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# An Exploration of Type of Animal Abuse and Intimate Partner Violence

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## ABSTRACT

Prior research has identified a relationship between animal abuse and intimate partner violence (IPV). However, there is a gap in the literature regarding the relationship between IPV and type of animal abused. From a sample of 851 participants, this study explored, using unadjusted odds ratios, the bivariate relationships between types of IPV victimization (e.g., psychological, physical, and severe IPV) and partners' abuse of cats, dogs, small pets, and horses. The strongest association was between the partner's abuse of cats and severe IPV victimization. The partner's cat abuse was associated with a 1,232% increase in the likelihood of severe IPV for women and a 945% increase for men. Cat abuse and dog abuse were significantly associated with all types of IPV, abuse of small pets was associated with physical and severe IPV, and horse abuse was not significantly related to IPV. Additionally, this study examined the relationship between types of animal abuse (e.g., neglect, emotional abuse, threats, physical abuse, and severe physical abuse) for cats and dogs and IPV. Cat neglect was most strongly associated with severe IPV and increased the likelihood of it by approximately 3,700%. Dog neglect increased the likelihood of severe IPV by approximately 1,600%. Results from the study indicate that there are differences between type of animal abused in relationship to IPV and highlights the need for future research to examine types of animal abuse separately.

## KEYWORDS

Animal abuse; human–animal interaction; intimate partner violence

Intimate partner violence (IPV) continues to be a social issue warranting serious attention (Smith et al., 2017). It can include physical violence, sexual violence, or psychological violence perpetrated against a current or former intimate partner. Approximately 47% of women and 43% of men have experienced some form of IPV victimization in their lifetime, and 32.5% of women and 24.6% of men have experienced severe physical IPV victimization (Leemis et al., 2022). Additionally, approximately 50% of both men and women have experienced psychological IPV victimization (Carney & Barner, 2012). IPV victimization is associated with a host of negative consequences, including physical injury, depression, anxiety, post-traumatic stress symptoms, physical health consequences, and even death (Breiding et al., 2014; Campbell, 2002; Coker et al., 2002; Smith et al., 2017; Spencer et al., 2019).

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Another type of violence that warrants serious concern is animal abuse. According to the National Incident Based Reporting System, animal abuse is defined 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. Included are instances of duty to provide care, e.g., shelter, food, water, care if sick or injured; transporting or confining an animal in a manner likely to cause injury or death; causing an animal to fight with another; inflicting excessive or repeated unnecessary pain or suffering, e.g., uses objects to beat or injure an animal (DeSousa, 2016, p. 2).

Attention toward this type of cruelty has grown in recent years owing to the association between animal abuse and human abuse (Lockwood & Arkow, 2016).

Prior research identifies a strong link between animal abuse and domestic violence. A recent systematic review examining the association between animal abuse and IPV found that animal abuse (including harm and threats to harm) co-occurred with IPV between 21% and 89% of the time (Cleary et al., 2021). The study that found higher rates of co-occurrence of IPV and animal abuse examined samples of women residing at women's shelters (e.g., Barrett et al., 2018), whereas the study that found the abuse co-occurrence of 21% examined a community sample diverse in terms of gender and sexual orientation (Riggs et al., 2021). One study found that women who were residing in women's shelters were 11 times more likely to report their partner had abused their pet compared with a control group (Ascione et al., 2007). Additionally, having a partner threaten a pet was associated with a five-times increase in the likelihood of being a victim of IPV (Volant et al., 2008). Research examining men who were arrested for IPV found that 52% of the sample reported that they had perpetrated animal abuse (Haden et al., 2018).

In the context of IPV, abusing or threatening to abuse an animal may be used by the perpetrator as a tactic to exert power or control over their partner (Gallagher et al., 2008; Newberry, 2017). Undoubtedly, animal abuse and IPV are interconnected phenomena. However, the research examining this link tend to examine all forms of animal abuse, without examining whether the type of animal (e.g., dog, cat, or small pet) results in stronger or weaker associations with IPV. In a recent systematic review, none of the studies highlighted made distinctions between the type of animal abused and its relationship to IPV (Cleary et al., 2021). Therefore, the present study sought to examine the relationship between IPV victimization and the type of animal (e.g., cat, dog, small pet, horse) that the perpetrator abused in order to help inform policy and education efforts surrounding both IPV and animal abuse.

### ***Why Type of Animal Matters***

Throughout history, there have been stereotypes about different animals and their personalities, whether or not these stereotypes translate to individual animals. Dogs may be viewed as loyal, friendly, outgoing, and protective, while cats may be viewed as independent, graceful, and poised. For example, one study on pet owners of both cats and dogs found that participants rated their dogs as significantly more sociable and protective, and rated their cats as significantly more neurotic than their dogs (Menchetti et al., 2018). Small pets, such as hamsters, guinea pigs, or birds, may be viewed as harmless and easy to take care of, and horses may be seen as majestic and regal animals that

represent freedom. However, there are also more negative stereotypes placed on some animals compared with others that could lend to people having more negative views of the species in general. Barnard (1999) makes a case for this, stating, "Cats are sometimes viewed as sneaky or aloof, probably because their facial muscles allow less expression, compared to dogs or primates" (p. 2). Cats may be viewed as sneaky, uncontrollable, or aloof (Barnard, 1999; Mitchell & Ellis, 2013), and small pets may be more associated with vermin (such as hamsters or guinea pigs), which may lead to certain individuals having more negative associations with different types of animal.

It is not just potential stereotypes supporting the importance of examining the association between IPV and the abuse of different animals; research confirms that there are different prevalence rates of abuse when comparing dogs and cats. For example, the Humane Society of the United States (1999) found that intentional cases of animal abuse are significantly higher for cats compared with dogs, and that cats (56.9%) are killed at significantly higher rates in cases of animal cruelty than are dogs (44.7%). Although the reason for this discrepancy is unclear, one possibility could be the physical nature of cats and dogs: many dogs are significantly larger than cats and may be more difficult to harm. For example, some cases of cat abuse involve the perpetrator throwing the cat (Flynn, 2000), which would be impossible if the dog was large. Cats are also more likely to have their bones broken or be dropped from heights (Felthous & Kellert, 1987), which may again be due to their size in comparison with dogs. However, abuse toward cats may also be associated with the long history of cruelty against cats. For example, violence has historically been perpetrated against cats due to their association with witchcraft (see Lockwood, 2005 for a thorough review of this history).

Additionally, when looking at the association between animal abuse and IPV, where gender is often considered an important component to examine, there are often gendered pairings when it comes to pets as well. For example, dogs are often associated with more masculine traits and cats are associated with femininity (Mitchell & Ellis, 2013). It has been hypothesized that men who victimize women may be more likely to victimize cats as well (Barnard, 1999). Due to the different associations and stereotypes individuals may have with different animals, the differences in the size of animals, gendered associations with some animals, and a long history of cruelty toward cats in particular, it is believed that the type of animal being abused will result in varying effect sizes when assessing relationships with IPV.

### ***Power and Control***

It is useful to examine the relationship between IPV and animal abuse through a theoretical lens of power and control, as they can be viewed as the root of both IPV and animal abuse. The importance of power and control can be seen in Johnson's typology of IPV, with the two most common being intimate terrorism and situational couple violence (Johnson, 2006, 2008). Intimate terrorism is rooted in power and control, where the perpetrator seeks to incite fear and dominate and control their partner through violence, whereas situational couple violence is typically less severe, does not include the use of coercive control, does not incite fear in one partner, and tends to be associated with a lack of communication or conflict resolution skills (Johnson, 2008; Kelly & Johnson, 2008). Pet abuse

could be a tactic of coercive control within intimate terrorism, which has been previously identified in the literature (Fitzgerald et al., 2019; Johnson, 2008). It is important to examine the relationship between different types of IPV and animal abuse to provide insight into severe forms of abuse that are associated with intimate terrorism.

Control is also a key motivation for animal abuse, as abusers will compensate for feelings of weakness by exerting power/control over an animal (Agnew, 1998). Animal abusers with this motivation may seek out animals that are easier to harm – such as small pets or cats (as compared with larger animals, such as dogs or horses). Additionally, animal abusers who seek out feelings of control or power may target animals that are seemingly more difficult to control. For example, cats have the reputation of being self-reliant, which may be a trait that is annoying to abusers who seek power and control. To illustrate the differences in obedience between cats and dogs in particular, Lockwood (2005) writes, “Individually, cats of both sexes can at one moment exhibit a warm, soft, cuddly demeanor and at the next indicate that they have had sufficient contact by terminating an interaction with a serious bite or scratch. This is often in stark contrast to dogs, who will solicit attention and often continue to invite interaction submissively even when maltreated” (p. 18). Additionally, animals such as hamsters, birds, or guinea pigs may also seem to be less easy to emotionally control – whereas dogs and horses are considered to be obedient animals and may not aggravate someone with control issues. It is important to examine the relationship between animal abuse and IPV through the lens of power and control, as both are means to control an animal and as a coercive tactic to control the victim of IPV.

### ***Gender, IPV, and Animal Abuse***

When examining the intersection between animal abuse and IPV, gender is an important factor to consider. In terms of IPV, men and women may experience lower levels of IPV, such as psychological IPV, at similar rates (Carney & Barner, 2012). However, when looking at more severe forms of IPV, it has been found that 32.5% of women and 24.6% of men have experienced it (Leemis et al., 2022). Women are more likely to be injured in cases of IPV (Caldwell et al., 2012). When looking at intimate partner homicide, the most severe form of IPV, there is a clear gender difference, with approximately 3% of homicides against men and 39% of homicides committed against women being committed by a current or former intimate partner (Catalano, 2013). When looking at animal abuse, men are more likely to intentionally harm or kill animals compared with women (Addington & Randour, 2022; DeGue & DeLillo, 2009). Although women are more likely to neglect animals compared with perpetrating intentional cruelty against them, men are still more likely to neglect animals than women are (Addington & Randour, 2022). Due to gender differences, where men are more likely to perpetrate severe forms of IPV, intentional cruelty against animals, and animal neglect than women are, accounting for gender when examining the relationship between animal abuse and IPV is needed.

### ***Present Study***

Previous literature shows a connection between animal abuse and IPV, with up to 75% of IPV cases co-occurring with animal abuse (Cleary et al., 2021). Animal abuse can also be

used as a tactic to control the abused partner (Gallagher et al., 2008). Despite the important work linking animal and partner abuse, there has not been a study examining the relationship between specific species of animal (dogs, cats, small pets, and horses) and IPV. This is important owing to differences between types of animal, such as associated personality traits and characteristics, size, associated femininity and masculinity, historical abuse of some animals (e.g., cats), and differences in abuse prevalence rates among different animals. In this study, unadjusted odds ratios were calculated between types of IPV victimization and different types of partner animal abuse for the entire sample, as well as men and women separately. The relationship between subtypes of animal abuse (neglect, emotional abuse, threats, physical abuse, and severe physical abuse) and IPV victimization (physical, psychological, and severe) was also examined.

## Methods

### *Sample and Procedures*

In May and October of 2022, two rounds of data were collected through Prolific.co, which is an online platform that provides compensation to individuals for taking surveys for research studies. First, the data collection methods were approved by the Kansas State University's Institutional Review board (IRB-11072). Participants who agreed to participate in the study filled out an online survey about their personal and relationship experiences and were compensated approximately \$12 an hour for their time. This particular study only used data collected from individuals who had been in a romantic relationship in the past year and had witnessed their partner interact with an animal in the past year. All questions were focused on their current or most recent partner.

Data collection resulted in 851 participants. Of these, 398 identified as male, 436 identified as female, 13 identified as non-binary, and four identified as transgender. The majority of the sample identified as heterosexual ( $n = 710$ ), followed by 85 identifying as bisexual, 32 as lesbian/gay, 13 as pansexual, six as "other," and five as queer. Participants were allowed to mark all that applied for race/ethnicity; the majority of the sample identified as White ( $n = 684$ ), followed by Black or African American ( $n = 97$ ), Hispanic or Latino ( $n = 54$ ), Asian ( $n = 49$ ), Native American/Alaskan Native ( $n = 19$ ), "Other" ( $n = 7$ ), and Southwest Asian, North African or Middle Eastern ( $n = 2$ ). Approximately 40.8% of the sample had a Bachelor's degree ( $n = 347$ ), 36% had a high school diploma or a GED ( $n = 306$ ), 13.7% had a Master's degree ( $n = 117$ ), 5.2% attended a Trade school ( $n = 44$ ), 2.8% had a PhD ( $n = 24$ ), and 1.5% had less than a high school diploma ( $n = 13$ ). The ages of participants ranged from 18–80 years, with an average of 45.86 years. A total of 389 participants were married (45.8%), 283 were in a committed relationship (33.3%), 170 were single (20%), eight were widowed (0.9%), and one individual did not answer the question.

## Measures

### *Intimate Partner Violence Victimization*

IPV victimization was measured by using the Revised Conflict Tactics Scale (CTS-2; Straus et al., 1996). The CTS-2 is a 78-item measure that examines both perpetration and

victimization of physical IPV, psychological IPV, sexual IPV, and injury with an intimate partner within the past year, as well as the use of negotiation tactics. The measure asks participants to report on the frequency of acts that have occurred in the relationship in the past year, ranging from 0 (this has never happened) to 6 (20 or more times in the past year). In this study, only victimization questions were used.

Four different subscales from the CTS-2 were used: physical IPV victimization (e.g., “My partner pushed or shoved me”), psychological IPV victimization (e.g., “My partner called me fat or ugly”), sexual IPV victimization (e.g., “My partner used force [like hitting, holding down, or using a weapon] to make me have sex”), and severe IPV victimization. Severe IPV victimization was measured by taking the mean score of seven items a participant could have experienced that involved IPV that could cause serious physical injury, such as being choked, having a knife or gun used on them, being burned or scalded on purpose, being beat up, being kicked, being slammed against a wall, or being punched or hit with something that could hurt.

The Cronbach’s alpha was acceptable for physical IPV victimization ( $\alpha = 0.89$ ), psychological IPV victimization ( $\alpha = 0.77$ ), and severe IPV victimization ( $\alpha = 0.85$ ). However, the Cronbach’s alpha for the sexual IPV victimization subscale was below the typical threshold of acceptability ( $\alpha = 0.59$ ) and was not included in the current study. For the binary logistic regressions, all subscales were dichotomized, where 0 = did not experience this type of IPV and 1 = did experience this type of IPV in the past year.

### ***Animal Abuse***

First, participants were asked if they had seen their current or most recent partner interact with any of the following pets, where they were allowed to choose all that applied: cats, dogs, horses, small animals (e.g., hamster, rabbit, guinea pig, bird), reptile, or “other.” If the participant indicated that they had witnessed their current or most recent partner interact with any of the following animals, they were given a revised version of the Partner’s Treatment of Animals Scale (PTAS; Fitzgerald et al., 2016): the word “pet” was replaced with the specific animals selected. The PTAS is a 21-item scale that measures various subtypes of animal abuse perpetrated by one’s intimate partner, including physical abuse of the pet (e.g., “smacked a pet,” “kicked a pet”), severe physical abuse of a pet (e.g., “killed a pet,” “injured a pet”), threats to harm a pet (e.g., “threatened to harm or get rid of a pet to get me to do something”), physical neglect (e.g., “refused to feed a pet,” “refused to provide water for a pet”) and emotional abuse of a pet (e.g., “intimidated or scared a pet on purpose”). Each item asked the participant to respond to the frequency their current or most recent partner engaged in these behaviors, rated from 1 (never) to 5 (very frequently). The Cronbach’s alpha was acceptable for the PTAS for dogs ( $\alpha = 0.96$ ), cats ( $\alpha = 0.93$ ), small animals ( $\alpha = 0.80$ ), and horses ( $\alpha = 0.78$ ).

### ***Analysis Plan***

First, using SPSS v. 27, frequencies were run to examine prevalence rates of IPV victimization and dog, cat, small animal, horse, and “other” animal abuse reported among men and women. Next, a series of independent samples *t*-tests were run to determine if there were any significant differences in partner’s animal abuse or IPV victimization by gender (men and women), sexual orientation (heterosexual individuals and LGBTQ+ individuals), and

race (White individuals and People of Color). Next, binary logistic regressions were run separately to calculate an unadjusted odds ratio between predictor variables (perpetrator's dog abuse, perpetrator's cat abuse, perpetrator's small animal abuse, and perpetrator's horse abuse) and the three outcome variables, which were physical IPV victimization, psychological IPV victimization, and severe IPV victimization. Additionally, unadjusted odds ratios were calculated for men and women separately. In these analyses, only individuals who identified as heterosexual were included in order to confirm the gender of the perpetrator. In analyses looking specifically at men and women, non-binary and transgender individuals were excluded. Owing to the sample sizes, only the relationship between IPV victimization and the partner's dog and cat abuse were examined separately for men and women. LGBTQ+ individuals were included in analyses examining the entire population. Lastly, unadjusted odds ratios were calculated for different subtypes of animal abuse (e.g., neglect, emotional abuse, physical abuse, and severe abuse) of cats and dogs and IPV and were calculated using the entire sample. Missing data were handled using pairwise deletion.

## Results

### *Frequencies and Descriptive Statistics*

A total of 511 (60.0%) participants reported psychological IPV victimization, 122 (14.3%) reported physical IPV victimization, and 53 (6.2%) reported severe IPV victimization in the past year. Of the 428 participants who witnessed their current or most recent dating partner interact with a cat, 96 (22.4%) reported that their partner had abused the cat in some way. Of the 623 participants who witnessed their partner interact with a dog, 133 (21.3%) reported some form of dog abuse. As for small pets, such as hamsters, birds, rabbits, or guinea pigs, 19 (13.2%) out of 144 reported some form of animal abuse. Of the 75 individuals who reported they saw their current or most recent partner interact with a horse, five (6.7%) reported that the partner abused the horse in some way. Lastly, for "other" pets, in which participants identified the pet themselves, which mostly consisted of fish, goats, and cows, four (13.8%) out of 29 individuals reported that their current or most recent partner abused the animal.

When looking at gender among individuals who identified as heterosexual, 50 women (13.3%) and 56 men (15.3%) experienced physical IPV victimization, 237 (61.6%) women and 225 of men (60.2%) experienced psychological IPV victimization, and 23 women (6.0%) and 22 of men (5.7%) experienced severe IPV victimization. Of the 185 women who witnessed their partner interact with a cat, 43 (23.2%) reported there was cat abuse, and out of 155 men who witnessed their partner interact with a cat, 33 (21.3%) reported there was some form of cat abuse. For women who witnessed their partner interact with a cat, 13.8% reported the partner threatening a cat, 12.6% reported cat emotional abuse, 9.3% reported physical cat abuse, 6.4% reported cat neglect, and 1.9% reported severe physical cat abuse. For men who had witnessed their partner interact with a cat, 11.4% reported their partner threatening a cat, 10.8% reported cat emotional abuse, 10.2% reported physical cat abuse, 3.8% reported cat neglect, and 1.1% reported severe physical cat abuse.



For women, 72 out of 279 (25.8%) reported dog abuse, and for men, 44 out of 246 (17.9%) reported dog abuse. For women who witnessed their partner interact with a dog, 13.8% reported them threatening a dog, 11.5% reported physical dog abuse, 11.2% reported dog emotional abuse, 3.5% reported dog neglect, and 3.2% reported severe physical dog abuse. For men who had witnessed their partner interact with a dog, 9.5% reported their partner threatening the dog, 8.7% reported dog emotional abuse, 7.7% reported physical dog abuse, 3.5% reported dog neglect, and 1.4% reported severe physical dog abuse. Additionally, seven out of 69 (10.1%) women and seven out of 53 (13.2%) men reported small animal abuse. Lastly, three women out of 41 (7.3%) and three out of 33 men (9.1%) reported their partner abused a horse.

A series of independent samples *t*-tests were calculated in order to determine if there were significant differences in rates of partner's animal abuse and participant's IPV victimization in regards to gender, sexual orientation, and race/ethnicity. There were no significant differences in rates of perpetrator's cat abuse, dog abuse, small animal abuse, or horse abuse, as well as physical IPV victimization and severe IPV victimization based on gender, sexual orientation, or race/ethnicity. However, it was found that People of Color ( $M = 12.07$ ,  $SD = 21.88$ ) experienced higher levels of psychological IPV victimization compared with White individuals ( $M = 8.32$ ,  $SD = 17.67$ ;  $t_{(903)} = -2.41$ ,  $p = 0.02$ ). Additionally, women ( $M = 10.57$ ,  $SD = 20.53$ ) experienced higher levels of psychological IPV victimization than men ( $M = 7.97$ ,  $SD = 17.18$ ;  $t_{(889)} = -2.05$ ,  $p = 0.04$ ). Therefore, additional adjusted odds ratios were calculated to control for race/ethnicity and for gender for analyses including the entire sample.

### ***The Relationship Between Animal Abuse and IPV***

The results from the unadjusted odds ratios using the entire sample showed that for reporting that one's current or most recent romantic partner had abused a cat, there was a 427% increase in the likelihood of reporting that the partner also physically abused the individual (see [Table 1](#)). If the participant reported that their current or most recent intimate partner abused a small pet, such as a rabbit, bird, hamster, or guinea pig, there was a 385% increase in the likelihood that the participant also reported being physically abused by the partner. Reporting that one's partner abused a dog was related to a 216% increase in the likelihood of also reporting physical IPV victimization. There was not a significant relationship between the partner abusing a horse and the participant reporting physical IPV victimization.

Reporting that the partner abused small pets was related to a 373% increase in the likelihood of reporting psychological IPV victimization by that partner, although this finding was no longer significant after controlling for race and gender. Similarly, reporting the partner abused a cat was associated with a 346% increase in the likelihood of reporting that the partner also psychologically abused the participant themselves. There was also an 81% increase in the likelihood of reporting psychological IPV victimization if they reported that their current or most recent partner abused a dog. There was not a significant association between the partner abusing a horse and psychologically abusing the participant.

When examining the link between partner's animal abuse and participant's reports of severe IPV victimization, which includes acts of violence that cause injury, such as being

**Table 1.** Unadjusted and adjusted odds ratios examining the relationship between IPV victimization and partner's animal abuse among the entire sample ( $n = 854$ ).

Variable	OR [95% CI]	<i>p</i> -value	AOR [95% CI]	<i>p</i> -value
<i>Physical IPV victimization</i>				
Partner's cat abuse perpetration	5.27 [2.92, 9.51]	< <b>0.001</b>	4.95 [2.73, 8.99]	< <b>0.001</b>
Partner's dog abuse perpetration	3.16 [1.95, 5.10]	< <b>0.001</b>	3.23 [1.98, 5.27]	< <b>0.001</b>
Partner's small pet abuse perpetration	4.85 [1.62, 14.49]	<b>0.005</b>	4.88 [1.58, 15.12]	<b>0.006</b>
Partner's horse abuse perpetration	2.58 [0.25, 26.98]	0.428	2.57 [0.18, 36.23]	0.484
<i>Psychological IPV victimization</i>				
Partner's cat abuse perpetration	4.46 [2.42, 8.20]	< <b>0.001</b>	4.22 [2.28, 7.79]	< <b>0.001</b>
Partner's dog abuse perpetration	1.81 [1.18, 2.80]	<b>0.007</b>	1.78 [1.15, 2.75]	<b>0.010</b>
Partner's small pet abuse perpetration	4.73 [1.05, 21.45]	<b>0.044</b>	4.40 [0.96, 20.19]	0.056
Partner's horse abuse perpetration	0.77 [0.12, 4.92]	0.779	0.44 [0.55, 3.58]	0.445
<i>Severe IPV victimization</i>				
Partner's cat abuse perpetration	12.31 [4.73, 32.03]	< <b>0.001</b>	11.44 [4.33, 30.23]	< <b>0.001</b>
Partner's dog abuse perpetration	4.12 [2.11, 8.03]	< <b>0.001</b>	4.25 [2.16, 8.37]	< <b>0.001</b>
Partner's small pet abuse perpetration	5.53 [1.13, 27.00]	<b>0.034</b>	5.60 [1.07, 29.24]	<b>0.041</b>
Partner's horse abuse perpetration <sup>a</sup>	–	–	–	–

Note: <sup>a</sup>Insufficient sample size. CI = confidence interval. Adjusted odds ratio (AOR) is adjusted for race/ethnicity and gender. Boldface indicates the result is statistically significant.

choked, burned, or beaten up, it was found that cat abuse had the strongest relationship with severe IPV victimization by that partner. In fact, if a participant reported that their partner had abused a cat, there was over a 1,000% increase in the likelihood that the participant reported severe IPV victimization. Reports that the partner abused a small pet was related to a 453% increase in reported severe IPV victimization, and the partner abusing a dog was related to a 312% increase in reporting severe IPV. There was not a sufficient sample of individuals who reported severe IPV victimization and that their current or previous partner had abused a horse to calculate an odds ratio to examine this relationship.

When examining men and women separately, using individuals who identified as heterosexual (to confirm the gender of the perpetrator), it was found that for women, the partner abusing a cat was most strongly related to severe IPV victimization, increasing the likelihood of it by 1,232% (see Table 2). For men, the partner's cat abuse increased the likelihood of severe IPV victimization by 945% (See Table 3). There was also a significant relationship between the partner's dog abuse and severe IPV victimization for both women and men, although the relationship was stronger for cats than dogs. For women, the partner's cat abuse increased the likelihood of physical IPV victimization by 371% and the partner's dog abuse increased the likelihood of reporting physical IPV victimization by 319%. For men, the partner's cat abuse increased the likelihood of reports of physical IPV victimization by 301% and the partner's dog abuse increased the likelihood by 185%. For women, the partner's cat abuse perpetration was linked to a 137% increase in reporting psychological IPV victimization. However, the partner's dog abuse was not significantly related to psychological IPV victimization. For men, the partner's cat abuse was related to a 645% increase in reporting psychological IPV victimization, and dog abuse was associated with a 310% increase.

Lastly, the study examined the different types of dog and cat abuse (e.g., neglect, emotional abuse, threats, physical abuse, and severe physical abuse) and their associations with IPV victimization (see Table 4). Cat neglect was most strongly associated

**Table 2.** Unadjusted and adjusted odds ratios examining the relationship between IPV victimization and partner’s animal abuse for women (n = 391).

Variable	OR [95% CI]	p-value	AOR [95% CI]	p-value
<i>Physical IPV victimization</i>				
Partner’s cat abuse perpetration	4.71 [1.95, 11.38]	<b>&lt; 0.001</b>	5.03 [2.04, 12.42]	<b>&lt; 0.001</b>
Partner’s dog abuse perpetration	4.19 [1.98, 8.87]	<b>&lt; 0.001</b>	4.13 [1.95, 8.76]	<b>&lt; 0.001</b>
<i>Psychological IPV victimization</i>				
Partner’s cat abuse perpetration	2.37 [1.05, 5.34]	<b>0.037</b>	2.39 [1.06, 5.36]	<b>0.036</b>
Partner’s dog abuse perpetration	1.14 [0.65, 2.00]	0.650	1.13 [0.64, 1.98]	0.683
<i>Severe IPV victimization</i>				
Partner’s cat abuse perpetration	13.32 [2.65, 66.89]	<b>0.002</b>	14.61 [2.84, 75.21]	<b>0.001</b>
Partner’s dog abuse perpetration	7.04 [2.10, 23.63]	<b>0.002</b>	7.19 [2.13, 24.22]	<b>0.001</b>

Note: AOR adjusted for race/ethnicity. CI = confidence interval. Boldface indicates the result is statistically significant.

with physical IPV, increasing the likelihood of physical IPV by 1,621%. Dog neglect increased the likelihood by 945%. Cat severe physical abuse increased the likelihood of physical IPV by 854%, followed by dog severe physical abuse (494% increase), threatening cats (489% increase), dog emotional abuse (390% increase), threatening dogs (348% increase), cat emotional abuse (317% increase), cat physical abuse (250% increase), and dog physical abuse, which increased the likelihood of physical IPV by 213%.

For psychological IPV victimization, cat physical abuse was associated with a 541% increase for psychological IPV. Dog neglect resulted in a 347% in the likelihood of psychological IPV, followed by cat neglect (258% increase), cat emotional abuse (251% increase), threatening cats (216% increase), threatening dogs (188% increase), dog emotional abuse (165% increase), and dog physical abuse (124% increase). However, severe physical cat abuse and severe physical dog abuse were not significantly associated with psychological IPV victimization.

When examining the link between types of cat and dog abuse and severe IPV victimization, cat neglect increased the likelihood of severe IPV victimization by 3,708%. Dog neglect increased the likelihood of severe IPV victimization by 1,598%. These unadjusted odds ratios were by far the largest, indicated the important connection between animal neglect and severe IPV. Following neglect, severe physical abuse of dogs led to a 1,511%

**Table 3.** Unadjusted odds ratios examining the relationship between IPV victimization and partner’s animal abuse for men (n = 387).

Variable	OR [95% CI]	p-value	AOR [95% CI]	p-value
<i>Physical IPV victimization</i>				
Partner’s cat abuse perpetration	4.01 [1.47, 10.95]	<b>0.007</b>	4.13 [1.50, 11.38]	<b>0.006</b>
Partner’s dog abuse perpetration	2.85 [1.32, 6.16]	<b>0.008</b>	2.95 [1.35, 6.44]	<b>0.006</b>
<i>Psychological IPV victimization</i>				
Partner’s cat abuse perpetration	7.45 [2.14, 25.95]	<b>0.002</b>	7.04 [2.01, 24.67]	<b>0.001</b>
Partner’s dog abuse perpetration	4.10 [1.65, 10.19]	<b>0.002</b>	4.12 [1.66, 10.24]	<b>0.002</b>
<i>Severe IPV victimization</i>				
Partner’s cat abuse perpetration	10.45 [1.93, 56.66]	<b>0.007</b>	9.63 [1.75, 52.87]	<b>0.009</b>
Partner’s dog abuse perpetration	5.46 [1.92, 15.50]	<b>0.001</b>	5.46 [1.92, 15.52]	<b>0.001</b>

Note: AOR adjusted for race/ethnicity. CI = confidence interval. Boldface indicates the result is statistically significant.

**Table 4.** Unadjusted odds ratios on types of IPV victimization and types of dog and cat abuse among the entire sample ( $n = 854$ ).

Variable	OR	95% CI	$p$ -value
<i>Physical IPV victimization</i>			
Partner's cat neglect perpetration	17.21	[7.26, 40.80]	< <b>0.001</b>
Partner's cat emotional abuse perpetration	4.17	[2.22, 7.82]	< <b>0.001</b>
Partner's cat threats perpetration	5.89	[3.19, 10.85]	< <b>0.001</b>
Partner's cat physical abuse perpetration	3.50	[1.78, 6.87]	< <b>0.001</b>
Partner's cat severe physical abuse perpetration	9.54	[2.08, 43.67]	<b>0.004</b>
Partner's dog neglect perpetration	10.45	[4.59, 23.76]	< <b>0.001</b>
Partner's dog emotional abuse perpetration	4.90	[2.86, 8.40]	< <b>0.001</b>
Partner's dog threats perpetration	4.48	[2.67, 7.51]	< <b>0.001</b>
Partner's dog physical abuse perpetration	3.13	[1.79, 5.49]	< <b>0.001</b>
Partner's dog severe physical abuse perpetration	5.94	[2.18, 16.20]	<b>0.005</b>
<i>Psychological IPV victimization</i>			
Partner's cat neglect perpetration	3.58	[1.21, 10.58]	<b>0.021</b>
Partner's cat emotional abuse perpetration	3.51	[1.73, 7.13]	<b>0.001</b>
Partner's cat threats perpetration	3.16	[1.60, 6.26]	<b>0.001</b>
Partner's cat physical abuse perpetration	6.41	[2.49, 16.49]	< <b>0.001</b>
Partner's cat severe physical abuse perpetration	4.05	[0.48, 33.89]	0.197
Partner's dog neglect perpetration	4.47	[1.32, 15.07]	<b>0.016</b>
Partner's dog emotional abuse perpetration	2.65	[1.42, 4.95]	<b>0.002</b>
Partner's dog threats perpetration	2.88	[1.58, 5.26]	<b>0.001</b>
Partner's dog physical abuse perpetration	2.24	[1.21, 4.13]	<b>0.010</b>
Partner's dog severe physical abuse perpetration	1.78	[0.57, 5.57]	0.323
<i>Severe IPV victimization</i>			
Partner's cat neglect perpetration	38.08	[14.93, 97.17]	< <b>0.001</b>
Partner's cat emotional abuse perpetration	9.38	[4.21, 20.91]	< <b>0.001</b>
Partner's cat threats perpetration	12.20	[5.44, 27.38]	< <b>0.001</b>
Partner's cat physical abuse perpetration	8.25	[3.64, 18.68]	< <b>0.001</b>
Partner's cat severe physical abuse perpetration	13.86	[2.94, 65.31]	<b>0.001</b>
Partner's dog neglect perpetration	16.98	[7.27, 39.69]	< <b>0.001</b>
Partner's dog emotional abuse perpetration	10.45	[5.39, 20.27]	< <b>0.001</b>
Partner's dog threats perpetration	6.20	[3.19, 12.06]	< <b>0.001</b>
Partner's dog physical abuse perpetration	5.82	[2.94, 11.52]	< <b>0.001</b>
Partner's dog severe physical abuse perpetration	18.11	[6.42, 51.12]	< <b>0.001</b>

Note: CI = confidence interval. Boldface indicates the result is statistically significant.

increase and severe physical abuse of cats led to a 1,286% increase in severe IPV. Additionally, severe IPV was associated with threatening a cat (1,120% increase) dog emotional abuse (945% increase), cat emotional abuse (838% increase), cat physical abuse (725% increase), threatening a dog (520% increase), and dog physical abuse (482% increase).

## Discussion

Although previous research has established the relationship between IPV and animal abuse (Cleary et al., 2021), this is the first study that specifically explores the type of animal being abused (dog, cat, small pet, or horse) and the associations with physical, psychological, and severe IPV. The unadjusted odds ratios showed that the strongest relationship among all variables was partner's cat abuse and severe IPV victimization, which was characterized by severe physical IPV, such as strangulation, assault with a weapon, or being beaten up. This was true for the entire sample, as well as for men and women separately. The partner's cat abuse was associated with a 1,232% increase

in the likelihood of severe IPV for women and a 945% increase for men. This is an alarming increase and highlights the strong relationship between cat abuse and escalated IPV. This warrants serious attention. Individuals who perpetrate such severe acts of violence against their partner are likely to be “intimate terrorists,” individuals who abuse in order to dominate, control, and intimidate their partner (Johnson, 2008), which highlights how someone desperate for power and control may be more likely to harm cats. This may be due to perceived self-reliant traits or a lack of submissiveness in cats (Lockwood, 2005), which may be triggering for someone who seeks power and control over others. There may also be an association with their size, making them easier to harm (Flynn, 2000). That the association was stronger for women than for men also highlights that cats are often associated with femininity (Mitchell & Ellis, 2013), and previous research hypothesizes that male abusers with female partners are more likely to abuse cats (Barnard, 1999). It is necessary for individuals in a relationship with someone who has abused a cat to be aware of its association with severe IPV.

For the entire sample, cat abuse, dog abuse, and small pet abuse were each significantly associated with severe and physical IPV, whereas horse abuse was not. Horse abuse was not significantly associated with any type of IPV. This may be because horses are not always kept near the home; they may be located in a stable away from the home, so there would be less opportunity for them to be abused. There was also a smaller sample of participants who had horses, so this might explain the lack of connection. Additionally, horses are expensive animals to own (Renelt, 2011); owners may view them as more of an investment than they would other pets. Lastly, their size and stature may also be a deterrent to abusive tactics.

The unadjusted odds ratios for physical abuse and severe IPV showed that cat abuse had the strongest association with both types of violence, followed by small pet abuse, with dog abuse being the weakest of the three. However, there was not a significant association between small pet abuse and psychological IPV after controlling for gender and race/ethnicity. Unfortunately, there is a lack of research specifically examining the relationship between small pet abuse and IPV. However, it is possible that abuse against such harmless animals could be used to control the victim of IPV, as pet abuse in general has been identified as a tactic that abusers use to control or emotionally harm victims of IPV (Fitzgerald et al., 2019; Johnson, 2008). This may also help explain why there was not a significant association between small pet abuse and psychological IPV (which may be a form of situational couple violence; Johnson, 2006, 2008; Kelly & Johnson, 2008). As small pets are typically kept in cages or enclosures, it would likely be a deliberate action to abuse them, potentially associated with an action to harm their owner.

This study also examined specific types of abuse for cats and dogs (neglect, emotional abuse, threats, physical abuse, and severe physical abuse). Cat neglect had the strongest relationship with physical IPV victimization and severe IPV victimization for the entire sample, with it increasing the likelihood of reported severe IPV victimization by approximately 3,700%. Dog neglect was also associated with a 1,598% increase in severe IPV victimization. This may also highlight an important connection with intimate terrorism or a need for power and control among perpetrators (Johnson, 2008). In this study, neglect was measured by a *refusal* to feed, provide water for, or provide medical care for the

animal, which suggests the neglect was intentional or deliberate and potentially on-going. Previous research found that victims of violence viewed animal neglect as an intentional abuse tactic to control and cause emotional harm to the victim themselves (Fitzgerald et al., 2019). Additionally, the next strongest associated factors with severe IPV perpetration were severe physical abuse of both cats and dogs, suggesting a pattern of severe violence across both humans and animals. This highlights a level of cruelty toward the animal that did not happen accidentally or as a result of a specific situational context (whereas someone may yell at a pet due to a certain stressful situation). This differs from IPV that may be classified as situational couple violence, which is characterized by violence stemming from a lack of emotional regulation and conflict resolution skills and is not rooted in power and coercive control (Johnson, 2008). This could also explain why severe physical abuse of cats and dogs was not significantly associated with psychological abuse. The results of this study highlight the importance of examining severe physical animal abuse and animal neglect in association with severe IPV as potential indicators of intimate terrorism.

### **Implications**

A major finding of this study is that cat abuse was related to a 1,232% increase in severe IPV victimization for women and a 945% increase for men. Cat abuse was also the most strongly related type of animal abuse for all three types of IPV examined (psychological, physical, and severe) for the entire sample. Cat abuse increased the likelihood of physical IPV victimization by 371% for women and 301% for men. This highlights the seriousness of cat abuse that should draw increased attention in research and education efforts. Future research would benefit from continued examination of cat abuse and its association with IPV. A main implication for future research would be the importance of examining the type of animal abuse as separate variables, as opposed to combining all forms of animal abuse into a single variable.

When looking specifically at severe IPV, cat neglect was the strongest associated factor, increasing the likelihood of severe IPV by approximately 3,700%. This finding may be surprising, as neglect may be viewed as a more “passive” act of animal abuse. Previous research found that both men and women reported animal cruelty as more bothersome than animal neglect, and women reported being more bothered by animal neglect than men (Henry, 2009). Educating individuals about the seriousness of *all* types of animal abuse is warranted. The results from this study highlight the dire need to continue to examine cat and dog neglect and its association with IPV. Additionally, although both cat and dog abuse were significantly related to severe IPV, it is necessary to highlight that cat abuse, particularly cat neglect, produced a very high increase for the likelihood of severe IPV. The abuse of cats and dogs, including neglect, should be seen as a “red flag” for individuals entering or currently in romantic relationships.

Additionally, this study offers important information that can help with education efforts. One strength of reporting unadjusted odds ratios is that they are easily translatable to the public and can be used to educate individuals about risk, as well as for IPV risk assessment efforts. Additionally, specific education efforts surrounding cats may be

needed. Cats are of the most recent animals to be domesticated and are not considered to be as obedient or controllable as other animals such as dogs (Barnard, 1999; Clutton-Brock, 1993; Mitchell & Ellis, 2013). Additionally, cats may bite or scratch as a signal for the human to stop a behavior, such as petting too aggressively or for too long a duration (Lockwood, 2005). If an individual views this as the cat attacking them, they may retaliate unnecessarily. Having realistic expectations of cats may be useful in decreasing situational violence toward them, as this may minimize frustrations due to misunderstanding cat behavior. Lastly, there have been accounts of pets requiring medical treatment after an abusive incident (Collins et al., 2018). It may be helpful to educate veterinarians on the strong relationship between type of animal abuse and IPV to potentially provide resources to individuals who come in with suspicious pet injuries.

Although cat abuse was most strongly associated with IPV, dog abuse and small pet abuse were also statistically associated with physical IPV and severe IPV. This suggests a strong need to protect the animals of abused individuals for the animal's quality of life, as well as to make it easier for an abused partner to potentially leave the abusive relationship. Previous research found that some victims of IPV chose to stay in an abusive relationship because domestic violence shelters often do not allow pets to be taken into these facilities (Newberry, 2017). Since many abusers tend to abuse animals as a means to exert power or control over their partners (Gallagher et al., 2008), not having the ability to ensure the animal is safe while leaving the relationship is another mechanism for the perpetrator to keep the victim in the relationship. Others have highlighted that, "an effective method for protecting an abuse victim and a victim's pets is to include pets in civil protective orders" (Mashburn, 2015, p. 4). It may also be important for animal fostering groups to reach out to domestic violence shelters and provide fostering support for victims of IPV, so they know their pets are safe when they leave the abusive relationship. Particularly for cats, a fostering situation may be most beneficial as "individual cats vary greatly in their reaction to encounters with other cats" (Bradshaw, 2016, p. 113). Taking one's cat to a shelter situation where multiple cats could be present may result in negative or stressful outcomes. Protecting the victim's pet is paramount in protecting both the victim and their pets.

Previous research found that most people support harsher penalties for individuals who abuse animals (Taylor & Signal, 2009). The strong connections between animal abuse and human abuse may offer insight into how dangerous individuals who abuse animals can be to society. Strengthening and enforcing protection for abuse against companion animals is needed (Lockwood, 2005). Findings from the study also support a need to enforce intentional animal neglect as seriously as animal cruelty. Although this study examined the relationship between IPV and animal abuse, it is necessary to ensure that all types of abuse are taken seriously. Animal abuse, even outside of its relationship with IPV, is abhorrent and requires serious attention. Solot (1997) provides an insightful example, stating that all abusers "need attention because they have committed horrific acts of violence against other living beings – not because someday they might do something worse" (Solot, 1997, p. 262). Although examining the relationship between animal abuse and IPV is needed, focusing on eliminating all forms of abuse, against all living beings, is imperative.

## **Limitations and Future Research**

Although this study provides unique insights into the relationship between animal abuse and IPV, it is not without limitations. One limitation of this study is that the data are cross-sectional; it cannot be determined if there were any patterns of escalation, if IPV and animal abuse happened simultaneously, or if one preceded the other. Longitudinal data examining how these relationships occur over time is needed.

It is important to note that the study was conducted with an adult community sample, so the results may not generalize to a more clinical sample regarding IPV (e.g., samples coming from domestic violence shelters, emergency room visits, individuals arrested for IPV, etc.). This means that, overall, the sample reported relatively low rates of animal abuse. This may also explain why we did not find a significant gender difference in average rates of animal abuse as previous research has found in clinical populations, arrest records, university students, and child populations (Addington & Randour, 2022; Herzog, 2007). Although this is the first step in examining the relationship between different types of animal abuse and IPV, and it is reasonable to examine bivariate associations, future research should continue to expand on this topic and examine potential covariates, mediators, or moderators of these relationships.

Another limitation of this study is that the participants were asked if they had seen their current or most recent partner interact with the different types of animal; it did not ask if the animal was their pet, their partner's pet, or an animal that did not belong to either partner. It would be very useful for future research to examine the relationship between pet abuse and IPV specifically. It may also be useful to examine if the partner had abused their own pet or the pet of the victim. This may provide valuable insight into the relationship between pet abuse and IPV.

Additionally, we did not have enough participants who had a partner who interacted with a horse or small pet to examine the relationship between animal abuse and IPV for men and women separately for these animals. Future research should use larger sample sizes and examine other types of animals in greater depth. This study also asked about participants' current or most recent relationship and asked them to report on IPV and animal abuse variables that occurred within the last year. It is possible that participants could have had difficulty accurately recalling events of IPV or animal abuse.

Lastly, the sample was mostly White and heterosexual, which limits generalizability to the LGBTQ+ community and People of Color. Future research should continue to examine these relationships among different communities and populations.

## **Conclusion**

This study fills a significant gap in the literature by examining the relationship between different types of IPV victimization (psychological, physical, and severe) and the perpetrator's abuse of different species of animal (e.g., cats, dogs, small pets, and horse). It highlights that the relationships between IPV and animal abuse are not necessarily universal among all species of animal. One major finding was that for both men and women, partner's cat abuse was associated with the largest increase in the likelihood of participants



reporting severe IPV victimization, with partner's cat abuse associated with a 1,232% increase in the likelihood of severe IPV for women and a 945% increase for men. Interestingly, cat neglect increased the likelihood of reported severe IPV victimization by approximately 3,700% and dog neglect increased the likelihood by approximately 1,600%. This finding supports the idea that all types of animal abuse, even types that may not involve physical abuse of animals, warrants serious attention. The results indicate that future research should examine types of animals separately when examining the relationship between animal abuse and IPV.

## Disclosure Statement

No potential conflict of interest was reported by the author.

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