Intentional Cruelty vs Neglect: New Insights on Animal Cruelty Crimes and Implications for Policy

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Abstract

Animal cruelty has received growing scholarly attention over the past few decades. One ongoing challenge for researchers has been the lack of readily accessible data. This situation changed in 2014 with the addition of animal cruelty offenses to the Federal Bureau of Investigation's Uniform Crime Reporting Program as part of its National Incident-Based Reporting System. In addition to providing a much-needed source of animal cruelty information, these data shed light on two distinct forms of cruelty: intentional animal abuse and neglect. Previous research tended to group both forms of cruelty together, which limited the ability of these findings to inform the development of targeted prevention and intervention policies. The present study is one of the first to examine the FBI's animal cruelty data and to distinguish between neglect and intentional cruelty. The findings obtained are discussed in terms of application to policy and guidance for future work.

Keywords: Animal cruelty prevention policy, intentional animal cruelty, animal neglect, animal cruelty offenders, NIBRS animal cruelty data

Introduction

Animal cruelty has received growing research attention over the past few decades. This interest can be traced back to the 1970s where connections between animal cruelty and interpersonal violence began to be explored, especially in the psychiatric literature (Tapia, 1971; Rigdon & Tapia, 1977; Felthous, 1979). By the 1980s, social scientists and mental health experts identified animal cruelty as an important factor in the development of anti-social and aggressive behavior and added "physical aggression toward people and animals" as a criterion for a diagnosis of conduct disorder to the DSM-III-R, in 1987. Around the same time, Walker (1984) suggested a link between pet abuse and domestic violence as batterers used companion animals as a way to intimidate victims. These linkages prompted studies that focused on various connections between animal abuse and family violence as well as other forms of interpersonal violence (Ascione, 1998; Ascione, 2001; Faver et al. 1993; Knight et al., 2014; Merz-Perez, et al., 2001; Walters, 2016).

In 2014, the evolving research on animal cruelty and its association with violence against humans led the Federal Bureau of Investigation (FBI) to add animal cruelty offenses to its collection of incident-based crime statistics in the Uniform Crime Reporting (UCR) Program's National Incident Based Reporting System (NIBRS). Inclusion of animal cruelty to NIBRS expands the opportunities to explore these crimes as well as address some of the shortcomings in previous research on animal cruelty and its association with criminal behavior.

Before the addition of these crimes to NIBRS, animal cruelty research was limited due to a lack of available data. These limitations were highlighted in a recent critical review of the literature on the link between animal cruelty and violence (Longobardi & Badeness-Ribera, 2019). Of the 32 research articles included in the review, 28 relied on non-probabilistic sources,

such as convenience samples from prisons, schools, or clinical settings. Moreover, the studies used often were limited to a single jurisdiction over a short period of time due to the labor-intensive nature of original data collection.

While most previous research did not rely on official police or court data, a few exceptions exist. These studies not only provide insights about animal cruelty offenses that come to the attention of the criminal justice system, but they highlight the challenges for researchers to access these data prior to the changes in NIBRS. For example, three studies that used police records were limited to data from a single city (Arluke et al., 1999; Burchfield, 2018; Febres et al., 2014). Researchers also have relied on conviction records (Gerbasi, 2004). Conviction record data, though, are subject to the filters of arrest and prosecution decisions.

The current state of the literature highlights the need for animal cruelty data that can provide not only details about individual incidents but also permit comparisons across jurisdictions and over years. Obtaining information at the early stages of the criminal justice system process, specifically from police reports, allows for the broadest number of incidents to be captured when they first come to the attention of officials. The addition of animal cruelty to NIBRS creates an important resource that fills this need. Given the relatively recent availability of these details, few articles could be published analyzing these data prior to the present study.

This study provides an initial exploration of two recent years of NIBRS data and helps improve the understanding of animal cruelty crimes with a focus on comparing two subtypes: intentional cruelty and neglect. Research that distinguishes between intentional cruelty and neglect is needed but largely absent from the current literature. One key reason for this distinction is that particular forms of cruelty (such as intentional cruelty) may be associated with certain offending patterns (such as violent offenses). For example, research suggests that early

and recurring animal cruelty that entails physical aggression and anti-social behavior is linked to continued violent behavior against animals and people into adulthood (Randour et al., 2019).

Despite the need to distinguish types of cruelty, a direct comparison of intentional cruelty and neglect is largely absent from the current literature (but see, Gerbasi, 2004; Reyes, 2016). This omission is due to measures of animal cruelty that commingled intentional abuse and neglect (Arluke et al., 1999; Baldry, 2004; Flynn, 1999; Vaughn et al., 2009). Two exceptions that distinguish types of cruelty (Gerbasi, 2004; Reyes, 2016) used the now-defunct Petabuse.com database (Gerbasi, 2004; Reyes, 2016). The Petabuse.com database gathered information from a range of sources including news reports, animal advocate data as well as official records from police and courts. Due to the diverse sources, Petabuse.com had an inconsistent collection of offender and incident details. As a result, researchers such as Gerbasi opted to limit their studies to those convicted of animal abuse to limit the effect of missing demographic data. In contrast, the NIBRS data are based on incidents reported to police. The NIBRS data also benefit from requirements for police to record the type of animal cruelty as well as other incident details.

Studying the distinctions between intentional abuse and neglect also is important for the development of anti-cruelty policies. Gaining more information about these offenses could support the development of policies and interventions tailored to the type of animal cruelty. In particular, obtaining a better understanding of the individuals involved in different forms of cruelty and variations in the incident characteristics could provide useful insights for training police officers responding to these crimes.

Previous Research on Patterns of Neglect and Intentional Animal Cruelty

Although previous studies on animal cruelty crime and its link to other offenses did not distinguish between intentional cruelty and neglect, this literature is useful to review. It provides

a context for understanding the findings obtained by this study including the types of crimes that co-occur with animal cruelty offenses as well as how they might inform policy development. As such, the following discussion summarizes previous findings on animal cruelty as it relates to the gender, age, and race of those who commit animal cruelty as well as patterns with other offenses.

Much of the existing research relies on samples of those who commit animal cruelty (Longobardi & Badeness-Ribera, 2019). As a result, demographics of these individuals are one of the more consistently reported characteristics. With regard to gender, many studies on animal cruelty relied on exclusively, or predominantly, male populations, which prevent any gender comparisons. The reason for this focus was based on early speculation that suggested men would be more likely to commit animal cruelty offenses than women. Studies of young people found initial support for this hypothesis. Three studies of undergraduate students found a higher percentage of young men reported engaging in some type of cruelty than young women (DeGue & DiLillo, 2009; Flynn, 1999; Miller & Knutson, 1997). While Miller and Knutson (1997) found a 2 to 1 ratio, Flynn (1999) found males four times more likely to commit abuse than females. Although DeGue and DeLillo (2009) did not report ratios, they found that males were significantly more likely than females to report intentionally neglecting, hurting, torturing, or killing an animal. A study of Italian youth found a similar pattern (Baldry, 2003), with males two times more likely to report acts of animal abuse. These patterns of men predominately committing animal cruelty were confirmed by research that used adult arrest data. A study of animal cruelty arrests in Chicago found only 11.7% were women (Burchfield, 2018).

Different patterns were obtained and discussed in one study that distinguished types of abuse and specifically compared convictions for hoarding, neglect and intentional cruelty (Gerbasi, 2004). Gerbasi found distinct gender patterns that varied by type of abuse for those

convicted of animal cruelty crimes. Specifically, intentional abuse cases were much more likely to involve men by a ratio of 11:1. In contrast, women were more likely to be involved in hoarding cases than men by a ratio of 5:1, but slightly less likely to be involved in neglect and abandonment. Women represented 42% of the convictions in the neglect category and men 57%. When hoarding and neglect were combined, the male-female ratio became even (50-50).

Age is another demographic for individuals committing animal cruelty crimes that previous studies considered. Research has considered levels of animal cruelty across the life course. The focus of this work has been on the age at which animal cruelty first appears as well as its persistence for committing animal cruelty into adolescence and adulthood. A meta-analytic review found that animal cruelty was one of the earliest symptoms of conduct disorder, appearing at a mean age of 6.75 year (Frick et al., 1993). In addition, children who are cruel to animals exhibit more severe conduct disorder problems than other children (Luk et al., 1999) and were younger at time of their first arrest (Bright et al., 2018). Furthermore, persistence in committing animal cruelty in childhood, adolescence and adulthood is strongly associated with more serious pathologies (Walters, 2014).

In addition to the initial age at which animal cruelty can appear and its significance, others have speculated on the ages at which committing animal cruelty would be most common. Based on information gleaned from newspaper accounts, Lockwood (2008, p. 89) speculated that "perpetrators of intentional animal cruelty are predominantly male and under 30." Subsequent studies, however, suggest a slightly later mean age of animal abusers. Approximately seven studies noted modal or average ages of those committing animal cruelty offenses and derived these from adult populations and found a range of average ages from 31 to 35.7 (Longobardi & Badeness-Ribera, 2019). One particularly informative study conducted by the FBI's Behavioral

Analysis Unit (BAU) identified, collected, and reviewed law enforcement case files from 41 states of individuals arrested for animal cruelty acts and examined their criminal histories (Hoffer et al., 2018). The FBI BAU study included 259 active animal cruelty cases and found these ages of those committing animal cruelty ranged from 18 to 82, with a mean age of 34 years. The FBI BAU findings are similar to those reported by Febres et al. (2014), which found an average age of 33.1 for adult animal abusers. The Chicago study of those arrested for animal abuse mentioned above found greater involvement by younger ages where about 56% of those arrested fell between the ages of 18-24 and 26% between the ages of 35-50 (Burchfield, 2018). One possible explanation for this study's finding slightly younger mean ages could be attributed to it being conducted in a single city.

Of all demographic characteristics for individuals committing animal cruelty, the least amount of attention has been devoted to patterns of race and ethnicity. A few studies have noted racial or ethnic differences in animal cruelty. Those that have examined race or ethnicity find the vast majority are White, which is proportionate with the US population. For example, the FBI BAU study mentioned above (Hoffer et al., 2018) found 78.8% of those arrested for animal abuse crimes were White and 12.2% were Black. A national epidemiological study (Vaughn et al., 2009) found a similar pattern. Of those who acknowledged committing at least one act of animal cruelty in their lifetime, about 70% were White, 14% were Black, over 7% were Hispanic, and almost 8% were other races (including Native American/Alaska Native and Asian). While there is limited information on racial differences for those who commit animal cruelty, even less is known about ethnic differences. In addition to the Vaughn et al. study, a Colorado study provides additional insights on ethnicity (Hartman et al., 2018). This study examined mother-child dyads who were clients at a Colorado domestic violence program

examined factors associated with domestic violence when pet abuse was present. The population, which was majority Hispanic, found that non-Hispanic partners born in the U.S. were nearly 5 times more likely to harm pets than partners born in Spanish-speaking countries (Hartman et al., 2018).

In addition to examining the characteristics of those who commit animal cruelty, previous studies have considered the types of offenses committed in addition to animal cruelty. Research in this area tends to consider a history of violence rather than the specific crimes that co-occur with animal cruelty in the same incident. These studies consistently show that individuals who commit animal cruelty also engage in other anti-social aggressive acts over a span of time as well as a range of non-violent offenses. For example, Arluke et al. (1999) examined criminal records of 153 convicted animal abusers, compared them to a group of 153 control cases and found that animal abusers were more likely to commit interpersonal violence. Arluke et al. also found animal abusers were more likely to commit property crimes as well as drug and public disorder offenses as compared to the control group. A study of juveniles confirms these findings with younger males and mixed gender samples (Walters, 2013). In the FBI BAU study (Hoffer et al., 2018), 60% of subjects committed interpersonal violence before, concurrently, and after animal cruelty offense. In addition, 73.4% of the subjects were arrested for some other offense. Of those who had been arrested, 88.7% were arrested before the animal cruelty offense, and 54.5% were arrested after the animal cruelty offense. Another study identified criminal history patterns. An in-house analysis of Atlanta Police Department data found 39 of 50 individuals charged with animal cruelty (or a related crime) had a prior criminal history including homicide, aggravated assault, and cruelty to children (A. Soeldner, personal communication, July 20, 2021).

This discussion illustrates patterns identified in previous studies, especially for individuals who committed animal cruelty offenses. It also highlights the limitations existing data have imposed on this work as almost all grouped animal cruelty into a single offense category. The Gerbasi (2004) research on convicted animal abusers suggests the failure to separate intentional cruelty from neglect might mask distinct patterns. These patterns could provide useful insights and inform prevention policies. As such, the current study seeks to explore two research questions concerning how (1) demographics of those who commit animal abuse offenses and (2) incident characteristics including co-occurring crimes might vary between intentional abuse and neglect.

Methodology

Data

To address these exploratory research questions, the present study uses UCR-NIBRS data. UCR data are based on reported crimes that have come to the attention of local and state police. NIBRS is the current format used to collect crime data for the UCR and gathers information at the incident level rather than as an overall aggregate count, which was the format used under the UCR's traditional summary reporting system. In addition to collecting incident details for violent crimes against persons and property crimes, NIBRS covers crimes against society, which include animal cruelty offenses. While the FBI approved adding animal cruelty offenses to NIBRS in 2014, states did not start submitting these data until 2016 (Federal Bureau of Investigation [FBI], 2016).

The present study uses NIBRS data from 2017-18, which are two of the most recently available years. These data are from a direct request by one of the authors to the FBI for its NIBRS animal cruelty data. The benefit of obtaining data in this manner is that the incident files were received faster than was possible from sources such as the National Archive of Criminal

Justice Data (NACJD). As of October 2021, the 2016 NIBRS data were the most recently available in the NACJD files. The limitations are that these raw data files from the FBI required a significant amount of time to clean and prepare for analysis. The data provided under this request also are limited to only incidents that included animal cruelty offenses. While this data file provides all variables needed to explore animal cruelty offenses reported to police, it does not allow direct comparisons with other crimes such as interpersonal violence. In 2017 and 2018, there were 8,740 animal cruelty incidents reported in NIBRS.

While NIBRS provides a unique source of animal cruelty cases reported to police, one caveat concerns its coverage, which has been multistate and not national in scope. As of January 1, 2021, NIBRS became the only format for reporting UCR crime data (FBI, n.d.). While a growing number of states and local agencies reported in NIBRS format prior to this change, the coverage has yet to achieve full national coverage. In 2017, 35 states contributed NIBRS data and 16 of these states reported all their crime data in NIBRS format (FBI, 2018). In 2018, these numbers increased to 38 states contributing data and 17 states fully reporting (FBI, 2019a). In 2018, this participation accounted for over 39% of US law enforcement agencies reporting NIBRS data, which covered almost 36% of the population in 2016 (FBI, 2019b).

Categorizing Types of Animal Cruelty

The FBI classifies animal cruelty into four categories: neglect, intentional cruelty, animal fighting, and animal sexual assault. For purposes of crime reporting, these categories make sense as they correspond to common animal cruelty laws enforced by police. Many state animal cruelty laws distinguish between behaviors encompassing active animal cruelty (such as intentionally beating or killing an animal) from passive ones (such as failure to care or neglect).

In addition to these two categories, state statutes often identify two other forms of animal cruelty: animal fighting and animal sexual assault.

The focus of this study is comparing incidents involving neglect with those involving intentional cruelty. As such, this study created an "intentional animal cruelty" variable that includes the NIBRS crimes of intentional cruelty, animal fighting, and animal sexual assault and will compare this with the neglect crime. The reasons for this decision are twofold. The first and primary reason is based on a common set of behaviors underlying the intentional cruelty, animal fighting, and animal sexual assault categories. Specifically, each of these crimes requires that a person acts against an animal (or animals) with the intent to harm or with an awareness that an animal (or animals) is being placed in a situation where they could be injured and killed. In contrast, cases of neglect more arise often arise from inaction. This failure to act could arise from a lack of education or resources or due to the mental condition of the person responsible. Most animal cruelty statutes recognize this distinction, assigning lesser penalties to neglect than to intentional animal cruelty (Gjelten, n.d.; Wisch, 2010). Moreover, other researchers, such as Reyes (2016) have made similar groupings. In her analysis of the PetAbuse.com data, Reyes used categories of active and passive. In the active category, she included acts of commission such as bestiality, fighting, kicking, beating, and torture. Neglect and hoarding fell into the passive category. The second reason is a practical one. Very few cases of animal fighting and animal sexual assault currently are reported in the NIBRS data (Table 1). It is unclear whether these numbers result from actual behavior (not many people engage in this behavior) or underreporting due to a lack of training for police with regard to how to recognize animal fighting and animal sexual assault.

Based on these decisions, this study defines *neglect* as those incidents recorded as only

neglect and *intentional cruelty* as an incident involving intentional abuse, fighting, sexual abuse or any combination of these offenses. A small percentage of cases (1% or n = 87) included both neglect and intentional cruelty (Table 1). These cases were coded as intentional cruelty since they included some behaviors identified as active animal cruelty.

Variables

To explore animal cruelty incidents reported to police and compare neglect and intentional cruelty incidents, this study focuses on variables concerning the characteristics of those individuals who committed the animal cruelty offenses and the characteristics of the incident. Victim information is not available as NIBRS classifies animal cruelty as a "crime against society". Since crimes against society do not involve specific victims, NIBRS does not collect victim details for them. For animal cruelty offenses, this practice means that no information is collected about the animals involved in these crimes. In discussing the variables and analyses, this study uses the terminology from the NIBRS data collection for consistency purposes and to facilitate replication by other researchers. These terms include "offender" and "sex", for example.

Offender Characteristics. Consistent with previous research, this study examines the offender demographic characteristics of sex, race, and age. It is also important to keep in mind that this study is analyzing incident-level data, and incidents can have more than one offender. 874 or 10% of the incidents involved more than one offender (Table 2). The demographic variables include a category to capture heterogenous sex, race, and age groups for these multi-offender incidents.

Sex is coded as male, female, male and female, or unknown/missing. NIBRS only collects binary male-female categories of sex. Incidents are coded as "male" if it is an incident

with only one offender who is male, or all the offenders are male for multi-offender incidents. Similarly, incidents are coded as "female" if it is an incident with only one offender who is female, or all the offenders are female for multi-offender incidents. An incident coded as a "male and female" if it is a multiple offender incident with both male and female offenders. Unknown/missing refers to incidents where the sex of the offender(s) is not known.

Race is coded as White, Black, other, mixed racial group, or unknown/missing. White refers to an incident with a single offender who is White or all White offenders. Black refers to an incident with a single Black offender or all Black offenders in multi-offender incidents. Given the small number of offenders whose race is not White or Black, the category "other" is used to capture all other race categories where a single offender is not White or Black or all offenders are not White or Black for multiple offender groups. "Mixed racial group" refers to a multiple offender incident with offenders of more than one race. Unknown/missing includes incidents where the offender(s) race is unknown. NIBRS does not consistently collect data on ethnicity as it is not a required data element. As such, Hispanic demographic information is not included in the current study.

Age. Age is coded into 8 groups ranging from 18 and under to 80 and over. Two additional categories are included. "Mixed age group" refers to a multiple offender incident with offenders from more than one age group and unknown/missing includes incidents where the offender(s) age is not known. This study uses age categories rather than using a continuous age variable in order to capture ages in multi-offender incidents.

Incident Characteristics. This study includes three incident characteristics: the location where the incident occurred, whether the incident involved offenses other than animal cruelty, and whether an arrest was made (or the incident was otherwise cleared). The location variable

includes the most common locations for animal cruelty. *Location* is coded as home, street, outdoors (other than streets or roads), non-residential buildings, farm, and other locations.

Whether the cruelty offense occurred with another crime is captured in two variables. *Cooccurrence* flags whether the incident included another crime. *Type of co-occurrence* categorizes the type of crime that occurred with the animal cruelty. These types include violence, property, crimes against society, and mixed offenses (if more than one type of crime occurred with the animal cruelty). *Arrest* identifies whether the incident was cleared by an arrest or by "exceptional" means. Exceptional clearances include circumstances where police have identified the suspect but cannot make an arrest due to death of the offender or failure of extradition. The vast majority of cases are cleared via an arrest.

Analysis

Given the nature of this exploratory study, the analyses focus on comparing joint frequencies between neglect and intentional animal cruelty incidents. This decision is based, in part, on following the lead of other researchers engaged in comparable exploratory studies (Stamatel & Mastracinque, 2011). This decision also is based on the fact that this study is not seeking to make generalizations to US population but is aimed at identifying possible ways NIBRS data could contribute to the study of animal cruelty. In addition, NIBRS is not a representative sample (which is the presumption underlying most statistical tests). This study is not unique in grappling with these challenges. While statisticians have devoted a great deal of attention to addressing the issue of very small samples, little attention has been devoted to the best practice for handling very large samples overall or with a focus on NIBRS (Addington & Perumean-Chaney, 2014). For the joint frequency tables, the nonparametric Chi-square test is reported. As this test is sensitive to large sample sizes, it is not surprising that statistical

significance is observed for each table presented. Additional interpretation of the tables is provided by considering the substantive or clinical significance of the findings.

Findings

Tables 2 to 8 report offender and incident characteristics of animal cruelty reported to police. Distinct patterns emerge when comparing intentional cruelty and neglect incidents.

Offender and incident characteristics are reported separately below.

Intentional Cruelty and Neglect by Offender Demographics

Prior to discussing the substantive findings for offender demographics, two overall patterns are important to note. One concerns the amount of unknown or missing demographic information, which ranges from about 22% overall for sex to 26% overall for race and age. Across all demographic characteristics, the percentage of unknown demographic data is higher for intentional abuse than neglect incidents. The findings discussed below include the unknown category in the analyses for completeness and to facilitate comparisons across tables. The present study, though, is unable to provide specific explanations for why these data are missing or the patterns for missingness between intentional cruelty and neglect. Future work is needed to study this issue. A second pattern concerns the number of multi-offender incidents. As noted on Table 2, about 10% of animal cruelty incidents (overall) were identified as having two or more offenders. A slightly higher percentage of neglect incidents involve two or more offenders (10.5%) as compared to intentional abuse incidents (8.9%). The present study is unable to explore this pattern in greater depth and highlights another area for future research.

With regard to offender characteristics, intentional cruelty and neglect incidents differ in terms of offender gender and age. Table 3 shows more male offenders are involved in intentional cruelty incidents (53.9%) than neglect (39.8%). In contrast, female offenders tend to

be involved in neglect (32.3%) than intentional cruelty (13.2%). While females are more likely to engage in neglect rather than intentional cruelty, it is important to note that a slightly higher percentage of male offenders committed neglect than female offenders, 39.8% and 32.3% respectively. This difference though is not as great as that observed for intentional animal cruelty where male offenders outnumber females by a ratio of 4 to 1. Another pattern to note is the heterogeneity for multi-offender incidents. While most incidents involve all male or all female offenders, sex is the demographic characteristics (as compared to age or race) with the highest percentage of heterogeneity for both intentional cruelty and neglect.

In terms of age, an examination of Table 4 shows that before the age of 18, intentional animal cruelty is about 5 times more frequent than neglect (7.2% to 1.5%), which is not surprising since individuals under the age of 18 typically do not have the capacity to provide for an animal and therefore cannot deliberately withhold provisions. For the age span of 19-29 there are slightly more offenders who commit intentional animal cruelty (19.0%) than neglect (17.2%). After that, the differences in percentages between intentional animal cruelty and neglect are negligible, with neglect offenses being slightly higher for those in age groups over 30.

For offender race patterns also emerge for neglect and intentional abuse (Table 5). For offender race, over half (56% for neglect, 52.7% for intentional) of incidents involved White offenders. Black offenders showed a similar pattern with slightly more involved in incidents of neglect (17.9%) than intentional animal cruelty (13.3%). Another pattern is the lack of heterogeneity for multi-offender incidents. As compared to sex and age, few incidents of either intentional cruelty or neglect involve offenders of different races.

Intentional Cruelty and Neglect by Incident Characteristics

Incident characteristics include location, co-occurring crimes and arrests. In terms of location, both types of animal cruelty incidents tend to occur in a residence (Table 6). Over two-thirds of neglect (69.6%) and intentional cruelty (68.5%) occur in a home location. Streets are the second most frequently reported location for neglect (16.9%) and intentional abuse (14%).

Neglect and intentional cruelty incidents differ markedly in terms of co-occurrence and arrest. Almost all (97%) neglect incidents are solo-occurring crimes (Table 7). In contrast, 80% of intentional abuse incidents occur alone, (i.e., about 20% occur at the same time as another crime). The offenses that occur most frequently with intentional abuse are violent crimes (which included fatal and non-fatal assaultive violence, sexual assault, and robbery). Over one-third (35.3%) of intentional cruelty incidents ended in an arrest as compared to about one-quarter (25.9%) of neglect cases (Table 8).

Discussion

This study sought to explore distinctions between incidents involving animal neglect and intentional animal cruelty using recently available NIBRS data. These findings can be used to extend and refine the existing literature on animal cruelty. In addition, these findings can help develop a research agenda that capitalizes on the growing number of states contributing animal cruelty crime data to NIBRS.

Demographic Comparisons

The present study confirms previous findings that men are more likely to engage in intentional cruelty than women. This pattern is consistent with the Gerbasi (2004) study that differentiated specific types of cruelty as well as those that did not. Unlike prior research, though, the present study did not find as large of a difference between incidents involving male and female offenders. For example, Flynn (1999) found a ratio of 4 to 1 (male to female) but

others found females at ratios as high 10 to 1 (Burchfield, 2018) and as low as 2 to 1 (Baldry, 2003. Miller & Knutson, 1997). A few reasons for these differences might be due to previous studies relying on a range of data sources including self-reported surveys as well as combining intentional cruelty with neglect in their measures of animal cruelty. For neglect cases, the present study found men were slightly more likely to engage in neglect offenses than women. This result appears to be supported by Gerbasi's (2004) finding that women were less likely than men to engage in animal neglect but were equally likely as men when neglect was combined with other forms of animal cruelty such as hoarding.

With regard to age, the present study found that almost half of the incidents involved individuals between the ages of 19 and 49. These findings are consistent with previous studies that did not distinguish type of cruelty and examined convicted animal abusers, which found a mean age of the mid-30s. One pattern of note is that of the youngest age group (18 and under) where a relatively small percentage of incidents with these ages are observed. For neglect cases, this finding would be consistent with a lower risk (as children and adolescents would be less likely to have primary care responsibilities). More work is needed to better understand this pattern for intentional cruelty offenses. Specifically, clarification is needed as to whether this under 18 age group is less likely to be involved with animal cruelty or if their incidents are less likely to come to the attention of police and appear in NIBRS data files.

Given the limited attention to race for those engaged in animal cruelty case overall and the lack of information on racial differences across intentional cruelty and neglect, this study provides much needed initial insights. The present findings confirm racial patterns from two previous studies (Hoffer et al., 2018; Vaughn et al., 2009). This study also extends this work by comparing intentional cruelty and neglect incidents. For intentional cruelty incidents, the

findings indicate a proportional distribution of White and Black offenders. A slightly disproportionate percentage of Black individuals committed neglect offenses (18% in the NIBRS sample vs. 13.4% in the US population). More work, though, is needed to confirm and better understand these patterns, especially to disentangle the underlying behavior from incidents that come to the attention of police.

Incident Characteristics

The NIBRS data provide the ability to gain insights into characteristics of animal cruelty incidents including co-occurring crimes as well as location and arrest patterns. This information can inform policy and support training police in identifying animal cruelty offenses. For co-occurring crimes, NIBRS data allow the identification of crimes committed along with animal cruelty and can compare co-occurring crimes between intentional cruelty and neglect. While previous research explored histories of violence for those committing animal cruelty crimes, few to no studies examined offenses that occurred at the same time as animal cruelty crimes. Using NIBRS data to consider co-occurring offenses allows for this understanding and a comparison between neglect and intentional cruelty cases. Only 3% of neglect offenses occur with another crime. In contrast, 20% of intentional abuse offenses occur with another crime. Of these co-occurring incidents, more intentional abuse incidents than neglect occurred with a violent crime. This pattern has support from previous studies that found violent crimes tended to occur most frequently with intentional abuse (Hoffer et al., 2018; A. Soeldner, personal communication, July 20, 2021).

In addition to exploring patterns of co-occurring offenses, the present study provides new insights about the location of animal cruelty incidents and whether an arrest occurred. Few previous studies have been able to examine these characteristics. Intentional cruelty and neglect

cases share common locations. For both types of incidents, nearly two-thirds happen in a residence. This residential location is consistent with the fact that about 67% of U.S. households in the U.S. have at least one pet (American Veterinary Medical Association [AVMA], n.d.). This finding, though, does highlight the challenge to prevent and identify animal cruelty as these crimes can be hidden out of sight.

This study also provides new information about arrests in animal cruelty offenses. Prior to the inclusion of animal cruelty into NIBRS, there was no systematic way to determine arrest rates for types of animal cruelty offenses overall or by subtype. This study found over one-third (35.3%) of intentional cruelty incidents ended in an arrest as compared to about one-quarter (25.9%) of neglect cases (Table 7). One explanation for this pattern might be the slightly higher percentage of co-occurring intentional cruelty cases, which could lead to more active investigations and likelihood of arrest. Another might be the nature of neglect offenses. Since neglect cases often involve more passive forms of animal maltreatment (such as failure to provide proper medical care, nutrition, or housing), it may be that these situations are handled in a manner other than arrest. Options other than arrest also might be used for neglect cases since most animal cruelty statutes assign lesser penalties to neglect than to intentional cruelty (Gjelten, n.d.; Wisch, 2010). It is beyond the scope of this exploratory study to investigate these explanations further. A fruitful area for future analysis would be to explore how neglect cases are handled and compare these with intentional cruelty cases.

Policy Implications

While this study's findings are preliminary, they suggest potential policy interventions that could be important for future work to explore further. One possibility arises from the consistent pattern of men being more likely to engage in intentional animal cruelty offenses than

women. This finding suggests an opportunity for violence prevention programs aimed at boys and men to include a focus on animal cruelty. The offender age patterns identified in this study highlight the need to continue violence intervention efforts and to incorporate animal cruelty prevention beyond childhood and adolescence. Currently, crime prevention programs tend to focus on younger individuals. A review of crime prevention programs rated effective by the US Department of Justice's Office of Justice Program's Crime Solutions reveals that 141 were directed at ages ranging from early childhood to high school, 45 entries for ages 18 and older, and 32 targeted at older adults, ages 55 and older (Crime Solutions, n.d.).

A better understanding of neglect and intentional cruelty offenses and those who commit these crimes also fits with current efforts in criminal justice reform that emphasize on alternatives to punitive punishments via restorative justice and alternative sentencing, especially for younger individuals who commit animal cruelty. Cases involving juveniles may warrant consideration of prevention and intervention programs as most experts agree that earlier intervention is more likely to be effective (Loeber et al., 2003). The evaluation of two programs show promise. One is administered by the spcaLA (Society for the Prevention of Cruelty to Animals Los Angeles). The Court Diversion Program for Youth is specifically designed for justice system-involved youth who are referred by the District Attorney's office and other juvenile justice professionals. This program is an animal-assisted intervention program run by spcaLA in which shelter dogs are paired with court-appointed youth. These youthful participants, under staff supervision, learn to interact and train the shelter dogs with positive reinforcement only (Hargreaves-Cormany et al., 2020). Healing Species also uses shelter dogs as part of it is a school-based violence prevention/intervention and character education program to teach antiviolence and prosocial messages to elementary and middle school students (Sprinkle, 2008). Both stand out due to a current lack of programs or practices that include attention to animal cruelty in youth violence prevention and intervention programs. These programs also could offer insights for expansion into adult restorative justice settings and promotion of the need for anti-cruelty programming.

Another benefit from understanding the distinctions forms of animal cruelty concerns the need to tailor interventions for individuals involved in neglect cases. For example, this study found almost none of the neglect offenses occurred with another crime. Local and national animal welfare agencies recognize that many cases of animal neglect are due to insufficient resources available to the human companion of the animal. Where animal services or shelters are publicly financed, consideration should be given to funding programs so that they can offer resources to the community to provide proper care for pets and combat neglect. This distinction also highlights the importance of coordinating efforts between law enforcement and animal services when intervening in cases of animal cruelty that involve neglect.

A final policy implication is supporting further training of police in terms of animal cruelty offenses. This information could include the various forms animal cruelty takes, the characteristics of these incidents as well as the individuals who committed these offenses. This information also could be used to support partnerships between police and animal services to develop effective interventions for neglect and intentional cruelty incidents. Additional policy work could explore animal cruelty arrest patterns and best practices for handling incidents that involve neglect as compared to intentional cruelty offenses.

Limitations of NIBRS Data for Studying Animal Cruelty

As discussed earlier, NIBRS data have benefits to provide insights for studying animal cruelty beyond previous studies. That being said, limitations exist that suggest caution in

interpreting the results and analyzing these data. One set of limitations is connected to the nature of the NIBRS data used in this study. In an effort to obtain recent data years, this study relied on information from a data request that was limited to only animal cruelty incidents and did not include certain details. One detail missing was whether the co-occurring assault was associated with domestic violence. As there is a sizeable literature on the link between animal abuse and domestic violence (Barrett et al., 2017; Knight et al., 2014; Simmons & Lehman, 2007; Walton-Manganello et al., 2005), knowing these details would further our understanding of this link. Similarly, there also is evidence that child abuse and animal abuse frequently occur in the same household (Bright et al., 2018; Currie, 2006; McEwen et al., 2014). Without these additional details from the co-occurring offenses, these patterns could not be explored in the present study.

While the NIBRS data provide important distinctions in types of animal cruelty, they do not specifically identify hoarding cases. Most experts agree that animal hoarding is a unique type of animal cruelty which occurs from different motivations and conditions than those that exist for animal neglect and intentional animal cruelty (Frost et al., 2015). As the current categories of the FBI's definition of animal cruelty do not include hoarding, this study could not consider hoarding as a category of animal cruelty.

A final limitation is the likely undercount of animal cruelty offenses as animal cruelty crimes only were recently added to NIBRS, and not all law enforcement agencies have been trained or encouraged to report animal cruelty crimes. The Appendix table provides a list of states that contributed animal cruelty data in 2017-18. This table highlights the variation in submitting animal cruelty data and possible undercounting across states. For example, Delaware contributed the most animal cruelty cases to NIBRS during these two years, which is likely

attributable to it being the only state with a statewide Office of Animal Welfare. The variations in reporting animal cruelty suggest the need for additional research at the state level.

Conclusion

This study provides new insights on differences between animal neglect and intentional cruelty cases using recently available data from the NIBRS. The findings obtained confirm previous work around the demographics of those who commit animal cruelty crimes and extend the understanding of animal cruelty incidents. In particular, the unique characteristics of the NIBRS data allow for the consideration of co-occurring crimes and arrest patterns. The present study found very few neglect offenses occur with another crime in contrast to intentional abuse offenses. In contrast, a slightly higher percentage of intentional abuse incidents are associated with an arrest as compared to those involving neglect. These patterns suggest the need to explore intervention and prevention programs tailored to the type of cruelty. The current study also highlights the utility of police data to study animal cruelty crimes and support for educating law enforcement on the importance of recognizing and accurately counting these crimes. Additional research can build upon and expand these findings.

References

- Achenbach, T.M., Howell, C.T., Quay, H.C., and Conners, C.K. (1991). National survey of problems and competencies among four- to sixteen-year-olds. *Monographs of the Society for Research in Child Development*, *56*(3)[225], v-120. https://doi.org/10.2307/1166156
- Addington, L.A. & Perumean-Chaney, S.E. (2014). Fatal and non-fatal intimate partner violence: What separates the men from the women for victimizations reported to police? *Homicide Studies*, *18*(2), 196-220. https://doi.org/10.1177/1088767912471341
- American Veterinary Medical Association (n.d.). U.S. pet ownership statistics. https://www.avma.org/resources-tools/reports-statistics/us-pet-ownership-statistics
- Arluke, A., Levin, J., Luke, C. & Ascione, F. (1999). The relationship of animal cruelty to violence and other forms of anti-social behavior. *Journal of Interpersonal Violence*, *14*(9), 963-975. https://doi.org/10.1177/088626099014009004
- Ascione, F.R. (1998). Battered women's response of their partners' and their children's cruelty to animals. *Journal of Emotional Abuse*, 1(1), 119-133 https://doi.org/10.1300/J135v01n01_06
- Ascione, F.R. (2001). Animal abuse and youth violence. *Juvenile Justice Bulletin*. Office of Juvenile Justice and Delinquency Prevention, US Department of Justice.
- Baldry, A. C. (2003). Animal abuse and exposure to interparental violence in Italian youth.

 *Journal of Interpersonal Violence, 18(3), 258–281.

 https://doi.org/10.1177/0886260502250081.
- Baldry, A.C. (2004). The Development of the P.E.T. Scale for the Measurement of Physical and Emotional Tormenting Against Animals in Adolescents. *Society & Animals*, *12*(1), 1-17. https://doi.org/10.1163/156853004323029513

- Barrett, B.J., Fitzgerald, A., Stevenson, R. & Cheung, C.H. (2017). Animal maltreatment as a risk marker of more frequent and severe forms of intimate partner violence. *Journal of Interpersonal Violence*, *35*(23-24),5131-5156. doi:10.1177/08862660517719542
- Bright, M.A., Huq, M.S., Spencer, T., Applebaum, J.W., & Hardt, N. (2018). Animal cruelty as an indicator of family trauma: Using adverse childhood experiences to look beyond child abuse and domestic violence, *Child Abuse & Neglect*, *76*, 287-296. https://doi.org/10.1016/j.chiabu.2017.11.011
- Burchfield, K. B. (2018). The nature of animal crime: Scope and severity in Chicago, *Crime & Delinquency*, 64(14), 1904–1924. https://doi.org/10.1177/0011128717719515
- Crime Solutions (n.d.). *Crime prevention programs*. Office of Justice Programs. https://crimesolutions.ojp.gov/topics/crime-crime-prevention#-2.
- Currie, C.L. (2006). Animal cruelty by children exposed to domestic violence. *Child Abuse & Neglect*, 30(4), 425-535. https://doi.org/10.1016/j.chiabu.2005.10.014
- Febres, J., Brasfield, H., Shorey, R. C., Elmquist, J., Ninnemann, A., Schonbrun, Y. C., Temple, J. R., Recupero, P. R., & Stuart, G. L. (2014). Adulthood animal abuse among men arrested for domestic violence. *Violence Against Women*, 20(9), 1059–1077. https://doi.org/10.1177/1077801214549641
- Federal Bureau of Investigation. (2016). *The expansion of NIBRS*.

 https://ucr.fbi.gov/nibrs/2015/resource-pages/the-expansion-of-nibrs-2015_final-1.pdf

 Federal Bureau of Investigation (2018). *Participation by state*, 2017.
 - $https://ucr.fbi.gov/nibrs/2017/tables/data-declarations/dd_participation_by-state_2017.pdf$

- Federal Bureau of Investigation (2019a). *Participation by state*, 2018. https://ucr.fbi.gov/nibrs/2018/tables/data-declarations/dd_participation_by-state_2018_final.pdf
- Federal Bureau of Investigation (2019b). Data declaration number of law enforcement agencies and population covered, enrolled, participation status, and method of data submission, by population group, 2018. https://ucr.fbi.gov/nibrs/2018/tables/data-declarations/dd_number_of_leas_enrolled_part_status_and_method_of_data_sub_by_pop_g roup-2018_final.pdf
- Federal Bureau of Investigation (n.d.). National Incident-Based Reporting System. https://www.fbi.gov/services/cjis/ucr/nibrs
- Felthous, A.R. (1979). Childhood antecedents of aggressive behaviors in male psychiatric patients. *Bulletin of the American Academy of Psychiatry and Law*, 8(1), 104-110.
- Flynn, C. P. (1999). Exploring the link between corporal punishment and children's cruelty to animals. *Journal of Marriage and Family*, *61*(4), 971–981. https://doi.org/10.2307/354017.
- Frick, P.J., Lahey, B.B., Loeber, R., Tannenbaum, L., VanHorn, Y., Christ, M.A.G., Hart, E.A., & Hanson, R. (1993). Oppositional defiant disorder and conduct disorder. A meta-analytic review of factor analysis and cross-validation in a clinical sample. *Clinical Psychology Review*, 13(4), 319-340. https://doi.org/10.1016/0272-7358(93)90016-F
- Frost, R.O., Patronek, G., Arluke, A., & Steketee, G. (2015). The hoarding of animals: An update. *Psychiatric Times*, 32(4). https://www.psychiatrictimes.com/view/hoarding-animals-update

- Gerbasi, K. (2004). Gender and nonhuman animal cruelty convictions: Data from Pet-Abuse.com. *Society & Animals* 12(4), 359–365.

 doi: https://doi.org/10.1163/1568530043068029
- Gjelten, E.A. (n.d.). *Animal cruelty laws*. Criminal Defense Lawyer. https://www.criminaldefenselawyer.com/resources/cruelty-to-animals.html
- Haden, S.C., McDonald, S.E., Booth, L.J., Ascione, F.R., & Blakelock, H. (2018). An exploratory study of domestic violence: Perpetrators' reports of violence against animals. *Anthrozoös*, 31(3), 337-352. https://doi.org/10.1080/08927936.2018.1455459
- Hargreaves-Cormany, H.A., Wood, E.L., Alicchio, J.T., & O'Connor, A. (2020,
 August). Program evaluation of the spcaLA court diversion program for youth:
 Implications for best practices in humane education diversion programs [Poster presentation]. American Psychological Association Convention, Virtual Convention (due to the COVID-19 pandemic).
- Hartman, C.A., Hageman, T., Williams, J.H., & Ascione, F.R. (2018). Intimate partner violence and animal abuse in an immigrant-rich sample of mother-child dyads recruited from domestic violence programs. *Journal of Interpersonal Violence*, *33*(6), 1030-1047. https://doi.org/10.1177/0886260515614281
- Hoffer, T., Hargreaves-Cormany, Muirhood, Y., & Meloy, J.R. (2018). *Violence in animal cruelty offenders*. Springer.
- Knight, K.E., Ellis, C. & Simmons, S.B. (2014). Parental predictors of children's animal abuse: Findings from a national and intergenerational sample. *Journal of Interpersonal Violence*, 29(16), 3014-3034. https://doi.org/10.1177/0886260514527825

- Loeber, R., Farrington, D.P., & Petechuk, D. (2003). *Child delinquency: Early intervention and prevention*. Child Delinquency Bulletin Series, U,S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 1-19.

 https://www.ojp.gov/pdffiles1/ojjdp/186162.pdf
- Longobardi, C. & Badenes-Ribera, L. (2019). The relationship between animal cruelty in children and adolescent and interpersonal violence: A systematic review. *Aggression and Violent Behavior*, 46, 201–211. https://doi.org/10.1016/j.avb.2018.09.001
- McEwen, F.S., Moffitt, T.E., & Arseneault, L. (2014). Is childhood cruelty to animals a marker for physical maltreatment in a prospective cohort study of children? *Child Abuse & Neglect*, 38(3), 533-543. https://doi.org/10.1016/j.chiabu.2013.10.016
- Merz-Perez L., Heide, .K., & Silverman, I. (2001). Childhood cruelty to animals and subsequent violence against animals. *International Journal of Offender Therapy and Comparative Criminology*, 45(5), 556-76. https://doi.org/10.1177/0306624X01455003
- Miller, K. S., & Knutson, J. F. (1997). Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. *Child Abuse & Neglect*, 21(1), 59–82. https://doi.org/10.1016/S0145-2134(96)00131-7.
- Randour, M.L., Smith-Blackmore, M., Blaney, N., DeSousa, D., & Guyony, A.A. (2019).Animal abuse as a type of trauma: Lessons for human and animal services professionals.Trauma, Violence, and Abuse, 22, 277-288. https://doi.org/10.1177/1524838019843197
- Reyes, C. (2016). Statistics and measurement of animal cruelty. In M. B. Brewster & C. L.

 Reyes (Eds.) *Animal cruelty: A multidisciplinary approach to understanding* (2nd ed.) (141-156). Carolina Academic Press.

- Rigdon, J. D. & Tapia, F. (1977). Children who are cruel to animals: A follow-up study. *Journal of Operational Psychiatry*, 8(1), 27-36.
- Simmons, C.A. & Lehmann, P. (2007). Exploring the link between pet abuse and controlling behaviors in violent relationships. *Journal of Interpersonal Violence*, 22(9), 1211-1222. https://doi.org/10.1177/0886260507303734
- Sprinkle, J. (2008). Animals, empathy, and violence: Can animals be used to convey principles of prosocial behavior to children? *Youth Violence and Juvenile Justice*, 6(1), 47-58. https://doi.org/10.1177/1541204007305525
- Stamatel, J.P. & Mastrocinque, J.M. (2011). Using National Incident-Based Reporting System (NIBRS) data to understand financial exploitation of the elderly: A research note. *Victims & Offenders*, 6(2), 117–136. https://doi.org/10.1080/15564886.2011.557321
- Tapia, F. (1971). Children who are cruel to animals. *Child psychiatry and human development*, 2(2), 70-77. https://doi.org/10.1007/BF01434639
- Vaughn, M. G., Fu, Q., DeLisi, M., Beaver, K. M., Perron, B. E., Terrell, K., & Howard, M. O. (2009). Correlates of cruelty to animals in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Psychiatric Research*, 43(15), 1213–1218. https://doi.org/10.1016/j.jpsychires.2009.04.
- Walker, L. E. (1984). The battered woman syndrome. New York: Springer Publishing
- Walters, G.D. (2013). Testing the Specificity Postulate of the Violence Graduation Hypothesis:

 Meta-Analyses of the Animal Cruelty–Offending Relationship. *Aggression and Violent Behavior*, *18*(6), 797-802. https://doi.org/10.1016/j.avb.2013.10.002

- Walters, G.D. (2014). Testing the direct, indirect, and moderated effects of childhood animal cruelty on future aggressive and non-aggressive offending. *Aggressive Behavior*, 40(3), 238-249. https://doi.org/10.1002/ab.21514
- Walters G.D. (2016). Parent and child reports of animal cruelty and their correlation with parent and child reports of child delinquency. *Psychology, Crime & Law*, 25(5), 479-488. doi:10.1080/1068316X.2016.1258472
- Walton-Moss, B.J., Manganello, J., Frye, V., & Campbell, J. (2005). Risk factors for intimate partner violence and associated injury among urban women. *Journal of Community Health*, 30(5), 377-389. https://doi.org/10.1007/s10900-005-5518-x
- Wisch, R.F. (2010). *Brief summary of state cruelty laws*. https://www.animallaw.info/intro/state-anti-cruelty-laws

Table 1

Types of Animal Cruelty, 2017-18 NIBRS

Type of Animal Cruelty	Frequency	Percentage
Neglect	5,872	67.2
Fighting	71	0.8
Intentional Abuse	2,599	29.8
Sexual Contact	102	1.2
Neglect and Fighting	7	0.1
Neglect and Intentional Abuse	78	0.9
Fighting and Intentional Abuse	4	0.0
Intentional Abuse and Sexual Contact	1	0.0
Neglect, Fighting, and Intentional Abuse	2	0.0
Total	8,736	100

Table 2

Multi-Offender Incidents by Type of Animal Cruelty, 2017-18 NIBRS

Number of Offenders	Type of Animal Cruelty	
	Neglect	Intentional
_	(percentage)	(percentage)
Single or Unknown Number of Offenders	5254	2608
	89.5%	91.1%
Two or More Offenders	618	256
	10.5%	8.9%
Total	5,872	2,864
	100%	100%

$$\overline{n = 8,736}$$

 $\chi^2(1, n=8,736) = 5.38, p<.05$

Table 3 Offender Sex by Type of Animal Cruelty, 2017-18 NIBRS

Offender Sex	Type of Anima	Type of Animal Cruelty	
	Neglect	Intentional	
	(percentage)	(percentage)	
Male	2,337	1,545	
	39.8%	53.9%	
Female	1896	377	
	32.3%	13.2%	
Male and female*	484	138	
	8.2%	4.8%	
Unknown/Missing	1,155	804	
	19.7%	28.1%	
Total	5,872	2,864	
	100%	100%	

^{*}For multi-offender incidents

$$n = 8,736$$

 χ^2 (3, n=8,736) =449.65, p<.05

Table 4 Offender Age Group by Type of Animal Cruelty, 2017-18 NIBRS

Offender Age	Type of Anim	al Cruelty
-	Neglect	Intentional
	(percentage)	(percentage)
18 and under	88	205
	1.5%	7.2%
19-29	1,012	543
	17.2%	19.0%
30-39	1,091	464
	18.6%	16.2%
40-49	737	299
	12.6%	10.4%
50-59	632	209
	10.8%	7.3%
60-69	382	132
	6.5%	4.6%
70-79	167	31
	2.8%	1.1%
80 and older	43	7
	0.7%	0.2%
Multiple age group*	298	113
	5.1%	3.9%
Missing	1,422	861
	24.2%	30.1%
Total	5,872	2,864
	100%	100%

^{*}For multi-offender incidents

n = 8,736 $\chi^2(9, n=8,736) = 300.94, p<.05$

Table 5 Offender Race by Type of Animal Cruelty, 2017-18 NIBRS

Offender Race	Type of Anima	Type of Animal Cruelty	
	Neglect	Intentional	
	(percentage)	(percentage)	
White	3,288	1,508	
	56.0%	52.7%	
Black	1,054	380	
	17.9%	13.3%	
Other races	73	69	
	1.2%	2.4%	
Multiple racial group*	51	29	
	0.9%	1.0%	
Unknown/Missing	1,406	878	
	23.9%	30.7%	
Total	5,872	2,864	
	100%	100%	

^{*}For multi-offender incidents

Percentages might not add to 100 due to rounding. $n=8,736; \chi^2(4,n=8,736)=79.33, p<.05$

Table 6 Incident Location by Type of Animal Cruelty, 2017-18 NIBRS

Incident Location	Type of Animal Cruelty	
	Neglect	Intentional
	(percentage)	(percentage)
Residence/home	4,085	1,963
	69.6%	68.5%
Street	994	401
	16.9%	14.0%
Outdoor location	186	181
	3.2%	6.3%
Non-residential building	382	147
	6.5%	5.1%
Farm	58	34
	1.0%	1.2%
Other	167	138
	2.8%	4.8%
Total	5,872	2,864
	100%	100%

n = 8,736

Percentages might not add to 100 due to rounding.

 χ^2 (5, n=8,736) = 84.37, p<.05

Table 7 Co-Occurring Incident by Type of Animal Cruelty, 2017-18 NIBRS

Co-Occurring Incidents	Type of Anir	Type of Animal Cruelty	
-	Neglect	Intentional	
	(percentage)	(percentage)	
Only Animal Cruelty	5,697	2,312	
	97.0%	80.7%	
Co-Occurring Incident (Total)	175	552	
	3.0%	19.3%	
Animal Cruelty and Violent*	70	220	
•	1.2%	7.7%	
Animal Cruelty and Property*	42	164	
	0.7%	5.7%	
Animal Cruelty and Society*	37	67	
	0.6%	2.3%	
Animal Cruelty and Multiple*	26	101	
	0.4%	3.5%	
Total	5,872	2,864	
	100%	100%	

^{*}Included in Co-Occurring Incident Total.

Table 8 Incident Arrest by Type of Animal Cruelty, 2017-18 NIBRS

Arrest	Type of Animal Cruelty	
	Neglect	Intentional
	(percentage)	(percentage)
No Arrest	4,352	1,854
	74.1%	64.7%
Arrest Made	1,520	1,010
	25.9%	35.3%
Total	5,872	2,864
	100%	100%

n = 8,736

$$\chi^2$$
 (1, n=8,736) = 82.32, p<.05

n = 8,736 $\chi^{2}(1, n=8,736) = 669.87, p<.05$

Appendix
States Contributing Animal Cruelty Cases, 2017-18 NIBRS

State	Type of Animal Cruelty (counts)	
	Neglect	Intentional
Alabama	2	0
Arizona	4	2
Colorado	927	451
Connecticut	58	38
Delaware	1,917	105
Hawaii	24	27
Idaho	9	3
Indiana	1	1
Kentucky	161	174
Massachusetts	34	26
Maine	11	5
Michigan	418	261
Minnesota	47	18
Missouri	61	26
Mississippi	46	2
Montana	103	73
Nebraska	0	1
North Dakota	66	61
New Hampshire	194	62
New Mexico	4	7
Ohio	82	53
Oregon	343	244
Rhode Island	4	1
South Carolina	301	210
South Dakota	23	13
Tennessee	513	439
Texas	210	257
Virginia	10	4
Vermont	35	33
Washington	99	148
Wisconsin	145	109
West Virginia	20	10
Total	5,872	2,864