Perceptions of Animal Abuse

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Abstract

In the past fifteen years, there has been increased interest in animal abuse and animal abuse cases; however, there is a lack of scientific research that would help attorneys prepare those cases to go before a jury. As part of a larger study examining jurors' reactions to animal abuse cases, I examined how jurors' gender and self-identified femininity affect their reactions toward a scenario involving dog abuse. Specifically, I hypothesized that women, compared to men, would be more upset when reading about the scenario. Support for this hypothesis comes from research finding that women are more empathic and emotionally reactive, especially about dogs. I also hypothesized that femininity would have a role in emotional reactivity, and participants who identified as more feminine would have higher levels of 'upset' than those who were less feminine. In this study, participants read a scenario involving animal abuse. Next, they completed several measures including a question regarding how upset they were about the animal abuse, the Personal Attributes Questionnaire (a measure of femininity), and demographics. Results revealed a significant main effect of participant gender and a significant interaction: Compared to men, women were more upset after reading about the dog abuse, and their responses were not affected by their level of self-reported femininity. But men's level of emotional upset was related to their level of femininity: Those who were high in femininity were more upset than those who were low in femininity; in fact, high-scorers were just as upset as women.

Perceptions of Animal Abuse

Darwin, in *The Descent of Man* (1871), wrote "there is no fundamental difference between man and the higher mammals in their mental faculties" (Darwin, 1871, p. 35). In recent years, there has been increased interest in research about animal sentience and the animal mind. Current research suggests that traits once thought to be exclusive to humans can also be found in animals, including empathy, self-awareness, language, and altruism (Brown, 2015; Lingle & Riede, 2014; Underwood, 2015; de Waal, 2008). For example, evidence suggests that when rats are distressed, nearby rats will also experience distress and will even choose to engage in helping behavior, rather than pursue a self-serving reward (Underwood, 2015). It has also been found that white-tailed deer mothers will respond to distress calls from infants of other mammal species, such as cats and human babies (Lingle & Riede, 2014). Furthermore, research indicates that fish use chemical cues to recognize themselves as well as other fish, which suggests that fish possess a level of sentience and self-awareness (Brown, 2015).

Legal interest and concern for animals has also grown over the years, especially recently, probably related to the discoveries just reviewed. Historically, legislation against animal abuse in the United States dates to the formation of the original colonies. The 1641 Massachusetts *Body of Liberties*, the first legal code established by European colonists in New England, is the first known body of legislation that refers to animal abuse. It refers to the protection of domestic work animals against 'tirrany' or 'crueltie' – directing animal owners to give their domestic animals a place to rest and recover if they fall sick, are hungry, or are weary (Gordon, 2000).

Philanthropist Henry Bergh was one of the first to influence animal abuse legislature in the U.S. by co-founding the American Society for the Prevention of Cruelty to Animals (ASPCA) in 1866. ASPCA was modeled after the Royal Society for the Prevention of Cruelty to Animals in England, which formed in 1824. Reportedly, Bergh witnessed violence toward horses and other work animals, which led him to approach the New York legislative body in Albany to give the ASPCA a charter. He also worked to pass laws in New York allowing the ASPCA to investigate animal cruelty and enforce the laws ("About Us: ASPCA," 2017). This was followed by the formation of the American Humane Association in 1877, which serves to promote and nurture bonds between animals and humans ("History," American Humane, 2016). Although at first concerned with enforcing anti-cruelty laws, both

organizations soon also began running animal shelters and advocating for animals. It is of note that anti-animal cruelty organizations were also responsible for promoting the first anti-child abuse laws. This reflects the historical connection between child abuse and animal cruelty, and suggests that those concerned with child abuse are often concerned with animal abuse and vice-versa (Myers, 2008; Herzog, 2007).

The "humane movement" was not only occurring in America, but in other countries as well. As mentioned, The Royal Society for the Prevention of Cruelty to Animals (RSPCA) was formed in London in the 1800s, as was the Victoria Street Society (now known as the National Anti-Vivisection Society). After initially focusing on horses as beasts of burden, the humane movement began focusing on dogs and cats, as their domestication increased ("About Us: ASPCA," 2017). In the US, the Animal Welfare Act was passed in 1966, and is the first and only comprehensive federal law to regulate the treatment of animals for research, pet use, and exhibition. People for the Ethical Treatment for Animals (PETA) was founded in 1980 and gained public attention by fighting for the ethical treatment of monkeys in laboratory settings. PETA continues to be one of the premier animal rights organizations worldwide.

In the past 15 years, there has been an increase in the number of laws related to animal abuse. As of 2013, 49 states had enforced felony laws to protect against cruelty to animals (Phillips & Lockwood, 2013). On January 1, 2016, the Federal Bureau of Investigations started tracking detailed information about instances of animal-related crimes in their annual US crime report (Knezevich, 2015).

Jurors' Reactions to Cases of Animal Abuse

As laws change, it is likely that more animal abuse cases will appear in courtrooms, and some will appear in front of juries. It is therefore important to understand how jurors will react to cases of animal abuse. Such knowledge is vital for helping attorneys prepare for court; however, there is a lack of scientific research investigating this issue. If an animal abuse case goes before a jury, what will the jury think? Will jurors convict? What factors will influence their decisions?

Jury decision making experiments in the field of psychology illustrate the methodology that can be used to answer such questions. In mock jury studies, researchers experimentally manipulate the presence or absence of variables, or track the outcome of individual differences among jurors to

determine how the variables affect jurors' reactions during a trial. These studies allow researchers to examine factors that influence jurors' decisions, while controlling for confounding variables. This, in turn, provides valuable information about individual juror decision making (Devine, Clayton, Dunford, Seying, & Pryce, 2001).

To conduct a mock jury study, researchers create a detailed case, often based on real case facts, and present it to research participants who play the part of mock jurors through written case documents and/or video-simulated trial extracts. These mock jurors are asked to provide a verdict and to give other opinions about a case (e.g., how confident they are in their verdict, how reliable they think witnesses are). Researchers can measure individual verdicts, or the jury's group verdict after group deliberations.

There have been many such studies examining jurors' reactions to child victims, especially in child sexual abuse cases (for review, see Bottoms, Golding, Stevenson, Wiley, & Yowziak, 2007). The experimental results from mock jury studies on child abuse can be used as a model to understand jurors' perceptions of animal abuse, because just as child victims of abuse are perceived as vulnerable, innocent, and blameless (Bottoms, Peter-Hagene, Stevenson, Wiley, & Mitchell, 2014), animal victims may be as well (Becker & French, 2004; Satz, 2009). Furthermore, there is a strong link between child abuse and animal abuse, with both often co-occurring in domestic violence situations (Henry, 2006). Jury studies examining child abuse have revealed certain factors that influence jurors' decisions in these cases (e.g., a lack of physical evidence), which might also affect decisions in animal abuse cases. When a case lacks physical evidence, extralegal factors, such as juror individual differences, can influence jurors' reactions. Factors such as victim age and gender, defendant gender, juror gender, and jurors' personal experience with aspects of the case have been found to affect jurors' attitudes and decisions in child sexual abuse cases (Bottoms et al., 2007).

The Influence of Juror Gender on Perceptions of Animal Abuse

Juror gender has been identified as one of the main factors to influence juror perceptions of child sexual abuse cases (e.g., Bottoms, 1993; Bottoms et al., 2014). Women are generally more pro-child victim and more prosecution-oriented than men. Sometimes these gender differences are apparent in verdicts, while other times differences emerge in judgments of the credibility of the victim or the defendant (Bottoms et al., 2007). Similar gender differences affect attitudes and perceptions in adult

rape cases. Specifically, men are more likely than women to attribute responsibility to the rape victim and are less likely than women to empathize with the victim (Barnett, Quackenbush, Sinisi, Wegman, & Otney, 1992; Deitz, Blackwell, Daley, & Bentley, 1982).

Juror gender effects in child sexual abuse cases can be explained by underlying gender differences in child victim empathy, an individual's tendency to believe children, attitudes toward women, attitudes toward sex between an adult and child (Bottoms et al., 2014). Research shows that compared to men, women make more pro-child victim judgments, are more likely to believe a child victim, and are more likely to oppose child-adult sexual relations (Bottoms, 1993; Bottoms et al., 2014; Gabora, Spanos, & Joab, 1993). Women are also more likely to feel emotionally close to child victims, which may cause them to make harsher judgments against defendants in child sexual abuse cases (Bottoms et al., 2014).

Another explanation for women's increased empathy in adult rape and child sexual abuse cases is differences in perceptions of vulnerability. Individuals who feel more vulnerable to crimes are more likely to support stronger punishments and be more empathic toward victims of those crimes. It is theorized that because women are more familiar with being victimized, they are more likely to feel empathy for victims of violent crimes than men (Hurwitz & Smithey, 1998).

Gender and Emotion Toward Animals

Just as women are more empathetic and emotional toward children, women may also feel high levels of empathy and emotionality for animals, as both animals and children are susceptible to abuse (Becker & French, 2004; Satz, 2009). I hypothesize that women, compared to men, will show more emotional reactivity toward animal victims, and in response to animal abuse. More specifically, I predict women will be more upset than men when reading about a scenario involving dog abuse. Several pieces of evidence support this hypothesis. As stated previously, women make more pro-child victim judgments than men, and experience higher specific empathy for child victims (Bottoms et al., 2014). Because women, compared to men, are more likely to empathize with children in abuse cases, it is also likely that they will also be empathetic in response to animal abuse. In support of this hypothesis, Taylor and Signal (2005) found a significant positive correlation between sensitivity to animal treatment and an

individual's gender. Specifically, women were more likely to be sensitive to animal treatment than were men. In addition, more women than men believe that dogs and cats can feel their owners' emotions, and in return, experience love and compassion toward their owners (Vitulli, 2006). Research also indicates that women are more supportive of animal welfare and less so of unethical and inhumane animal research than men (Herzog, 2007). For instance, women outnumber men in animal rights activist groups (Herzog, 2007). All of this suggests that compared to men, women are more concerned with animal welfare, and are therefore more likely to be upset about a case of animal abuse.

Evidence supporting the hypothesis that women will be more emotionally responsive (i.e., upset) than men also comes from research showing that cruelty toward animals is often associated with anti-social personality traits (Henry, 2004; Gleyzer, Felthous, & Holzer, 2002), which are observed in more men than women (Henry, 2004). The act of cruelty to animals is related to interpersonal violence (Arluke, Levin, Luke, & Ascione, 1999; Ascione, 2001; Hensley & Tallichet, 2008; Hensley & Tallichet, 2009; Schwartz, Fremouw, Schenk, & Ragatz, 2012), which is most likely to be perpetrated by men. Men are more likely than women to commit acts of animal cruelty (Hensley, Tallichet, & Singer, 2006; Hensley & Tallichet, 2005; Hensley & Tallichet, 2008), to admit to animal cruelty (Henry, 2004; Flynn, 1999; Miller & Knutson, 1997), and to be prosecuted in animal abuse cases (Luke & Arluke, 1997). For all these reasons, men may be more desensitized to animal abuse, and therefore, less upset than women when presented with an animal abuse scenario.

The final reasons to expect that women will be more upset than men by animal abuse are related to the focus of the current study on an instance of animal abuse involving a dog. There are unique relationships between dogs and humans, and especially between women and dogs. Adult women were found to have more empathy for animals than humans, and especially more empathy for puppies, than men were (Angantyr, Eklund, & Hansen, 2015). Given hypothetical scenarios in which participants had to choose to save an animal's life over the life of a human adult, women were more likely to choose the animal's life than men were, except when the adult was a close relative (Topolski, Weaver, Martin, & McCoy, 2013). Further, Vitulli (2006) found that women, compared to men, were more likely to believe that domesticated cats and dogs have feelings and love their owners. In addition, women in experimental stress tasks showed less physiological reactivity indicative of stress when they were in the presence of

their pet dogs, compared with more physiological reactivity and poorer performance in stress tasks when they were in the presence of a female friend (Allen, Blascovich, Tomaka, & Kelsey, 1991). This literature suggests that women will have higher levels of emotional reactivity than men when they read about dog abuse in this study.

I also believe that self-identified levels of femininity will be related to reactions to animal abuse, even apart from perceiver gender. That is, gender and self-identified masculinity or femininity are not completely correlated, even though usually, women do score higher on femininity levels than men do (Gilligan & Attanucci, 1988). There should be differentiation between gender and gender role orientation (masculinity/femininity). For example, Bem (1974, 1975, 1978) argues that the adoption of masculine and feminine traits is a main part of socialization of any individual, and these traits may override one's gender in terms of psychological functioning (Karniol, Gabay, Ochion, & Harari, 1998). Individuals can be high or low on femininity, regardless of gender, but femininity is related to empathy levels (Karniol et Al., 1998) and therefore it is important to examine gender roles as well as gender. As discussed below, one prior study has linked femininity to reactions to animal abuse.

Studies Examining Perceptions of Animal Abuse

To date, I am only aware of two studies that have examined gender as a predictor of attitudes toward animal abuse. Sims, Chin, and Yordon (2007) asked 438 undergraduate students (74% women and 26% men; ethnicity and age range not reported) from a southeastern state university about their opinions of how crimes against animal abuse should be punished. A set of vignettes were used, with four predictor variables, including animal type (puppies or chickens), sex of perpetrator (male or female), crime type (abuse or neglect), and crime outcome (death or recovery for the animal). Each participant read one of sixteen possible scenarios, and then was asked to assign a punishment to the perpetrator (counselling sessions; community service; jail time; fines; no punishment; or in the future, not being able to adopt an animal, not being able to work with the elderly, or not being able to work with children).

Two of the variables – participant sex and animal type (puppy or chicken) – had significant effects on jurors' perceptions. Women were more likely to assign harsher punishments than men, and stronger punishments were given for the abuse of a puppy than the abuse of a chicken. The authors

theorized this to be consistent with research showing that women are more empathic than men and more opposed to animal abuse. The investigators concluded that further research should be conducted using a sex roles inventory or questionnaire to determine whether greater female empathy could be due to cultural norms of traditional femininity. Animal type was also a predictor: Harsher punishments were given for the puppy scenario than the chicken scenario. This was likely due to the perceived attachment differences between a puppy (often a pet, perhaps considered to be an important part of the family) and a chicken (more commonly thought of as a food source).

There were a few limitations in this study. 74% of the participants were women, which is not ideal for a research study. No demographic information was given related to the race of the participants and the race distribution cannot be determined from the study.

Bailey, Sims, and Chin (2016) conducted a study investigating key factors in predicting views toward punishment of animal cruelty. They sampled a total of 657 undergraduate students (71% female, 29% male; 74% white, 8.9% Hispanic, 5.3% black, 4.4% Asian, 4% other, 2.3% biracial, and 1.1% declined to answer), who acted as participants and read scenarios based on actual animal cruelty cases. The researchers used a fully crossed, between-subjects design with eighteen possible scenarios. Each scenario varied in animal type (dog, cat, or both), perpetrator age (12-, 18-, or 28-years-old), and location of crime (kennel or animal shelter). An example of a scenario follows:

"Early one morning, humane officers and law enforcement agencies were alerted by a volunteer of the deaths of all the animals at a local shelter (kennel). This shelter (kennel) housed stray and abandoned animals and specialized in finding them homes (housed animals whose owners were away on vacation). The volunteer who had arrived for the morning feedings observed several bloody footprints leading away from the back door, which was wide open. Inside, the volunteer found blood splattered on the walls and all 6 dogs (6 cats, 3 dogs and 3 cats) bludgeoned to death. The sole person accused of this crime, a 12-year-old (18-year-old, 28-year-old) male, is charged with breaking and entering, trespassing, and the bludgeoning of 6 dogs and 6 cats (3 dogs and 3 cats) to death with a baseball bat," (p. 33).

Participants were given a total of sixteen questions regarding punishment for the perpetrators, ranging from not being able to adopt animals in the future, and not being allowed to spend time alone

with the elderly or children, to jail time or fines. Participants also completed the Marlowe-Crowne Social Desirability Scale, which is an 18-item survey used to measure whether respondents are concerned with social approval or may not be answering truthfully. In addition, participants responded to the Personal Attributes Questionnaire (PAQ), which is a 24-item survey that measures self-identified gender identity. Each item consists of a pair of contradictory characteristics (e.g., "Not at all emotional" and "Very emotional") that are located at opposite ends of a 5-point scale, ranging from 0 to 4. For each item, participants must choose the number that best describes the type of person they are. These questions are aggregated to get three scores: instrumentality (masculinity), expressivity (femininity), and androgyny (Spence, Helmreich, & Stapp, 1974).

Participant ratings for seven of the punishments (adopt a pet, spend time alone with pets in the future, be punished in some way, get counseling, perform community service, pay a fine, and be monitored) were highly skewed. Specifically, on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree* with a punishment), the median response was 7, indicating that participants strongly agreed with these punishment decisions. However, there was variability in the other eight punishment options – spending time alone with children, spending time alone with the elderly, length of counseling sessions (0-24 months), length of community service time (0-200 hours), amount of fine ($2500-$10,000), serving time in a detention facility, how long a perpetrator would serve in the detention facility (0-60 months), and amount awarded to individuals involved in the case for pain and suffering (up to $2000). One punishment rating was omitted due to an error in the materials.

There was a main effect for two of the three independent variables. Perpetrator age (child or adult) and location of crime (animal shelter or pet kennel) played a role in predicting punishment decisions. Punishments were harsher when the perpetrator was 18- or 28-years old than when the perpetrator was 12-years-old, likely because people who are 18- or 28-years-old are considered adults and judged as such, whereas a 12-year-old may be judged as a child. Punishments were also harsher when the location of the crime was a pet kennel. This might be because pets in kennels have owners, and so cruelty against a pet that someone owns could be perceived as equivalent to property damage, which is a violation of the law. There was no main effect for type of animal (cat or dog).

Bailey and colleagues (2016) found that participants' self-identified femininity (measured with the PAQ) played a large role in their attitudes toward animal cruelty – more so than their biological sex. They found that higher self-identified femininity predicted more severe punishments. Although masculinity and femininity are not always gender-specific, they are strongly related to gender (Gilligan & Attanucci, 1988), and high levels of femininity are related to more empathy as well as "emotionality" (Karniol, et al., 1998). Therefore, self-identified femininity, not masculinity, was the largest predictor of views toward punishing animal abuse, consistent with my theory that femininity will influence reactions toward animal abuse. Yet their study had several limitations. Like Sims, Chin, and Yordon (2007), the sample was predominantly female (77%), which threatens generalizability. No information was included about how many participants were in each condition, making it difficult to determine if any of the results were influenced by unequal distributions or low power. Furthermore, as mentioned above, the median score for seven of the possible punishment decisions (1 = *strongly disagree* and 7 = *strongly agree* with a punishment) was a seven, a ceiling effect. Thus, the researchers assessed a tiny variance in judgments.

Overview and Hypotheses

Based on past work, specifically that of Sims and colleagues (2007), Bailey and colleagues (2016), and Bottoms and colleagues (2007; 2014), I will investigate gender differences in jury decision making in cases involving animal abuse. I hypothesize that gender differences will affect participants' level of emotional reactivity for an animal – in this case, a dog. Specifically, I predict that in contrast to men, women will be more upset when they read about a dog abuse scenario. Given Bailey et al.'s (2016) findings, I will also explore self-rated femininity, as this may serve as a more sensitive independent measure of the gender construct than simple sex identification. I predict that compared to those low in femininity, people who are high in femininity will be more upset when they read about a dog abuse scenario, as femininity is linked to empathy levels and general levels of caring (Karniol et. al, 1998).

Method

Participants

There were 89 undergraduate student participants (34% male, 66% female) from a large Midwestern university. Participants ranged from 18 – 25 years in age (M = 19.2 years, SD = 1.26 years).

There were a variety of ethnicities reported within the sample: 33% Hispanic, 32% Asian, 25% White, 9% "Other," 8% African American, and 1% Native Hawaiian/Pacific Islander [1].

Measures

Case vignette. Participants were instructed to read, think hard about, and respond to several questions about a brief scenario involving dog abuse. The case vignette stated, "John walks into his house and starts beating his dog. The dog sustained serious internal injuries but did not die."

Emotional reactions. Participants reported how upset they were by responding to the question, "How upset are you about what John did to the dog?" (1 = *not at all upset*, 7 = *extremely upset*).

Demographics. Participants indicated their gender, age, race/ethnicity, and whether they were a U.S. citizen.

Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974). The PAQ is composed of 24 items that provide independent assessments of masculinity and femininity, based on respondents' self-perceived possession of stereotypically gender-related traits (Robinson, Shaver, & Wrightsman, 2013). Each item consists of a pair of contradictory characteristics (e.g., "Not at all kind" and "Very kind") that are located at opposite ends of a 5-point scale, ranging from 0 to 4. For the analyses reported below, the scale items were recoded to be 1 – 5. For each item, participants chose the number that best describes the type of person they are. These questions are aggregated to get three scores: instrumentality (masculinity), expressivity (femininity), and androgyny (Spence & Helmreich, 1978). Given that I was primarily interested in individuals' self-perceived femininity ratings, I only administered the eight items that directly assess femininity (Spence & Helmreich, 1978). A mean split was performed to classify participants as high or low on this construct.

Procedure

Undergraduate students were recruited from the Psychology 100 subject pool to participate in this research study. When participants arrived at the laboratory, the experimenters instructed them to sit at a table. Participants completed the materials simultaneously in groups of four or more. Participants were informed of the purpose of the study, any potential risks, and what they would be asked to do.

[1] Race/ethnicity categories were not mutually exclusive.

After providing consent, participants were administered a study packet, with one hour to complete it. Participants read the dog abuse scenario. Next, they answered the emotional reactions question, and completed the Personal Attributes Questionnaire and demographics. After the participants completed their packets, they were debriefed. This research was approved by the University of Illinois at Chicago Institutional Review Board and all participants were properly compensated with course credit for their participation.

Results

First, a preliminary correlational analysis revealed that gender and femininity were not significantly correlated in this sample, $r = .124$, $p = .25$, confirming the independence of the two constructs.

Next, I conducted a 2 (Gender: Men vs. Women) X 2 (Femininity: Low vs. High) between-subjects Analysis of Variance (ANOVA) examining how upset participants were about what John did to the dog. The analysis revealed a significant main effect of gender, $F(1, 86) = 6.16$, $p = .02$, $\eta_p^2 = .07$. Women ($M = 6.58$, $SD = .73$) were significantly more upset than men ($M = 6.00$, $SD = 1.41$) about the dog abuse. There was no significant main effect of femininity, $F(1, 86) = 2.25$, $p = .14$, $\eta_p^2 = .03$. The main effects were qualified by a significant interaction between gender and femininity, $F(1, 86) = 4.16$, $p = .05$, $\eta_p^2 = .05$.

Simple effects analyses indicated that women who were high in femininity ($M = 6.53$, $SD = .75$) were just as upset as women who were low in femininity ($M = 6.65$, $SD = .71$), $F(1, 83) = .21$, $p = .65$, $\eta_p^2 = .002$. Men, however, differed significantly in how upset they were as a function of femininity, $F(1, 83) = 4.83$, $p = .03$, $\eta_p^2 = .06$. Specifically, men who were high in femininity ($M = 6.43$, $SD = .76$) were significantly more upset than men who were low in femininity ($M = 5.63$, $SD = 1.75$). In fact, as can be seen below, men who were high in femininity were just as upset about the dog abuse as women were (*Figure 1*).

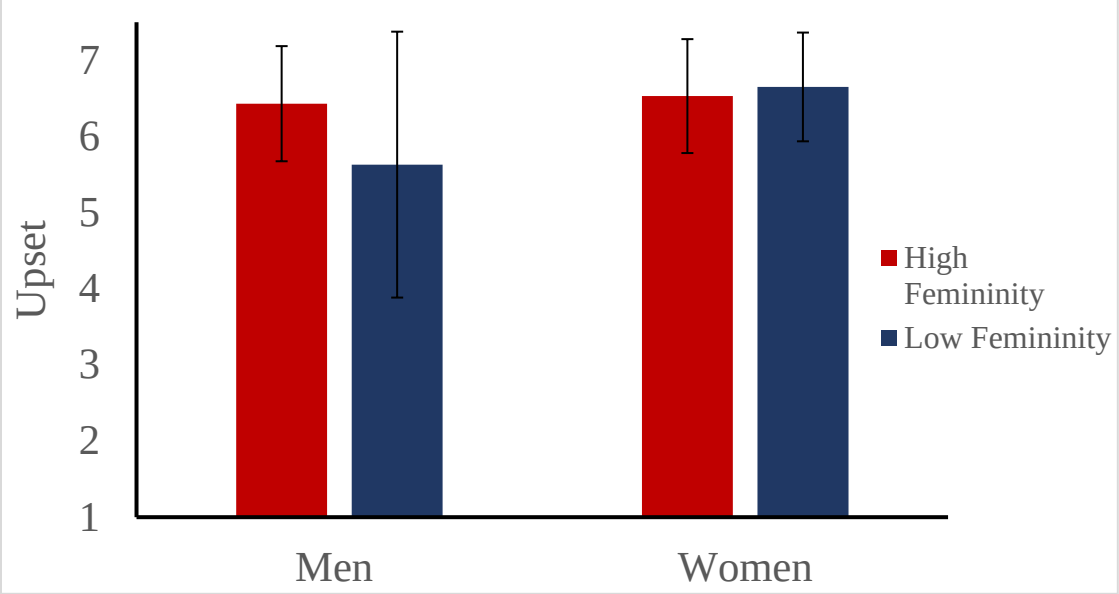

Figure 1. How upset participants were as a function of gender and femininity, where higher numbers indicate greater upset.

Discussion

The results of this study support the hypothesis that women would be more upset than men in reaction to a scenario describing dog abuse. Furthermore, although women's level of femininity did not affect their case judgments, men who were high in femininity were significantly more upset than men who were low in femininity. This suggests that the PAQ was a more sensitive measure of the social construct of femininity that are often conflated with gender than simple sex identification. This supported Bailey et al.'s (2016) findings that self-identified femininity plays an important role in reactions to dog abuse cases.

In addition, gender and femininity were not significantly correlated, which is an interesting finding. This means that, although participants do differ in terms of femininity, the groups are not evenly split along gender lines. This is important because traditionally, femininity and gender have been highly correlated – specifically, women have higher femininity and lower masculinity than men and vice versa (Sharpe & Heppner, 1991). According to the results, however, there is no significant relationship between gender and gender role identity. This raises questions of whether there is less of an obvious difference between men and women in terms of gender role identity today as compared to several

decades ago, and suggests that the PAQ is a more subtle measure of the social construct of femininity, which may play a more important role than gender.

Although these results are similar to the findings of Bailey et al. (2016), this was not a direct replication, as I was interested in finding the relationship between emotions and gender, as well as femininity. Emotions are a strong predictor of views about jury cases (Bright & Goodman-Delahunty, 2006), and are therefore important to study. A jury member's emotional state during a trial may influence the whole trial outcome.

There were a few limitations to this study. As this was not a real mock trial study – participants were not asked to pretend that they were jurors, but rather only asked about their opinions regarding animal abuse – the results should not be generalized to juror decision making until a real mock trial is conducted. Most mock jury simulations more accurately resemble a real criminal trial, which may make a difference in levels of emotional reactivity and trial verdicts. However, this study serves as a starting point for future real mock trials regarding animal abuse cases. The participant sample may also affect the study's generalizability. Participants were all undergraduates from a large metropolitan university – results may have differed if a different sample population was used. For example, a group with a diverse range of ages, those with prior jury experience, or a community member sample may provide different case judgments. In addition, a different sex roles inventory could be used for validity, such as the BEM Sex-Role Inventory; however, I administered the PAQ for consistency with Bailey et al. (2016).

This study also had its strengths. The undergraduate sample was very racially diverse. In addition, the study took place in a highly controlled laboratory environment. This is a preliminary study, and results from this research may be used to develop a more focused jury deliberation study.

Future Directions

Future work can extend the present findings by using harsher language, a more violent scenario, or visual stimuli, all of which might exacerbate emotional responses to the trial stimuli (Bandes & Salerno, 2014; Salerno & Bottoms, 2009). Bright and Goodman-Delahunty (2006) found that mock jurors who viewed gruesome photographs, compared with those who saw no photographs, reported experiencing more intense emotional responses, and weighted prosecution evidence more than evidence presented by the defense. Therefore, mock jury participants would likely be more upset about the abuse

scenario presented, and make stronger punishment ratings, if presented with more stimuli, such as videos or photographs of the aftermath of animal abuse.

Although empathy was not explored in this project, the role of individual and gender differences in empathy toward dog abuse should also be explored in future studies. Empathy has been defined as "the cognitive act of adopting another's perspective," "a cognitively based understanding of others," and an "affective emotional reaction to the emotions of another" (Davis, 1994, p. 11). Researchers have found that women have higher general levels of empathy than men (Barnett et al., 1992; Batson et al., 1988; Mestre, Sampre, Frias, & Tur, 2009; Norscia, Demuru, & Palagi, 2016; Toussaint & Webb, 2005). Women make more pro-child victim judgments than men, explained in part by their higher levels of empathy for child victims (Bottoms et al., 2014). Compared to men, women are also more likely to have the same level of empathy for puppies and infants, and to have more empathy for animals than adult humans (Angantyr, Eklund, & Hansen, 2015). It is theorized that because women are more familiar with being victimized, they are more likely to empathize with victims of violent crimes than men (Hurwitz & Smithey, 1998). For this reason, they may be more empathic toward animals.

The jurors in our study did not actually deliberate, which would happen in a real court case. Deliberations may change verdicts due to social influence, which may cause jurors to vote in a way to homogenize with the rest of the group (Wood, 2000). Jurors could be swayed by the opinions of the rest of the jury, causing them to make harsher or more lenient punishments. Gender could also influence how attitudes are expressed when jurors deliberate on a case: Women in particular could be likely to change their original verdict after deliberating with a jury of their peers; this could lead to a more guilt-leaning or innocent-leaning jury (Golding, Bradshaw, Dunalp, & Hodell, 2007).

Conclusion

This study makes both practical and theoretical contributions to the fields of psychology and law. These results will be informative in planning future research to further explore jurors' emotional reactions to animal abuse cases, and the relation between emotions and trial verdicts. With many of the study participants reporting that they were upset about the animal abuse, it is clear that people are strongly affected by these kinds of cases. Due to increased legal interest in these types of cases, there may be more animal cases tried in courts. This study expands the literature related to court cases

involving animal abuse. In doing so, it attempts to provide attorneys with practical knowledge about how jurors may differ in their reactions to animal abuse cases.

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