Animal cruelty, pet abuse & violence: the missed dangerous connection

Article ·	November 2018	
DOI: 10.15406/frcij_2018.06.00236		
CITATION:		READS
6		4,049
1 autho	a	
3	Scott A Johnson	
	Forensic Consultation	
	31 PUBLICATIONS 84 CITATIONS	
	SEE PROFILE	
	SEL HOLE	
Some of	the authors of this publication are also working on these related projects:	
Project	Intoxicated Perpetrators of Sexual Assault & Rape Know What They Are Doing Despite Intoxication: What the Literature Has To Say View project	
Desirest	Pornongraphy and Frotica and the Sey Offender View project	



Literature Review





Animal cruelty, pet abuse & violence: the missed dangerous connection

Abstract

The mistreatment and abuse of animals is a significant indicator of violence towards humans, up to and including intimate partner abuse, sexual assault, rape, murder. All too often mental health professionals and prosecutors miss the seriousness of any cruelty towards animals and the significant role animal cruelty plays in the perpetuation of violent and non-violent criminal behavior. The literature supports that animal cruelty is one of the earliest markers for future acts of both violent and nonviolent criminal behaviors. Whether animal cruelty occurs prior to or subsequent to witnessing or experiencing any type of abuse is unknown. What is known is the connections between experiencing abuse, witnessing domestic abuse, and animal cruelty. This means that the directionality of cruelty to animals is not always clear, that is, which occurs first, the negative environmental factors (abuse) or animal cruelty.

Volume 6 Issue 6 - 2018

Scott A Johnson

Licensed Psychologist, Forensic Consultation, USA

Correspondence: Scott A Johnson, Licensed Psychologist, Forensic Consultation, USA, Tel +612-269-3628, Email scatt@forensicconsultation.org

Received: September 22, 2018 | Published: November 20, 2018

Background

It is sad to see time and time again how information on the seriousness and dangerousness of animal cruelty goes unnoticed or is minimized when intervention and prosecution occurs. Research from the 1980's to the present has demonstrated that cruelty to animals is a hallmark or signature indicator for future acts of violence, including rape, child molestation, domestic abuse, school shootings, and other forms of violence. If someone can be abusive or cruel to animals, then it makes sense that they could and often do become aggressive and violent towards people. Animal cruelty is defined as the crime involving the infliction of pain, suffering, or death to an animal. Animal neglect can include withholding of food and water and shelter and that as a result the animal has in any way suffered, died, or been placed in imminent danger of death (animal cruelty, n.d.). In short, anything that is done to mistreat an animal. People who engage in animal cruelty are monsters. What does it take to abuse or neglect a living and gentle pet? The answer is simply monstrous and evil intentions.

Definition of animal cruelty

In summary, animal cruelty is defined as any intentional and repeated behavior that causes physical or psychological distress in animals, including, but not limited to, causing unnecessary pain, suffering, distress, or death of an animal.¹⁻³ The terms *animal cruelty* and *animal abuse* will be used interchangeably in this article.

Definition of domestic violence

The term domestic violence will include any act of emotional, psychological, physical, or sexual abuse or neglect that occur within a family unit, regardless of the relationship between the adults and children. Intimate partner violence will be used interchangeably with domestic abuse, partner abuse, dating violence, any relationship violence between romantic partners.

Definition of batterer

The term batterer will include those who emotionally, psychologically, physically, or sexually harm or abuse their romantic

or relationship partner, regardless of whether married, sexual preference, or whether residing together. Abuser and batterer may be used interchangeably.

Problems in assessing abuse and animal cruelty

It should be noted that numerous researchers have mentioned a weakness in assessing whether domestic or child abuse had occurred in the home, that being that it relies on someone's, usually the mothers, self-report. It is understandable that parents may under- or over-estimate the degree of or any type of abuse that occurred in the home, especially when looking retrospectively at their child's violent behavior. Victims have also been known to minimize the degree of violence that occurs in the home. The prevalence of abuse or violence within the home of children who engage in animal cruelty would likely be higher if there were better means to assess it other than simply self-report. In addition, defining a *violent* from *non-violent* offender is challenging because the majority of offenders are versatile and commit both violent and non-violent crimes. In fact, those who habitually commit violent crimes share similarities with those who habitually commit non-violent crimes.

What the research has to say

There have been consistent research findings to suggest a strong link between animal cruelty and violence towards people including domestic abuse and child abuse. 6-16 Law enforcement is also aware of the connection between animal abuse and human violence. 17-20 Animal abusers are more likely to engage in criminal behavior and to be diagnosed as having Antisocial Personality Disorder.21-24 Those who engage in animal cruelty were 3 times more likely to commit other crimes, including murder, rape, robbery, assault, harassment, threats, and drug/substance abuse.21 The major motivations for engaging in animal cruelty include anger, fun, control, fear, dislike, revenge, imitation, and sexual pleasure.25-27 Cruelty to animals is first often reported when children are ages 4-6 and older.²⁸ Unfortunately, parents often underreport children who are abusive to animals. Children who demonstrate cruelty to animals often display callous unemotional traits and have often been the victim of abuse or witness abuse in their home. Childhood animal cruelty is also linked to violence against



people, including committing future acts of child abuse and abuse against the elderly.²⁹⁻³¹ MacDonald³¹ first wrote about the Triad of childhood cruelty to animals, firesetting, and enuresis, and that child who had these behaviors were often sadistic. However, when later retested in 1967, he found that his sample of homicide offenders presented with histories of parental brutality, parental seduction, childhood firesetting, and cruelty to animals, but not enuresis. The Dark Triad of narcissism, Machiavellianism, and psychopathy³² have been associated with negative interaction styles and negative behavior, though not always criminal in nature. The Dark Triad involves callous and manipulative behaviors. Those who present with higher levels of the three traits in the Dark Triad demonstrated more negative attitudes towards animals and reported engaging in more acts of animal cruelty.33 Callousness has been found to be at the core of the Dark Triad. 33,34 The younger the age and having higher level of the Dark Triad traits correlate with more negative views of animals and is predictive of an anti-social or violent trajectory. Early onset of animal cruelty is predictive of engaging in multiple acts of animal cruelty among men incarcerated for murder or attempted murder.35,36 Incarcerated men reported higher rates (25%) of "substantial cruelty to animals" in childhood.37 Approximately 36% of assaultive women reported having engaged in cruelty to animals as well. 38 Female serial killers have reported histories of engaging in the torture or killing of animals, especially cats.³⁹ Law enforcement is also aware of the connection between animal abuse and human violence. 17-20 Perhaps one of the first symptoms of Conduct Disorder is animal cruelty in childhood.40

Domestic abusers may engage in animal cruelty because they likely lack empathy and conscience. Domestic abusers and child abusers also engage in animal cruelty as a means to control and further intimidate their victims. Harming the family pet is an effective was to instill fear in and secrecy from victims and even giving the pet away or killing it effectively teaches the victims that they can just as easily be killed or seriously injured as well. Children who were sexually abused were also more likely to be cruel to animals. Adolescent sex offenders may use animal cruelty to gain compliance from victims 40% of sexual homicide perpetrators admitted that they had been sexually abused and that they had engaged in sexual contact with animals.

Children who engage in animal cruelty

Children who witness animal cruelty are 3-8 times more likely to abuse animals.44 Children who engage in animal cruelty are more likely to abuse in the community, at school, and in the family and to be exposed to domestic violence. 45-47 Children may engage in cruelty to animals out of curiosity or imitation, because they have been desensitized to violence, have decreased empathy, or lack of attachment. 48-50 In extreme cases, children living in a violent home may kill their pet to prevent their pet from sustaining further injury.⁵¹ Approximately 30% of women in violent homes reported that their children had harmed or killed their companion animals.⁴⁹ In her study, Baldry⁵³ found that over 50% of youth who witnessed parental domestic abuse engaged in animal cruelty, nearly 70% of the children were male. Children who engage in animal cruelty are more likely to engage in other antisocial conduct, including a decrease in empathetic response toward violence against others and animals as well as more emotional and behavioral problems. 53-55 The exposure to witnessing animal violence may desensitize the child to violence. Significant

relationships were found between active animal abuse (e.g., beating, stabbing) and both interpersonal violence and substance abuse as well as between sexually abusing animals (bestiality) and sexual offending against humans.¹³ Children exposed to domestic abuse, sexual abuse, and who were physically abused or neglected were more likely to engage in animal cruelty than other children. 56-58 Children exposed to physical and/or sexual abuse were far more likely to engage in animal cruelty than those children not abused.⁵⁹⁻⁶¹ Children who were physically abused were twice as likely to engage in animal cruelty as their peers⁴⁸ and children from homes with domestic abuse and who were maltreated were more likely to engage in animal cruelty. In summary, children who experienced multiple types of abuse were more likely to engage in animal cruelty. It is suggested that early antisocial childhood behavior that includes callous and unemotional traits is related to both genetics and family environment, though in some studies family environment did not always appear to play a significant role. 54-62 In some cases, approximately half of the children that were cruel to animals had not been physically maltreated. Over 80% of children who were maltreated did not engage in animal cruelty.^{63,64} Acts of animal abuse that continue without intervention may escalate to more severe violence against humans in the future. 65 Children who engage in animal cruelty is a hallmark of psychopathy.44Again, not all children who engage in animal cruelty will become psychopaths or harm others. Ascione¹⁵ found that 32% of abuse victims indicated that their children had hurt or killed one or more of their family pets. Children of women in shelters were 20 times more likely to have witnessed animal cruelty.⁴⁹ Duncan and Miller⁶⁶ identified several family risk factors associated with childhood animal cruelty and adult violence: physical abuse, sexual abuse, paternal alcoholism or paternal absence, and exposure to domestic abuse. Baldry⁵³ found that over 50% of children/adolescents in their study that had been exposed to children domestic violence and witnessing animal cruelty actually engaged in animal cruelty themselves. Baldry also found that witnessing a mother enact animal cruelty resulted in over 90% of boys directly abusing animals. This may suggest a more damaging developmental impact on children when their mother is the animal cruelty perpetrator. Animal cruelty may well be a reaction to the exposure to domestic violence and/or a result of modeling. The theory of modeling animal cruelty and other violence has support. 66,67 The two are intertwined and other factors may also impact the children. Domestic violence and child abuse have consistently been found to exist prior to children engaging in animal cruelty.8-46 One study found that children exposed to domestic abuse are 3 times more likely to engage in animal cruelty64

Domestic abuse

In a review of the literature, it was demonstrated that children's exposure to domestic abuse is correlated with negative outcomes, including psychosocial impact, which increases the chance for the children to engage in intimate partner violence later in life.⁶⁸ The rates for intimate partner violence range from 11%-71%⁶⁹⁻⁷² Exposure to intimate partner violence includes direct observation of the violence as well as being aware of the violent behavior.^{73,74} Exposure to domestic abuse has been associated with numerous negative outcomes, including the development of serious and persistent social, emotional, and behavioral problems, all of which may impact the development or maintenance of healthy adult relationships. These factors have been associated with engaging in domestic abuse in adulthood.⁷⁵⁻⁷⁷

405

Kimber et al.68 found that exposure to intimate partner violence in childhood increased the likelihood of engaging in adulthood intimate partner violence fourfold. The more types of intimate partner violence that are co- occurring (e.g., emotional and physical), the stronger the connection with engaging in later adulthood partner violence.^{78,79} It is more frequently the case that if one form of intimate partner violence is occurring, that other forms are occurring as well (e.g., emotional, psychological, physical, and sexual). In addition, early and enduing exposure to environmental stressors, including witnessing intimate partner violence has been shown to impact the immune system which in turn may significantly impact the child's responsivity (ability to cope) with subsequent stressful situations and therefore more likely to respond to interpersonal stress and conflict with violence. 80,81 Levitt, Hoffer, Loper,14 found that at least half of their sample had one or more arrests for intimate partner violence and animal cruelty. Violent individuals tend to attack multiple family members, including pets. 82 In the majority of families where physical abuse occurred animal cruelty also occurred; approximately 66% of the animal cruelty perpetrators were the fathers or males in the home and in approximately 33% of the abusive homes the children were the perpetrator of the animal cruelty.83 Abusers often used threats against the family pet to maintain control over the victims.84-86 Studies found that abusers had injured or killed the family pet in order to prevent the victim from leaving.¹⁹ When violence occurs between the parents or within the household, children are also likely to be abused or neglected.87-89 Animal cruelty and domestic violence occur together regardless of the sexual preference of the partners7 and sexual abuse has also occurred within the same families as domestic/partner abuse and animal abuse. 57-90 One study found that when reports of animal cruelty were investigated, 82% of the families were identified as having children who were at risk of abuse or harm. 91 The forms of violence used against the family pet often parallels the violence used against the partner (e.g., hands or feet used to punch or kick; strangulation, choking, throwing). 92 In one study, 46% of those arrested for animal cruelty had also been arrested for domestic abuse. 14 Physical violence and verbal aggression of humans predict threats, abuse and murder of animals in the same home. Approximately 12-80% of battered women report that their abuser threatened to harm or actually harmed or killed the family pet. 93-99 The fear for the safety of the family pet keeps many battered women from leaving the home for safety or returning home soon following a violent incident. Approximately 18% to 65% of battered women report that they delayed leaving the home out of fear that harm would occur to their pet. 93-97 Remember that when a victim leaves the violent home for a shelter, as many as 50% or more of the pets remain with the abuser. 15,16

The impact of witnessing parental violence

Witnessing parental or other violence may increase the likelihood for the development of antisocial traits and behaviors. ¹⁰⁰⁻¹⁰⁴ This fits into Bandura's Vicarious Learning Theory ¹⁰⁵ which theorizes that the observation of a behavior is more likely to lead to the replication of the behavior when the observer and model have a meaningful relationship. Parents and adults who model any type of violence or aggression are likely to teach that same behavior to the children who witness it. ¹⁰⁶ Witnessing significant others and those in the media engage in violence or animal cruelty encourages children to replicate the behavior and may result in the child being desensitized to later violence as well as a decreased physiological arousal following exposure to violence. ¹⁰⁷⁻¹¹⁰

This scenario sets the child up to accept violence as a way to deal with and vent emotions and desensitizes the child to the use of violent behavior. Children exposed to domestic violence are at increased risk for developing psychological maladjustment^{111,112} Boys are especially at risk for showing externalization of symptoms such as physical aggression and antisocial behavior. 113,114 Girls exposed to domestic violence may become more submissive and withdrawn¹¹⁵ Both male and female children who witness domestic violence are at higher risk for engaging in the same violent behavior. 116,117 The strongest predictor of violence towards a partner was presence of Conduct Disorder and the second strongest predictor was exposure to domestic abuse. Additional mediating events in the household may also account for that relationship. The relationship between children who were cruel to animals and abuse is very strong, the strongest relationship was for children who had been physically abused and/or sexually abused and for those who witnessed parental domestic abuse. 42-59 Gullone 96 summarizes that childhood animal cruelty, parenting, and the home environment are important for the development of antisocial behavior for children and adolescents. Gullone% indicates that homes where there is a greater instability in the family, more conflict, and problematic parenting strategies (i.e., physical punishment) are more likely to model and direct the child's development towards an antisocial and violent path. Children who experience or observe domestic violence are more likely to be negatively impacted in regards to maladaptive cognitions as well as to develop a callous unemotional response to the violence, thereby disengaging from a normative empathic reaction typical of victims and others.

Corporal punishment

Parents who condone corporal punishment are at higher risk of also engaging in animal cruelty. 118,119 Father's use of corporal punishment (spanking, slapping, or hitting) was correlated with engaging in animal cruelty. 120 These same men were over twice as likely to have experienced corporal punishment as adolescents. In addition, the link between animal cruelty, intimate partner violence, and child abuse suggests that everyone in the offender's lives is potentially at risk for being abused or assaulted as well. 121

Animal abuse as an indicator of child abuse

Numerous studies have demonstrated a correlation between children who were sexually abused and subsequently abused animals. Friedrich, Urquiza, & Beilke, 13 found that 35% of boys who were sexually abused engaged in animal abuse versus only 5% of those not abused. One study found that of boys who had sexually abused other children and engaged in other acts of violence, that 20% had a history of engaging in bestiality. 122 many of the children had themselves been severely abused during childhood. Another study found that 20% of sexually abusive children had histories of severe abuse and neglect and had a history of cruelty to animals¹²³ when child abuse or neglect occurred, animal cruelty often co-occurred. This is an important and dangerous connection. When a perpetrator chooses to abuse others, they have little reason not to harm the family animals as well. It would be fruitful for child protection services to refer cases to the police or other mental health professionals to assess for animal cruelty. Conversely, for animal control and law enforcement to refer families and individuals who are engaging in animal cruelty for further mental health assessment.

Risky families

Children who develop aggressive and antisocial behaviors (including animal abuse) tend to be exposed to what is referred to as the risky family.124 These families are characterized by abusing the children, overt family conflict, expressions of negative effect, and low nurturance and warmth. Risky parents are often cold, neglectful and unsupportive of their children. Tapia¹²⁵ explained that a chaotic home environment with aggressive parental models created a hostile environment for the children. Cruelty to animals occurs in conjunction with other hostile behavior (e.g., bullying, fighting, and lying, stealing). The chaotic home environment along with aggressive parents who often utilized harsh corporal punishment created a situation that modeled the children into behaving violently. 125 Curry found that children exposed to domestic violence were significantly more likely to engage in animal cruelty. Approximately 29-32% of children exposed to domestic violence engage in animal cruelty. 48-50 Children physically or sexually abused engaged in cruelty to animals at a rate of 44%, and 54% of children who were exposed to domestic abuse and animal cruelty engaged in animal cruelty.⁴⁸ For children who were sexually abused, physically abused, and exposed to domestic abuse demonstrated higher rates of animal cruelty than those who experienced only one form for abuse.⁴² Those children who experienced multiple types of abuse, including exposure to domestic abuse, were also more likely to present with more psychological distress than those who experience one form of abuse or only witnessed domestic abuse. 42-127

Bullying & animal cruelty

A relationship has also been established between animal cruelty and bullying. ^{128,129} Males tend to perpetrate both animal abuse and bullying at higher rates than females and those that have engaged in bullying have higher rates of engaging in animal cruelty behavior. Witnessing animal cruelty, family conflict, and being the victim of bullying resulted in higher rates of engaging in animal cruelty. ¹³⁰ High rates of bullying and of victimization are predictive of multiple acts of animal cruelty and vice versa. ¹³¹ When children are identified as engaging in bullying behavior, it is important to assess whether they have engaged in animal cruelty as well, and vice-versa. Imagine the pain the child who is the bully experiences to lead to their decision to hurt others and animals. This is important not only in understanding the bully's motivation but to offer the most effective intervention. The bully may well live in a violent home and intervention is needed there are well.

Rapists, pedophiles, violent offenders

Researchers found that approximately 50% of rapists over 25% of pedophiles had childhood histories of harming animals. ¹³² In one study, nearly all homicidal sex offenders in the study engaged in significantly more animal cruelty when young and no homicidal sex offenders engaged in animal cruelty in both childhood and adolescence. ¹³³ It is suggested that bestiality is also forced on children who are sexually abused and involved in the production of child pornography. ¹³⁴ It was reported that 50% of boys who were sexually abused were involved in bestiality. ¹³⁵ Of serial murderers, as previously mentioned above, a significant percent engaged in animal cruelty as children, adolescents, and as adults. ^{136,137} There is also a significant correlation between sexually abusing animals (bestiality) and sexual offending against humans. ¹⁴ In fact, they found that at

least 20% of their sample committed a sex offense including rape or child molestation- this statistic is higher for batterers and animal cruelty offenders than in the general population. Cruelty to animals is a hallmark background for serial murderers. 137 Approximately 25% of incarcerated violent offenders admitted they had engaged in animal cruelty versus approximately 7% of the nonviolent group. 138 Kellert & Felthous¹³⁹ also found that 25% of aggressive inmates reported multiple incidents of cruelty to animals in childhood. Aggressive inmates also reported more extreme forms of animal cruelty, higher levels of generalized violence in childhood, and exposure to domestic abuse. Aggressive, violent criminals often report paternal violence, reporting repeated and excessive child abuse and approximately 75% of non-criminals who reported childhood physical abuse reported engaging in animal cruelty. McPhedran¹⁴⁰ points out that although 25% of animal cruelty offenders engage in violence towards people, 75% do not. This is important in that animal cruelty is a marker for more severe psychopathology and violence towards people but not all will become those violent criminals. It is important that the sex offenders and domestic abuse perpetrators be assessed for a history of animal cruelty not only to understand the progression of violence in the offender's life but to ascertain the degree to which the offender has or lacks attachment capabilities. To engage in animal cruelty or animal killing may suggest a more serious personality disordered individual. Of school shooters, 45% had histories of alleged animal cruelty141 and 21% of serial murderers reported they had engaged in cruelty to animals as children. 137 Serial murderers and mass murderers often have engaged in animal cruelty in childhood. 142 These are facts that are simply too important for law enforcement and mental health to overlook. Early intervention is the key to address this dangerous connection of animal cruelty and violence towards humans.

Motivations for animal cruelty

Batterers use threats to harm, actual harm, and actually kill pets in order to control their victims. 143,144 Batterers who harmed the family pet or other animals tended to engage in more extreme forms of violence including higher rates of sexual violence, marital rape, emotional violence, and stalking, and utilized more controlling behaviors including isolation, exercising the male privilege, blaming, intimidation, threats, and economic abuse145 Jealousy has also been identified as a reason why batterers engage in animal cruelty, suggesting that the abuser is jealous of his partner's relationship with the animal.14 Men abuse companion animals in order to confirm their power over others; to express rage; to punish or terrorize; to teach submission; and to discourage their partner from leaving.¹⁴⁶ The impact of the above motivations increased when the batterer killed a companion animal. Threatening to or actually harming the family pet is at times an effective way to deter the partner from leaving the relationship, instilling fear, punish the partner for attempt to leave, and isolating the partner from supportive relationships, as well as used to force the victim to return to the violent relationship out of fear for the family pet.16-45 Some have suggested that those who engage in intimate partner violence and animal cruelty have a compromised capacity to empathize with others, have an uncontrollable anger, attempt to dominate others who are weaker than themselves, and/or a desire to control one's intimate partner¹⁴Another motivation for animal cruelty appears to be a perceived misbehavior of the pet. For example, an abuser who has unrealistic expectations of the animal or does not understand the animal's reactions to situations or how to appropriately

train the animal. 14-93 Some of the abusers who engage in animal cruelty may do so for far more nefarious motives, such as sadism. 22-45 These sadists may abuse the animals before moving to human victims or concurrently. In summary, adult animal cruelty offenders may harm the family pet in order to intimidate, retaliate, punish, to isolate the victim/s, prevent the victim/s from leaving, or to force the victim to return. 147 Just as for any crime, the motivations of the offender vary. It is important to determine what the underlying motives are. Often the witnesses to the animal cruelty provide information that is helpful in this matter. Some of the witnesses may also be victims of direct abuse or violence at the hands of the perpetrators as well and they have valuable information to help assess the underlying and direct motives for the animal cruelty.

Explanation of the role animal cruelty plays in violent histories

The Violence Graduation Hypothesis (VGH) and the Deviance Generalization Hypothesis (DGH) both help to understand how animal cruelty occurs. Gullone% provides a thorough review and explanation of these hypotheses. It is within the context of the home environment, the parenting relationship, relationships at school, and personality factors. There is no one theory that fully explain how animal cruelty occurs and/or the directionality of how the known factors interact to allow for animal cruelty to occur. Both of the hypothesis provides a better understanding for assessment and intervention into the lives and homes of the person who engages in animal cruelty.

The violence graduation hypothesis

This approach suggests that animal cruelty in childhood is predictive of violence towards humans in adulthood. 148,149 significant association was found between violence in adulthood and animal cruelty. This included animal torture and killing of animals in childhood and adolescence. Of serial murderers, in one study 36% engaged in animal cruelty as children, 46% engaged in animal cruelty as adolescents, and 36% engaged in animal cruelty as adults. 136 Another study showed that 21% of serial murderers had engaged in animal cruelty¹³⁷In short, this theory suggests that children learn about and practice animal cruelty and are desensitized to the consequences of the violent behavior before they graduate to violence against humans.

Violent offenders were significantly more likely to present with a history of animal cruelty than non-violent offenders. 150 However, animal cruelty was correlated with both violent and non-violent offending, not just violent offending. Therefore, at least for males, animal cruelty may be a marker for antisocial behavior in general, including violent and non-violent crimes. However, for female offenders, animal cruelty correlated twice as high with violent offenses. 150 The presence of Antisocial Personality Disorder, Antisocial Personality traits, and polysubstance use is highly related to those who engage in animal cruelty.9 Two factors related to repeated interpersonal violence were bestiality and young age at first act of animal cruelty.¹⁵¹ Those with childhood onset of animal cruelty present with more severe forms of antisocial behavior than those who began in adolescence. They demonstrated an escalation of severe aggression and were referred to as the life-course persistent group. 152,153 Another study found that 37% of abused children engage in animal cruelty.58 Factors related to childhood animal cruelty includes being a victim of physical or sexual abuse, witnessing parental violence, witnessing parents or peers engage in animal cruelty, and bullying or being the bully.¹⁵⁴

Being abused or neglected in childhood may lead to the development of callous-unemotional traits, 155 which is related to animal cruelty and violent behavior later in life. Fighting, bullying, cruelty to animals, and assault were some of the earliest indicators of conduct disorder and cruelty to animals placed the individual at the severe end of the continuum. 156-158 Perhaps one of the first symptoms of Conduct Disorder is animal cruelty in childhood¹⁵⁶ and the animal cruelty may lead to further forms of violence and can disrupt development. 118

The deviance generalization hypothesis (DGH)

This approach suggests that aggressive behaviors occur in the context of other antisocial behavior; including substance abuse, not just physically or sexually aggressive behavior. 159 The view of the DGH is that aggressive behaviors, including animal cruelty, lie on the antisocial behavior spectrum. 160,161 Animal cruelty is simply one aspect along the continuum of violent and non-violent criminal behavior. Animal cruelty may precede or follow other non-violent or violent behavior- directionality is not specific.²² In the DHG theory, animal cruelty may precede or follow interpersonal violence, whereas the VGH model described above would argue that the animal cruelty would likely have occurred prior to the interpersonal violence. Research has demonstrated that those who engage in animal cruelty are associated with more serious and recurrent violence162 and in one study 25% of the animal cruelty offenders committed other offenses including rape, homicide, assault, abduction/kidnap, and harassment as well as property crimes and drug/other offenses.¹⁶³ Animal abusers were more likely to be involved in other criminal and violent behavior, with as many as 70% of those cruel to animals committing at least one property or person offense. In addition, those who were cruel to animals also presented with lifetime histories of "lifetime nicotine dependence" and "lifetime alcohol use disorder". 128 Animal cruelty was correlated with both violent and non-violent offending. 150 The first incident of animal cruelty generally occurs around 6 1/2 years of age along with other aggressive behaviors. 156 Of those children diagnosed as having conduct disorder, approximately 25% engage in animal cruelty. 156 Males were by far more likely to engage in animal cruelty however when females did so, they were just as likely to engage in other antisocial and aggressive behaviors. Some have suggested that older children who engage in animal cruelty present with callousunemotional traits, characterized by a lack of guilt and empathy, and that they also possessed other traits related to psychopathy (e.g., superficial charm, lack of empathy, grandiose sense of worth). 164,165 Among factors for lifetime animal cruelty and violence included being male, younger when the first aggression or animal cruelty occurred, being from a lower socioeconomic status. 166 Other identified consistent behavior included arson, harassment, threatening others, rape, and lifetime substance abuse including nicotine.

Summary of the VGH & DGH models

Both the Violence Graduation Hypothesis (VGH) and the Deviance Generalization Hypothesis (DGH) help explain how the role that animal cruelty plays in the course of developing a violent lifestyle. Both offer support from the research community in explaining the role of animal cruelty. The VGH model suggests that one form of violence leads to other forms of violence and from violence against animals to violence against humans. The DGH model proposes that animal cruelty simply lies on the continuum of violence and occurs with other crimes, both violent and nonviolent. The progression from Conduct Disorder to Antisocial Personality Disorder is well documented and supported in the DSM-5. This offers support for both the *Violence Graduation Hypothesis* (VGH) and the *Deviance Generalization Hypothesis* (DGH). Both models appear to have validity though neither independently explains the directionality of childhood negative environments, the occurrence of animal cruelty, and the progression to adult violent behavior. A caveat is necessary here. Not all violent offenders have a history of animal cruelty as children, adolescents or adults. In addition, the vast majority of children who engage in animal cruelty do not go on to become serial killers. \(\)

Risk assessment

Youth who engage in animal cruelty are likely to come to the attention of mental health and the juvenile justice system at younger ages and more likely to have experienced multiple traumas in their lives. 167 They were also more likely to be White non-Hispanic and more likely to be male (however some will be female). The majority of youth engaged in animal cruelty are likely to have experienced domestic violence, caregiver divorce, and the incarceration of a caregiver. 167 The authors also identified that the youth had "also experienced physical abuse, sexual abuse, household substance use, physical neglect, sexual abuse, emotional neglect, and household member with mental illness..." (p. 294). Their findings were supported by numerous other researchers. 126 Children who have experienced trauma often demonstrate difficulty controlling their emotions and behavior¹⁶⁸ which may lead to engaging in cruelty toward animals. Others have suggested that the above factors play a less direct role for children who are cruel to animals and indicate that factors such as the child's psychopathology, including callous and unemotional traits play a role.⁵⁴ However; this author cautions that directionality has not been nor likely will ever be proven. Whether the child or adolescent presents with psychopathology including callous and unemotional traits prior to having experienced the negative environment (e.g., witnessing domestic violence or being the victim of any type of abuse) or as a result of the negative environment is difficult to determine. Parents in the negative environment may present facts about the home and family members in a less than forthcoming manner. Therefore, it is recommended that a thorough assessment of the youth involved in animal cruelty and their family occurs and that they all undergo a thorough psychological and violence risk assessment. It is important to assess repeated acts versus isolated acts of animal cruelty when assessing the future risk of violence. 162 Even more so to investigate and assess intentional animal cruelty because it serves as a red flag for the propensity of engaging in violent behavior including intimate partner violence¹⁷ intra-familial violence¹⁶⁸ sexual assault¹⁶⁹ and bullying.¹⁷ Even the American Psychiatric Association includes animal cruelty as a criterion for concern, especially under Conduct Disorder and Intermittent Explosive Disorder. Included in the Diagnostic and Statistical Manual of Mental Health Disorders under Conduct Disorder is "A repetitive and persistent pattern of behavior ..." and one of the criteria (criteria 5) states: "Has been physically cruel to animals". When assessing a children or adolescent who has engaged in animal cruelty it is important to assess other ways they may have behaved violently and to thoroughly assess the child's environment. The connection between having been physically and sexually abused, witnessing domestic abuse, and witnessing animal cruelty and behaving violently towards animals and others is important to understand. It is understood that adults and juveniles who

abuse animals vary on their motives for engaging in animal cruelty. Motivations may suggest specific mental health diagnosis and may be a symptom of the disorder, but mental health diagnosis never cause someone to engage in animal cruelty. Some of the motivations for engaging in animal cruelty include: 139

- I. Control (of the animal or of others)
- II. Retaliation
- III. Expression of aggression
- IV. Shock and amusement
- V. Displacement of aggression
- VI. Sadism

Specific developmental motivations may include:49

- I. Curiosity or exploration
- II. Peer pressure
- III. Mood enhancement
- IV. Sexual gratification
- V. Force abuse (being forced to engage in sex with animals)
- VI. Attachment to the animal
- VII. Posttraumatic play
- VIII. Imitation
- IX. Intimidation (abuse pet to intimidate others)

For more in-depth discussion on motivations see¹³⁹ a typology for juvenile firesetters has been used to also assess juveniles who engage in animal cruelty.²⁹ The three categories are:

- i. Normal curiosity (typically ages 3-7)
- ii. Pathological ("Plea for help") (typically ages 7-13)
- iii. Delinquent animal abuse or fire setters (typically ages 13 to adulthood).

The above three categories may provide an effective way to assess and intervene in addressing juvenile animal abusers. The following DSM-5 diagnostic categories include animal cruelty. It should be noted that animal cruelty may or may not play a role for a violent individual and those with any of the following diagnosis may or may not have ever engaged in animal cruelty. However, unless specific questions are asked, it is likely that many individuals who are psychologically or forensically assessed may not disclose a history of animal abuse. Self-report is also a concern in that people can deny engaging in animal cruelty despite having done so. However, when considering any of the following diagnosis (or other diagnosis as well) it is imperative that specific questions be asked to determine whether the individual has ever engaged in animal cruelty.

Intermittent explosive disorder

Involves "Recurrent behavioral outbursts representing a failure to control aggressive impulses as manifested by either of the following:" criteria 1 (Verbal aggression) includes temper tantrums and verbal

arguments/fights toward property, animals, or others at least twice weekly regardless of whether physical injury occurred; Criteria 2three behavioral outburst within a year involving damage or physical assault involving physical injury against animals or others.

Psychopathy

Traits of psychopathy become evident in childhood, including the hallmark sign of callous- unemotional traits. These include a lack of a sense of guilt and empathy and the callous use of others for their own gain. 170,171 Callous-unemotional traits remained stable from childhood into adulthood and are predictive of adult antisocial behavior and psychopathy. 172,173 Cruelty to animals may be one of the first symptoms of conduct disorder, often evident around age 6 1/2.29 Children who engage in animal cruelty are demonstrating a hallmark of psychopathy 36% of sexual homicide perpetrators had engaged in animal cruelty in childhood and 46% continued to do so in adolescence. 44 Lockwood 19 concluded that nearly all serial killers first abused animals. Again, not all children who engage in animal cruelty will continue to do so nor will they all become psychopathic or homicidal.

Oppositional defiant disorder and conduct disorder

When assessing children and adolescents for Oppositional Defiant Disorder and Conduct Disorder, it is imperative to assess for other types of acting out behavior as well, in addition to assessing the home environment for abuse and other deviant issues. Childhood animal abuse has been tied to childhood histories of physical abuse, sexual abuse, and exposure to domestic violence²⁹ When assessing children for Conduct Disorder, it is important to separate out those that engage in animal cruelty from those who do not.¹⁷⁴ There is significant support in the literature to support that if animal cruelty is present in childhood that adult violence against people is highly likely. Remember that animal cruelty¹⁷⁵ occurs within the context of a complicated set of factors (e.g., home environment, parental abuse and criminality, absent father, high stress environments) that impact the child or adolescent in unique ways and each child/adolescent may be impacted differently. Animal abuse is a marker for adult violence¹⁷⁶ but should not in and of itself be the only factor assessed.^{55,66} The entire environment must be taken into account. Animal cruelty occurs within a deviant environment.177

Bestiality

When assessing bestiality, it is important to remember that bestiality and young age of first instance of animal cruelty are important indicators for a dangerous home and for future violence against people. 178 In fact, bestiality alone is the only single factor that if present significantly predicated recurrent future acts of violence.¹⁵¹ It should be noted that zoophilia¹⁷⁹ (a paraphilic interest in animals) had the highest rate of paraphilic crossover with an average of just under 5 paraphilias. 180 A history of bestiality was the single greatest predictor for engaging in future child sexual abuse. 181 In fact, those who engaged in bestiality had a significantly high rate of engaging in sexual offenses against humans.¹⁸² It is important to recognize that not all of those with bestiality and zoophilia will engage in sexual or other violence towards humans. 183 However, it is a robust factor. There is also a significant relationship between sexually abusing animals (bestiality) and sexual offending against humans. 184 Animal sexual abuse and interpersonal violence, including sexual assault/rape may involve the fusion of aggression and sexuality.¹⁸⁵ The pairing of violence against humans and animals may have a sexual release and the animal cruelty may escalate to the killing of the animal.¹⁸⁶ Engaging in sex with animals, animal cruelty, and sexual assault/rape suggest a preference for abusing those who are unable to refuse or resist.¹⁸⁷ In one study, 36% of incarcerated sexual offenders admitted to having had sex with animals. 188 Perhaps more sexual offenders who target intoxicated, drugged, or unconscious victims also have also engaged in sexual contact with animals or engaged in animal crueltythis needs to be further assessed. Engaging in sex with an unconscious or severely intoxicated individual implies at least some degree of preference of sex with those unable to refuse or resist.

Additional mental health diagnosis associated with animal cruelty

Other mental health diagnosis correlated with cruelty to animals include Conduct Disorder, Antisocial Personality Disorder, Obsessive-Compulsive Personality Disorder, Histrionic Personality Disorder, and a significant association with Substance Use Disorders, Pathological Gambling, and a family history of antisocial behavior. 189 Borderline Personality Disorder would also likely be correlated with animal cruelty, however again, the clinician would have to ask specific questions to assess whether animal cruelty has occurred. 190

What we can do

Because of the important role pets play in the family, it is imperative that domestic abuse shelters allow for pets. Victims are often isolated from family, friends, and then their pets, which places them at higher risk for returning to the abusive and violent home. Keeping the pets with the victim will help in victim safety. This has been echoed by many others, including Allen, Gallagher, & Jones;143 Komorosky, Woods, Empie; 191 Krienert, Walsh, Matthews, & McConkey. 192 One strategy that I teach police officers nationwide is to use the local humane society, 193 animal shelters, as well as the local pet food/ supply stores. Most will temporarily shelter a pet to help a victim of domestic abuse be safe. 194 And the result is often a more cooperative victim when it comes to prosecution, 195 not to mention a victim is now safe. For veterinarians, 196 it is important to work with other agencies, especially law enforcement, when abuse or neglect is suspected. 197 It is also imperative that humane societies, societies for the prevention of cruelty to animals, 198 and animal control agencies report to child welfare and law enforcement agencies any suspected animal abuse or neglect. 199 These agencies may be the first to recognize dangerous patterns²⁰⁰ of animal cruelty and child abuse, domestic abuse, and other serious mental health and behavioral problems. For further information, see.201

Summary

The reason this article and review of literature was undertaken was to address frustration at how the dangerous connection between animal abuse, domestic and child abuse, and witnessing parental abuse somehow continue to be missed. Professionals intervening in animal abuse or domestic violence/child abuse situations need to assess the presence or history of animal cruelty. The missed dangerous connection between animal cruelty and other forms of violence is one for mental health professionals to address. The literature and research has clearly demonstrated that the risk factors for animal cruelty are no

different than those for aggression, violence, and antisocial behaviors. Pet abuse is often one of the first indicators noticed of a violent home situation, one that if ignored may develop into a pattern of violence against both animals and people. Over fifty years of research supports that animal cruelty is an indicator of risk for violence towards humans. Physical batterers and assaulters, as well as sexual offenders, often have a history of engaging in animal abuse. The Dark Triad of narcissism, Machiavellianism, and psychopathy often result in violence towards animals and humans. Callousness is perhaps the most supported factor involving the development of aggression towards animals and humans. Early onset of animal cruelty is predictive of engaging in multiple acts of animal cruelty among men incarcerated for murder or attempted murder. It is suggested that early antisocial childhood behavior that includes callous and unemotional traits is related to both genetics and family environment; Children who engage in animal cruelty are demonstrating a hallmark of psychopathy. Again, not all children who engage in animal cruelty will become psychopaths or harm others. The importance of identifying and intervening in situations where children are exposed to domestic violence is imperative. Witnessing parental violence is an important and often missed connection between children who become violent towards animals and humans and those who do not become violent. Rapists, pedophiles, and murderers often have histories of engaging in animal cruelty beginning in their childhood or adolescence. Domestic abusers and child abusers often abuse or kill companion animals in order to exert power over others, to express rage, to punish or terrorize, to teach submission, and to discourage their partner from leaving. In summary, abusers engage in animal cruelty to control and intimidate others. The Violence Graduation Hypothesis (VGH) and the Deviance Generalization Hypothesis (DGH) both help to understand how animal cruelty occurs. In summary, the VGH theory suggests that children learn about and practice animal cruelty and are desensitized to the consequences of the violent behavior before they graduate to violence against humans. The DHG theory suggests that animal cruelty may precede or follow interpersonal violence, following a trajectory of violence in many arenas. Both offer support for the important of examining the presence of animal cruelty. Intervention for any type of violence should include an assessment to address whether the individual has a current or prior history of engaging in acts of animal cruelty. When law enforcement and animal control officials are called to investigate animal cruelty complaints, it is important to refer the suspects for a violent risk assessment. Again, not all people who engage in animal cruelty will become mass murderers and certainly many children who have engaged in animal cruelty may cease the animal cruelty on their own or when intervention occurs.

Acknowledgements

None

Conflict of interest

The author declares that there is no conflict of interest.

References

- 1. Ascione FR. The abuse of animals and human interpersonal violence: Making the connection. Child abuse, domestic violence, and animal abuse: Linking the circles of compassion for prevention and intervention. IN: Purdue University Press. 1999;50-61.
- Dadds MR. Conduct problems and cruelty to animals in children: What is the link? 2008.

- 3. Felthous AR, Kellert SR. Violence against animals and people: Is aggression against living beings generalized? Bulletin of the American Academy of Psychiatry & Law. 1986;14(1):55-69.
- 4. Capaldi DM, Patterson GR. Can violent offenders be distinguished from frequent offenders: Prediction from childhood to adolescence. Journal of Research in Crime and Delinquency. 1996;33(2):206-231.
- 5. Piquero AR. Frequency, specialization, and violence in offending careers. Journal of Research in Crime and Delinquency. 2000;37(4):392-418.
- 6. Ascione FR, Arkow P. Child abuse, domestic violence, and animal abuse: Linking the circles of compassion for prevention and intervention. West Lafayette, IN: Purdue University Press. 1999.
- 7. Beirne P. From animal abuse to interhuman violence? A critical review of the progression thesis. Society and Animals. 2004;12(1):39–65.
- Faver CA, Strand EB. Domestic violence and animal cruelty: Untangling the web of abuse. Special section: Domestic violence and social work education. Journal of Social Work Education. 2003;39(2):237–248.
- 9. Gleyzer R, Felthous AR, Holzer CE. Animal cruelty and psychiatric disorders. Journal of the American Academy of Psychiatry & the Law. 2002;30(2):257-265.
- 10. Hardesty JL, Khaw L, Ridgway MD, et al. Coercive control and abused women's decisions about their pets when seeking shelter. Journal of Interpersonal Violence. 2013;28:2617–2639.
- 11. Hartman CA, Hageman T, Williams JH, et al. Intimate partner violence and animal abuse in an immigrant-rich sample of mother-child dyads recruited from domestic violence programs. Journal of Interpersonal Violence. 2015;33(6):1030-1047.
- 12. Henry BC. The relationship between animal cruelty, delinquency, and attitudes toward the treatment toward animals. Society and Animals. 2004;12:185-207.
- 13. Hensley C, Tallichet SE, Dutkiewicz EL. Recurrent childhood animal cruelty: Is there a relationship to adult recurrent interpersonal violence. Criminal Justice Review. 2009;34:248-257.
- 14. Friedrich WN, Urquiza AJ, Beilke RL. Behavior problems in sexually abused young children. Journal of ediatric Psychology. 1986;11(1):47-57.
- 15. L Hoffer TA, Loper AB. Criminal histories of a subsample of animal cruelty offenders. Aggression and Violent Behavior. 2016;30:48-58.
- 16. Lockwood R, Ascione FR. Cruelty to animals and interpersonal violence: Readings in research and application. West Lafayette, IN: Purdue University Press. 1998.
- 17. Newberry M. Pets in danger: Exploring the link between domestic violence and animal abuse. Aggression and Violent Behavior. 2017;34:273-281.
- Volant AM, Johnson JA, Gullone E, et al. The relationship between domestic violence and animal abuse: An Australian Study. Journal of Interpersonal Violence. 2008;23(9):1277-1295.
- 19. Lockwood R, Church A. Deadly serious: An FBI perspective on animal cruelty. 1996.
- 20. Ponder C, Lockwood R. Programs educate law enforcement on link between animal cruelty and domestic violence. The Police Chief. 2000;67(11):31-36.
- 21. Schleuter S, FR Ascione, P Arkow. Animal abuse and law enforcement. Child Abuse, Domestic Violence, and Animal Abuse: Linking the Circles of Compassion for Prevention and Intervention. 1999;316–327.
- 22. Turner N. Animal abuse and the link to domestic violence. The Police Chief. 2000;67:28-30.
- 23. Arluke A, Levin J, Luke C, et al. The relationship of animal abuse to violence and other forms of antisocial behavior. Journal if Interpersonal Violence. 1999;14(9):963-975.

- Felthous AR, Kellert SR. Violence against animals and people: Is aggression against living beings generalized? Bulletin of the American Academy of Psychiatry & Law. 1986;14(1):55–69.
- Hensley C, Tallichet SE. Exploring the link between recurrent acts of childhood and adolescent animal cruelty and subsequent violent crime. Criminal Justice Review. 2004;29(2):304

 – 316.
- Hensley C, Tallichet SE. Animal cruelty motivations: Assessing demographic and situational influences. *Journal of Interpersonal Violence*. 2005;20(11):1429–1443.
- Hensley C, Tallichet SE, Dutkiewicz EL. Examining demographic and situational factors on animal cruelty motivations. *International Journal* of Offender Therapy and Comparative Criminology. 2011;55: 492–502.
- Kellert S, Felthous AR. Childhood cruelty towards animals among criminals and non criminals. In R Lockwood et al. editors. Cruelty to Animals and Interpersonal Violence: Readings in Research and Application. 1985;38(12):194–210.
- Overton JC, Hensley C, Tallichet SE. Examining the relationship between childhood animal cruelty motives and recurrent adult violent crimes toward humans. *Journal of Interpersonal Violence*. 2012;27(5):899–915.
- Ascione FR. Animal abuse and youth violence. U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention. 2001.
- Becker F, French L. Making the links: Child abuse, animal cruelty, and domestic violence. *Child Abuse Review*. 2004;13(6):399–414.
- Walton Moss BJ, Manganello J, Frye V, et al. Risk factors for intimate partner violence and associated injury among urban women. *Journal of Community Health*. 2005;30(5):377–389.
- 33. MacDonald JM. The threat to kill. *American Journal of Psychiatry*. 2006;120(2):125–130.
- Paulhaus DL, Williams KM. The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*. 2002;36(6):556–563.
- 35. Kavanagh PS, Signal TD, Taylor N. The dark triad and animal cruelty: Dark personalities, dark attitudes, and dark behaviors. *Personality and Individual Differences*. 2013;55:666–670.
- Jones DN, Figueredo AJ. The core darkness: Uncovering the heart of the Dark Triad. European Journal of Personality. 2012;12(6):521–531.
- Grady OKE, Kinlock TW, Hanlon TE. Prediction of violence history in substance–abusing inmates. *The Prison Journal*. 2007;87(4):416–433.
- 38. Tallichet SE, Hensley C. Rural and urban differences in the commission of animal cruelty. *International Journal of Offender Therapy and Comparative Criminology.* 2005;49(6):711–726.
- Ascione FR. Animal abuse and youth violence. U.S. Department of Justice, Office of Juvenile Justice and Delinguency Prevention, 2001.
- Felthous AR, Yudowitz B. Approaching a comparative typology of assaultive female offenders. *Psychiatry*. 1977;40(3):270–276.
- 41. Schurman Kauflin D. *The new predator: Women who kill.* New York: Algora
- 42. Ascione FR. Children who are cruel to animals: A review of literature and implications for developmental psychopathology. *Anthrozoos*. 1993;6(4):226–247.
- Ascione FR, Friedrich WN, Heath J, et al. Cruelty to animals in normative, sexually abused, and outpatient psychiatric samples of 6- to 12-year-old children: relations to maltreatment and exposure to domestic violence. *Anthrozoos*. 2003;16(3):194–212.
- Kaufman KL, Hilliker DR, Daleiden EL. Subgroup differences in the modus operandi of adolescent sexual offenders. *Child Maltreatment*. 1996;1:17–24.

- 45. Ressler RK, Burgess AW, Douglas JE. Sexual homicide: Patterns and motives. New York: The Free Press. 1988.
- McDonald SE, Collins EA, Nicotera N, et al. Children's experiences of companion animal maltreatment in households characterized by intimate partner violence. *Child Abuse & Neglect*. 2015;50:116–127.
- Degue S, Dilillo D. Is animal cruelty a "red flag" for family violence? Investigating co-occurring violence toward children, partners, and pets. *Journal of Interpersonal Violence*. 2009;24(6):1036–1056.
- Baldry AC. Animal abuse among preadolescents directly and indirectly victimized at school and home. *Criminal Behavior and Mental Health*. 2005;15(2):97–110.
- McEwen FS, Moffitt TE, Arseneault L. Is childhood cruelty to animals a marker for physical maltreatment in a prospective cohort of children? *Child Abuse & Neglect*. 2014;38(3):533–543.
- Ascione FR, Thomson T, Black T. Childhood cruelty to animals: assessing cruelty dimensions and motivations. *Anthrozoos*. 1997;10(4):170–177.
- Ascione F, Weber C, Wood D. The abuse of animals and domestic violence: A national survey of shelters for women who are battered. Society & Animals. 1997;5(3):205–218.
- Tallichet SE, Hensley C, O'Bryan A, et al. Targets for cruelty: Demographic and situational factors affecting the type of animal abused. Criminal Justice Studies. 2005;18(2):173–182.
- 53. McDonald SE, Collins EA, Nicotera N, et al. Children's experiences of companion animal maltreatment in households characterized by intimate partner violence. *Child Abuse & Neglect*. 2015;50:116–127.
- Baldry AC. Animal abuse and exposure to interparental violence in Italian youth. *Journal of Interpersonal Violence*. 2003;18(3): 258–281.
- Dadds MR, Whiting C, Hawes DJ. Associations among cruelty to animals, family conflict, and psychopathic traits in childhood. *Journal of Interpersonal Violence*. 2006;21(3):411–429.
- Girardi A, Pozzulo JD. Childhood experiences with family pets and internalizing symptoms in early adulthood. *Anthrozoos*. 2015;28(3):421–436.
- Friedrich WN, Urquiza AJ, Beilke RL. Behavior problems in sexually abused young children. *Journal of ediatric Psychology*. 1986;11(1):47– 57
- 58. Hunter M. Abused boys: The neglected victims of sexual abuse. 1990.
- Deviney E, Dickert J, Lockwood R. The care of pets within child abusing families. *International Journal for the Study of Animal Problems*. 1983;4(4):321–329.
- Boat BW, Pearl E, Barnes JE, et al. Childhood cruelty to animals: Psychiatric and demographic correlates. *Journal of Aggression, Maltreatment & Trauma*. 2011;20(7):812–819.
- Duncan A, Thomas J, Miller C. Significance of family risk factors in development of childhood animal cruelty in adolescent boys with conduct problems. *Journal of Family Violence*. 2005;20(4):235–239.
- McCellan J, Adams J, Douglas D, et al. Clinical characteristics related to severity of sexual abuse: A study of seriously mentally ill youth. *Child Abuse & Neglect*. 1995;19(10):1245–1254.
- Rhee S, Waldman ID. Genetic and environmental influences on antisocial behavior: A meta-analysis to twin and adoption studies. *Psychological Bulletin*. 2002;128(3):490–529.
- Becker KD, Stuewig J, Herrera VM, et al. A study of firesetting and animal cruelty in children: Family influences and adolescent outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2004;43(7):905–912.
- Currie CL. Animal cruelty by children exposed to domestic violence. Child Abuse & Neglect. 2006;30(4):425–435.

- 66. Lockwood R, Hodge G. The tangled web of animal abuse: the links between cruelty to animals and human violence. 1986.
- 67. Duncan A, Miller C. The impact of an abusive family context on childhood animal cruelty and adult violence. *Aggression and Violent Behavior*. 2002;7(4):365–383.
- 68. Bandura A. Social learning theory. 1977.
- Kimber K, Adham S, Gill S, et al. The association between child exposure to intimate partner violence (IPV) and perpetration of IPV in adulthood—A systematic review. *Child Abuse & Neglect*. 2018;76:273–286.
- Alhabib S, Nur U, Jones R. Domestic violence against women: Systematic review of prevalence studies. *Journal of Family Violence*. 2010;25(4):369–382.
- Archer J. Cross-cultural di □erences in physical aggression between partners: A social role analysis. *Personality and Social Psychology Review*. 2006;10(2):133–153.
- Harvey A, Garcia–Moreno C, Butchart A. Primary prevention of intimatepartner violence and sexual violence. Background paper for WHO expert meeting May 2–3, 2007.
- Garcia–Moreno C, Jansen HA, Ellsberg M, et al. Prevalence of intimate partner violence: Findings from the WHO multi–country study on women's health and domestic violence. *Lancet*. 2006;368(9543):1260– 1269
- Gilbert R, Widom CS, Browne K, et al. Burden and consequences of child maltreatment in high-income countries. *Lancet*. 2009; 373(9657):68–81.
- Wathen C, Macmillan H. Children's exposure to intimate partner violence: Impacts and interventions. *Paediatrics & Child Health*. 2013;18(8):419–422
- Levendosky A, Bogat G, Martinez–Torteya C. PTSD Symptoms in young children exposed to intimate partner violence. *Violence Against Women*. 2013:19(2):187–201.
- Osofsky JD. Prevalence of children's exposure to domestic violence and child maltreatment: Implications for prevention and intervention. *Clinical Child and Family Psychology Review*. 2003;6(3):161–170.
- Renner L, Slack K. Intimate partner violence and child maltreatment: understanding co-occurrence and intergenerational connections London, CA: Institute for Research on Poverty. 2004:1278–1304.
- Gonzalez A, MacMillan H, Tanaka M, et al. Subtypes of exposure to intimate partner violence within a Canadian child welfare sample: associated risks and child maladjustment. *Child Abuse & Neglect*. 2014;38(12):1934–1944.
- Vu NL, Jouriles EN, McDonald R, et al. Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. *Clinical Psychology Review*. 2016;46:25–33.
- 81. Buss C, Entringer S, Moog NK, et al. Intergenerational transmission of maternal childhood maltreatment exposure: Implications for fetal brain development. *Journal of the American Academy of Child & Adolescent Psychiatry.* 2017;56(5):373–382.
- Gonzalez A. The impact of childhood maltreatment on biological systems: Implications for clinical interventions. *Paediatrics & Child Health*. 2013;18(8):415–418.
- 83. Finkelhor D, Ormrod RK, Turner HA, et al. The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*. 2005;10(1):5–25.
- 84. Deviney E, Dickert J, Lockwood R. The care of pets within child abusing families. *International Journal for the Study of Animal Problems*. 1983;4(4):321–329.
- 85. Adams CJ. Bringing peace home: a feminist philosophical perspective on the abuse of women, children and animals. Cruelty to Animals and Interpersonal Violence: Readings in Research and Application.

- 1998;9(2):63-84.
- Arkow P. The relationships between animal abuse and other forms of family violence. 1996.
- Firmani D. Helping preserve the human–animal bond. *Animal Sheltering*. 1997;20:15–18.
- Guymer EC, Mellor D, Luk ESL, et al. The development of a screening questionnaire for childhood cruelty to animals. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. 2001;42(8):1057– 1063.
- Munro HMC, Thrusfield MV. Battered pets: features that raise suspicion of non– accidental injury. *The Journal of Small Animal Practice*. 2001;42(5):218–226.
- Widom CS. Childhood victimization: early adversity, later psychopathology. National Institute of Justice Journal. 2000.
- 91. Boat BW. Abuse of children and abuse of animals: Using the links to inform child assessment and protection. In FR Ascione, et al., editors. Child abuse, domestic violence, and animal abuse: Linking the circles of compassion for prevention and intervention. West Lafayette, Indiana: Purdue University Press. 1999.
- Hutton JS. Animal abuse as a diagnostic approach in social work: A pilot study. In R Lockwood et al., editors. Cruelty to animals and interpersonal violence: Readings in research and application. West Lafayette, IN: Purdue University Press. 1998;415–420.
- 93. Sheridan DJ, Nash KR. Acute injury patterns of intimate partner violence victims. *Trauma, Violence Abuse.* 2007;8(3):281–289.
- Carlisle–Frank P, Frank JM, Nielsen L. Selective battering of the family pet. Anthrozoos. 2004;17:26–42.
- Flynn CP. Women's best friend: pet abuse and the role of companion animals in the lives of battered women. Violence against Women. 2000:6(2):162–177.
- Flynn CP. Why family professionals can no longer ignore violence toward animals. 2000;49(1):87–95.
- Gullone E. An evaluation review of theories related to animal cruelty. *Journal of Animal Ethics*. 2014;4(1):37–57.
- R Lockwood, FR Ascione. Cruelty to animals and interpersonal violence: Readings in research and application. West Lafayette, IN: Purdue University Press. 1998.
- Loring MT, Bolden-Hines TA. Pet abuse by batterers as a means of coercing battered women into committing illegal acts. *Journal of Emotional Abuse*. 2004;4(1):27–37.
- 100. Quinslick JA, F Ascione, P Arkow. Animal abuse and family violence. Child abuse, domestic violence, and animal abuse: Linking the circles of compassion for prevention and intervention. West Lafayette, Purdue University Press. 1999:168–175.
- Cummings EM. Coping with background anger in early childhood. *Child Development*. 1987;58(4):976–984.
- Davies PT, Myers RI, Cummings EM, et al. Adult conflict history and children's subsequent responses to conflict: An experimental test. *Journal* of Family Psychology. 1999;13(4):610–628.
- 103. Margolin G, Gordis EB. The effects of family and community violence on children. *Annual Review of Psychology.* 2000;51(1):445–479.
- 104. Maughan A, Cicchetti D. Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. *Child Development*. 2002;73(5):1525–1542.
- 105. Thompson KI, Gullone E. An investigation into the association between the witnessing of animal abuse and adolescents' behavior toward animals. *Society and Animals*. 2006;14(3):223–243.

- 106. Bandura A. Psychological mechanisms of aggression. Aggression: Theoretical and empirical reviews. New York, NY: Academic Press. 1983.
- Bandura A. Social learning theory of aggression. *Journal of Communication*, 1978.
- Anderson CA, Huesmann IR. Human aggression: A social-cognitive view: in MA Hogg, J Cooper (Eds.), The Sage Handbook of Social Psychology. 2003;296–323.
- 109. Anderson CA, Shibuya A, Ihori N, et al. Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries: A meta-analytic review. *Psychological Bulletin*. 2010;136(2):151-173.
- 110. Gullone E. Animal Cruelty, antisocial behavior and aggression: More than a link. Palgrave Macmillan. 2012.
- Guerra NG, Huesmann IR, Spindler A. Community violence exposure, social cognition, and aggression among urban elementary school children. *Child Development.* 2003;74(5):1561–1576.
- 112. Grych JH, Jouriles EN, Swank PR, et al. Patterns of adjustment among children of battered women. *Journal of Consulting and Clinical Psychology*. 2000;68(1):84–94.
- 113. Sternberg KJ, Lamb ME, Greenbaum C, et al. Effects of domestic violence on children's behavioral problems and depression. *Developmental Psychology*.1993;29(1):44–52.
- Edleson JL. Children's witnessing of adult domestic violence. *Journal of Interpersonal Violence*. 1999;14(8):839–870.
- 115. Kolbo JR, Blakely EH, Engleman D. Children who witness domestic violence: a review of empirical literature. *Journal of Interpersonal Violence*. 1986;11(2):281–293.
- 116. Grych JH, Fincham FD, Jouriles EN, et al. Interparental conflict and child adjustment: testing the mediational role of appraisals in the cognitive–contextual framework. *Child Development*. 2000;71(6):1648–1661.
- 117. Kalmuss D. The intergenerational transmission of marital aggression. *Journal of Marriage and the Family*. 1984;46:11–19.
- 118. Stith SM, Rosen KH, Middleton KA, et al. The intergenerational transmission of spouse abuse: a meta-analysis. *Journal of Marriage and the Family*. 2000;62(3):640–654.
- 119. Flynn CP. Animal abuse in childhood and later support for interpersonal violence in families. *Society and Animals*. 1999;7(2):161–171.
- Zolotor AJ, Theodore AD, Chang JJ, et al. Speak softly
 – and forget the stick: Corporal punishment and child physical abuse. American Journal of Preventative Medicine. 2008;35(4):364
 –369.
- Flynn CP. Exploring the link between corporal punishment and children's cruelty to animals. *Journal of Marriage and the Family*. 1999;61(4):971–981.
- 122. Arkow P. Breaking the cycles of violence: A guide to multi–disciplinary interventions. *A handbook for child protection, domestic violence and animal protection agencies*. Alameda, CA: Latham Foundation. 2003.
- 123. Duffield G, Hassiotis A, Vizard E. Zoophilia in young sexual abusers. *The Journal of Forensic Psychiatry*. 1998;9(2):294–304.
- 124. Bladon EMM, Vizard E, French L, et al. Young sexual abusers: a descriptive study of a UK sample of children showing sexually harmful behaviors. *The Journal of Forensic Psychiatry and Psychology*. 2005;16(1):109–126.
- 125. Repetti RL, Taylor SE, Seeman TE. Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*. 2002;128(2):330–366.
- 126. Rigdon JD, Tapia F. Children who are cruel to animals: A follow—up study. *Journal of Operational Psychiatry*. 1977;8(1):27–36.

- 127. Boat B. Connections among adverse childhood experiences, exposure to animal cruelty and toxic stress: What do professionals need to consider? *National Center for the Prosecution of Child Abuse Update*. 2014;24(4):1–3.
- Finkelhor D, Ormrod RK, Turner HA. Poly-victimization: A neglected component in child victimization. *Child Abuse Neglect*. 2007;31(1):7–26.
- 129. Vaughn MG, Fu Q, De Lisic M, et al. Correlates of cruelty to animals in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Psychiatric Research*. 2009;43(15):1213–1218.
- Gelhorn HL, Sakai JT, Price RK, et al. DSM–IV conducts disorder criteria as predictors of antisocial personality disorder. *Comprehensive Psychiatry*. 2007;48(6):529–538.
- 131. Gullone E, Robertson N. The relationship between bullying and animal abuse in adolescents: The importance of witnessing animal abuse. *Journal of Applied Developmental Psychology*. 2008;29:371–379.
- 132. Henry BC, Sanders CE. Bullying and animal abuse: Is there a connection? *Society & Animals*. 2007;15:107–126.
- 133. Tingle D, Barnard GW, Robbins G, et al. Childhood and adolescent characteristics of pedophiles and rapists. *International Journal of Law and Psychiatry*. 1986;9(1):103–116.
- 134. Alys L, Wilson JC, Clarke J, et al. Developmental animal cruelty and its correlates in sexual homicide offenders and sex offenders. *The link between animal abuse and human violence*. 2009;145–162.
- 135. Itzin C. Pornography and the organization of intra— and extra familial child sexual abuse. 1999.
- Wherry JN, Jolly JB, Feldman J, et al. Child Sexual Abuse Inventory scores for inpatient psychiatric boys: An exploratory study. *Journal of Child Sexual Abus*. 1995;4(3):95–105.
- 137. Ressler RK, Burgess AW, Hartman CR, et al. Murderers who rape and mutilate. *Journal of Interpersonal Violence*. 1996;1(3):273–287.
- 138. Wright J, Hensley C. From animal cruelty to serial murder: Applying the graduation hypothesis. *International Journal of Offender Therapy and Comparative Criminology*. 2003;47(1):71–88.
- Merz Perez L, Heide KM, Silverman IJ. Childhood cruelty to animals and subsequent violence against humans. *International Journal of Offender Therapy and Comparative Criminology*. 2001;45(5):556–573.
- 140. Kellert SR, Felthous AR. Childhood cruelty toward animals among criminals and noncriminals. *Human Relations*. 1985;38:1113–1129.
- 141. McPhedran S. Animal abuse, family violence, and child wellbeing: A review. *Journal of Family Violence*. 2009;24(1):41–52.
- 142. Verlinden S, Hersen M, Thomas J. Risk factors in school shootings. *Clinical Psychology Review.* 2000;20(1):3–56.
- 143. Petersen ML, Farrington DP. Cruelty to animals and violence to people. *Victims & Offenders*. 2007;2(1):21–43.
- 144. Allen M, Gallagher B, Jones B. Domestic violence and the abuse of pets: Researching the link and its implications in Ireland. *Practice*. 2006;18(3):167–181.
- 145. Faver CA, Strand EB. Fear, guilt, and grief: Harm to pets and the emotional abuse of a woman. *Journal of Emotional Abuse*. 2007;7(1):51–70.
- 146. Simmons C, Lehmann P. Exploring the link between pet abuse and controlling behaviors in violence relationships. *Journal of Interpersonal Violence*. 2007;22(9):1211–1222.
- 147. Adams C, J Donovan. Woman-battering and harm to animals. *Animals and women: Feminist theoretical explorations*1995;55–84.
- 148. Arkow P. Form of emotional blackmail: Animal abuse as a risk factor for DV. Family & Intimate Partner Violence Quarterly. 2014;19(4):7–14.

- 149. Brantley AC. The use of animal cruelty evidence in dangerousness assessments by law enforcement. First International Academic Conference on the Relationship between Animal Abuse and Human Violence. 2007.
- 150. Tallichet SE, Hensley C. Exploring the link between recurrent acts of childhood and adolescent animal cruelty and subsequent violent crime. *Criminal Justice Review.* 2004;29(2):304–316.
- 151. Walters GD. Testing the specificity postulate of the violence graduation hypothesis: Meta–analysis of the animal cruelty–offending relationship. *Aggression and Violent Behavior.* 2013;18(6):797–802.
- 152. Henderson BB, Hensley C, Tallichet SE. Childhood animal cruelty methods and their link to adult interpersonal violence. *Journal of Interpersonal Violence*. 2011;26(11):2211–2227.
- 153. Farrington DP. Childhood aggression and adult violence: Early precursors and later life outcomes. In DJ Peplar et al., editors. *The development and treatment of childhood aggression*. 1991;5–29.
- Loeber R, Hay D. Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*. 1997;48:371–410.
- 155. Flynn CP. Examining the links between animal abuse and human violence. *Crime, Law and Social Change.* 2011;55(5):453–468.
- 156. Anderson CA, Bushman BJ. Human aggression. Annual Review of Psychology. 2002;(53):27–51.
- 157. Frick PJ, Lahey BB, Loeber R, et al. Oppositional defiant disorder and conduct disorder: A meta-analytic review of factor analysis and cross-validation in a clinical sample. *Clinical Psychology Review*. 1993;13(4):319–340.
- 158. Gelhorn HL, Sakai JT, Price RK, et al. DSM–IV conducts disorder criteria as predictors of antisocial personality disorder. *Comprehensive Psychiatry*. 2007;48(6):529–538.
- 159. Luk ES, Staiger PK, Wong L, et al. Children who are cruel to animals: A revisit. Australian and New Zealand Journal of Psychiatry. 1999;33(1):29–36.
- Hartup WW, RE Tremblay et al. Developmental origins of aggression. New York, NY: Guilford Press. 2005;3–22.
- 161. Frick PJ, Viding E. Antisocial behavior from a developmental psychopathology perspective. *Development and Psychopathology*, 2009;21(4):1111–1131.
- Rutter M. Commentary: Causal processes leading to antisocial behavior. *Developmental Psychology*. 2003;39(2):372–378.
- 163. Felthous AR, Kellert SR. Childhood cruelty to animals and later aggression against people: A review. *American Journal of Psychiatry*. 1987;144(6):270–276.
- 164. Gullone E, Clarke J. Human animal interactions: The Australian Perspective. In F Ascione editor. *The International Handbook of Theory and Research on Animal Abuse and Cruelty*. West Lafayette, IN: Purdue University Press. 2008;305–335.
- 165. Frick PJ, Dickens C. Current perspectives on conduct disorder. *Current Psychiatry Reports*. 2006;8(1):59–72.
- Frick PJ, O'Brien BS, Wooten JM, et al. Psychopathy and conduct problems in children. *Journal of Abnormal Psychology*. 1994; 103(3):700–707.
- 167. Grant BF, Harford DA, Dawson DA, et al. The Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS): Reliability of alcohol and drug modules in a general population sample. *Drug and Alcohol Dependence*. 1995;39:37–44.
- 168. Bright MA, Huq MS, Spencer T, et al. Animal cruelty as an indicator of family trauma: Using adverse childhood experiences to look beyond child abuse and domestic violence. *Child Abuse & Neglect*. 2018;76:287–296.
- 169. Khan R, Cookie, DJ. Risk factors for severe inter-sibling violence: A

- preliminary study of a youth forensic sample. *Journal of Interpersonal Violence*. 2008;23(11):1513–1530.
- Simons DA, Wurtele SK, Durham R. Developmental experiences of child sexual abusers and rapists. *Child Abuse & Neglect*. 2008;32(5):549–560.
- 171. Cleckley H. The mask of sanity. MO: Mosby. 1976.
- 172. Hare RD. Without conscience: The disturbing world of the psychopaths among us. New York, NY: Guilford Press. 1993.
- 173. Blonigen DD, Hicks BM, Kruger RF, et al. Continuity and change in psychopathic traits as measured via normal-range personality: A longitudinal- biometric study. *Journal of Abnormal Psychology*. 2006;115(1):85–95.
- 174. Lynam DR, Caspi A, Moffitt TE, et al. Longitudinal evidence that psychopathy scores in early adolescence predict adult psychopathy. *Journal of Abnormal Psychology.* 2007;116(1):155–165.
- 175. Abel G, Becker JV, Cunningham–Rathner J, et al. Multiple paraphilic diagnoses among sex offenders. *Bulletin of the American Academy of Psychiatry and the Law.* 1988;16(2):153–168.
- 176. MacDonald JM. Homicidal threats. *American Journal of Psychiatry*. 2006;124(4):475–482.
- 177. Petersen ML, Farrington DP. Cruelty to animals and violence to people. *Victims & Offenders*. 2007;2(1):21–43.
- 178. Piquero AR. Frequency, specialization, and violence in offending careers. *Journal of Research in Crime and Delinquency.* 2000;37(4):392–418.
- 179. Hansen CH, Hansen RD. Rock music videos and antisocial behavior. Basic and *Applied Social Psychology*, 1990;11(4):357–369.
- 180. Gullone E, Volant A, Johnson J. The link between animal abuse and family violence: A Victoria-wide study. Conference presentation. Australian Veterinary Association, Welfare Conference. Canberra: Australia. 2004.
- 181. Animal cruelty. The Free Dictionary.com. 2018.
- 182. Cook A, Spinazzola J, Ford J, et al. Complex trauma in children and adolescents. *Psychiatric Annals*. 2005;35(5):390–398.
- 183. Squires J. The link between animal cruelty and human violence: children caught in the middle. Kentucky Children's Rights Journal.2000;8:2–18.
- 184. Capaldi DM, Patterson GR. Can violent offenders be distinguished from frequent offenders: Prediction from childhood to adolescence. *Journal of Research in Crime and Delinquency*. 1996;33(2):206–231.
- 185. Abel G. What can 44,000 men and 12,000 boys with sexual behavior problems teach us about preventing sexual abuse? Paper presented at the Annual Training Conference of the California Coalition on sexual offending. San Francisco, California. 2008.
- 186. Fleming WM, Jory B, Burton DL. Characteristics of juvenile sexual offenders admitting to sexual activity with nonhuman animals. *Society and Animals*. 2002;10(1):31–45.
- 187. Holoyda BJ, Newman WJ. Childhood animal cruelty: Bestiality, and the link to interpersonal violence. *International Journal of Law and Psychiatry*. 2016;47:129–135.
- 188. Merz Perez L, Heide KM. Animal cruelty: Pathway to violence against people. 2004.
- 189. Sandnabba NK, Santrila P, Nording N, et al. Characteristics of a sample of sadomasochistically—orientated males with recent experience of sexual contact with animals. *Deviant Behavior*. 2002;23(6):511–529.
- English K, Jones L, Patrick D, et al. Sexual offender containment: Use of the post conviction polygraph. Annals of the New York Academy of Sciences. 2003;989:411–427.
- 191. Strand EB, Faver CA. Battered women's concern for their pets: A closer look. *Journal of Family Social Work*. 2005;9(4):39–58.

- 192. Komorosky D, Woods DR, Empie K. Considering companion animals: an examination of companion animal policies in California domestic violence shelters. *Society and Animals*. 2015;23:298–315.
- 193. Krienert JL, Walsh JA, Matthews K, et al. Examining the nexus between domestic violence and animal abuse in a national sample of service providers. *Violence and Victims*. 2012;27(2):280–285.
- 194. Ascione FR, Weber CV, Thompson TM, et al. Battered pets and domestic violence: Animal abuse reported by women experiencing intimate violence and by nonabused women. *Violence against Women.* 2007;13(4):354–373.
- 195. Dadds MR. Conduct problems and cruelty to animals in children: What is the link? 2008.
- 196. FR Ascione. The international handbook of animal abuse and cruelty: Theory, research, and implication. West Lafayette, IN: Purdue University Press.

- 197. Sheridan DJ, Nash KR. Acute injury patterns of intimate partner violence victims. *Trauma, Violence Abuse.* 2007;8(3):281–289.
- 198. Simmons C, Lehmann P. Exploring the link between pet abuse and controlling behaviors in violence relationships. *Journal of Interpersonal Violence*. 2007;22(9):1211–1222.
- 199. Arseneault L, Moffitt TE, Caspi A, et al. Strong genetic effects on cross-situational antisocial behavior among 5– year–old children according to mothers, teachers, examiner–observers, and twins' self–reports. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*. 2003;44(6):832–848.
- Arkow P. Form of emotional blackmail: Animal abuse as a risk factor for DV. Family & Intimate Partner Violence Quarterly. 2014;19(4):7–14.
- 201. Ascione FR. Battered women's reports of their partners' and their children's cruelty to animals. *Journal of Emotional Abuse*. 1998;1(1):119–133.