CAN CHILDHOOD ANIMAL CRUELTY BE LEARNED?:

EXAMINING AGE OF ONSET

AND RECURRENCY

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ABSTRACT

Few studies have examined how animal cruelty can be a learned behavior. Using data collected from 257 male inmates at a Southern state medium-security prison, the current study seeks to replicate the Hensley, Tallichet and Dutkiewicz (2012) study. It examines the potential for the onset and recurrence of childhood animal cruelty to become a learned behavior, specifically in terms of how demographic characteristics and childhood experiences, such as witnessing animal cruelty and being mentally and/or physically abused, influence such behavior. In the current study, those who were physically abused as children reported engaging in recurrent animal cruelty. Those who reported witnessing animal cruelty at a younger age also reported engaging in animal cruelty at an earlier age. Respondents who reported witnessing a parent commit acts of animal abuse reported that they committed animal abuse themselves at an older age, while those who witnessed a brother/sister commit animal abuse reported engaging in it at an earlier age.

DEDICATION

This thesis is dedicated to my wife, LeAnn, who has shown an extraordinary amount of patience and support while I have pursued my academic dreams.

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TABLE OF CONTENTS

ABSTRACT	Γ	iv
DEDICATION	ON	v
ACKNOWI	LEDGEMENTS	vi
CHAPTER		
I.	INTRODUCTION	1
II.	LITERATURE REVIEW	5
	Animal Cruelty and Learning Theories	11
III.	METHODOLOGY	15
	Participants Measures	
IV.	RESULTS	18
V.	DISCUSSION	21
REFERENC	CES	25
APPENDIX		
A.	ZERO-ORDER CORRELLATION MATRIX	27
В.	OLS REGRESSION SUMMARIES	29
C.	IRB APPROVAL LETTER	31
D.	QUESTIONAIRRE	33
VITA		36

CHAPTER I

INTRODUCTION

Many people feel an emotional connection with animals. Media is often full of images of animals in poses which make the animal appear friendly and loveable. Such images elicit feelings of warmth and companionship that are often associated with pets. These images often evoke comments about the affection for animals that many people possess. Not only are there such tender images of animals, but there are also those images of animals which have been neglected and/or mistreated. Animal cruelty is an issue which also causes emotional responses from many who witness or learn of such acts. The emotional use of animals has extended to mainstream media where the American Society for the Prevention of Cruelty to Animals (ASPCA) has aired a fundraising commercial featuring a prominent female vocalist, singing a sad song, accompanied by images of homeless or mistreated animals. Such images cause people to wonder why someone would commit acts of neglect or cruelty toward an animal.

One well-known activity which involves cruel practices toward animals is cock fighting. Cock fighting takes place in clandestine locations and is often an event that promotes illegal gambling in addition to the injury that the birds sustain. Game birds can be observed fighting in nature as they establish dominance among other birds, but in the illegal cock fights, the birds are equipped with metal spurs that inflict much more damage than their naturally occurring spurs. While cock fighting has a lineage that extends to ancient times, cock fighting has now become illegal in all 50 states. Although the states have seen fit to criminalize cock fighting, there are no federal statutes that currently prohibit such fights (Brewster & Reyes, 2013).

Dog fighting has also received national attention. In 2007, professional football player Michael Vick was arrested and prosecuted for his involvement in a dog fighting ring. Unlike cock fighting, dog fighting is a federal crime in addition to being against state laws. Dog fighting is often surrounded by cruel training methods and atrocious treatment of dogs which do not perform to the expectations of those involved in the fighting. Individuals will many times take great measures to avoid detection of the dog fighting activities, and the actual dog fights often end with a maimed or crippled animal. Vick went as far as to build a house on his property in order to help conceal the activities involving the dogs. In his indictment, Vick was accused of killing dogs which did not possess the proper temperament to fight, using methods such as hanging, drowning, and electrocution (Maske, 2007). His treatment of the dogs fit firmly in one of the more commonly used definitions of animal cruelty which describes animal cruelty as the "socially unacceptable behavior that intentionally causes unnecessary pain, suffering, or distress to, and/or death of, an animal" (Ascione, 1993, p. 228). Although Vick was an adult when he committed these offenses, others who have committed dog fighting potentially learned that behavior as children within the cultural context in which they were raised. Such learning can influence later interactions with other people.

The link between such childhood animal cruelty and later violence toward humans has been studied since the 1960s. Oftentimes, the respondents of these studies are individuals under psychiatric confinement and/or incarcerated individuals who have committed violent offenses (Hensley, Tallichet, & Dutkiewicz, 2009; Kellert & Felthous, 1985; Merz-Perez & Heide, 2004; Merz-Perez, Heide, & Silverman, 2001; Tallichet & Hensley, 2004). Kellert and Felthous (1985), for example, found that aggressive criminals had higher rates of incidents involving cruelty to animals with 25% of them being involved in five or more acts of childhood animal

cruelty as compared to only 6% of the less aggressive criminals. Merz-Perez and Heide (2004) and Merz-Perez et al. (2001) examined the relationship between childhood animal cruelty and future acts of violence toward humans. They found that more than half of the violent inmates had some form of involvement in animal cruelty as a child as compared to only 20% of the non-violent participants.

Other recent studies concerning animal cruelty examined recurrent acts of childhood animal cruelty as it was related to future acts of interpersonal violence. Tallichet and Hensley (2004) found that there was a significant relationship between recurrent acts of childhood animal cruelty and later acts of human violence among a sample of inmates. Of the respondents, nearly half reported that they had been involved in committing acts of animal cruelty as a child or adolescent. Hensley et al. (2009) replicated this study, again finding that a relationship existed between those who had committed recurrent childhood animal cruelty and later recurrent interpersonal violence.

While these studies focus on childhood animal cruelty and future interpersonal violence, there has been a lack of studies that seeks to theoretically understand animal abuse and the factors which surround it (Agnew, 1998). It is undoubtedly important to understand any links between animal cruelty and future violent acts, but by applying a theoretical perspective some of the reasoning for the initial acts of animal cruelty that lead to future acts of violence may be revealed. According to differential association, a social learning theory, socialization and the learning of acceptable behaviors and practices takes place within intimate social groups which often consist of family and close friends (Sutherland, 1947). When approaching recurrent childhood animal abuse from a theoretical perspective, particularly that of differential association theory, it can be suggested that the acts of cruelty are part of the accepted behaviors learned from

intimate social groups. Unfortunately, only two studies have examined such a theoretical link (Hensley & Tallichet, 2005; Hensley et al., 2012).

Hensley and Tallichet (2005) addressed recurrent acts of childhood animal cruelty, finding that children who witnessed a friend commit an act of animal cruelty also participated in more frequent acts of animal cruelty, something that points toward the idea that recurrent acts of childhood animal cruelty can be learned behaviors. Hensley et al. (2012) also found that respondents who witnessed family members commit animal cruelty at earlier ages also participated in acts of recurrent animal cruelty. Family members would be a part of the intimate social groups from which behaviors are learned according to differential association theory.

The current study seeks to replicate the Hensley and Tallichet (2005) and Hensley et al. (2012) study by theoretically examining whether or not animal cruelty may be learned. In doing so, several important questions arise. Does observing the commission of animal cruelty impact whether or not the witness will later engage in the same behavior? Does the relationship that the observer has with the abuser affect the likelihood of him engaging in later acts of cruelty toward animals? Does the age when the respondent first witnesses animal cruelty influence their own participation in animal abuse? Does being mentally and/or physically abused as a child affect the age of onset or the recurrent nature of animal cruelty? In other words, do childhood experiences with animal cruelty shape when someone will engage in animal cruelty for the first time and how often it occurs.

CHAPTER II

LITERATURE REVIEW

Animal cruelty has been the subject of much discussion and debate with studies addressing many of the issues surrounding its impact on individual behavior and interpersonal relationships. While some studies have focused on the link between childhood animal cruelty and later interpersonal violence, relatively few studies involving incarcerated subjects have been conducted which attempt to evaluate the age of onset, age of exposure, and the potential for animal cruelty to be a learned trait and thus influenced by exposure to its commission at an early age (Hensley & Tallichet, 2005; Hensley et al., 2012). In an attempt to better understand the potential link between learned behaviors involving cruelty toward animals and the youthful offender, and particularly recurrent incidents of cruelty as a potentially learned trait, studies have been conducted among prison inmates with the hope of learning when and how these behaviors were first learned and if such behaviors were repeated.

Kellert and Felthous (1985) conducted a study of 152 individuals with the goal of revealing any association between childhood animal cruelty and future acts of aggression toward humans. The study consisted of a sample of federal prison inmates from Connecticut and Kansas, along with non-criminal individuals who lived in areas near the locations of the prisons. The subjects were divided into groups which consisted of aggressive criminals, moderately aggressive criminals, non-aggressive criminals, and non-criminals. The study found that respondents reported 373 acts of animal cruelty. As an indication of the existence of an association between childhood acts of cruelty toward animals and future aggressive criminal acts, the researchers found that among those interviewed, the aggressive criminals had a much

higher rate of childhood cruelty toward animals with 25% reporting that they had been involved in five or more acts of cruelty. Rates of childhood cruelty was significantly lower among other participants in the study with fewer than 6% of moderately aggressive and non-aggressive criminals reporting five or more incidents of cruelty, and none of the non-criminal sample reporting that level of involvement in cruel acts toward animals. The authors indicated that one of the "motives for cruelty toward animals" which they encountered during the study was a "displacement of hostility from a person to an animal," which explained that some acts of childhood cruelty toward animals might come from a level of hatred or fear of an adult which the child was unable to physically confront, thus making an animal a weaker, more suitable target for the child's aggression (Kellert & Felthous, 1985, p. 1124).

In a study which examined physical punishment, animal cruelty, and inmates convicted of felonies, Miller and Knutson (1997) studied a group of 314 inmates in the Iowa Department of Corrections' classification center. The inmates, convicted of a broad range of felonies, took part in a voluntary survey which was used to measure demographic information, history and severity of punishment, and exposure to animal cruelty as a child. According to the results of the survey, 66% reported having been exposed to some form of cruelty toward animals. The exposure to animal cruelty was not limited to the actual participation in an act of cruelty, but also included witnessing an act of cruelty (Miller & Knutson, 1997). The authors reported that there was a rather high rate of at least some amount of exposure to acts of animal cruelty among the respondents in the survey. Such a finding points to a possible link between those involved in antisocial behavior, leading to arrest and conviction for felony offenses and their exposure to animal cruelty. However, the authors did not find such a link, and the information did not

provide any insight into the age at which the cruelty was witnessed, or information which may indicate if the exposure led to future incidents involving acts of cruelty toward animals.

In contrast to the findings of the Miller and Knutson (1997) study, Merz-Perez & Heide (2004) and Merz-Perez et al. (2001) conducted a study which sought to identify a possible relationship between childhood animal cruelty and the future commission of violent acts. The researchers examined characteristics of 45 violent offenders and 45 non-violent offenders incarcerated in a Florida maximum security facility. A significantly higher rate of prior animal cruelty was reported by respondents considered violent as compared to those considered nonviolent. The findings revealed that while only 20% of non-violent participants had taken part in any form of animal cruelty, 56% of violent participants had been involved in acts of animal cruelty. It was noted that motivations for cruelty toward animals can be very complex, much like the motivations for violence against people. The authors also felt it important that incidents of animal cruelty committed by children not be taken lightly, or written off as "troubled kids" committing an act when, in fact, the acts of animal cruelty by children might point toward future acts of violence toward humans (Merz-Perez et al., 2001). Merz-Perez et al. (2001) also went on to express that through investigating singular instances of childhood animal cruelty, particularly considering each incident as an act between one individual and one animal, it may prove possible to identify the acts that are associated with later acts of interpersonal violence.

Childhood Animal Cruelty and Later Interpersonal Violence

In 1987, Felthous and Kellert addressed the idea of childhood animal cruelty, and the possibility that it leads to later interpersonal acts of violence. They conducted a meta-analysis of 15 previous studies concerning the association between childhood animal abuse and later acts of

violence against people. The meta-analysis consisted of five studies that had found a clear association between the abuse and later acts of violence, and ten studies which had found no association between the two. One of the main factors which had a significant impact on the outcome of the reviewed studies was the application of definitions to some of the behaviors listed. For example, animal cruelty was found to have a wide variation in definition, wide enough that some definitions included relatively acceptable acts of discipline involving a family pet, or common housekeeping practices such as swatting flies in acts that may constitute animal cruelty. Such definitions depart greatly from the more accepted definition provided by Ascione (1993).

A second point addressed by Felthous and Kellert (1987) was the method by which information was gathered for studies. Having earlier noted that there were conflicting findings in studies involving childhood animal cruelty and later acts of violence, it was determined that the method used to obtain study information influenced the findings of the studies. They found that in all of the studies where direct interviews were conducted with subjects, an association between animal cruelty and aggression existed. It was noted that in cases involving the review of clinical records, the findings were less likely to include information which would be necessary to properly evaluate relationships. As is the case in many areas of research, particularly in research design, the thoroughness of the research is critical to obtaining the most accurate and reliable findings.

Finally, Felthous and Kellert (1987) felt that recurrent violent acts – both in terms of animals and people – were a much more appropriate measure of aggression than were single acts of violence or even threats. It would not be completely unusual for a person to have a singular aggressive incident during their lifetime. With this idea, recurrence becomes a focal point for

possible indicators of future behaviors, and studies began to examine recurrent acts of animal cruelty and their relationships to future acts of violence.

Ressler, Burgess, Hartman, Douglas, and McCormack (1998), for example, conducted a study of 36 male murderers and their prior experiences with animal cruelty. The study considered how the prior experiences with animal cruelty were related to the ages and backgrounds of the murderers. Twenty-eight of the subjects were studied for childhood behaviors which would include the commission of cruelty toward animals. The study found that 36% of the subjects reported that they had been involved with animal cruelty as a child, while 46% of the subjects reported that they had been involved with animal cruelty as an adolescent. Thirty-six percent of the subjects reported that had continued their involvement with acts of animal cruelty as they became adults. The findings of the study point to a potential relationship between acts of animal cruelty at earlier ages and recurrent acts of animal cruelty as a subject progresses into adulthood.

When considering the idea of recurrent acts of childhood animal cruelty and the relationship with future acts of violence toward humans, the idea must be considered that at some point the animal abuser might progress from acts against animals to acts against humans. Such is the idea behind the graduation hypothesis (Arluke et al., 1999). Wright and Hensley (2003) conducted a study of 354 cases of serial murder, applying the graduation hypothesis to the progression from acts of cruelty toward animals to acts of human violence. The study found that of the 354 serial murderers which were studied, 75 of them had been known to have been involved in committing acts of childhood animal cruelty (Wright & Hensley, 2003). The fact that slightly more than one out of five of the serial murderers had been involved in acts of animal cruelty lends itself to the belief that identification of children involved in recurrent acts of

violence toward animals may assist in the identification of future potential for violence (Wright & Hensley, 2003). This idea was addressed by subsequent studies into recurrent childhood acts of animal cruelty and their relationships with future acts of violence.

Tallichet and Hensley (2004) conducted a study into the possible connection between recurrent acts of childhood violence and later acts of violent crime. The study included 261 surveys completed by males in two Southern state medium-security prisons and one maximum-security prison. Of the 261 surveyed inmates, 112 reported that they had committed childhood and adolescent acts of cruelty toward animals. The only significant finding of the study was the relationship between "recurrent childhood and adolescent acts of animal cruelty and subsequent repeated acts of aggression against humans" (Tallichet & Hensley, 2004, p. 312). The study also noted that various familial and demographic factors, such as family size, did not appear to be associated with the childhood act of animal cruelty. While this finding could garner additional research into family influence on behavior, it also suggests the importance of continued studies into childhood acts of animal cruelty and their value as predictors of future behavior.

In 2009, Hensley, Tallichet, and Dutkiewicz replicated the Hensley and Tallichet (2004) study of recurrent acts of childhood animal cruelty. Surveys completed by 180 inmates who were incarcerated in either a medium-security prison or maximum-security prison located in a Southern state were examined. The findings indicated that inmates who had committed more acts of childhood animal cruelty were more likely to commit repeated acts of interpersonal violence when they became adults. The study indicates that further studies into the repeated acts of childhood animal cruelty are warranted in order to more thoroughly examine their effects on future violent behavior.

Animal Cruelty and Learning Theories

Many studies have been conducted on the subject of animal cruelty and abuse, with few of the studies approaching the subject from a theoretical and criminological perspective. In 1998, Agnew conducted an analysis of some of the causes of animal abuse. He painted the issue of animal cruelty with a rather broad brush, allowing for the inclusion of activities which normally fell under acceptable social standards such as hunting, trapping, and the practice of killing animals for the purpose of food. The abuse was then divided into socially acceptable and unacceptable practices. Basically, acts that resulted in the death or harm of an animal that are done with the benefit of the community at large were considered to be socially acceptable.

Agnew (1998) theorized that animal abuse occurs when an individual is not aware of the abusive consequences of their behavior toward animals, they do not think that their behavior is wrong, and/or they believe that they benefit from their behavior. The factor of socialization includes an individual's exposure to certain acts or behaviors, which would potentially come from within a close social network.

Differential association theory, as described by Sutherland (1947), involves the idea that deviant behavior is a learned trait. Particularly, deviant or criminal behavior is learned from intimate social groups which can consist of family members or friends which are part of a close social network. In addition to learning these behaviors from their surrounding groups, these individuals also learn methods of committing the criminal behavior and then behaviors that are considered acceptable within their intimate groups. By looking at how behaviors are learned, according to differential association, it can be assumed that a child witnessing acts of animal

abuse being committed within their intimate social group will learn the behavior themselves, and the behavior will be a part of a pattern of behavior which they will likely view as socially acceptable (Hensley & Tallichet, 2005; Sutherland, 1947).

Hensley and Tallichet (2005) sought to find if prior childhood exposures to animal cruelty could lead to a behavior which would be learned, and repeated as a result of the exposure. A survey was conducted among 261 male inmates in two medium-security prisons and one maximum-security prison located in a Southern state in order to collect data concerning exposure to animal cruelty, the age at which the inmate was exposed to animal cruelty, as well as information concerning any acts of animal cruelty committed by the inmate. The findings of the study indicated that the age when someone first witnessed animal cruelty and witnessing a friend commit an act of animal cruelty were statistically significant variables. Inmates who reported witnessing acts of animal cruelty at earlier ages also hurt or killed animals more frequently. The inmates who reported witnessing a friend commit an act of animal cruelty reported taking part in more frequent acts of animal cruelty. By identifying the relationship between witnessing a friend commit an act of animal cruelty and the individual participating in more frequent acts of animal cruelty, the social learning theory was applied. The friend who was witnessed committing an act of animal cruelty would likely be a part of an intimate social group of the individual witnessing the act, a group from which the individual might learn what the social group considered acceptable acts or behaviors. Hensley and Tallichet (2005) were able to determine that there was some amount of animal cruelty that was indeed a learned behavior.

Hensley et al. (2012) replicated Hensley and Tallichet's (2005) study concerning animal cruelty as a learned behavior. The study consisted of a self-report survey completed by 180 male inmates in one medium-security prison and one maximum-security prison in a Southern state.

Information was collected on numerous characteristics including race, education, residence, age when animal cruelty was witnessed, and relationship to the animal abuser (Hensley et al., 2012). In examining the responses, 103 of the 180 respondents reported that they had engaged in at least one act of animal cruelty as a child.

Analysis of the data resulted in the identification of several significant findings.

Respondents who witnessed a family member commit an act of animal cruelty also reported engaging in recurrent acts of animal cruelty themselves. Respondents who witnessed acts of animal cruelty at an earlier age also reported that they committed acts of animal cruelty at an earlier age. Furthermore, respondents who witnessed a family member commit an act of animal cruelty were older when they first committed an act of animal cruelty (Hensley et al., 2012). The findings of this study did differ somewhat from the 2005 study. The differences were explained through the different coding of one variable, and through the elimination of another variable which was considered redundant. The variable concerning recurrent acts of animal cruelty was a continuous variable in the 2012 study, and the variable addressing witnessing animal cruelty was removed. The respondents in the 2012 study were also from a different state than were the respondents in the 2005 study, something that could result in some amount of demographic difference between the samples.

Research on the potential theoretical influence of demographic characteristics and childhood experiences on the age of onset and recurrent nature of animal cruelty is lacking. The current study specifically examines the effect of the respondents' (a) race, level of education, and residential location during childhood; (b) mental and/or physical abuse during childhood; (c) the age when first witnessed animal cruelty; and (d) who was witnessed committing that behavior.

Thus, the current study replicates research conducted by Hensley and Tallichet (2005) and

Hensley et al. (2012). However, the current study has been revised in several key areas. First, male inmates from a different Southern state were surveyed. Second, the researchers included two questions regarding childhood mental and physical abuse in order to determine if they affected when someone would engage in animal cruelty for the first time and how often it may occur. Third, the researchers further delineated the relationship variable by expanding the breadth of response categories (i.e., parent, brother/sister, other family member, friend, neighbor, and stranger).

CHAPTER III

METHODOLOGY

Participants

In February 2010, all inmates housed in a medium-security Southern correctional facility for men were provided questionnaires for a study on childhood animal cruelty. Of the 2,315 inmates incarcerated in the prison, a total of 257 agreed to participate in the study, yielding a response rate of 11.1% (as each inmate received a questionnaire). Although this response rate appears low, most prison studies dealing with sensitive issues attract 25% or fewer respondents (Hensley et al., 2009; Tallichet & Hensley, 2004; Tourangeau, Rips, & Rasinski, 2000). After obtaining approval from the state department of corrections and the university's Institutional Review Board, researchers drove to the facilities and delivered the questionnaires and informed consent forms. The informed consent stated that the questionnaires were confidential and the respondents' participation was voluntary. In addition, the state department of corrections agreed not to open any of the surveys prior to mailing them to the researchers.

Mail staff at the prison distributed self-administered questionnaires to each inmate. Inmates were informed that it would take approximately 20 minutes to complete the 26-item questionnaire. Inmates were asked to return their completed questionnaires and signed informed consent forms in a stamped, self-addressed envelope within one month of distribution. The informed consents were immediately shredded upon arrival. No incentives were given for completion of the survey. The researchers contacted the facility after the 30 day period to make sure all completed surveys had been mailed.

Measures

The primary goal of the present study was to investigate the effects of several demographic and childhood characteristics (race, education, residence, the age when witnessed animal cruelty, and whether the animal cruelty witnessed had been committed by a parent, brother/sister, other family member, friend, neighbor, or stranger) on the initial age of animal cruelty and its repetitive nature. The variables were derived from previous studies that had examined these relationships (Merz-Perez & Heide, 2004; Miller & Knutson, 1997; Tallichet et al., 2005).

An item in the survey defined "animal" in which inmates could choose between hurting or killing a pet, stray, or farm animal and listing the exact type or types (i.e., dog, cat, horse, etc.) that they hurt or killed. In addition, the means for "hurting or killing" animals was examined by allowing inmates to select what methods they had used to hurt or kill animals (i.e., drowned, hit/beat, shot, kicked, choked, burned, stabbed, starved/neglected, hit with rocks, and/or had sex with animals). Animal cruelty included any action where the respondent hurt or killed animals as children (other than for hunting). This is consistent with the most frequently used definition of animal cruelty by social scientists which states that animal cruelty is "socially unacceptable behavior that intentionally causes unnecessary pain, suffering, or distress to and/or death of an animal" (Ascione, 1993, p. 228). This definition is preferred because it omits behaviors that may be socially and culturally acceptable or condoned in other contexts, such as hunting.

Respondents who reported killing animals for food were not considered animal abusers as this is socially condoned behavior.

Inmates were asked two questions regarding the frequency with which they committed animal cruelty and their age when they initially engaged in this conduct. The two questions were:

1) "How many times have you ever hurt or killed animals other than for hunting?," and 2) "How old were you when you first hurt or killed animals other than for hunting?" These two items served as the dependent variables.

Inmates were also asked "how old they were when they first witnessed someone hurt or kill animals other than for hunting," and "who they had seen hurt or kill animals other than for hunting" (cruelty witnessed had been committed by a parent, brother/sister, other family member, friend, neighbor, or stranger, with a stranger serving as the reference category).

Demographic characteristics (race, educational level, and childhood residence) were also included. Finally, respondents were asked if they had ever been mentally and/or physically abused as children. These items served as the independent variables.

CHAPTER IV

RESULTS

Appendix A presents the zero-order correlations between the independent and dependent variables. White inmates were more likely to have resided in rural areas and to have witnessed a parent, friend, and neighbor hurt or kill animals as children. However, non-whites were more likely to have engaged in recurrent animal cruelty. Those inmates who resided in rural areas as children were more likely to have witnessed a parent, brother/sister, and neighbor engage in animal cruelty.

Respondents who were mentally abused as children were more likely to have been physically abused as children and witnessed a parent, brother/sister, other family member, friend, and neighbor commit animal cruelty. In addition, they were more likely to have engaged in recurrent animal cruelty themselves and to have witnessed it at an earlier age. Those who were physically abused as children were more likely to have witnessed a parent, brother/sister, friend, and neighbor hurt or kill animals. They were also more likely to witnessed recurrent animal cruelty and engaged in that recurrent behavior as well. Respondents who witnessed recurrent animal cruelty were more likely to see a parent, other family member, friend, or neighbor commit the behavior.

Respondents who witnessed a parent commit animal cruelty were also more likely to witness a brother/sister, other family member, friend, and neighbor commit the same act. Those who viewed a brother/sister committing animal abuse also witnessed another family member, friend, and neighbor commit it. Those who viewed a friend commit animal cruelty were also more likely to witness a neighbor engage in it. Respondents who saw another family member

commit cruelty were more likely to see a friend and neighbor commit such acts. They were also more likely to engage in recurrent animal cruelty and be younger when they first committed the behavior. Finally, respondents who engaged in recurrent animal cruelty were more likely to engage in it at an earlier age.

In sum, most of 45 significant correlations discussed above were weak to moderate in strength (.13 - .49). However, two correlations were strong (.50 or higher). They included: Inmates who were mentally abused during childhood were more likely to be physically abused during childhood. Inmates who witnessed animal cruelty at a younger age were more likely to engage in animal cruelty themselves at an earlier age.

In order to examine the effects of the independent variables on each of the two dependent variables, two separate multiple regression analyses were performed. According to the first model in Table 2, being physically abused as a child was the only statistically salient variable affecting the number of times respondents had hurt or killed animals. In other words, respondents who were physically abused as children reported engaging in recurrent animal cruelty themselves. The independent variables accounted for approximately 9% of the total variance in this model.

According to the second model, age when witnessing someone hurt or kill animals for the first time and witnessing a parent and brother/sister hurt or kill animals were the only three statistically salient variables which affected the age when the respondent first hurt or killed animals. Inmates who were younger when they first witnessed animal cruelty also hurt or killed animals at a younger age. In addition, respondents who had observed a parent commit animal cruelty were older when they first hurt or killed animals themselves, but were younger if they

witnessed their brother/sister commit the behavior. The independent variables accounted for 33% of the total variance in this model.

CHAPTER V

DISCUSSION

In previous studies, childhood acts of animal cruelty have been shown to be related to later violence against humans. These findings illustrate the need to examine those who commit acts of animal cruelty in order to develop an understanding of how repetitive acts of animal cruelty begin. Such findings may also indicate that studying those who commit violence against animals could assist in recognizing other antisocial behaviors early in their emergence (Hensley & Tallichet, 2004; Hensley et al., 2012; Merz-Perez & Heide, 2004; Merz-Perez et al., 2001). Social learning theories have suggested that individuals can learn behaviors by observing other people commit those same behaviors when they are part of the same social groups. The present study sought to examine how animal cruelty may be potentially learned among a sample of inmates from a Southern state. Results indicated that victims of childhood physical abuse were more likely to engage in recurrent childhood animal cruelty. Inmates were also more likely to have begun committing acts of violence toward animals after witnessing their parents or a brother/sister commit animal cruelty, pointing to the idea that animal cruelty can be a learned behavior. Inmates who reported witnessing their brother/sister commit animal cruelty engaged in it themselves at an earlier age, while those who witnessed a parent commit such behavior reported that they committed animal abuse at an older age.

The finding of the current study that revealed a relationship between the respondent having experienced childhood physical abuse and the number of times the respondent hurt or killed animals is explained by noting that the physical abuse variable was not included in the earlier study. DeGue and DiLillo (2009) conducted a study of the co-occurrence of animal cruelty and family violence within a sample of college students. Their study revealed that 60%

of respondents who had witnessed or participated in acts of animal cruelty also experienced family violence. The study also found that victims of family violence were more likely to witness or participate in animal cruelty than those who had not experienced family violence. The addition of the physical abuse variable in the current study allowed for the ability to identify other factors that could influence an individual to participate in recurrent acts of animal cruelty.

Hensley et al. (2012) noted that, in witnessing animal cruelty being committed by someone who is a part of their primary social environment, a young person may become less sensitive to the harm being caused to an animal, thus losing some of their capability to empathize with any suffering of the animal. The existence of empathy also played a role in Merz-Perez and Heide's (2004) study which found that violent offenders had a higher likelihood of engaging in recurrent acts of animal cruelty than did the non-violent offenders. The non-violent offenders involved in that study reported more empathy and felt bad about having injured animals. Coston and Protz (1998) believed that a lack of empathy could be passed from one member of the family to another, ultimately leading to aggression toward animals. These behaviors can be passed from family members that have authority, such as parents or older siblings, to the younger members of the family (Hensley et al., 2012).

Based on the findings of the current study, additional studies are needed to further examine the conditions under which animal cruelty is learned. One significant finding in the current study that had not been identified in previous literature was the relationship between physical abuse and recurrent animal cruelty. The idea that being the subject of physical abuse leads to repeated incidents of animal abuse can point to numerous issues that need to be addressed. The physical abuse variable could be further explored by looking at who committed the abuse as well as how the respondent had been abused. The current study also found that

those who reported committing animal cruelty at an earlier age were more likely to report witnessing their brother/sister commit acts of cruelty toward animals. By changing the "brother/sister" variable to two independent variables, it could be possible to further identify influential members of intimate social groups, potentially demonstrating the amount of influence that the actions of individual members of those groups have on the learning of animal cruelty. Additionally, with the available information linking acts of animal cruelty to future violence against humans, it could be possible to intervene in potentially harmful situations surrounding children who are found to be committing animal cruelty.

While the present study seeks to continue to build on the factors which may contribute to the learning of animal cruelty, there are some limitations to the study. First, the self-reported surveys were completed by inmates. The use of such surveys can potentially exclude inmates who are illiterate and may have further selected the sample. Second, the response rate to the survey was also low for survey-based methodology, at only 11.1%. However, low response rates are not uncommon when dealing with sensitive topics and prison inmates. Finally, the current study did not make use of a control group, which could affect the generalizability of the study.

The relationship between recurrent childhood animal abuse and later recurrent interpersonal violence has been demonstrated in previous studies (Tallichet & Hensley, 2004; Hensley et al., 2009). The ability to identify how animal cruelty is learned is essential in order to effectively identify and prevent the behavior, as well as assist those at risk of committing the behaviors. Law enforcement could be in a position to uncover victimization of a child based upon the discovery of that child's involvement in animal cruelty. Social service providers can also better learn what may be influencing a child in their decision to abuse animals, and recognize signs that will assist in making appropriate decisions when confronted with a troubled

child. Additionally, in order to move forward with policies that adequately address acts of animal cruelty, it is imperative that we gain additional understanding as to why animal cruelty is committed and what has caused an individual to learn that behavior. As noted in the Hensley et al. (2012) study, not every child who has been exposed to animal cruelty goes on to abuse animals. What is important is learning what makes the ones that do go on to abuse animals make the decision to commit acts.

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APPENDIX A

ZERO-ORDER CORRELLATION MATRIX

Zero-Order Correlation Matrix

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X ₁₁	X_{12}	\mathbf{Y}_1
	03												
_	.22*	.10											
	06	05	06										
X_5	07	10	05	.74*									
X_6	.11	09	03	17*	09								
X_7	05	00	05	.08	.17*	32*							
X_8	19*	.07	17*	.17*	.14*	36*	.25*						
X_9	08	05	13*	.24*	.21*	14	.12	.48*					
X_{10}	05	02	11	.15*	.11	20*	.28*	.38*	.44*				
X_{11}	13*	09	07	.17*	.14*	08	.18*	.26*	.36*	.41*			
X_{12}	16*	02	14*	.17*	.15*	22*	.16*	.29*	.32*	.34*	.48*		
\mathbf{Y}_1	03	01	09	.10	.14	14	.20*	07	07	.16	08	07	
\mathbf{Y}_2	07	.05	00	20*	17	.53*	12	04	19*	18*	17	17	12

^{*} Denotes statistical significance at the .05 level. Coding of Independent Variables: (X_1) Race (0 = White, 1 = non-White); (X_2) Education $(0 = 8^{\text{th}} \text{ grade or less}, 1 = \text{some high school}, 2 = \text{completed high school}, 3 = \text{some college}, 4 = \text{completed college})$; (X_3) Residence (0 = rural area; 1 = urban area); (X_4) Mental Abuse (0 = no, 1 = yes); (X_5) Physical Abuse (0 = no, 1 = yes); (X_6) Age When You Saw Someone Hurt or Kill Animal Other Than For Hunting? (continuous); (X_7) Number of Times During Childhood Did You See Someone Hurt or Kill an Animal (continuous); (X_8) Did You See Parent Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); (X_9) Did You See Brother/Sister Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); (X_{10}) Did You See Other Family Member Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); (X_{11}) Did You See Friend Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); (X_{12}) Did You See Neighbor Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes). Coding of Dependent Variables: (Y_1) How Many Times Have You Hurt or Killed Animals Other Than For Hunting? (continuous).

APPENDIX B OLS REGRESSION SUMMARIES

OLS Regression Summaries

	Times Hurt or Killed				Age Hurt or Killed			
Variable	b	S.E.	β	b	S.E.	β		
Race	1.59	.96	.16	33	1.03	03		
Education	31	.35	09	.31	.37	.07		
Residence	18	.97	02	.35	1.04	.03		
Mental Abuse	95	1.33	10	2.15	1.43	.18		
Physical Abuse	3.16	1.30	.34*	-1.95	1.40	17		
Age Saw Someone Hurt or Kill Animals	22	.12	20	.87	.13	.62*		
Times Seen Hurt or Killed	03	.19	02	.20	.20	.09		
Parent	22	1.08	02	2.44	1.17	.21*		
Brother/Sister	.60	1.13	.06	-2.70	1.22	22*		
Other Family Member	1.47	.97	.16	-1.20	1.05	10		
Friend	28	.98	03	-1.75	1.06	14		
Neighbor	48	.96	05	.36	1.03	.03		
Adjusted R^2		.09			.33			
F value		1.85			5.26			
Significance		.05			.00			

^{*} Denotes statistical significance at the .05 level. Coding of Independent Variables: Race (0 = White, 1 = non-White); Education (0 = 8th grade or less, 1 = some high school, 2 = completed high school, 3 = some college, 4 = completed college); Residence (0 = rural area; 1 = urban area); Mental Abuse (0 = no, 1 = yes); Physical Abuse (0 = no, 1 = yes); Age When You Saw Someone Hurt or Kill Animal Other Than For Hunting? (continuous); Number of Times During Childhood Did You See Someone Hurt or Kill an Animal (continuous); Did You See Parent Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); Did You See Brother/Sister Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); Did You See Other Family Member Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); Did You See Neighbor Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); Did You See Neighbor Hurt or Kill Animal Other Than For Hunting? (0 = no, 1 = yes); Did You See Neighbor Hurt or Killed Animals Other Than For Hunting? (continuous); How Old Were You When You First Hurt or Killed Animals Other Than For Hunting? (continuous).

APPENDIX C IRB APPROVAL LETTER

MEMORANDUM

TO: Mr. John Browne IRB # 13-138

FROM: Lindsay Pardue, Director of Research Integrity

Dr. Bart Weathington, IRB Committee Chair

DATE: September 27, 2013

SUBJECT: IRB #13-138: Recurrent Childhood Animal Abuse as a Learned Behavior

The IRB Committee Chair has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 13-138.

Since your project has been deemed exempt, there is no further action needed on this proposal unless there is a significant change in the project that would require a new review. Changes that affect risk to human subjects would necessitate a new application to the IRB committee immediately.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page $\underline{\text{http://www.utc.edu/irb}}$ or email us at: $\underline{\text{instrb@utc.edu}}$.

Best wishes for a successful research project.

APPENDIX D

QUESTIONNAIRE

I would like to begin by asking you several background questions. Please circle or fill in the best response for each question. Please do not put your name or other identifiers on this survey. After you complete the survey, return it in the stamped, self-addressed envelope.

1. How old are you?						
2. How do you describe yourself?						
 White African American/Black 	3. Hispanic 4. Other ()					
3. What is the highest level of schoolir	ng you have completed?					
 8th grade or less Some high school 						
4. Where did you grow up?						
1. Rural area (small town/farm	a) 2. Urban area (city/su	burb)				
5. Were you ever mentally abused as a	1. Yes	2. No				
6. Were you ever physically abused as	1. Yes	2. No				
7. Have you ever committed murder or	1. Yes	2. No				
If yes, at what age did you firs	If yes, at what age did you first commit murder?					
8. Have you ever committed rape or at	tempted rape?	1. Yes	2. No			
If yes, at what age did you firs	How many	How many times?				
9. Have you ever committed assault?	1. Yes	2. No				
If yes, at what age did you firs	How many	How many times?				
10. Have you ever committed robbery	?	1. Yes	2. No			
If yes, at what age did you firs	How many	How many times?				
The Following Questions DO NOT I	Relate to Hunting or Accidents	:				
11. Have you seen anyone hurt or kill	1. Yes	2. No				
12. How old were you when you first s	saw someone hurt or kill an anin	nal?				

OVER PLEASE

The Following Questions DO NOT Relate to Hunting or Accidents: 13. How many times during your childhood did you see someone hurt or kill an animal? _____ 14. Who have you seen hurt or kill an animal during your childhood? (Circle all that apply) 1. Parent 3. Other family member 5. Neighbor 2. Brother/sister 4. Friend 6. Stranger 1. Yes 15. Did you or your family have a pet while growing up? 2. No 16. Have you hurt or killed animals? 1. Yes 2. No. 17. How many times have you hurt or killed animals? _____ 18. How old were you the first time you hurt or killed an animal? ______ 19. How old were you when you hurt or killed an animal the last time? 20. What animals have you hurt or killed? Pet animals (what kind) _____ Stray animals (what kind) Farm animals (what kind) 21. How did you hurt or kill the animals? (Circle <u>all</u> that apply) 1. Drowned 5. Choked 9. Starved/neglected 2. Hit/beat 6. Burned 10. Hit with rocks 3. Shot 7. Stabbed 11. Other _____ 4. Kicked 8. Had sex with it 22. Why did you hurt or kill the animals? (Circle all that apply) 1. For fun 4. Because you saw someone else do it 2. Out of anger 5. Other reason _____ 3. Hate for the animal

THANK YOU FOR YOUR PARTICIPATION

1. Yes

1. Yes

1. Yes

1. Yes

2. No

2. No

2. No

2. No

23. Did you hurt or kill the animals alone?

24. Did you try to cover up what you did to the animals?

25. Did hurting or killing the animals upset you when it occurred?

26. Does it upset you today that you hurt or killed animals before?

VITA

John Andrew Browne was born in Chattanooga, TN, to Milton and Dorris Browne. He attended Alpine Crest Elementary School and continued through Red Bank Junior High and High Schools. He took a break from school and pursued a career in law enforcement for 14 years, serving in many capacities throughout his tenure. He left law enforcement to attend college full time, obtaining a Bachelor of Science in Criminal Justice in May 2012 from the University of Tennessee at Chattanooga. He graduated with a Master of Science in Criminal Justice from the University of Tennessee at Chattanooga in May 2104, where he taught Introduction to Criminal Justice courses while completing his degree.