



A review of the evidence for associations between empathy, violence, and animal cruelty

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ABSTRACT

There is clear evidence that cruelty to animals may co-occur with other violent behaviors, such as assault. Animal cruelty, particularly towards domestic pets, tends to occur disproportionately within the wider context of intimate partner violence. A factor that may contribute to the associations between interpersonal violence and animal cruelty is a compromised ability to experience feelings of empathy. The current paper sought to provide an overview of empathy and its relationship to violence, with particular emphasis on attitudes towards animals.

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It has long been recognized that cruelty to animals is associated with a spectrum of violent and antisocial behaviors, highlighting the need for appropriate policy measures to address the factors contributing to this relationship. Cruelty to animals may occur in conjunction with generalized illegal behaviors, including assault, drug related offences, rape and other sexual offenses, theft, and arson. Animal cruelty, particularly towards domestic pets, tends to occur disproportionately within the wider context of intimate partner (domestic) violence and/or family abuse, in comparison with non-abusive situations. In conjunction with family violence, threats of violence or actual violence against a pet may be used as a means of intimidating, frightening, or exerting control over others. Violence towards companion animals has been conceptualized by some as an extension of the pattern of ‘controlling’ behaviors that characterize intimate partner abuse (Arkow, 1996).

One of the factors that may contribute to observed associations between interpersonal violence and animal cruelty is a compromised ability to experience feelings of empathy, relative to levels of empathy reported in normal populations. The current review therefore sought

to provide an overview of empathy and its relationship to violence, with particular emphasis on attitudes towards animals. While it is temptingly simple to view a lack of empathy as the central explanatory factor for manifestation of concurrent animal abuse and human violence, this approach encourages the treatment of empathy as the sole factor contributing to behavior. There is no evidence to suggest that low empathy levels alone are responsible for the development or continuation of behavioral problems. Empathy is considered herein as but one part of an inter-related network of developmental factors, all of which can contribute to manifestations of problem behavior.

1. Empathy and aggression

Briefly, empathy involves both affective (emotional) and cognitive components (Zahn-Waxler & Radke-Yarrow, 1990). The cognitive component of empathy, sometimes labeled “perspective taking,” entails understanding or identifying with another individual’s response. For this reason, empathy is considered a highly important and influential aspect of moral reasoning (Hanson & Mullis, 1985). However, empathy is not necessarily generated by complex cognitive operations.

Empathy may also be defined as a vicarious affective response that is congruent with, and arises from, understanding of another individual’s emotional experience (Zahn-Waxler & Radke-Yarrow, 1990). Part of the emotional response involves sharing the emotional experiences

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of others (empathic concern), and part consists of reacting to that experience (personal distress). Given the complexity of behavioral development, it appears imprudent to treat empathy alone as the central factor underlying multidimensional behaviors such as animal cruelty and interpersonal violence. Such an approach would be expected to be as unlikely to provide an adequate account of behavior as would any other single explanatory factor.

Moral development and moral reasoning theories, which refer to the development and maintenance of ways in which people reason about and justify their own behavior and that of others, conceptualize empathy as a motivator in eliciting altruism and inhibiting aggression (Hastings, Zahn-Waxler, Robinson, Usher, & Bridges, 2000; Palmer, 2005; Zahn-Waxler & Radke-Yarrow, 1990). It is argued that if an individual is capable of empathy, and thus vicariously 'experiences' the consequences of his/her actions towards others, then that individual will be less likely to hurt others, and more likely to help them. As such, empathy has been cast as a 'protective factor' against aggression; empathy provides immediate feedback that discourages aggressive acts by making the perpetrator aware of, and possibly sympathetic toward, another's suffering (Hastings et al., 2000).

Empathy and aggression appear to be inversely related (Miller & Eisenberg, 1988). The strength of this negative association has been found to increase with age in children with behavioral problems (for example, the older the child, the higher the aggression and the lower the levels of empathy). Children from violent homes may have lower levels of empathy than control samples (Hinchey & Gavelek, 1982), and may be more able than other children to find means of rationalizing or justifying their own use of violence (Jaffe, Wolfe, & Wilson, 1990). Regarding the influence of violent homes upon children, Ascione and Arkow (1999) suggest that children may copy violent adult behaviors (modeling) and be able to enjoy their feelings of power over the animals they hurt (control theory), without suffering emotionally (compromised empathy).

Flynn (1999a) studied the relationship between retrospectively reported childhood animal cruelty and adult acceptance of violence against women and children. The sample consisted of 267 undergraduate psychology students. 18% of the sample reported animal cruelty as children, where cruelty was defined as having ever (a) killed a pet, (b) killed a stray or wild animal, (c) hurt or tortured an animal to tease it or to cause it pain, (d) touched an animal sexually, or (e) had sex with an animal. Hunting was excluded, as was euthanasia and killing for food. 'Animal' was defined as 'all animals,' thus including reptiles, for example. The most commonly reported categories were killing a stray or wild animal (particularly, rodents, birds, and reptiles) followed by hurting or torturing an animal to tease it or cause it pain. Physical force was generally used to tease, torture, or cause pain.

The individuals who reported that they had been cruel to animals in childhood or adolescence showed more favorable attitudes towards corporal punishment (the spanking of a child) and a wife being slapped by her husband than respondents who did not report cruelty. However, among the individuals who reported a history of animal cruelty, support for corporal punishment was approximately consistent with nationally observed levels of support, and support for a husband slapping his wife was low. Flynn (1999b) found that in the same sample, males who reported animal cruelty were more likely than other respondents to have been hit frequently by a parent when they were children and teenagers. Empathy levels were not assessed. Nonetheless, Flynn (1999a) discussed the role of childhood animal cruelty, empathy development, attitude formation, and adult violence using the following framework:

If cruelty to animals does cause children to be less empathic, it makes sense that they may be less troubled as young adults by parents hitting children or husbands hitting wives. Further, if abusing animals not only inhibits one's ability to show kindness and compassion, but also socializes one to use violence, then

perpetrators may be more likely not only to approve intimate violence, but to engage in it as well (p.170).

The implication from this study is that animal cruelty, broadly defined and independent of context, interferes with empathy development in children, a process that may affect subsequent attitudes and behaviors including the likelihood of committing acts of violence in adulthood. This assertion contradicts conceptualizations of contextual factors such as an abusive home environment contributing to impaired empathy development, and thence to the development of animal cruelty. Flynn's (1999a) theory reverses the direction of the relationship, despite the body of extant evidence suggesting otherwise, as well as the finding within Flynn's (1999b) related study that individuals who committed animal cruelty appeared more likely to have experienced abusive home environments than the individuals who did not report being hit frequently.

Ascione (1993) speculated that childhood exposure to violence (independent of exhibiting animal cruelty) interferes with development of empathy. Studies suggest that compromised parental empathy, accompanied by a lack of 'prosocial' behaviors¹, are frequently present in the context of child abuse (see Feshbach, 1989; Letourneau, 1981). For example, Perez-Albeniz and de Paul (2004) found that fathers who were deemed a 'high risk' for child physical abuse displayed lower levels of 'perspective taking' than 'low risk' fathers. 'High risk' mothers had higher levels of 'personal distress' than 'low risk' mothers, which was suggested to translate into high levels of anxiety, and aversive rather than prosocial reactions to others' suffering. Feshbach (1989) reviewed studies on levels of empathy in child abusing families and noted that to sustain the hypothesis that empathy is a developed behavior, "abusive parents should be low in empathy and that the abused child should also manifest a lack of empathy" (p.355).

Accumulated research suggests that parental aggression towards a child, possibly resulting partially from a lack of parental empathy, may contribute to impairment in childhood empathy development, which can in turn contribute to the manifestation of cruelty to animals and other violent or 'callous' behaviors. This theory addresses both the impact of the abuse by the parent on child empathy, and the possibility that empathy development may be influenced by the behavior of the parent. Empathy may in itself be a learned behavior, thus modeling theories can encompass empathy development. This is empirically supported by research demonstrating that abusive parents tend to have low levels of empathy and consequently do not express behaviors likely to contribute to the development of empathy in children.

Lack of empathy is one characteristic of the psychological trait labeled as 'callous and unemotional' (CU), and is typically accompanied by manipulative behavior, a lack of guilt or remorse, and superficial charm. These characteristics all represent diagnostic criteria for antisocial personality disorder in adults. There is an inverse relationship between 'callousness' and empathy, with high callousness and low empathy accompanying low levels of concern for others (Lahey, Waldman, & McBurnett, 1999). In studies of criminal offenders, male offenders consistently display (among other differential characteristics) lower empathy levels than males in control samples.

For example, Heilbrun (1982) assessed 168 male prisoners with histories of violent behavior and found that low levels of empathy may be associated with physical aggression. There are also studies that suggest adult sex offenders exhibit low levels of empathy (Geer, Estupinan, & Manguno-Mire, 2000; Scully, 1988; Ward, Keenan, & Hudson, 2000). Empathy, and in particular the cognitive or 'perspective taking' dimension, was found to be one of a range of predictive factors concerning the likelihood of commission of violent acts among

¹ Prosocial behaviors refer to behaviors such as helping others and showing concern for the needs of others.

an all-male methadone maintenance population ($n=254$) (Bovassa, Alterman, Cacciola, & Rutherford, 2002). Lower empathy levels indicated a higher risk of violence. However, antisocial personality factors (including childhood conduct disorder, poor socialization, manipulateness, and egocentricity) were also strongly predictive of violence. This demonstrates that empathy should not be viewed in isolation as underlying violent behavior.

It also seems that aggression must be assessed as a multifaceted construct. While empathy may be one factor that inhibits the overt expression of aggression (manifestations of physical violence), Campbell (2005) contends that levels of anger are consistent between males and females, but that different levels of guilt, fear (especially of physical harm), and fear-related behavioral inhibition combine with empathy to influence an individual's likelihood of expressing physical aggression (but not other types of aggression, such as verbal). Loeber and Hay (1997) argue that levels of aggression may remain relatively constant throughout a lifespan, but that the manifestation of aggression (for example, physical aggression to humans, versus verbal aggression) may change over time.

Levels of empathy may act in conjunction with socially defined gender-role expectations and gender-identification to encourage the displacement of anger into forms of aggression other than the physical. Similarly, it must be considered that empathy is in itself a multi-dimensional construct (personal distress versus perspective taking, for example). Different dimensions of empathy may relate differently to different behaviors. With regard to individuals who engage in generalized patterns of antisocial and violent behavior, and particularly those who meet diagnostic criteria for conduct or antisocial personality disorder, compromised empathy appears to be just one aspect of impaired emotional ability overall (Herpetz & Sass, 2000).

2. Empathy generalization

It has been theorized that empathy 'generalizes' from animals to humans. It has also been claimed that through the 'humane education' of children, involving school-based programs designed to instill 'pro-animal' attitudes, increased levels of empathy towards animals will necessarily result in increased levels of empathy for other humans. Thompson and Gullone (2003) support this view, contending that instilling and maintaining normative levels of empathy in children is becoming "increasingly recognized" as a means of reducing animal cruelty and human violence (p.175).

Promoting the empathy generalization hypothesis as a method of reducing violence in society rests upon the same assumptions as the premise that preventing cruelty to animals will lower rates of interpersonal violence; namely, that there is a 'transferral' between behaviors and that preventing one can therefore minimize or prevent another. There is insufficient evidence to support this premise. Empathy generalization also tacitly accepts the supposition that empathy is the key factor driving or inhibiting the manifestation of violence.

Within an empathy generalization perspective of animal treatment, the argument that human welfare should be addressed as a priority is dismissed by the premise that improving our treatment of animals will improve our treatment of humans. Despite assertions that teaching children to hold particular attitudes towards animals will lead to improvements in empathy towards humans, evidence supporting increases in levels of empathy after humane education interventions remains scarce. Existing research is characterized by methodological problems such as a failure to test levels of empathy prior to conducting humane education programs, thus rendering before and after comparisons impossible.

It is inconclusive whether empathy towards animals reliably generalizes into empathy towards humans. Just as there is a lack of evidence to support the transferral of violence from animals to humans, there is a notable lack of empirical data to support the

premise of empathy transferral from animals to humans. Although empathy for animals and humans is frequently assumed to be positively correlated, this does not mean that empathy *transfers* from one to the other. Nor does it imply that high levels of empathy towards animals 'cause' high levels of empathy towards humans (or vice versa).

Perhaps the most comprehensive available study of humane education is that of Ascione (1997), who conducted a year-long school-based program designed to foster empathy towards animals (study conducted in Utah, United States). Enhancement of 'humane attitudes' was found for children in 4th grade, but not for children in 1st, 2nd, or 5th grades. Therefore, it could not be concluded that there was overall enhancement of humane attitudes towards animals following humane education. Note that different assessment surveys were used for younger (1st, 2nd grade) versus older (4th, 5th grade) children.

In terms of the generalization of empathy from animals to humans (inferred from correlations between human-directed empathy and attitudes towards animals questionnaires), the experimental group (exposed to humane education) were said to show higher levels of generalization than the control group (no humane education). Precise statistics were not provided to support this claim (Ascione, 1997). In an earlier paper reporting the same study (Ascione, 1992), it was stated that children in the older (4th and 5th grade) experimental group showed higher levels of human-directed empathy (mean score=60.25 out of 88) than the control group (mean score=58.21 out of 88), but this was not substantiated with reference to their attitudes towards animals. Given that attitudes towards animals did not differ between the control and experimental groups, except for 4th graders, it cannot be assumed that empathy generalized more readily after humane education.

It was noted that *correlations* between attitudes towards animals and empathy for humans were calculated on pre-humane education data for all children, but that post-education *comparisons* in those correlations between control and experimental groups were not made (although it was stated in the methods section of Ascione (1992) that these comparisons had been conducted). There was no test of whether the correlation between animal attitudes and human empathy was higher for the experimental group than the control group, after the education program. Therefore, it is extremely difficult to use the results to support claims of empathy generalization as a result of humane education.

It was also acknowledged by Ascione that attitudes, rather than behaviors, were assessed, meaning that the possibility of children providing what they believed to be the 'desired' responses cannot be disregarded. Furthermore, Ascione's (1992) sample consisted of 'low risk' children without empathy deficits, rather than a sample of children with a history of cruelty to animals or identified empathy impairments. There is very little research investigating the efficacy of interventions to reduce the frequency or severity of animal cruelty behaviors in samples with an established history of such acts. It is doubtful that results from studies of 'normal' samples can be generalized to abusive contexts. Unfortunately, a selection of subsequent review papers overlook the shortcomings of Ascione's (1992) humane education research, and erroneously conclude that the study provided solid evidence of empathy transferral (see for example Thompson & Gullone, 2003) or that humane education rectified empathy deficits (Taylor & Signal, 2004).

The assumption that animal-directed and human-directed empathy are different aspects on a single continuum (and that fostering empathy towards one target will inherently transfer to other targets) has been challenged by Paul (2000). Paul's (2000) community-based sample of 497 Scottish respondents demonstrated that animal-directed and human-directed empathy, although often positively correlated (albeit not strongly), also appear to be separable, have different sources of variation, and may represent different psychological constructs rather

than a unitary construct. Paul (2000) suggested that although the general construct of empathy may underlie both animal-directed and human-directed attitudes, the actual process of directing empathy may be mediated by different factors depending on the target (human or animal).

In the case of animal-directed empathy levels, the strongest predictor was current or former pet ownership, whereas the best predictor of human-directed empathy was the presence of a child living in the home. Consequently, it cannot be reliably concluded that animal-directed empathy will transfer to human-directed empathy, or that humane education produces the desired outcomes. This underscores the importance of dissociating correlation from causality, and approaching theories of generalization of empathy (or, indeed, the role of compromised empathy in the development of different aspects of violence) with due caution. Also, the different cognitive and affective components of empathy may exert differential influences on behavior; this has not been evaluated with regard to behavior towards animals.

3. Conclusions

There is insufficient evidence to support the view that empathy levels are the sole or key driver of aggressive behavior and/or animal cruelty. Empathy appears to be just one factor among a host of contributors towards generalized violent and antisocial behavior patterns. Based on existing research, it appears that childhood exposure to violence (with or without the presence of animal cruelty), coupled with a lack of pro-social parental behavior, may contribute to the development of a spectrum of violent behaviors (which may or may not include animal cruelty). Although an impaired capacity for empathy may be part of this process, other antisocial personality factors such as manipulateness and egocentricity appear to play an important role in sustaining violent behavior. Additionally, empathy is, in itself, a multifaceted construct. Therefore it remains unwise to view empathy as an isolated explanatory variable underlying violence.

Given that negative childhood experiences such as exposure to family violence and related dysfunction seem to underlie the development of a spectrum of violent behaviors and associated characteristics, it is recommended that future research focus on these relationships, and their psychosocial contributors. For example, it would be valuable to better investigate the extent to which different aspects of family violence correlate with the development of aggressive behavior in children, and ways in which different types of family dysfunction may be associated with different types of behavioral problems. Also, there is a need to better explore the various dimensions of empathy, to establish which specific components of empathy appear most strongly related to wider antisocial personality factors.

Regarding empathy and behavior towards humans and animals, it cannot be assumed that empathy towards animals will transfer to empathy towards humans (or vice versa). The available information in this regard is contradictory and equivocal. The suggestion that human-directed and animal-directed empathy represent different personality dimensions, and have different sources of variation, merits further investigation. Although it has been assumed that humane education interventions for children are beneficial, there have been few systematic efforts to quantify the efficacy or otherwise of such efforts. Where assessment has been undertaken, there is limited evidence for sustained or significant effects. This remains a research

question for the future, particularly with regard to whether humane education programs for children with identified behavioral problems have any effect on moderating those antisocial patterns of behavior, especially if any ongoing family dysfunction remains unaddressed.

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