychopathy including callousness, remorselessness, or selfish behavior. Factor two examines social deviance and antisocial behavior.

A more recently developed measure for psychopathy was introduced by Boduszek et al. in 2016. Using systematic sampling from 10 maximum- and medium-security prisons, Boduszek et al. ended up with 1,794 participants. Aside from the authors' psychopathy scale, several other measures were conducted: a Measure of Criminal Social Identity, a Self-Esteem Measure for Criminals, a Child Sexual Abuse Myth Scale, a measure for Attitudes Toward Male Sexual Dating Violence, and a Lie Scale. Boduszek et al.'s psychopathy measure, the PPTS, was designed to assess psychopathic personality traits through four factors: affective responsiveness (i.e., low empathy and emotional shallowness), cognitive responsiveness (i.e., one's ability to understand other's emotional states, cognitively engage emotionally, and mentally represent another's emotional process), interpersonal manipulation (i.e., superficial charm, grandiosity, deceitfulness), and egocentricity (i.e., focus on one's own beliefs, interests, and attitudes). The PPTS consists of 20 items with five statements for each of the four factors. Further, the measure includes two method factors—the first centers around knowledge and skills while the second involves attitudes and beliefs. For each of the 20-items, participants were instructed to choose

whether they agreed or disagreed—or, in other words, whether participants identified the trait as present or absent. Composite reliability was performed and demonstrated adequate to good reliability (between .69 and .86) for all four factors.

Although all the studies discussed above have contributed to the research on animal abuse and psychopathy, each study was not without limitations. While Chan and Wong's (2019) meta-analysis examined nearly 90 different studies, the authors noted that older studies had several discrepancies, making it difficult to draw strong conclusions from the literature. Hensley and Tallichat's (2009) investigation utilized a representative forensic population and examined varying methods and frequency of animal abuse. However, Hensley and Tallichat faced low response rates and only surveyed males. Both Dadds et al. (2006) and Schwartz et al. (2012) assessed males and females but both studies had small sample sizes and varying results. Ireland et al.'s (2022) study was one of very few that specifically examined women but their study only measured animal abuse proclivity (i.e., interest in) and not actual acts of animal abuse.

Rock et al.'s (2021) article was among the most thorough in terms of measuring personality traits and psychopathy in male and female jail inmates. The authors trained students to conduct two- to three-hour interviews to assess the participant and determine a PCL:SV score. However, Rock et al. noted the short version of the PCL might have missed indicators of the concept. Further, they did not measure the type, frequency, or the severity of animal abuse.

Boduszek et al. (2016) had a sizable sample of 1,794 and a strong multi-trait multi-method model. In fact, Boduszek et al. managed to create and validate a self-report scale of psychopathic personality traits. While the scale had evidence to support its validity and reliability, Boduszek et al. argued for further scale development research as their sample consisted of Polish prisoners and thus might not be generalizable to the general public. Further

research and application of the PPTS would test the scale's validity and reliability across different groups of individuals.

This study was specifically concerned with measures of animal abuse and psychopathy. In the past, much of the criminological research surrounding animal abuse measured the concept with a binary "yes" or "no," failing to capture other important details about the abuse. Psychopathy has been measured in several ways; the DSM-5 and PCL-R are among the most widely recognized and validated measurements. The DSM-5 is used most often in clinical conditions by licensed psychiatrists and does not include a specific measure for psychopathy, instead measuring for APD. The problem with this, as mentioned earlier, was many people expressing psychopathic personality traits fell into the realm of APD but most people with APD are not psychopaths. The PCL-R is arguably the most well-known measure for psychopathy as it has been validated consistently throughout the literature. The PCL-R, however, requires trained professionals and several hours of the participant's time. The purpose of this study was to examine the relationship between psychopathy and animal abuse using the Psychopathic Personality Traits Scale (PPTS; Boduszek et al., 2016) and the Boat Inventory on Animal-Related Experiences (Boat Inventory; Boat, 1994) while accounting for other factors including what types of animals are abused and the methods of abuse. Both measures consist of 20 items and are in the form of a self-report survey. As such, the following research question(s) guided this study:

Q1   Is there a positive relationship between animal abuse (IV) and psychopathy (DV)?

Q2   Which factors predict psychopathy (DV) while controlling for demographic variables?

CHAPTER III

RESEARCH METHODOLOGY

To answer the research questions, a cross-sectional and retrospective online survey was administered to adults in the United States. The sample ($N = 200$) consisted of a panel recruited by Amazon's Mechanical Turk (MTurk) survey platform. The survey, which was created using the Qualtrics online survey-building platform, consisted of questions relating to the individual's psychopathic personality traits as well as the individual's experiences with animals.

Participants and Research Design

Because the current study was conducted via an online survey, an anonymous Qualtrics link was posted to MTurk for distribution. A random number generator included at the end of the Qualtrics survey provided a unique four-digit code the participants used to receive payment for their time. Heen et al.'s (2014) examination of online survey platforms compared three popular websites (Mechanical Turk, Qualtrics, and Survey Monkey) to one another. Overall, Qualtrics was found to be the most representative of the U.S. population while also wielding the lowest discrepancy rate of the three. However, due to the significant cost difference between Qualtrics and MTurk, MTurk was chosen for affordability. The group in question was the general U.S. population but the study population was individuals in the United States over the age of 18 with internet access. The use of a survey through MTurk provided systematic, wide-ranging data without the time and financial constraints of mailing physical surveys or face-to-face interviews. The sampling strategy employed a non-probabilistic quota sampling of 200 participants. MTurk administered the survey to potential participants in the sampling frame.

Procedures

Before administering the survey, Institutional Review Board approval was obtained through the University of Northern Colorado (see Appendix A). MTurk then invited a number of potential respondents to participate in the survey. This invitation was vague in description to avoid self-selection bias and told the potential participant how long the survey would take. Further, this invitation emphasized that the survey was strictly for research purposes only. No identifying information was retained and participation was completely voluntary. Potential participants were provided with informed consent which explains the risks/benefits associated with participation in the study (see Appendix B). Recruits made an informed decision to consent to participate in the survey and could withdraw at any time. The survey was completely voluntary and anonymous. No names, residences, or personal data were collected to ensure that no identifying features are documented or shared. Demographics were recorded for analysis (i.e., to describe the sample and compare to the general population for representativeness). If a recruit did not consent to participate, they were thanked for their interest and redirected out of the survey. If a recruit consented to participate, they first answered a series of demographic questions. Next, the participant completed the PPTS questionnaire. Lastly, the participant was then be directed to complete the selected items from the Boat Inventory. Upon completion of the survey, participants were thanked for their participation, debriefed on the study, and provided with researcher contact information. A random number generator included at the end of the Qualtrics survey provided unique four-digit codes for each individual, which allowed participants to be compensated in relation to their agreement with the panel vendor. A validity question was added to the survey to ensure that participants were paying attention while completing the survey. This was added to avoid response sets.

Measures

The dependent variable in this study was psychopathic personality traits. To measure this concept, the PPTS was utilized (see Appendix C; see Appendix D for permission to use the PPTS). The PPTS was developed and tested on a sample of 1,794 Polish prisoners by Boduszek et al. in 2016. This 20-item scale was developed to assess psychopathic traits in both forensic and non-forensic populations. The scale measures across four latent factors: affective responsiveness (Factor 1), cognitive responsiveness (Factor 2), interpersonal manipulation (Factor 3), and egocentricity (Factor 4). Each subscale has five items that are answered with either *agree* or *disagree*. Affective responsiveness refers to the characteristics of emotional shallowness and low empathy. Items measuring affective responsiveness included "I don't care if I upset someone to get what I want," "What other people feel doesn't concern me," "Seeing people cry doesn't really upset me," "I tend to get emotionally involved with a friend's problems" (reverse-coded), "I get filled with sorrow when people talk about the death of their loved ones" (reverse-coded). Cognitive responsiveness measures the ability to understand another's emotional state and processes and emotionally engage with others at a cognitive level. Cognitive responsiveness items included "Before criticizing somebody, I try to imagine and understand how it would make them feel" (reverse-coded), "I always try to consider the other person's feelings before I do something" (reverse-coded), "I am good at predicting how someone will feel" (reverse-coded), "I am quick to spot when someone is feeling awkward or uncomfortable" (reverse-coded), and "I find it difficult to understand what other people feel." Interpersonal manipulation assesses characteristics of grandiosity, deceitfulness, and superficial charm. Items concerning interpersonal manipulation included "I know how to make another person feel guilty," "I know how to pay someone compliments to get something out of them," "I know how to stimulate

emotions like pain and hurt to make others feel sorry for me," "Sometimes I provoke people on purpose to see their reaction," and "Sometimes I tell people what they want to hear to get what I want from them." Egocentricity measures the tendency of an individual to focus on their own attitudes, beliefs, and interests. Egocentricity items included "I tend to focus on my own thoughts and ideas rather than on what others might be thinking," "I don't usually appreciate the other person's viewpoint if I don't agree with it," "In general, I'm only willing to help other people if doing so will benefit me as well," "I believe in the motto: 'I'll scratch your back, if you scratch mine,'" and finally, "It is natural for human behavior to be motivated by self-interest." Participants were asked to respond to each of the above items with either *agree,* coded as 1 indicating the trait as present, or *disagree*, coded as 0 indicating the trait's absence. Items 2, 6, 10, 13, 14, and 17 were reverse-coded as noted above. Scores ranged from 0-20, with higher scores indicating higher levels of psychopathic personality traits. Each of the factors was measured through two 'method' factors: knowledge/skills and attitudes/beliefs. Behavior measures were not included to avoid tautological reasoning (i.e., using the premises as the conclusion; circular arguments). Two of the items on the PPTS were deleted somewhere between the Qualtrics survey and the MTurk platform (see discussion for more details)

This research measured animal abuse as the main independent variable. Few studies have measured animal abuse in a verified, systematic way; however, the current study utilized the Boat Inventory (see Appendix E; see Appendix F for permission to use the Boat Inventory). As the name suggests, the retrospective inventory examined the participant's experiences with animals. In its entirety, the Boat Inventory was designed to capture an array of animal involvement—from pet loss to the individual's attitudes about roadkill. For the purposes of the current study, questions specific to animal abuse and cruelty were utilized. Abuse severity was

measured across three questions, each a more severe level than the last. First, participants were asked "Have you ever deliberately *hurt* a pet or animal in a cruel way?" If the participant chose no, they moved on to the next question. If the participant answered yes, they were prompted to answer the following items: "What kind (of animal)? (circle all that apply)" with the response categories (0) Dog(s), (1) Cat(s), (3) Bird(s), (4) Fish, (5) Horse(s), (6) Turtles, snakes, lizards, insects, etc., (7) Rabbits, hamsters, mice, guinea pigs, gerbils, and (8) Wild animals (please describe); "How many (of the chosen animal)?" with a type-in number box; "What did you do to hurt, torture, or kill the pet or animal? (choose all that apply)" with the response categories including (1) Drowned, (2) Hit, beat, kicked, (3) Stoned, (4) Shot (BB gun, bow and arrow), (5) Strangled, (6) Stabbed, (7) Burned, (8) Starved or neglected, (9) Trapped, (10) Had sex with it, and (11) Other (please describe); "How many times?" with a type-in response box; "What happened afterward?" with a type-in response box; "How old were you?" with categories including (1) Under age 6, (2) 6-12 years, (3) Teenager, and (4) Adult; and finally, "Were you alone when you did this?" with (0) yes and (1) no response categories. Then, participants are asked whether they had *tortured* a pet or animal, with the same follow up questions. The last severity level question asked whether participants had deliberately *killed* a pet or animal, following the same follow up format as the previous severity level item. Next, all participants were asked, "Have YOU ever given animals any drugs? (alcohol, pot, etc.)" If yes, the participant was asked to describe the occurrence. Participants were then asked "Have you ever made animals fight?" If yes, the individual was asked to describe. Lastly, participants were asked, "Have you ever done sex acts or sexual touching with animals?" If yes, participant were asked to describe what type of animal and what they did or were made to do, along with follow-up items "Who made you do this? (if applicable)" with responses including (1) Friend or

acquaintance, (2) Family member or relative, (3) Stranger, and (4) Other, with a description

prompt; and "How old were you? (circle all that apply)" with answer choices including (1)

Under age 6, (2) 6-12 years old, (3) Teenager, and (4) Adult.

To capture basic demographics of the sample, respondents were asked several questions.

The first asked "What is your age?" with a blank space for the write-in response. Second was

"What is your sex?" with the response categories being (0) male, (1) female, or (2) other. Third

was "What is your ethnicity?" with the response categories including (0) White, (1) Hispanic or

Latino, (2) Black or African American, (3) Native American or American Indian, (4) Asian, (5)

Pacific Islander, or (6) other. Next, the survey inquired "What is your marital status?" with the

response categories being (0) single (never married), (1) married, (2) divorced, (3) widowed, or

(4) separated. Next, the survey asked, "What is your highest level of education?" with the

responses including (0) less than eighth grade, (1) some high school, (2) high school

diploma/GED, (3) some college, (4) associate degree, (5) tech/trade/vocational training, (6)

bachelor's degree, and finally, (7) graduate degree. Then, the questionnaire asked, "Are you

employed?" and the responses included (0) unemployed, (1) employed part time, (2) employed

full time, (3) self-employed, and (4) employed—other. Finally, household income was recorded

on a scale: with the options being (1) less than $15,000, (2) $15,000 - $29,999, (3) $30,000-

$49,999, (4) $50,000-$74,999, (5) $75,000-$99,999, (6) $100,000-$150,000, and (7) more than

$150,000.

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Analysis

</div>

After the data were collected, they were analyzed through preliminary univariate and

bivariate analyses to screen for errors and abnormalities and to assess the distribution of the data

including measures of central tendency and dispersion, cross tabulations, and correlations. In the

primary analysis, the following hypothesis tests were performed to assess the relationship

between psychopathy and animal abuse.

> H1   Individuals who disclose that they have purposefully hurt, tortured, and/or killed an animal will score higher on the PPTS.
>
> H2   There will be a positive relationship between psychopathy and the severity level of self-reported animal abuse.

To test the above hypotheses, the following regression model was utilized:

$$y_{\text{PTTS Score}} = \beta_0 + \beta_1 x_{AbuseLevel} + \beta_2 x_{\text{Gender(Male)}} + \beta_3 x_{\text{Age}} + \beta_4 x_{\text{Race(White)}} +$$

$$\beta_5 x_{\text{MaritalStatus(Married)}} + \beta_6 x_{\text{employment}} + \beta_7 x_{\text{communitytype}} + \beta_7 x_{\text{education}} + \varepsilon$$

For Hypothesis 1, participants are separated into two groups: those who indicated they

had harmed an animal (abusers) and those who did not (non-abusers). Several *t*-tests assessed

any significant differences in psychopathy scores (according to the PPTS) between the two

independent groups. Hypothesis 2 was different as it only concerned animal abusers. Using the

formula above, three regression models were run through IBM's Statistical Package for the

Social Sciences (SPSS) for analysis. A regression analysis was chosen for the study because it

allowed examination of several independent variables and revealed the association between each

independent variable and the overall dependent variable. The three regression models each

included the same demographic variables, only differing in level of abuse. In this case, the first

regression included a variable determining whether or not a participant *hurt* an animal. The

second regression concerned whether or not a participant *tortured* an animal, and the third

included whether or not the participant *killed* an animal. Through the regressions, the author was

able to compare PPTS means and estimate the impact of each independent variable on PPTS

scores.

Further, the regression model helped determine which factors (if any) acted as a predictor of psychopathy while controlling for demographic factors. While not included in the regression model, other supplemental data were collected and are presented in the results section. This data included what type of animal was hurt, tortured, and/or killed.

Validity and Reliability of Measures

Although the DSM-5 and the PCL-R are two of the most well-known and verified measures of personality, neither was used in the current study. The DSM-5 is well-established but does not measure specifically for psychopathy. Instead, it measures a host of personality disorders with psychopathy falling under the antisocial personality disorder (APD) umbrella. This was problematic for several reasons. First, the DSM-5 uses APD and psychopathy synonymously, though it could be argued that they should be considered distinct and independent. Second, most people who displayed psychopathic personality traits fall into the APD realm; however, many individuals who have APD are not psychopaths.

The PCL, PCL-R, and even the PCL-Short Version are lengthy, costly, require trained personnel to perform the interview, and entail access to criminal record and case history. Thus, while popular options for measuring psychopathy and highly regarded by researchers, they were simply too expensive and time-consuming to consider. Further, current research is an online questionnaire, and it would be virtually impossible to conduct according to the appropriate procedures.

Indeed, psychopathy is not an observable entity that can be measured directly. However, due to the existing knowledge and theory, it is possible to measure psychopathy through a collection of traits or indicators such as selfishness, manipulativeness, callousness, remorselessness, grandiosity, impulsivity, or shallow affect. The PPTS measures both the

interpersonal and affective traits of psychopathy, as described by Hare (1996) while also measuring the participant's cognitive responsiveness and egocentricity. Each of the factors of the PPTS is measured with five questions spread throughout the questionnaire to test all aspects of the construct.

CHAPTER IV

ANALYSIS

Results

The purpose of this study was to examine the relationship between psychopathy and

animal abuse using the PPTS (Boduszek et al., 2016) and the Boat Inventory (Boat, 1994) while

accounting for other factors including what types of animals are abused and the methods of

abuse. For this study, the target number of participants was 200. While there were 200

participants, 16 individuals had to be excluded, leaving a final participant count of 184. The

excluded individuals did not provide sufficient data (failed to answer one or more necessary

questions) to be considered for fair analysis. Similarly, an unexpected computing error between

Qualtrics and MTurk cut the PPTS down to 18 items instead of 20 (see discussion). It is

important to note that while two questions went unanswered, all factors of the PPTS were

properly represented. With 18 items, the scale still displayed an acceptable Cronbach's alpha

value ($\alpha = .78$).

Descriptive Statistics

Table 1 shows participant demographic information. The data showed that most

participants were male (61.1%) and the vast majority identified as White (88.5%). The age

ranged from 22 to 73. More than three-quarters of individuals reported being married. Most

participants held a bachelor's degree (69.3%); interestingly, this was followed by graduate

degrees (master's or doctorate) at 11.1%. Most participants also reported being employed full-

time (86.3%). Over 95% (95.6%) stated they lived in communities with more than 50,000 people

but only 62% claimed to live in an urban environment. Finally, household income was scored on

a scale from 1 (less than $15,000 a year) through 7 (more than $150,000 per year). As shown on

the table, more than half answered they made between $30,000 and $75,000 per year.

Table 1

Demographic Data for Survey Participants

Variable	N	%
Sex		
Non-Female	121	61.1
Female	77	38.9
Ethnicity		
White	177	5.0
Hispanic/Latino	1	.50
Black/African American	3	1.5
Native/Indian American	5	2.5
Asian	13	6.5
Other	1	.50
Marital Status		
Single (never married)	42	21.0
Married	152	76.0
Divorced	5	2.5
Separated	1	.50
Education		
Some High School	1	.50
General Equivalency Diploma/ High School Diploma	20	10.1
Some College	9	4.5
Associate Degree	8	4.0
Tech/Trade/Vocational	1	.50
Bachelor's Degree	138	69.3
Graduate Degree	22	11.1
Employment		
Unemployed	3	1.5
Employed Part-Time	17	8.6
Employed Full-Time	170	86.3
Self-Employed	7	3.6
Community Type		
Urban	124	62.0
Rural or Suburban	76	38.0

Table 1 Continued

Variable	*M*	*SD*
Average Age	36.97	10.59
Household Income	3.51	1.25

Part of this study was designed to explore aspects of animal abuse that had been previously overlooked in research: namely, what kind of animals were abused and exactly *how* they were abused. Table 2 provides insight into types of animals abused. Because dogs and cats are among the most common and prevalent household animals, it was perhaps unsurprising that dogs and cats were chosen most often. Dogs, however, were by far the most popular option, being chosen a total of 81 times; cats followed with a total of 57. Interestingly, birds were the third most prevalent option, being chosen 23 times, while fish followed closely with 20 reports of abuse. The other animal types were chosen far less frequently: horses were chosen a total of nine times; rabbits, hamsters, mice, guinea pigs, gerbils, etc. were chosen eight times; turtles, snakes, lizards, insects, etc. were chosen a total of six times; and wild animals were chosen only thrice.

Table 2

Level of Abuse and Types of Animals Abused: Frequencies

Animal Type	Animals Hurt	Animals Tortured	Animals Killed
Dog(s)	46	24	11
Cat(s)	32	15	10
Bird(s)	8	7	8
Fish	6	8	6
Horse(s)	6	2	1
Turtles, snakes, etc.	3	3	0
Rabbits, hamsters, etc.	3	4	1
Wild animals	2	1	0

Recording methods of abuse, while unpleasant, provides new data for researchers, shining a light on what people do in order to abuse animals. As shown in Table 3, 10 different methods of abuse were chosen. Hitting, beating, and kicking an animal were undoubtedly the most common abuse method as it was selected a total of 47 times. Stoning an animal also seemed to be a popular option as it was selected 36 times. This was followed by drowning, which was chosen 35 times. Strangling and stabbing an animal had similar instances, being selected 23 and 22 times, respectively. Both trapping an animal and burning an animal were selected a total of 17 times each. Shooting an animal (with a BB gun or a bow and arrow) was chosen 11 times. Starving or neglecting an animal was reported nine times. Finally, there were six total reports of participants having sex with animals.

Table 3

Level of Abuse and Method of Abuse: Frequencies

Abuse Method	Animals Hurt	Animals Tortured	Animals Killed
Drowned	15	13	7
Hit, Beat, Kicked	30	12	5
Stoned	18	14	4
Shot (BB, Bow & Arrow	7	4	0
Strangled	12	6	5
Stabbed	12	6	4
Burned	6	8	3
Starved/Neglected	5	3	1
Trapped	12	4	1
Had sex with it	3	3	0

Regression Model

Before running the regression model, several parametric *t*-tests were performed. Independent *t*-tests were used to determine whether there was a significant difference of means between two groups. For this study, three *t*-tests were utilized. The first *t*-test compared PPTS score means between participants who had purposefully hurt an animal and those who did not. The 48 individuals who had hurt an animal ($M = 12.35$, $SD = 3.27$) had higher PPTS scores than the 136 participants who had not hurt an animal ($M = 10.01$, $SD = 3.48$), $t(182) = 4.07$, $p < .001$. The second *t*-test compared PPTS means between the 28 participants who had deliberately tortured an animal ($M = 13.04$, $SD = 3.20$) and the 156 who had not ($M = 10.19$, $SD = 3.47$), finding again that individuals who tortured an animal scored significantly higher than those who did not, $t(182)$, 4.04, $p < .001$. The last *t*-test compared PPTS scores between 19 individuals who reported killing an animal ($M = 13$, $SD = 3.21$) and the 165 who had not ($M = 10.35$, $SD = 3.51$), $t(182)$, 3.14, $p = .002$. Interestingly, while those who killed an animal did indeed score higher on the PPTS than those who had not, the difference in means was less significant than the disparity between participants who tortured animals and the individuals who had not.

In order to run the regression model, several variables had to be recoded. Because the overwhelming majority of participants were male, sex was recoded into "female" and "non-female." Ethnicity was recoded into "White" and "Non-White," while community type was recoded into "urban" and "rural or suburban." Marital status was coded into "married" and "not married." Education was coded into "Bachelor or Graduate" and "Non-bachelor." Finally, employment was recoded into "employed full-time" and "not employed full-time."

Three regression models were created and run through SPSS. All three models had a dependent variable of PPTS score. The main independent variable for each model was animal

abuse level (hurt, torture, or kill) while control factors included employment status, ethnicity, community type, community density, household income, education, and marital status. Cohen's (1988) categorizations of effect sizes were used to determine the impact of the beta value for each model. A value of 0.10-0.29 is considered small, 0.30-0.49 is considered medium, and 0.50 or more is considered large.

Model 1 focused specifically on whether hurting an animal acted as a predictor for psychopathy score while controlling for demographic variables. The model was found to be statistically significant (see Table 4) overall ($r^2 = .172$, $F(9, 168) = 5.1$, $p < .001$). The model then accounted for 17.2% of the variance in PPTS score. Three predictor variables were found to be statistically significant. The first significant variable was sex (reported as "female"), which had a beta value of -.256 and a corresponding B-coefficient of -1.87 ($p < .001$). The next significant variable of this model was level/severity of abuse (reported as Animal Hurt in Table 4), which had a beta value of .252 and a B-coefficient of 2.02 ($p < .001$). Lastly, full-time employment had a beta value of .043 with a B-coefficient of 1.62 ($p = .043$). In other words, while all three effect sizes were considered small, full-time employment and reporting hurting an animal had a positive impact on PPTS score. Being female, on the other hand, had a negative effect on the PPTS. B-coefficients represented the raw point difference from the mean, which is either increased (positive values) or decreased (with negative values). For Model 1 then, being female led to a 1.87 decrease in PPTS score. Hurting an animal led to an increase of 2.02 points on the PPTS. Being employed full-time contributed to a 1.62 point increase.

Table 4

Regression Table Comparing Psychopathic Personality Traits Scale Scores of Those Who Self-Reported Hurting Animals

Variable	B-Coefficient	*P*-value	Beta
Female*	-1.87	<.001	-.255
Animal Hurt*	2.02	<.001	.252
Full-Time Employment*	1.62	.043	.162
Community Density	-2.15	.099	NS
Married	.878	.203	NS
Ethnicity	1.14	.178	NS
Urban	.508	.338	NS
Bachelor Education	-.434	.507	NS
Household Income	-.045	.829	NS

Note: DV = PPTS Score
r^2 adjusted = 0.172
*p < .05

Model 2 included the same demographic variables but abuse level was changed from animal hurt to animal tortured. This model was found to be slightly more significant than Model 1 (see Table 5), (r^2 = .181, $F(9, 168)$ = 5.34, $p < .001$), explaining 18.1% of variance. Much like the previous model, only three factors proved significant. Abuse level/severity (reported as Animal Tortured in Table 5) was found to be statistically significant at $p < .001$, with a beta value of .268 and corresponding B-coefficient of 2.68. Being female had a negative effect on PPTS scores with a beta value of -.258 and a B-coefficient of -1.89 ($p < .001$). Finally, full-time employment had a beta value of .179 and a B-coefficient of 1.78 ($p = .026$).

Table 5

Regression Table Comparing Psychopathic Personality Traits Scale Scores of Those Who Self-Reported Torturing Animals

Variable	B-Coefficient	*P*-value	Beta
Animal Tortured*	2.68	<.001	.268
Female*	-1.89	<.001	-.258
Full-Time Employment*	1.78	.026	.179
Community Density	-1.99	.124	-.112
Married	.918	.179	.110
Ethnicity	1.16	.169	.104
Urban	.513	.330	.070
Bachelor Education	-.491	.449	-.055
Household Income	-.004	.986	-.001

Note: DV = PPTS Score
r^2 adjusted = .181
p < .05

The third and final model swapped level of abuse once more from Animal Tortured to Animal Killed (see Table 6). Interestingly, Model 3 was the least powerful, explaining only 15.3% of variance (r^2 = .153, F (9, 168) = 4.54, p < .001). Unlike Models 1 and 2, four variables were found to be statistically significant. The most impactful variable of this model was sex: being female had a negative effect on PPTS scores with a beta value of -.263 and a B-coefficient of -1.92. Level of abuse (reported as Animal Killed) was similarly important with a beta value of .206 and B-coefficient of 2.51 but less significant than sex (p = .004). Full-time employment had a beta score of .171, a correlating B-coefficient of 1.71 (p = .036). Lastly, community density

was statistically significant in this model. Community density had a beta value of -.146 with a B-coefficient of -2.62 (*p*=.046), demonstrating a negative impact on PPTS score.

Table 6

Regression Table Comparing Psychopathic Personality Traits Scale Scores of Those Who Self-Reported Killing Animals

Variable	B-Coefficient	*P*-value	Beta
Female*	-1.92	<.001	-.263
Animal Killed*	2.51	.004	.206
Full-Time Employment	1.71	.036	.171
Community Density	-2.62	.046	-.146
Married	.946	.175	.113
Ethnicity	1.09	.206	.097
Bachelor Education	-.577	.381	-.065
Urban	.361	.499	.049
Household Income	.001	.997	.000

Note: DV = PPTS Score
r^2 adjusted = .153
p < .05

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

Discussion

The purpose of this study was to examine the relationship between psychopathy and animal abuse using the PPTS (Boduszek et al., 2016) and the Boat Inventory (Boat, 1994) while accounting for other factors including what types of animals are abused and the methods of abuse. This study first examined differences in psychopathy scores between those who self-reported abusing animals and those who reported no abuse. Second, this study provided further insight into what types of animals were abused as well as what methods of abuse were most often used. Third, the regression model tested the relationship of each independent variable (most importantly level of animal abuse) with the dependent variable of psychopathy score.

Psychopathy Scores Between Animal
Abusers and Non-Abusers

The parametric *t*-tests results discussed above showed significant differences in PPTS scores between animal abusers and non-abusers. Individuals who disclosed harming an animal (across all levels: hurt, torture, and kill) did indeed score higher on the PPTS in comparison to the participants who did not endorse a history of animal abuse (see Hypothesis 1). Interestingly, higher levels of abuse did not necessarily predicate more dramatic differences in PPTS score between groups. In other words, score difference did not steadily increase with each level or severity of abuse (from hurt to torture to kill) as originally expected. The highest score disparity was between participants who tortured animals and those who had not with a 2.843 average point

difference. The next highest disparity was between individuals who killed an animal and those who had not with an average point difference of 2.649. Finally, those who endorsed hurting an animal scored, on average, 2.339 points higher on the PPTS than the participants who did not endorse harming an animal.

Predictors of Psychopathy

Hypothesis 2 predicted a positive relationship between psychopathy scores and the severity level of abuse. In other words, individuals who killed an animal would have higher PPTS scores than those who tortured an animal and those who tortured an animal would have higher PPTS scores than participants who hurt an animal. While each abuser group did score significantly higher on the PPTS than their non-abusing counterparts, the severity level of abuse did not result in increased scores from hurting, to torturing, and finally killing an animal. It was expected that participants who killed an animal would score the highest on the PPTS but the results showed the group that scored highest (and had the most disparity) was the group who reported a history of torturing animals. This was an interesting finding as it implied that purposefully killing an animal was *not* the best abuse predictor of psychopathy score.

While all three regression models were significant, only certain variables in each model proved to be significant predictors of psychopathy. Across all three models, being female was a significant predictor of lower PPTS scores. This was not surprising as women tend to be less physically aggressive and violent (Bennet et al., 2005; Campbell, 1995). Each severity level of abuse (hurt for Model 1, tortured for Model 2, killed for Model 3) was positively significant in each of their respective models but torturing an animal seemed to hold the most predictive power on PPTS score. Unexpectedly, full-time employment was significant in all three models,

predicting higher psychopathy scores. Community density, on the other hand, was only significant in Model 3 where it seemed to negatively impact PPTS score.

      The results of this study certainly mimicked findings from previous studies (Rock et al., 2021) with animal abusers reporting more psychopathic personality traits than non-abusers. However, contrary to Hypothesis 2, there was no significant increase in PPTS score with every severity level of abuse. In other words, individuals who reported killing an animal did not have higher PPTS scores than individuals who tortured and/or hurt an animal. In this study's sample, those who tortured animals had the highest psychopathy scores. This could mean the act of torturing an animal, as opposed to hurting or killing it, was a better predictor for psychopathic personality than hurting or killing animals. Similarly, this implied that torturing animals might be a serious red flag for other in-home violence or neglect. Individuals who lived in less dense areas also seemed to have higher psychopathy scores, perhaps due to less foot traffic or fewer patrolling law enforcement officials. Rural areas, then, might have more animal abuse (and possibly in-home violence or neglect) than previously thought.

      While this study did not measure other types of violence (domestic or interpersonal, child or elder abuse and neglect), the findings were still relevant to the current literature (Chan & Wong, 2019; Dadds et al., 2006; DeGue & DiLillo, 2009; Hensley & Tallichat, 2009; Long & Kulkarni, 2013; McPhedran, 2009; Newberry, 2017; Trentham et al., 2017). These results added to the ever-growing research around the link between psychopathy and animal abuse. The association among psychopathy, animal abuse, and other types violence is still considerably under-explored considering the real-life implications of potential findings.

Strengths and Weaknesses of This Study

This study extended the current literature surrounding animal abuse and psychopathy (Dadds et al., 2006; Ireland et al., 2022; Rock et al., 2021; Schwartz et al., 2012). Further, this study addressed limitations from previous studies (Rock et al., 2021) by assessing what type of animals were abused, how they were abused, and how often the abuse happened. No previous studies have taken these factors into account as many left animal abuse as a binary "yes" or "no" question. This study further detailed the instances of abuse for a better understanding of what type of abuse was common as well as the types of animals most often abused.

Although there is a need to further the study of the relationship between animal abuse and psychopathy, this study was not without its limitations. As mentioned before, this study utilized an online survey. While online surveys are time- and cost-effective, an online platform could not capture the nuances of the individual taking the survey. Unlike the PCL-R, a face-to-face assessment of an individual's psychopathic traits, this study was contact-free and therefore could not be as in-depth as the PCL-R. Similarly, the sample was limited due to the necessity of internet access to take the survey itself.

Another important limitation concerned the PPTS. As mentioned before, somewhere between Qualtrics and MechanicalTurk, two of the scale items were deleted. The first deleted item (Item 13) read, "I tend to get emotionally involved with a friend's problem" and was a Method 2 (attitudes and beliefs) measure of affective responsiveness (Factor 1). The second deleted item was also a Method 2 measure, reading "It's natural for human behavior to be motivated by self-interest," and acted as a measure of egocentricity (Factor 4). It is certainly possible that the loss of these two items resulted in a scale with less predictive power but both affective responsiveness and egocentricity were still measured across four items per factor.

However, future research on the topic should present the scale in its entirety. In fact, a revised version of the PPTS (called the PPTS-R) was tested and published in 2022 by Boduszek et al., containing 28 items as opposed to the original 20. If the PPTS-R has indeed improved, the revised scale should be used.

Also worthy of noting are the specific definitions of some of the abuse methods listed in the study. As there is no official definition for trapping an animal, which might be confusing for individuals who, for example, use traps while hunting or to keep pests or wild animals away. This was not well-specified and could have potentially affected the recorded responses if participants endorsed trapping an animal for hunting or pest control (as opposed to purposeful cruelty). Similarly, although the survey asked whether participants had killed a pet or animal in a cruel way, it is definitely possible that some respondents who reported killing an animal felt they had to due to poor or failing health. Putting an animal down might seem cruel but it could also be considered mercy.

Implications and Recommendations

The research questions presented earlier in this study were answered in one way or another. First, an overall positive correlation was found between endorsing a history of animal abuse and psychopathy score. Second, several statistically significant factors consistently acted as predictors for PPTS score: namely, being female, being employed full-time, and each severity level of abuse. Community density was only significant in Model 3, which was similarly the least powerful regression model. Community density seemed to have a negative impact on PPTS score, suggesting that living in a community with 50,000 or more people predicted lower psychopathy scores as compared to living in a community with less than 50,000 people. Community density might affect abuse and psychopathy levels for several reasons: perhaps

living in a dense community meant less privacy and more law enforcement presence. Or, it is possible that living in a more rural area provided easier access to more wild animals than one would find in a more urban area. This study also managed to capture unique, under-reported aspects of animal abuse such as types of animals abused and the methods used to abuse animals. Animal abuse is most often measured dichotomously, which captures no information about the severity level of the abuse, the type of animal abused, nor the abuse method. This study, then, provided deeper exploratory insight into these important factors.

However, it is equally important to acknowledge that this was not a perfect study. Several participants were excluded for not answering all of the questions presented in the questionnaire. Similarly, the study only had 200 participants and the vast majority of the participants were White men, which reduced the generalizability of the results. A larger participant group with a more representative sample population would allow for more generalizable results. Also worth noting is the possibility some participants chose all available options concerning animal type and method of abuse regardless of whether it applied to them or not. This was, of course, a distinct possibility when conducting an online survey of any sort.

Future research concerning animal abuse and psychopathy ought to recruit a much larger, more diverse sample population, possibly through Qualtrics if the research is to be conducted through an online survey. If any written-in responses are included in the survey, the question should be especially specific to avoid any misconceptions or confusion. Lastly, the PPTS should be used as a measure in its entirety to obtain the most accurate results. In fact, Boduszek et al.'s (2016) scale was revised in 2022 to include 28 items instead of the original 20. It would also be interesting for future studies to examine both when and why participants choose to harm, torture, or kill animals. It might also be beneficial to give participants multiple choice options for type of

animal and method of abuse instead of the "check all that apply" option, which could entice participants to choose more options than the ones that actually applied to them.

Overall, these results validated previous studies on animal abuse and psychopathy (Chan & Wong, 2019; Dadds et al., 2006; DeGue & DiLillo, 2009; Hensley & Tallichat, 2009; Long & Kulkarni, 2013; McPhedran, 2009; Newberry, 2017; Rock et al., 2021; Schwartz et al., 2012; Trentham et al., 2017), further establishing the relationship between the two. With the growing evidence of the link among psychopathy, animal abuse, and other types of violence, it is important to recognize that animal abuse and cruelty could indeed act as predecessors of domestic and interpersonal violence or neglect. It is hard to gain a complete understanding of the prevalence of animal abuse as it is most often committed behind closed doors, largely going unreported. The growing use of AARs is a step in the right direction toward protecting the rights of animals and humans. Law enforcement officials could utilize AARs in much the same way they use sex offender registries by keeping known abusers from adopting animals of any sort. Similarly, law enforcement could cross-reference AARs with their own records, which could be useful if they were called out to a domestic violence or child abuse case. If animal abuse is truly a red flag for other violence and psychopathy, then it is absolutely necessary to continue investigating the nuances within the relationship. This way, law enforcement can act as protectors for both humans and animals alike.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY OF NORTHERN COLORADO

Institutional Review Board

Date: 08/29/2022

Principal Investigator: Allison Renegar

Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**

Action Date: 08/29/2022

Protocol Number: 2208042549

Protocol Title: Animal Abuse and Psychopathy: Examining Psychopathic Personality Traits in Animal Abusers and Non-Abusers

Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) for research involving

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

APPENDIX B

CONSENT FORM

CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

Project Title: Animal Abuse and Psychopathy: Examining Psychopathic Personality Traits in Animal Abusers and Non-Abusers

Researchers:

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Prior to completing the survey, please use the above contact information to ask any questions you may have regarding the study, survey instrument, or any other questions. The purpose of this study is to examine the relationship, if any, between an individual's treatment of animals and certain aspects of one's psychological personality traits. More specifically, the current study will assess each participant's experiences with animals (through sections of the BOAT Inventory on Animal-Related Experiences) along with the participant's psychopathy score (according to the Psychopathic Personality Traits Scale, or the PPTS). The participant will also be asked to provide demographic information. It should be noted that this survey is NOT a diagnostic tool— that is, a participant's PPTS score is not designed to diagnose the participant as a "psychopath." Rather, the researchers are interested in the presence or absence of certain traits and how they are related to other behaviors or demographic factors. The researchers anticipate that this survey should take no more than 20 minutes to complete, and participants will remain anonymous after completion.

Benefits: This study will help researchers determine whether animal abuse acts as a predictor for high psychopathy scores according to the PPTS. Your participation, then, is vital to better understanding this relationship and could potentially lead to policy changes that benefit law enforcement officers as well as the general public.

Risks: There are no foreseeable risks involved with participation in this study. The survey is voluntary and anonymous—no identifying information will be retained, guaranteeing each participant's anonymity.

This survey will be anonymous. You will be asked to provide demographic information, but nothing that can be tracked back to you, individually. Results of the study will be analyzed in the aggregate. The ultimate goal of the researcher is to make sure to protect the anonymity and confidentiality of your answers. Data collected during this project is for research purposes only. Results from the study may be presented at professional conferences and be published. However,

participants will remain anonymous. Furthermore, data will be stored under lock and key in the researcher's office. Data will be maintained as detailed by the APA ethics code.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you give your permission to be included in this study as a participant. If you have any concerns about your selection or treatment as a research participant, please contact:

Nicole Morse, IRB Administrator, Office of Sponsored Programs
25 Kepner Hall
University of Northern Colorado, Greeley, CO 80639
(970) 351-1910

APPENDIX C

PSYCHOPATHIC PERSONALITY TRAITS SCALE-REVISED

Psychopathic Personality Traits Scale – Revised (Boduszek et al., 2022)

<u>Subscales:</u>
1. Affective responsiveness: 1, 5, 9, 13, 17, 21, 25
2. Cognitive Responsiveness: 2, 6, 10, 14, 18, 22, 26
3. Interpersonal Manipulation: 3, 7, 11, 15, 19, 23, 27
4. Egocentricity: 4, 8, 12, 16, 20, 24, 28

   Reverse scored items: 10, 22

	Please indicate to what extent you agree or disagree with the following statements. Read each statement and put an X in the appropriate box.	Strongly agree	Agree	Sometimes Agree	Disagree	Strongly disagree
1	I don't care if I upset someone to get what I want.					
2	Before slagging someone off, I don't try to imagine and understand how it would make them feel.					
3	I know what to say or do to make another person feel guilty.					
4	I tend to focus on my own thoughts and ideas rather than on what others might be thinking.					
5	What other people feel doesn't concern me.					
6	I don't take into account the other person's feelings before I do or say something, even if they may be affected by my behaviour.					
7	I'm good at saying nice things to people, to get what I want out of them.					
8	I don't try to understand another person's opinion if I don't agree with it.					
9	Seeing people cry doesn't really upset me.					
10	I can guess how people will feel in different situations.					
11	I know how to fake emotions like pain and hurt to make other people feel sorry for me.					
12	No matter what happens and what people say, I'm usually the one who is right.					

Please indicate to what extent you agree or disagree with the following statements. Read each statement and put an X in the appropriate box.	Strongly agree	Agree	Sometimes Agree	Disagree	Strongly disagree
13	I don't feel bad when a friend is going through a tough time.					
14	I can't really tell when someone is feeling awkward or uncomfortable.					
15	I sometimes provoke people on purpose to see how they react in certain situations.					
16	I'm happy to help somebody as long as I get something in return.					
17	I don't really feel compassion when people talk about the death of their loved ones.					
18	I find it difficult to understand what other people feel.					
19	I'm good at pretending that I like someone if this will get me what I want.					
20	Something has to benefit me otherwise it I'm not willing to do it.					
21	Seeing somebody suffer doesn't distress me.					
22	I can see when someone is hiding what they really feel.					
23	I would lie to someone if this gets me what I want.					
24	I like it when people do as I say, regardless of whether I'm right or wrong.					
25	It doesn't really bother me to see somebody in pain.					
26	I find it hard to understand why some people get very upset when they lose someone close to them.					
27	I'm good at getting people to do what I want, even if they don't want to at first.					
28	How others feel is irrelevant to me, as long as I feel good.					

APPENDIX D

PERMISSION TO USE THE PSYCHOPATHIC
PERSONALITY TRAITS SCALE

From: Daniel Boduszek <D.Boduszek@hud.ac.uk>
Sent: Monday, February 6, 2023 12:30 AM
To: Renegar, Allison <rene3756@bears.unco.edu>
Subject: Re: Requesting permission for scale use in thesis

Hi Allison

Permission granted - Please see the revised scale and the article attached.

All the best

Dan

Professor Daniel Boduszek PhD, Dr Hab., CPsychol, AFBPsS, FHEA

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APPENDIX E

BOAT INVENTORY ON ANIMAL-RELATED EXPERIENCES

1. Have YOU ever deliberately **hurt** a pet or animal in a cruel way? (Y) (N)

    If yes, what kind of animal(s)? How many?

    a. Dog(s)
    f. Turtles, snakes, lizards, insects, etc.

    b. Cat(s)
    g. Rabbits, hamsters, mice, guinea pigs, gerbils

    c. Bird(s)
    h. Wild animals (describe)

    d. Fish

    e. Horse(s)

    What did you do to hurt the pet or animal(s)? (read all options and choose all that apply)

    a. Drowned
    g. Burned

    b. Hit, Beat, Kicked
    h. Starved or Neglected

    c. Stoned
    i. Trapped

    d. Shot (BB gun, bow/arrow)
    j. Had sex with it

    e. Strangled
    k. Other (describe) _____

    f. Stabbed

    What happened afterwards? _____

    How old were you?

    a. Under age 6

    b. 6-12 Years

    c. Teenager

    d. Adult

    Were you alone when you did this? (Y) (N)

    How many times did you do this? _____

2. Have YOU ever deliberately **tortured** a pet or animal in a cruel way? (Y) (N)

    If yes, what kind of animal(s)? How many?

    a. Dog(s)
    f. Turtles, snakes, lizards, insects, etc.

    b. Cat(s)
    g. Rabbits, hamsters, mice, guinea pigs, gerbils

    c. Bird(s)
    h. Wild animals (describe)

    d. Fish

    e. Horse(s)

What did you do to torture the pet or animal(s)? (read all options and choose all that apply)

a	Drowned	g.	Burned
b.	Hit, Beat, Kicked	h.	Starved or Neglected
c.	Stoned	i.	Trapped
d.	Shot (BB gun, bow/arrow)	j.	Had sex with it
e.	Strangled	k.	Other (describe) _____
f.	Stabbed		

What happened afterwards? _____

How old were you?

e. Under age 6

f. 6-12 Years

g. Teenager

h. Adult

Were you alone when you did this? (Y) (N)

How many times did you do this? _____

3. Have YOU ever deliberately **killed** a pet or animal in a cruel way? (Y) (N)

If yes, what kind of animal(s)? How many?

a.	Dog(s)	f.	Turtles, snakes, lizards, insects, etc.
b.	Cat(s)	g.	Rabbits, hamsters, mice, guinea pigs, gerbils
c.	Bird(s)	h.	Wild animals (describe)
d.	Fish		
e.	Horse(s)		

What did you do to **kill** the pet or animal(s)? (read all options and choose all that apply)

a.	Drowned	g.	Burned
b.	Hit, Beat, Kicked	h.	Starved or Neglected
c.	Stoned	i.	Trapped
d.	Shot (BB gun, bow/arrow)	j.	Had sex with it
e.	Strangled	k.	Other (describe) _____
f.	Stabbed		

What happened afterwards? _____

How old were you?

   i.   Under age 6

   j.   6-12 Years

   k.   Teenager

   l.   Adult

Were you alone when you did this? (Y) (N)

How many times did you do this? _____

4. Have you ever given animals any drugs? (alcohol, cannabis, etc.) (Y) (N)

Please describe: _____

How many times? _____

5. Have you ever made animals fight? (Y) (N)

Please describe: _____

How many times? _____

6. Have you ever done sex acts or sexual touching with animals? (Y) (N)

If yes, what kind of animals? _____

Please describe what you did or what you were made to do: _____

Who made you do this? (if applicable)

   a.   Friend or Acquaintance

   b.   Family Member or Relative

   c.   Stranger

   d.   Other _____

How old were you?

   a.   Under age 6

   b.   6-12 Years

   c.   Teenager

   d.   Adult

How many times? _____

Appendix C: Demographics

1. What is your age? _____

2. What is your sex?

    a. Male (0)

    b. Female (1)

    c. Other (2)

3. What is your ethnicity?

    a. White (0)   e. Asian (4)

    b. Hispanic or Latino (1)   f. Pacific Islander (5)

    c. Black or African American (2)   g. Other (6)

    d. Native American or American Indian (3)

4. What is your marital status?

    a. Single (never married) (0)   d. Widowed (3)

    b. Married (1)   e. Separated (4)

    c. Divorced (2)

5. What is your highest level of education?

    a. Less than eight grade (0)   e. Associate's degree (4)

    b. Some high school (1)   f. Tech/Trade/Vocational training (5)

    c. High school diploma/GED (2)   g. Bachelor's degree (6)

    d. Some college (3)   h. Graduate degree (7)

6. Are you employed?

    a. Unemployed (0)   d. Self-employed (3)

    b. Employed part time (1)   e. Employed—other (4)

    c. Employed full time (2)

APPENDIX F

PERMISSION TO USE BOAT INVENTORY ON
ANIMAL-RELATED EXPERIENCES

From: Boat, Barbara (boatbw) <BOATBW@UCMAIL.UC.EDU>
Sent: Monday, February 6, 2023 12:12 PM
To: Renegar, Allison <rene3756@bears.unco.edu>
Subject: Re: Requesting permission for scale use in thesis

Hi Allison - you are welcome to use any portions of the Boat Inventory. Good luck with your research! I will return a copy of your permission request as soon as I can figure out how to save it - which may be this coming Friday when my assistant is back at work! Thanks for your patience. B

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