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Ideology, community and demography : explaining the link of violence against human and nonhuman animals

Lisa Anne Zilney

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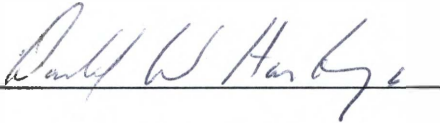
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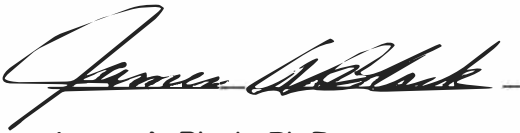


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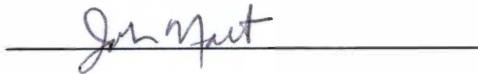
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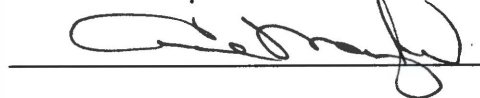


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Acceptance for the Council:



Vice Provost and
Dean of Graduate Studies

**IDEOLOGY, COMMUNITY AND DEMOGRAPHY:
EXPLAINING THE LINK OF VIOLENCE
AGAINST HUMAN AND NONHUMAN ANIMALS**

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Lisa Anne Zilney
May 2003

Thesis
2003b
.Z56

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DEDICATION

*The greatness of a nation and its moral progress
can be judged by the ways its animals are treated.*

---Mahatma Gandhi

I dedicate this work to my partner in life - Sammy Zahran. You provide me with daily inspiration and are both my most loyal supporter and my fiercest critic. Though I have shared my life with a furry friend since the age of nine, you opened my eyes to facets of the human-nonhuman animal bond that I had never considered, and in doing so, changed my perspective toward life and all its inhabitants dramatically. This work, as all others, would not have been possible without your patience and advice. You make what seem like insurmountable obstacles seem miniscule as you guide me toward the end of each project effortlessly. We are partners in the truest sense, and I would be less of an intellectual and a person without you. For now and always, I love you!

As well, I dedicate this work to my furry friends: Leviathan for being the soul that brings a smile to my face each and every day, and who allows me to fully appreciate the joys of a relationship with another species; Huxley for finding his way into my heart and home while in Tennessee; and Sylvester, who is no longer in this world, but who now and always will represent, the beauty and mystery that is life.

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I would like to thank Linda Daugherty of the Social Science Research Institute at the University of Tennessee, for her skill and speed in creating the CATI version of the survey that formed the foundation of this dissertation. Without your assistance, this project would have seemed insurmountable. For all those who assisted in the focus group of the survey instrument or provided statistical advice, you have my thanks. For repeated statistical consultations, thank you to Sean Huss. Thank you to the many undergraduate and graduate students who conducted the survey calling for this project, specifically Amy Page who was present virtually every calling evening. Special thanks to the professors who allowed the survey to be conducted in your offices: James Black, Sherry Cable, and Donald Hastings.

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Despite all the input on this project, the errors and interpretation remain my own.

ABSTRACT

This research examines the role of ideological, community, and demographic variables in explaining the link between violence against human and nonhuman animals. Based on analysis of special populations such as battered women or prison inmates, current literature links violence against animals to later aggression against humans, suggesting all forms of abuse are connected in a larger network of violence. Through the test of three hypotheses, this study examines these relationships among a randomized sample, and ascertains an incidence rate of animal abuse. First, the graduation hypothesis explores whether individuals engaged in violence against animals as youth, progress to violence against humans at a later stage in the life course. Second, the generality of deviance hypothesis suggests instead that individuals may engage in abuse of animals during youthful experimentation, but mature from this behavior with no further abusive actions toward any species. Third, the masculinities thesis examines the correlations between attitudes toward women and nonhumans, and the role of negative attitudes in predicting abuse against human or nonhuman animals. This project is the first to sample a generalized population, and thus will become significant in informing policy decisions and initiatives already begun to address linkages between various forms of violence.

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I. INTRODUCTION

The plight of nonhuman animals¹ worldwide is obscured daily by the progressive elimination of animals from everyday human experience, and academically, from the social sciences generally, and criminology specifically. In 1998, Congressperson Tom Lantos (D-CA) introduced House Resolution 286 to the U.S. Congress. Resolution 286 insisted that attention be given to identifying and treating individuals guilty of animal cruelty,² because of a presumed link between abuse of animals and future violence against humans. Resolution 286 also called for federal monies to be allocated to increase scientific understanding of the cycle of violence, and urged institutional cooperation between law enforcement and animal welfare agencies to better identify and treat individuals guilty of violence against animals. In the Senate, William S. Cohen, then senior Republican Senator of Maine, spearheaded the issue and introduced the following statement into the Congressional Record:

¹ While some scholars (Kappeler 1995) suggest that use of the term 'nonhuman' or 'humans and other animals' serves to leave a hierarchy that promotes the dichotomy between species intact, the terms 'nonhumans' and 'animals' will be used interchangeably throughout this research to refer to animals who are indeed nonhuman. While the comparison to labeling women 'nonmen' is understood, this researcher believes that the semantic debate would involve unnecessary politicization of a somewhat tangential concern at this historic juncture.

² The terms 'violence against animals,' 'animal abuse' and 'animal cruelty' are used interchangeably throughout this work. Historically, 'cruelty' was used to define those acts committed against nonhumans deemed illegal through legislation. Recently, the term abuse was adopted by animal protection organizations to symbolize the physical, sexual, and emotional/psychological mistreatment of animals.

. . . Mr. President, it is time that we took a serious look at animal abuse and its link to crime against people . . . Abusing animals is a despicable act, and psychologists and criminologists tell us those who lack empathy for animals may also lack empathy for humans. As a result they may be predisposed to other violent behavior . . . violence is not an isolated event and animal abuse is often part of a larger cycle of violence. For this reason, violence toward animals must be taken much more seriously. Cruelty to animals can be a predictor of future violence and an indicator of the violence already in the perpetrator's life. . . I have asked Attorney General Janet Reno to accelerate the Department of Justice's research in this area . . . admittedly this is not an exact science [but] we must realize that violent behavior rarely exists in a vacuum . . . It is our responsibility to do all that we can . . . so that today's animal abusers do not continue these despicable actions and become tomorrow's dangerous felons, thereby perpetuating the cycle of violence that has taken such a devastating toll on our society (Cohen 1999: 335-337).

Despite calls by Congress and animal welfare and humane organizations, researchers have failed to: establish accurate incidence rates based on a consistent measurement instrument; examine the variation of victimization by species; gather accurate information on offenders; and, examine why many children who experiment with cruelty do not graduate to more heinous forms of animal abuse or violence against humans (Arluke and Lockwood 1997).

This research examines the link, if any, between violence against human and nonhuman animals through the use of a quantitative assessment of the general population of Knox County, Tennessee. It is the belief of this researcher that government policies should not be based on incomplete, anecdotal, and contradictory empirical evidence of non-probabilistic samples of the population, but should instead be grounded in an accurate representation of the linkages between forms of violence.

Social scientists remain tangentially interested in animal abuse.

Research on animal abuse is frequently focused on its connection to human violence, using non-representative populations such as criminals, who may not assist in the accurate illumination of a portrait of an animal abuse offender. Though the Humane Society of the United States launched a campaign calling attention to animal abuse, the focus remains on animal abuse as a 'human problem' and ways to break the cycle of family violence, a pitfall explored by Solot (1997):

. . . it appears that the new interest in 'the web of violence' has provided the perfect opportunity for those who previously focused on animal abuse to reap praise for performing the role of 'early warning sign' for more 'important' kinds of violence . . . Even as we validate the connections among all forms of violence, we must take care not to invalidate each separate form (Solot 1997: 262).

The concept of a tangled web of violence, each strand of violence connected to others, offers questions not addressed by scientists who focus on merely on one form of violence. For example, researchers concerned with more than one form of violence are able to explore the relevance of the cycle of violence thesis, the notion that a variety of forms of abuse occur simultaneously, affecting many household members. Adam and Donovan (1995) elaborate the relevance of viewing oppressions as interconnected:

. . . not one creature will be free until all are free - from abuse, degradation, exploitation, pollution, and commercialization. Women and animals have shared these oppressions historically, and until the mentality of domination is ended in all its forms, these afflictions will continue . . . (Adams and Donovan 1995:3)

Research on the abuse of nonhumans should explore the relationships between forms of violence to provide a framework for understanding the frequency of animal abuse, and whether such abuse is related to violence against humans. This understanding however, is complicated by society's contradictory attitudes toward animals, and further endangered by the temptation to evaluate research on animal abuse based solely on its applicability to humans. Nonhuman animal issues and the dynamics of the relationship between violence against humans and violence against animals would fit within the boundaries of criminological work as knowledge of animal abuse is paramount to a comprehensive understanding of violence.

II. THEORETICAL FOUNDATIONS AND HYPOTHESES

Though sociologists and social theorists have rarely shown much interest in the flora and fauna of the social worlds they have studied, some notable exceptions include Vilfredo Pareto, Thorstein Veblen, and Read Bain (Synnott 1987). In 1928, in an article entitled “The Culture of Canines,” sociologist Read Bain made the case for an “animal sociology.” Bain asserted that:

. . . the persistent attempt to set human phenomena distinctly and widely apart from all other natural phenomena is a hang-over of theological teleology, an instance of organic ego-centrism, a type of wishful aggrandizement and self-glorification [that belongs] in the realm of valuation, not in the realm of science (Bain 1928: 554).

Bain predicted “the denial of culture of subhuman [sic] animals is probably a phase of anthropocentrism³” (Bain 1928:556). Despite his suggestion, an ‘animal sociology’ never came to fruition and was not explicitly addressed again until 1979 when Clifton Bryant argued, again unsuccessfully, for a study of zoological crime to encompass issues of violence against animals. Such anthropocentrism and marginalization of issues relating to nonhumans continues in current criminological work.

A brief review of criminological texts, reference materials, or journals, reveals an absence of issues on nonhumans, or issues of how humans relate

³ Anthropocentrism is an inclination to evaluate reality exclusively in terms of human values. Broadly, it is the notion that human values and worldviews legitimately determine appropriate treatment of nonhumans, who are not afforded equal or moral consideration due to their perceived inability to rationalize and communicate.

to, or impact, nonhumans. Only recently has the criminological community addressed issues of animal abuse and this inclusion has come primarily from Piers Beirne, rather than a movement of criminological work generally.

According to Beire (1999), criminological work treats animal abuse as: (1) a signifier of conflict or potential conflict between humans; (2) a violation of the current property law status of animals; (3) part of the philosophical utilitarian notion of pain and suffering, wherein nonhumans should be afforded consideration based on their sentience and ability to feel pain; (4) a violation of human rights; or (5) part of a network of abuse governed by the patriarchy as identified by feminists (Beirne 1999).

When included in criminological works, the treatment of nonhuman issues is largely atheoretical with animals treated as objects, a reflection of their property status in society at large (Beirne 1995). "To define crime as 'social harm' or 'analogous *social* injury,' for example, seems to deny space *ab initio* for harms and injuries committed against animals" (Beirne 1995: 24). Even using a broad conception of crime, one inclusive of social harm or social injury, no space remains for harms perpetrated against animals as the law extends only to humans, nonhumans still legally considered property (Beirne 1999). "Animals, in other words, remain without standing in a sort of legal and moral wilderness" (Beirne 1999:129). Despite the current status of animals as property, an increasing number of lawyers are educated in animal law at schools like Harvard, Georgetown, the University of Vermont, and the University of California at Los Angeles. Such attorneys, with strong financial

backing from animal welfare organizations, specialize in testing the boundaries of established legal principles and aim to garner some level of rights for nonhumans.

In the 21st century, multiple linkages between human and nonhumans have increased slowly in concern, but primarily focus on potential or actual effects on humans. Seminars on the role of nonhumans in human societies are being taught at numerous colleges and universities, conferences are organized by academic associations such as the International Society for Anthrozoology (ISAZ), and scholarly articles are being published in journals such as *Society & Animals*. The first Animals and Society course was offered in 1978 at Colorado State University and many universities have followed. The Humane Society of the United States presently documents over 5000 animal related studies nationwide in a variety of disciplines, although this interest remains largely unexplored in criminology wherein nonhumans are included as objects of study only via their importance for humans.

Remarkably, the mass of the sociological and criminological literature ignores those animals that are incorporated into so many facets of human life, the policy-making realm, and the practice of everyday life. For Cazaux:

. . . transcending these 'borders', while adopting a nonspeciesist perspective will lead not only to a better understanding of the practices of objectification and domination of '*non-human*' animals, but also - following the path of the interconnectedness of different lines of oppression and patterns of exclusion - will enrich our inquiries into the 'nature' and 'culture' of . . . the histories of domination and oppression in general (Cazaux 1998:381; emphasis in original).

Feminist, multicultural, and postmodern critiques of modernism create spaces for considering nonhumans, making nonhumans an appropriate theme of discourse in some disciplines.

In a thought provoking sociological work, David Nibert (2002) explores the connections between the oppression of humans and the mistreatment of animals, arguing that the mistreatment of animals globally fuels human exploitation. Both human and nonhuman animal oppression are believed to require economic exploitation or competition, an unequal balance of power, and ideological control to persist. Nibert makes the case for unification of social movements, and dismisses the opinion of many leftists who assert that linking human and animal oppression serves to trivialize human suffering. Instead, Nibert uses sociological, specifically minority group theory, to elaborate the root economic connections between speciesism (the belief that poor or abusive treatment of animals is condoned as they are not believed to be sentient and thus unable to feel pain or suffering) and other forms of oppression, such as domestic violence (Nibert 2002).

The comprehensive understanding of the dynamics of violence and the relationships between animal abuse and human violence will result from the inclusion of the nonhuman animal into scholarly pursuits. Prior to the development of child protection organizations, humane societies addressed both the welfare of animals and children, with animal cruelty laws commonly used to prosecute child protection cases. Splitting into two distinct agencies in the late 1920s, the relationships between animal abuse and child abuse

were separated by agency boundary work and a link of oppressions not deemed pressing for either organization. As the domestic violence literature has progressed in scope, relationships between child abuse and wife battering have come to light that were previously not established. It is the belief of this researcher that an increased focus on the multiple relationships between forms of violence will continue to bring new information on the linkages between wife battering, child abuse, and animal abuse.

The purpose of this research is to examine the role of ideological, community, and demographic variables in explaining the link between violence against human and nonhumans, by testing the graduation hypothesis, the generality of deviance hypothesis, and the masculinities hypothesis. Because literature on animal abuse and its connections with other forms of violence is in its infant stages, a theoretical basis is absent from most current literature. Though the hypotheses examined in this work are rooted in developmental criminological literature and tested using issues such as juvenile delinquency, none of the hypotheses have been used to directly test a relationship between human and nonhuman abuse and are thus applied to this work theoretically.

Elaboration of the Graduation Hypothesis

The graduation hypothesis, by some scholars termed the life-course-persistent model of offending (Moffitt 1997), is the notion that antisocial

behavior, including deviance, occurs at all stages of the life course, beginning in childhood and progressing and continuing through adulthood. While the behaviors an individual engages in may change as life course stages and opportunities change, the disposition to behave in an antisocial or deviant fashion persists throughout all stages (Moffitt 1997). This category of offending is believed to affect a very small minority of mainly men, with a greater percentage of deviant behavior occurring during adolescence without incidence in childhood or adulthood (Moffitt 1997). It is believed that a developmental sequence of a variety of forms of deviance or antisocial behaviors escalate or increase in seriousness over the lifetime of the offender (Loeber and Le Blanc 1990).

As applied to the relationship between human and nonhuman abuse, the graduation hypothesis is the notion that violence escalates from abuse of animals as a child to later aggression toward humans. This hypothesis suggests that animal abuse is not an isolated incident with only an animal victim, but instead an under-recognized component of family violence, with common origins and influences (Arkow 1995; Ascione and Arkow 1999; Kellert and Felthous 1985; Lockwood and Hodge 1986). Specifically, the graduation hypothesis suggests that individuals engage in abuse of animals during their childhood (or adolescence in a slightly modified version of the hypothesis), and graduate to abuse of humans during adulthood. Thus, animal abuse by a child or teen can be viewed as a predictor or risk factor for later interpersonal violence. The graduation hypothesis is examined on

perpetration of domestic violence against either a child or intimate partner and can be stated as:

H1a: Animal abuse during one's childhood or adolescence will be a statistically significant predictor of perpetration of abuse of a child during one's adult years.

H1b: Animal abuse during one's childhood or adolescence will be a statistically significant predictor of perpetration of abuse of an intimate partner during one's adult years.

Should the graduation hypothesis be sustained, policy initiatives already begun, such as the Rhode Island Special Legislative Commission and initiatives in Guelph, Ontario that support cross-reporting of domestic violence and animal abuse should continue and be expanded in an attempt to prevent violence.

Elaboration of the Generality of Deviance Hypothesis

The generality of deviance hypothesis, by some scholars termed the adolescence-limited model of offending (Moffitt 1997), is the notion that there are temporary increases in antisocial or deviant behaviors that occur during adolescence. This hypothesis is antithetical to the graduation hypothesis and for the purposes of this research the two hypotheses will be treated as opposite ends of one theoretical spectrum. The generality of deviance perspective focuses on the role of external factors in juvenile delinquency

causation (Hirschi 1969), the importance of opportunity, and the finding that criminals do not escalate into more serious actions over time (Hirschi and Gottfredson 1993). Among this type of offender, scholars find no notable antisocial or deviant activities occurring in childhood and no such activities in adulthood for approximately 75% of this population (Moffitt 1997). Further, there is believed to be no consistency of adolescent limited deviant activities across situations. This category of offending is believed to affect a large percentage of the adolescent population, with minimal chance for acceleration of such activities during adulthood as individuals respond to changing life contingencies and mature from such deviant behaviors (Loeber and Le Blanc 1990).

Applied to the relationship between human and nonhuman abuse, the generality of deviance hypothesis suggests that acts of deviance cluster predictably over the life course, with individuals engaging in crime in their teen and early adult years. As part of this hypothesis, animal abuse is believed to be one of many forms of deviance in which individuals engage as youths, but from which they mature as adults (Hirschi and Gottfredson 1993; Osgood, Johnston, O'Malley and Bachman 1988). Following this hypothesis, animal abuse would be one of many deviant behaviors that may occur during childhood or adolescence, but would not necessarily lead to future deviance or violence. The generality of deviance hypothesis is examined on perpetration of domestic violence against either a child or intimate partner and can be stated as:

H2a: Animal abuse during one's childhood or adolescence will not be a statistically significant predictor of perpetration of abuse of a child during one's adult years.

H2b: Animal abuse during one's childhood or adolescence will not be a statistically significant predictor of perpetration of abuse of an intimate partner during one's adult years.

Thus, the generality of deviance hypothesis suggests that individuals do not accelerate from perpetration of animal abuse during their childhood or adolescence, making animal abuse mute as a predictor or risk factor of future violence.

Elaboration of the Masculinities Hypothesis

The masculinities hypothesis links the oppression of women and nonhumans. This hypothesis is rooted in the gendered study of men and holds that individuals with dominionistic attitudes toward animals are likely to hold patriarchal attitudes toward women. Those possessing dominionistic and patriarchal worldviews are believed to be at increased risk for perpetration of abusive behaviors toward both women and animals. That is, those possessing negative attitudes toward both women and nonhumans, as manifested in beliefs of male dominance and the dominion of humans over nature and its inhabitants, would be more likely to engage in violence against both humans and nonhumans.

The masculinities hypothesis is examined on perpetration of domestic violence against either a child or intimate partner and can be stated as:

H3a: Negative attitudes toward animals as represented by a dominionistic worldview will be a statistically significant predictor of perpetration of abuse of a child during one's adult years.

H3b: Negative attitudes toward women as represented by a patriarchal worldview will be a statistically significant predictor of perpetration of abuse of a child during one's adult years.

H3c: Negative attitudes toward animals as represented by a dominionistic worldview will be a statistically significant predictor of perpetration of abuse of an intimate partner during one's adult years.

H3d: Negative attitudes toward women as represented by a patriarchal worldview will be a statistically significant predictor of perpetration of abuse of an intimate partner during one's adult years.

The masculinities hypothesis has no temporal implications, but instead attempts to correlate negative attitudes with an increased likelihood of engaging in various forms of violence.

These three hypotheses will be examined and findings will be rooted in criminological literature which provides the theoretical flexibility to examine selected aspects of violence against human and nonhumans. To facilitate comprehension of the hypotheses, this work is organized into sections covering theoretical foundations and hypotheses, methodology, domestic violence, masculinities and the abuse of nonhumans, and discussion.

Specifically, Chapter 2 Theoretical Foundations and Hypotheses, elaborates the theoretical framework for this dissertation using developmental criminology. The three major hypotheses tested are elaborated and null statements are produced. Chapter 3 Methodology, discusses how the hypotheses were tested, the method of data collection, operationalizations, and specifics on dependent and independent variables that includes a discussion of index construction.

Chapter 4 Domestic Violence, provides a detailed literature review covering major works on wife battering and child abuse, including definitional concerns and statistical findings. Gender differences are explored on attitudinal and infliction of violence indices, and descriptive statistics on child and partner abuse are addressed. The graduation hypothesis and the generality of deviance hypothesis are tested on measures of perpetration of partner and child abuse. Chapter 5 Masculinities and the Abuse of Nonhumans, explores historic treatment of nonhumans, and current literature on the prevalence of animal abuse and its predictors. This chapter tests the masculinities hypothesis and explores potential relationships between negative attitudes toward animals, negative attitudes toward women, and forms of domestic violence perpetration. Chapter 6 Discussion and Implications, explores limitations of this work, suggests avenues for future research, and examines implications of the findings of this research on policy and educational endeavors.

III. METHODOLOGY

This research examines the role of ideological, community, and demographic variables in elucidating the relationships between violence against humans and nonhumans. While many variables and relationships are examined, as diagrammed in Figure 1, the hypotheses tested are the graduation hypothesis, the generality of deviance hypothesis, and the masculinities hypothesis. To test these hypotheses, a number of independent variables were examined and the creation of indices was required.

Hypothesis Testing

The central hypotheses of this work are the graduation hypothesis, the generality of deviance hypothesis, and the masculinities hypothesis. The **graduation hypothesis** is the notion that violence escalates from abuse of animals during childhood to later aggression toward humans. Using this hypothesis, animal abuse is not an isolated incident with only an animal victim, but an under-recognized predictor or risk factor of family violence, with common origins and influences (Arkow 1995; Ascione and Arkow 1999; Kellert and Felthous 1985; Lockwood and Hodge 1986). The graduation hypothesis purports a temporal element to violence: animal abuse during one's childhood or adolescence is believed to be a valid predictor of adult victimization of a child or intimate partner.

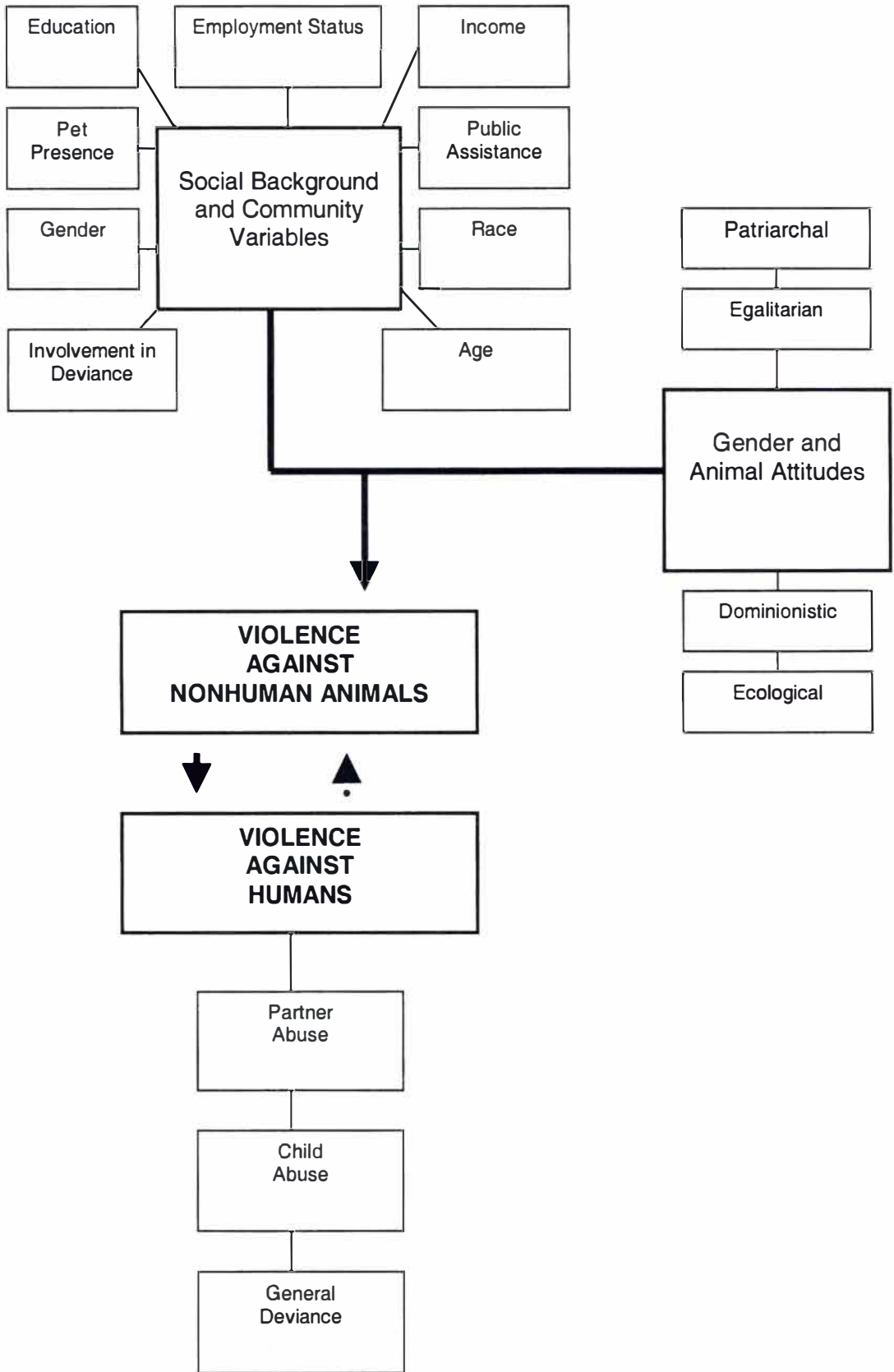


Figure 1: Visual of Variable Relationships.

To examine the graduation hypothesis, violence against nonhumans is considered the independent variable; violence against humans the dependent variable. Categories of abuse perpetration against nonhumans, include neglect and a continuum of physical abuse, ranging from hitting or kicking an animal to killing an animal. Animal abuse is examined at different stages in the life course to determine if those who engage in abuse of animals as children or teens are more likely to graduate and perpetrate domestic violence.

The **generality of deviance hypothesis** suggests a strong link between age and violation of social norms through involvement in deviance. Independent variables to test this hypothesis are involvement in deviance, such as drug use, and abuse of nonhumans during the child or teen years. Under this hypothesis, individuals will engage in animal abuse and other forms of deviance during childhood and adolescence, but not be at greater risk for perpetration of domestic violence. As part of this hypothesis, animal abuse is believed to be one of many forms of deviance in which individuals engage as youths, but from which they mature, thereby not engaging in higher rates of domestic violence as adults or more heinous forms of animal abuse (Hirschi and Gottfredson 1993; Osgood, Johnston, O'Malley and Bachman 1988).

The final hypothesis explored is the **masculinities hypothesis**. Purported by eco-feminists and critical criminologists, linkages between oppressions are applied most directly in similar forms of negative treatment of

women and nonhumans. Implying no temporal element, this hypothesis holds that those with negative attitudes toward women are more likely to hold negative attitudes toward nonhumans, and thus be more susceptible to engaging in abuse of nonhumans, children, and women.

Data Collection

Data for this project were gathered through the use of a needs assessment survey, designed to solicit public opinion on issues of violence in Knox County, Tennessee (Appendix A-1). It was determined that a telephone survey would be the most efficient method to conduct this research, due to the ability to produce quick results and the minimal cost in comparison to a mail survey. The costs of this research were offset by a grant courtesy of the William and Charlotte Parks Foundation. Using the Computer Assisted Telephone Interviewing (CATI) system, the survey was formatted by a consultant at the Social Science Research Institute at the University of Tennessee. The principal investigator for this project was able to conduct the surveys at a central facility and act as both the survey trainer and supervisor to minimize caller error and maximize consistency in data entry.

Interviewers were trained by the principal investigator, which included background information about the survey, foundations and techniques of survey calling, and appropriate use of the CATI system. An information sheet was available to all telephone interviewers to assist in answering

respondent's questions about the study (Appendix A-2). As well, the principal investigator was present during all calling periods to handle any questions or complaints.

To account for individuals who did not include their number in a telephone directory, the technique of random digit dialing, including all Knox County prefixes, was used as a method of potential inclusion for all residents who have a phone. While it is acknowledged that approximately 24% of Southerners with less than a high school education do not possess a phone (Salant and Dillman 1994), the sample obtained for this survey was similar in most respects to the population. To randomize within the household, the individual present in the home, over the age of 18 with the most recent birthday was asked to participate. Calling was completed on Tuesday and Thursday nights so as not to exclude individuals participating in church activities, and thus increase the response rate.

While telephone surveys may be influenced by leading questions, the principal investigator believes this potential occurrence was avoided through the use of a focus group of fellow graduate students and one faculty member, resulting in a well-written and pre-tested survey. Instrument design components were constructed with the assistance of IRB members familiar with both the CATI system and asking potentially sensitive questions. To maximize response rates, recent initiatives by the United States Congress were mentioned in the opening of the survey to encourage Knox County residents to participate. Because public interest in an issue has been shown

to increase the response rate of telephone interviews, mentioning Congressional initiatives likely reduced non-response error.

Because respondents were asked to remember a wide variety of events that may have occurred over a long period of time, depending on the individual's age, it is possible that errors in memory have resulted. Respondents may have failed to recall events or failed to place them in the appropriate phase of the life course. As well, specifically relevant to questions of emotional, physical, or sexual abuse, blockage or distortion of memories may have occurred. Furthermore, retrospective bias, during which respondents distort the number of specific occurrences due to later adult outcomes, was a potential flaw of this research. Situations may also have occurred wherein respondents purposefully misrepresented themselves and events that took place throughout their life. Misrepresentation may have resulted due to social desirability or the desire of the respondent to portray themselves in a specific manner, personal embarrassment at perpetrating or experiencing victimization, or an intent to sabotage the research findings.

The project held minimal risk for the subjects, though some may have experienced minor emotional distress due to the sensitive nature of some of the questions. Participants were reminded of their anonymity and their freedom to withdraw from the study at any time was without penalty or risk. Potential participants were asked to provide consent by indicating their agreement to participate in the telephone survey. The consent form section of the survey was designed as specified by the "Informed Consent Checklist"

provided by the Office of Research Compliance at the University of Tennessee.

To minimize risk, at the completion of the survey, participants were provided with the website address of the principal investigator and informed that both national and local information on various forms of violence were present on the site. At least one respondent visited the website of the principal investigator and contacted her via email reinforcing the value of the research for the community and praising the professionalism of the interviewer. Respondents were also given a contact number for the principal investigator should they have questions or desire that national or local violence information be sent to them via mail (Appendix A-3). Because the respondent would call the principal investigator at a time separate from the actual interview, anonymity would not be violated.

Operationalizations

A cornerstone of this project, and thus one that required accurate operationalization, was the term 'animal' or 'nonhuman.' When conceptualizing questions for survey respondents, a broad definition was adopted to include nonhumans as varied as frogs, snakes, dogs, cats, cows, and horses. Through the use of a focus group early in the survey construction phase, it was revealed that leaving the definition of animal to the respondent allowed for too much variability in responses and most animals were overlooked as individuals focused exclusively on domestic companions.

While the hierarchy of animals in U.S. society informs our treatment of them, it was important for this research to examine a wide range of species to explore treatment of animals generally.

At the community and demographic levels, 11 variables were matched to explore the impact of an individual's embeddedness in the community or similarity with community members. Variables considered demographic and community included: educational attainment; family income; race; involvement in deviant activities; employment status; age; gender; and pet ownership. All variables are operationalized in Table 1. At the ideological level, indices were created to examine attitudes toward women and nonhumans and will be elaborated in a later discussion. Throughout this project, significance was measured at a p-value of .05.

Independent Variables

Independent variables were arranged by social background and community variables, attitudinal variables, and acts of violence against nonhumans. Social background and community variables included income, involvement in deviance, receipt of public assistance, race, age, gender, employment status, pet ownership, and education. Though literature assessing the hypotheses tested in this work make no specific reference to background variables, the background variables included were chosen based on the larger body of criminological research.

Table 1: Analytic Variable Definitions.

GENERAL CONCEPTS

Animal	Includes animals as varied as frogs, dogs, cats, cows, and horses.
Attitudes Toward Animals Index	Includes: acceptability of animal use for medical tests; acceptability of animal use for testing food products and cosmetics; acceptability of using animals for entertainment or competition; animals should be protected regardless of the impact on economic growth; and, protection of animals from cruelty.
Attitudes Toward Women Index	Includes: women should have the same rights as men; the criminal justice system should deal more harshly with men who are violent against women; a husband has the right to discipline his wife; and, women have the right of control over their body.

VIOLENCE CONCEPTS

Violence Against Humans	Includes perpetration and victimization, as a child or an adult, on measures of emotional/psychological, physical, and sexual abuse.
Violence Against Animals Index	Includes: failure to provide animal with food and/or water; deliberate frightening of an animal; giving alcohol and/or drugs to an animal; physical abuse of an animal; and, killing of an animal.

THEORETICAL CONCEPTS

Dominionistic	Ideology of anthropocentrism, where human values and worldviews are given precedence; endorse the control of nonhumans due to the perceived inability of them to rationalize.
Ecologistic	Ideology wherein nonhumans are considered more egalitarian or equal partners in the environment; endorse non-abusive treatment of nonhumans and do not prioritize human over nonhuman values.
Egalitarian	Paradigm represented by the view that men and women should attain equality in society's social, cultural and economic realms.
Patriarchal	Paradigm represented by a view that society is and should be male centered. Represents the view that men achieve and maintain social, cultural and economic dominance over females.

SOCIAL BACKGROUND VARIABLES

Age	Number of years since birth.
Education	Highest level of education attained.
Employment	Employed or unemployed.
Gender	Female or male.
Income	Family income.
Involvement in Deviance	Participation in illegal activities; drug use; and, alcohol use.
Race	White or non-white .
Pet Presence	Guardianship of a pet during any stage of the life course.

Background Variables

Respondents indicated family income by range on the survey instrument and during analysis mean family income categories were created to compare respondents with the general population and available Census Data. Public assistance was indicated by a respondent's receipt of public assistance at any time during the life course (no = 1; yes = 2). Race was measured as white (1) and non-white (2) due specifically to the low minority response to the survey instrument and generally to the low minority population of Knox County, TN. Age was measured in years and not categorized. Gender was measured male (1) and female (2).

Though degrees of employment status were measured in the initial instrument, responses varied widely and prior to analysis employment was categorized employed (1) and unemployed (2). Respondents who indicated they were primarily students were categorized as unemployed as per Census policy. Pet presence was measured by asking respondents if at any point in their life they had a pet, and pet ownership was measured by asking respondents if they currently had a pet (no = 1; yes = 2). Finally, education was measured using categories ranging from less than a high school diploma to graduate school or professional degree, and categorized using Census Data groupings. All social background variables that were measured by the Census at a community level were categorized comparatively and are discussed later in a comparison of the sample and the population.

Deviance

The deviance index was constructed using three of the following four behaviors: participation in an illegal activity; arrest history; experimentation with drugs; and, alcohol use. Arrest history was deleted to increase the alpha from 0.67. Respondents were asked whether they had engaged in each activity (1 = no; 2 = yes). Scores ranged from 3 indicating no participation in any deviant activities, to 6 indicating participation in all deviant activities measured by the index. The Cronbach's alpha coefficient of reliability was 0.7.

Attitudes Toward Nonhumans

Attitudes toward both women and animals were indexed and used as independent variables. An index of attitudes toward animals included all five of the following: acceptability of animal use for medical tests; acceptability of animal use for testing food products and cosmetics; acceptability of using animals for entertainment or competition purposes; belief that animals should be protected even at the expense of economic growth; and, the belief that animals should be protected from cruel treatment. Respondents were asked their opinions using response categories of strongly agree (1), agree (2), disagree (3), or strongly disagree (4). Where required responses were reverse coded for logical consistency. Scores ranged from 1, indicating a

very negative attitude toward animals as encompassed by a dominionistic worldview, to 4 indicating a very positive attitude as encompassed by the ecologicistic worldview. The Cronbach's alpha coefficient of reliability was 0.8.

A low score on the animal attitude index, measured on a four-point scale, conforms to dominionistic attitudes toward nonhumans. Dominionistic individuals view animals as inferior and thus condone use of animals for human purposes, whether for entertainment value or potential medical advantages. A high score on the animal attitudes index represents an ecological view toward nonhumans, wherein the individual values animals for some inherent quality rather than for any value the animal may have for humans.

Attitudes Toward Women

An index of attitudes toward women included all four of the following: women should have the same rights as men; the criminal justice system should have harsher penalties for men who are violent against women; a husband has a right to physically discipline his wife; and, women have the right to control over their bodies. Respondents were asked their opinions using response categories of strongly agree (1), agree (2), disagree (3), or strongly disagree (4). Where required, questions were reverse coded for logical consistency. Scores range from 1, indicating a very negative attitude toward women as encompassed by a patriarchal worldview, to 4 indicating a

very positive attitude as encompassed by an egalitarian worldview. The Cronbach's alpha coefficient of reliability was 0.7.

A low score on the attitudes toward women index, measured on a four-point scale, conforms to patriarchal beliefs wherein individuals believe women to be inferior and thus justify male control. Respondents scoring low on the index endorse male control of social, cultural and economic institutions based on support for traditional gender roles. A high score represents an egalitarian worldview wherein men and women are believed equal and thus advocate affording the same rights to a person irrespective of their gender. Equal control of social, cultural and economic institutions is supported, and traditional gender roles are discarded.

Violence against nonhumans (also used as a dependent variable) was explored through questions on neglect and physical abuse. Respondents were required to respond no (1) or yes (2) to their participation in emotionally or physically abusive activities toward nonhumans that will be elaborated in the dependent variable section.

Dependent Variables

Two sets of dependent variables are examined: violence against nonhumans (which was also used as an independent variable to test the graduation hypothesis) and violence against humans. All forms of human violence were examined from emotional to sexual abuse. Forms of violence

were examined at all stages of the life course (child, teen and adult) and included both victimization and perpetration.

Abuse of Nonhumans

An animal abuse index was created using five of the six questions that were designed to capture a continuum of abuse measuring violence against nonhumans. Respondents were required to respond no (1) or yes (2) to their participation in the following activities: failure to provide food or water for an animal; deliberately frightening an animal; giving an animal away; giving alcohol or drugs to an animal; hitting, kicking or beating an animal; and killing an animal. Giving an animal away was deleted. An animal index was created to examine these actions throughout the life course. Scores range from 5 indicating no involvement in animal abuse, to 10 indicating involvement in all forms of animal abuse. The Cronbach's alpha coefficient of reliability was 0.7.

Life course specific animal abuse indices were also created. Animal abuse included the five behaviors listed above for the animal abuse as a child and animal abuse as a teen indices. The Cronbach's alpha coefficient of reliability for the animal abuse as a child index was 0.6, and 0.6 for the index measuring animal abuse as an adolescent. Scores range from 5 indicating no involvement in animal abuse, to 10 indicating involvement in all forms of animal abuse. Examining animal abuse as an adult, giving an animal away

was deleted as this behavior may have been a function of breeding, and killing an animal was deleted, as hunting is a socially accepted and sanctioned activity in American society, particularly in the South (Nisbett and Cohen 1996). Scores range from 4 indicating no involvement in animal abuse, to 8 indicating involvement in all forms of animal abuse. The Cronbach's alpha coefficient of reliability for the animal abuse as an adult index was 0.6.

Abuse of Humans

The dependent variable of violence against humans was separated into four variables: perpetration of violence against a child, perpetration of violence against an adult partner, victimization as a child, and victimization as an adult by a domestic partner. Respondents indicated frequency (never = 1; rarely = 2; sometimes = 3; often = 4) of either engaging in abuse or being victimized, at both the child and adult phase of the life course. Perpetration and victimization indices were created by adding the scores attained on each question and dividing by the number of questions comprised in the index.

Child Abuse

A child abuse offender index was constructed using all four of the following behaviors: emotionally abusing a child, physically abusing a child,

sexually abusing a child, and threatening the child's animal in an effort to control or punish the child. Scores ranged from 1 indicating no perpetration of any forms of abuse, to 4 indicating often perpetration of all forms of abuse. The Cronbach's alpha coefficient of reliability was 0.6.

A child abuse victim index was constructed using three of the following four behaviors: emotionally abused as a child, physically abused as a child, sexually abused as a child, and had an animal threatened as a child in an effort to control or punish. Having one's animal threatened in an attempt to control or punish a child was deleted, increasing the alpha score from 0.64. Scores ranged from 1 indicating no victimization on any forms of abuse, to 4 indicating frequent victimization of all forms of abuse. The Cronbach's alpha coefficient of reliability was 0.7.

Partner Abuse

To create partner perpetration of violence and victimization, respondents indicated frequency (never = 1; rarely = 2; sometimes = 3; often = 4) of either engaging in abuse or being victimized. On data analysis, the variables of partner perpetration of violence and victimization were skewed, requiring the researcher to collapse 'sometimes' and 'often,' creating a scale ranging from 1 to 3.

A partner abuse offender index was constructed using three of the following four behaviors: emotionally abusing a partner, physically abusing a

partner, sexually abusing a partner, and threatening the partner's animal in an effort to control or punish the individual. Threats made to a partner's animal were deleted, increasing the alpha score from 0.47. Further reduction of this index would have resulted in a continued decrease of the Cronbach's alpha score. Index scores ranged from 1 indicating no perpetration of any forms of abuse, to 3 indicating frequent perpetration of all forms of abuse. The Cronbach's alpha coefficient of reliability was 0.5. Due to the relatively low Cronbach's alpha score, interpretations including the partner offender index must be considered carefully, though the researcher believes inclusion of emotional, physical, and sexual abuse is necessary for an accurate assessment of overall partner perpetration.

A partner abuse victim index was constructed using three of the following four behaviors: emotionally abused in a domestic relationship, physically abused, sexually abused, and had an animal threatened by a partner in an effort to control or punish. Having one's animal threatened in an attempt to control or punish a partner was deleted, increasing the alpha score from 0.59. Scores ranged from 1 indicating no victimization on any forms of abuse, to 3 indicating frequent victimization on all forms of abuse. The Cronbach's alpha coefficient of reliability was 0.6.

For all variables with two response categories, responses were coded 1 and 2 as opposed to 0 and 1 to facilitate data entry by the telephone interviewers. In analysis of ordinary least squares regression, coding variables with two categories in this manner (versus the traditional 0 and 1

coding) has no effect on the outcome of the findings, and thus no adverse effect on interpretation of findings to be discussed throughout this work.

The Sample as an Estimate of the Population

According to the U.S. Census Bureau, the 2000 population of Knox County, Tennessee was 382,032. Employing a figure of 386,000 as an overestimate of the population of interest, the principal investigator sought 384 complete surveys to obtain a confidence level of 95% and a confidence interval of +/-5 (Salant and Dillman 1994). Due to the speed and cost advantages, it was determined that a telephone survey would be the most efficient method to conduct this research. The instrument was formatted using the CATI system and the principal investigator trained and supervised interviewers.

To maximize randomization, random digit dialing, including all Knox County prefixes, was used as a method of inclusion for all residents who have a phone. To randomize within the household, the individual present in the home, over the age of 18 with the most recent birthday was asked to participate. Calling was completed on Tuesday and Thursday nights so as not to exclude individuals participating in church activities, and thus to increase the response rate. If the potential respondent did not have the time to complete the survey but was willing to participate, interviewers obtained

the potential respondent's name and a more convenient time to conduct the survey.

In total, 691 Knox County homes were contacted by phone for an opportunity to participate in the survey. The response rate was 58.5% as 287 individuals contacted refused to participate in the study. In sum, 404 surveys were completed. Two surveys had an excessive amount of missing data and were removed from analysis, leaving a total sample of 402 respondents.

Table 2 examines the analysis of demographic data of respondents against community level data to ensure generalizability of the findings from respondents to Knox County residents.

To determine the independence of the sample from the population, a chi-square on several independent variables was conducted. Chi-square analysis revealed consistency with attributes of the general population, however differences between the sample and population are noted. First, the sample drawn for this survey was younger than the general population of Knox County. Of the respondents surveyed, 76.3% were younger than 55, only 53.6% of the Knox County population was under 55.

A similar pattern holds for educational attainment. Approximately 25% of respondents had a high school diploma or fewer years of education, 27% had some college but no degree, 32% had either an Associate's or Bachelor's degree, and almost 15% had a graduate or professional degree.

Table 2: Sample Versus Population Characteristics.

<u>Characteristic</u>	<u>Sample Data</u>	<u>Population</u>
Age by Category		
	N = 402	N = 296,939
18-24	15.2	9.2
25-34	23.3	14.4
35-44	17.1	15.9
45-54	20.5	14.1
55-59	7.3	5.0
60-64	7.3	4.0
65-74	6.8	9.9
75-84+	2.6	6.9
Total	100.0	79.4
x2 (obtained) = 20.061	df = 7	x2 (critical) = 14.067
Education		
	N = 402	N = 296,939
Less than High School	5.2	17.5
High School or GED	20.1	27.2
Some College, No Degree	27.6	20.8
Associate's Degree	10.0	5.4
Bachelor's Degree	22.5	18.3
Graduate/Professional Degree	14.6	10.8
Total	100.0	100.0
x2 (obtained) = 35.500	df = 5	x2 (critical) = 11.070
Employment Status		
	N = 402	N = 296,939
Employed	61.6	61.3
Not Employed	38.4	38.7
Total	100.0	100.0
x2 (obtained) = 0.003	df = 1	x2 (critical) = 3.841
Gender		
	N = 402	N = 382,032
Male	40.1	48.3
Female	59.9	51.7
Total	100.0	100.0
x2 (obtained) = 2.693	df = 1	x2 (critical) = 3.841

Table 2: Continued.

<u>Characteristic</u>	<u>Sample Data</u>	<u>Population</u>
Income		
	N = 402	N = 296,939
Less Than \$9,999	8.9	5.9
\$10,000-\$19,999	17.0	10.0
\$20,000-\$39,999	30.1	23.4
\$40,000-\$59,999	18.0	20.6
\$60,000-\$79,999	13.3	16.0
\$80,000-\$99,999	6.0	9.8
\$100,000-\$119,999	2.3	1.8
More Than \$120,000	4.4	12.5
Total	100.0	100.0
x2 (obtained) = 15.932	df = 7	x2 (critical) = 14.067
Current Pet Ownership		
	N = 402	N = 382,032
No	44.0	53.9
Yes	56.0	36.1
Total	100.0	100.0
x2 (obtained) = 12.788	df = 1	x2 (critical) = 3.841
Race		
	N = 402	N = 382,032
White	90.3	89.2
Non-White	9.7	10.8
Total	100.0	100.0
x2 (obtained) = 0.126	df = 1	x2 (critical) = 3.841

Comparatively, 45% of the population had a high school diploma or less, 21% had some college but no degree, 23% had an Associate's or Bachelor's degree, and approximately 11% had a graduate or professional degree. Level of educational attainment was significantly higher for the sample than the population.

On income the sample differed from the population. For the survey sample family incomes of more than \$120,000 were under-represented compared to the population, and those with a family income less than \$60,000 were over-represented. Thus, the sample tended to be both younger, more highly educated, and have lower family incomes, than the population of Knox County.

The researcher believes this estimation of the population by the sample is a conservative test of the hypotheses and will not significantly impact an estimation of the hypotheses, considering the tendency for both age and education to be negatively related to engaging in various types of violence. Further, age, education, and income did not prove to be statistically significant predictors of perpetrating any form of abuse, or being victimized.

On pet ownership, 56% of respondents currently had a pet as part of their family, in comparison to 36.1% of the population. Significant differences were found on current pet ownership, which indicate a lower rate of pet ownership among the population than among the sample. It is hypothesized that these differences were a result of two factors: (1) students, who were over-represented in the sample, reported ownership of a pet though the

animal resided at the parent's residence; and (2) the statistics used for the Knox County population for pet ownership were license rates and thus did not represent all individuals with a pet, but only individuals who have licensed their animal companion(s) with Knox County. Studies examining pet ownership report approximately 57% of the population currently with an animal companion (AVMA 1993), thus license rates clearly under-estimate pet ownership.

There was comparability between the sample and the population on independent measures of employment status (61.6% of respondents employed versus 61.3% of the population), gender (40% male respondents versus 48% male population), and race (90.3% of respondents white versus 89.2% of the population). No significant differences were found on measures of employment status, gender or race, which indicated the sample was a good representation of the residents of Knox County on these variables. When examining the analyses, one must consider the over representation of those younger aged, those more highly educated, and the differences in family income. All other variables were well matched between the sample and the population.

IV. DOMESTIC VIOLENCE

Historically, gender inequality and patriarchy meant that intimate violence was defined through a male lens, and consequently defined as a private matter. As lines between private and public spheres become increasingly blurred, many Americans continue to uphold the sanctity of the home as a private sphere, despite overwhelming data suggesting that violence is most likely to occur in this locale. Privatization of what should be considered a public issue, reinforced by responses from the criminal justice system, medical, legal, social and religious institutions, plagues even scholars who view violence against women as a small part of the larger 'crime' problem. Historically, some harms were considered less criminal if committed against a woman (Cole 1989; Michalowski 1985), and popular conception viewed violence against women as a personal problem best resolved in the home, creating strong forces toward secrecy (Koss 1990). This perception of intimate violence as a personal problem is underwritten by the privatization of women's lives, and women's relative and persistent lack of power in the American public sphere.

Review of Domestic Violence Literature

Physical abuse of women remained unidentified as a social problem until the 1970s, though earlier attempts were made to focus attention on

domestic violence (Belknap 1996). Although not considered a public issue, physical abuse of women has been documented for hundreds of years, often portrayed as an acceptable, even expected, form of male behavior (Martin 1976). Such violence was often sanctioned by law, including in the United States, where wife beating was permitted until 1871 when an Alabama court ruled that “the privilege, ancient though it be, to beat her with a stick, to pull her hair, choke her, spit in her face or kick her about the floor or to inflict upon her other like indignities, is not now acknowledged by our law” (Neft and Levine 1997).

Beginning in the mid-1970s, shelters for battered women began to emerge across the United States, Canada, England and some other European nations, as a result of the work by grassroots community organizations spearheaded by feminists. While the movement made headway in constructing emergency shelter facilities, lobbying for legislation and changes to government policy, and in stimulating research, violence against women remains invisible to many. Such invisibility is evidenced by criminal justice responses, such as mandatory arrest policies that result in the arrest of the battered woman, lax enforcement of protection orders, and minimal sentences for those convicted of violence against women (Belknap 1996; Tierney 1983).

Definitional Concerns

The notion of intimate or domestic violence encompasses “violence committed by those individuals one is more likely to trust and have continuing social relations with” (Miller and Wellford 1997: 17). The social scientific study of intimate violence is characterized by considerable disagreement over what acts should be considered violent or abusive. Many researchers (Brinkerhoff and Lupri 1988; Follingstad, Wright, Lloyd, and Sebastian 1991; Kennedy and Dutton 1989; Makepeace 1986; Roscoe and Kelsey 1986) adopt a narrow scope and limit their attention to sub-lethal or physical acts of violence. This position is rejected by many feminists (DeKeseredy and Kelly 1993; MacLeod 1987; Smith 1994) who contend that accurate rates of victimization cannot be obtained if research asks only about physical abuse to the exclusion of psychological or sexual abuse. Thus, victimization rates vary widely depending on the definitions of violence employed and the types of measurement.

For the purposes of this research, intimate violence includes actions by a husband, estranged husband, cohabitating partner, or dating partner, of the same or opposite sex, that fall into at least one of four categories of abuse: (1) physical abuse, consisting of any nonsexual physical violence; (2) sexual abuse involving any form of violence that assumes a sexual nature; (3) psychological or emotional abuse which, though often minimized in research, includes insults and other forms of degradation; and (4) threats to nonhuman

companions (Belknap 1996). All four categories of abuse result in harm to the victim and manifest the domination and control of the perpetrator (Tong 1984). While respondents were questioned regarding all four categories of abuse, the perpetration of violence index was created without the inclusion of threats made to nonhuman companions, both to increase validity, and because respondents to the survey indicated very low rates of this form of abuse.

Domestic Violence Findings in the Literature

In the Uniform Crime Report, national violence statistics are collected by the Federal Bureau of Investigation, however this instrument does not include information on the relationship of the victim to the perpetrator in nonfatal violent crimes (Miller and Wellford 1997). The National Crime Survey defines 'intimate' so broadly that it includes neighbors and work associates, thus diminishing the understanding of intimate violence as defined by one's intimate partner (Miller and Wellford 1997). The Conflict Tactics Scale (CTS) (Straus 1979) remains the most widely used survey to measure multiple types of family violence in both the United States and Canada. This scale consists of 18 items measuring ways of handling interpersonal conflict within a family relationship, and respondents are asked how frequently they perpetrated or were the victim of a number of physical acts. The CTS is not without its faults: the scale ignores unequal strengths

of men and women, does not consider injurious outcomes of abuse (Dobash and Dobash 1988), fails to recognize that violence perpetrated by women is primarily defensive (Saunders 1988), does not adequately address psychological or emotional abuse (Tolman 1989), combines threats, attempts, and actual violence into one measure, and does not address sexual assault (Johnson 1996). Despite these flaws and the development of other indices (Gondolf 1987; Shepherd and Campbell 1992; Tolman 1989), the Conflict Tactics Scale remains the most widely employed instrument to measure intimate violence.

Aside from diverse and often incomplete measurement instruments, an incidence rate of intimate violence is further complicated by the victim's silence, often a result of economic dependence, fear of retaliation, religious or familial influences, perceived lack of legal options, or a variety of other reasons. Such factors are especially prevalent in ethnic communities that may be more tolerant of intimate violence based on different cultural expectations and beliefs on gender roles, or who "place an extremely high value on setting forth a positive racial-ethnic identity and seek to avoid anything which might reinforce stereotypical images" (Rasche 1988: 163). Incidence rates are further misleading as those residing in rural areas, the very poor, those who do not speak English fluently, those who are hospitalized, homeless, institutionalized, incarcerated, or military families living on base are not given an equal opportunity for inclusion in nationally 'representative' samples (Browne 1997).

Despite these methodological difficulties and the wide range of incidence rates produced, the rate of intimate violence in the United States historically has been high. The rates also are high when compared to statistics from other industrialized nations. In random samples and national surveys, intimate violence incidence rates are near 16% (Straus and Gelles 1986; Straus, Gelles and Steinmetz 1980), but increase dramatically to 50% when using methodologies such as victimization surveys and interviews, believed by feminists and critical scholars to be more revealing (Russell 1982; Walker 1979). This project explores victimization and perpetration of emotional, physical, and sexual abuse to gather a more holistic picture of violence. Recall that 53.2% of respondents admitted emotionally abusing a partner, 16.7% admitted physical abuse of an intimate, 5% admitted sexually abusing a partner, and 1.5% of respondents admitted threats to a partner's animal to frighten or control. Conversely, 61.2% were victimized emotionally, 25.4% physically, 16.4% sexually, and 3.5% experienced threats to a nonhuman companion.

The National Crime Victimization Survey (NCVS), conducted every six months by the Bureau of Justice Statistics (BJS) is based on victimization data and estimates that 2.1 million American women are battered each year (Langan and Innes 1986). Colleges across the United States report similar levels of intimate violence (Makepeace 1981; Pirog-Good and Stets 1989). Research shows that women are six times more likely than men to be victims of a violent crime in which the perpetrator is an intimate. In fact, women are

more likely to be assaulted, injured, raped, or killed by a male partner than by any other assailant (Harlow 1991).

Despite the high rate of intimate violence found in victimization surveys such as the NCVS, this statistic may still be an underestimate due to a variety of limitations of the survey. For example, respondents may not report events believed to be shameful or embarrassing, may forget events that happened some time ago, may not perceive certain events as crimes or as serious enough to report, incidents that happened outside of the period of inquiry may be reported inadvertently or deliberately, and questions may be worded poorly or ambiguously (Johnson, 1996; Skogan 1986). All of these factors may skew the real picture of intimate violence in the United States.

The first national representative survey of family violence was conducted in 1975 using the Conflict Tactics Scale (Straus, Gelles, and Steinmetz 1980), and revealed that approximately 28% of married couples experienced at least one physical assault. The National Crime Survey found those assaulted by intimates were more likely to sustain physical injury than those involved in a stranger assault (Browne 1997). Note that sexual assault measures may or may not be included in all definitions of intimate violence. Research examining sexual assault reveals that over 13% of the American female population experiences at least one forcible rape in their lifetime, 78% perpetrated by a family member or acquaintance (Browne 1997). Further, the more intimate the relationship between the sexual assailant and the victim, the greater the level of aggression and likelihood of serious injury (Pagelow

1984). In fact, intimate violence is the leading cause of injury to women, resulting in over one million American women per year seeking medical attention, and accounting for approximately 30% of all emergency room visits by women (Neft and Levine 1997). Despite a dramatic increase in national awareness of family violence issues, rates of intimate violence, psychological, physical, and sexual, remain at high levels.

Although research suggests that women living in poverty and those that are ethnically diverse are at a greater risk for all forms of violence, primarily for life-threatening assaults (Belle 1990), scholars demonstrate clearly that race alone does not distinguish violent and nonviolent intimates (Browne 1997). Instead, the increased risk that many women in minority groups face is associated with poverty and isolation. In a U.S. study by Yllo (1983), high levels of wife battering were found in states in which the status of women was low relative to other states; abuse of women declined as the status of women improved. Interestingly, in states in which women's status was the highest relative to men's, rates of intimate abuse increased, leaving Yllo to hypothesize that rapid change toward equality may elicit a backlash from male intimates.

Theories of Domestic Violence

Though theories of intimate violence range from individual pathology (Gelles and Straus 1979; Walker 1983), to family dysfunction (Dutton and

Painter 1981; Pagelow 1981; Rosenbaum and O'Leary 1981), to structural approaches (Bograd 1988; Kurtz 1987), they are far beyond the purview of this work. But it is important to underscore the institutionalization of intimate violence. Violence against women must be seen as a socio-political problem reflecting the power of patriarchy in both the American context and globally. Such victimization is legitimated by the state through failure to extend equal protection of laws and the criminal justice system to women, and through support, both direct and indirect, of a culture of violence toward women that operates at both the institutional and individual levels, by ideological and material practices.

Gender Differences on Attitudes and Infliction of Violence

To explore gender differences on attitudinal measures and all created indices, mean differences are represented in Table 3. The animal abuse index ranged from 5, indicating no perpetration of any forms of animal abuse, to 10 indicating perpetration of all forms of animal abuse. The deviance index ranged from 3, indicating no participation in any of the deviant behaviors measured by the index, to 6 indicating participation in all deviant activities. Other abuse indices ranged from 1 to 2, with 1 indicating no participation in any form of violence, and 2 indicating frequent perpetration or victimization of all forms of violence.

Table 3: Summary Statistics and T-Test for Selected Indices and Gender.

	<u>Gender</u>	<u>N</u>	<u>Mean</u>	<u>P-Value</u>	<u>T-Value</u>
Animal Abuse Index	Male	160	6.8695	.000	7.372
	Female	242	5.9565		
Attitudes Toward Animals Index	Male	160	2.6463	.218	-5.110
	Female	242	2.9562		
Attitudes Toward Women Index	Male	160	3.2922	.010	-5.044
	Female	242	3.5434		
Child Offender Index	Male	160	1.0875	.005	1.552
	Female	242	1.0568		
Child Victim Index	Male	160	1.5354	.165	2.961
	Female	242	1.3609		
Deviance Index	Male	160	4.8999	.695	4.295
	Female	242	4.4007		
Partner Offender Index	Male	160	1.2750	.626	1.536
	Female	242	1.2328		
Partner Victim Index	Male	160	1.2688	.001	-3.758
	Female	242	1.3926		

Attitudinal indices ranged from 1 to 4, with 1 indicating negative views toward either women or animals, and 4 indicating favorable views toward women or animals.

For the abuse indices, there were significant differences found on the child offender index. Men (1.0875) inflicted a greater amount of violence against children as an adult than did women (1.0568). When examining partner perpetration or victimization of violence, men (1.2750) indicated they engaged in abuse of their partner at a higher rate than women (1.2328), but this difference was not significant. The insignificance of victimization differences may be a direct result of the failure to account for women's violence perpetrated in self-defense. A significant difference was found between men (1.2688) and women (1.3926) when examining victimization during an adult relationship, with women experiencing more victimization.

Further, men (1.3937) indicated they engaged more frequently in a variety of forms of abuse against animals as measured by the animal abuse index than women (1.1893; p-value .000). Thus, men were more likely to perpetrate all types of violence measured by the indices, and women were more likely to experience victimization during domestic relationships.

Statistically significant differences between the genders resulted when examining attitudes toward women. Men (3.2922) were found to be less supportive than women (3.5434) of attitudes representative of equal treatment of the sexes in social, cultural, and economic institutions. While statistically significant differences were found, note that the attitudes toward

women index was created on a four-point scale, indicating that both sexes had attitudes that could only be considered favorable.

Partner Abuse in a Domestic Relationship Descriptives

Examination of abuse of a partner in a domestic relationship included aspects of emotional, physical, and sexual abuse indexed using a three-point scale. Respondents were asked to respond to abuse questions indicating 'never,' 'rarely,' 'sometimes,' or 'often.' Upon data analysis, the variable partner abuse was skewed toward 'never' and 'rarely,' requiring the researcher to collapse 'sometimes' and 'often,' thus creating an index measured from one through three. The partner abuse offender index had a Cronbach's alpha score of 0.5 and thus must be interpreted with caution. Removal of the emotional, physical, or sexual abuse aspects of the index would not have resulted in a higher Cronbach's alpha score, and thus were included to garner a holistic view of violence perpetration.

Perpetration of emotional abuse against a domestic partner was reported by 53.2% of respondents, physical abuse by 16.7%, sexual abuse by 5%, and threats to a partner's animal to punish or control a partner was reported by 1.5% of respondents. Admissions of perpetration were much lower than admissions of victimization and thus one must consider the possibility that respondents were more likely to admit victimization than infliction of violence, as the rates should have been similar.

Using correlational data, those who offended against a domestic partner were more likely to have engaged in abuse of animals at some point in their lives (.411), and participated in deviant behaviors (.255), including drug use and participation in unnamed illegal activities. Those who abused a domestic partner in an adult relationship reported greater victimization during childhood by their parents or caregivers (.383), and greater rates of abusing their own children as an adult (.304). Those engaging in violence against a partner were likely to express negative attitudes toward animals (-.097) represented by a dominionistic worldview wherein nonhumans are rightfully subjected to treatment by humans that may cause pain or suffering. As well, those with lower family incomes (-.100) were more likely to abuse a partner.

Child Abuse Descriptives

Nine percent of respondents indicated neglecting or emotionally abusing a child on at least one occasion, 10.9% admitted to physical abuse of a child, 1% admitted to sexual abuse of a child, and 1.7% admitted to threatening the animal of a child to punish or control. Using correlation analysis, those who offended against a child, as measured by the child offender index, were more likely to be victimized themselves as a child (.324), victimized in an adult relationship (.129), or perpetrated violence against an adult partner (.304). The correlations between various forms of abuse are initial support for the cycle of violence thesis purported by many scholars. Demographically, lower educational attainment (-.146) and increasing age

(.177) were correlated with the child offender index, indicating that those who were older and less educated were more likely to inflict violence on a child.

Of the 402 respondents surveyed, 40% admitted to being emotionally abused or neglected as a child, 33.6% reported physical abuse as a child, 6.2% reported sexual abuse, and 4.7% reported that threats had been made to their nonhuman companion by a parent or caregiver. The variation in perpetration and victimization findings implies rates of perpetration against a child should have been higher, and it is hypothesized that respondents may have been less willing to admit perpetrating abuse against a child, than in reporting victimization as a child. Those victimized as a child were more likely to have participated in deviant activities at some point in the life course (.217), more likely to have abused a domestic partner (.383), and more likely to have been victimized in an adult relationship (.264). Once again, correlational data is illustrative of the cycle of violence thesis.

Examination of perpetration of violence against a child by a parent or other caregiver included aspects of emotional, physical, and sexual abuse, as well as threats made to the animal of a child in order to control or punish. Responses were indexed using a four-point scale and respondents were asked to respond to abuse questions indicating 'never,' 'rarely,' 'sometimes,' or 'often.' The Cronbach's alpha score for the child abuse offender index was 0.6.

Domestic Violence and Animal Abuse

The potential link of animal abuse to violence more generally, occurring at a later developmental period, has been explored through retrospective studies (Felthous 1980; Felthous and Yudowitz 1977; Kellert and Felthous 1985) and testimonials (Goleman 1991; Lockwood 1987; Lockwood and Hodge 1986; Siino 1994). Though the connection remains far from clear and is subject to much contradictory research, domestic violence is linked frequently in the literature to the abuse of nonhumans. Surveys of battered women that question the abuse or threatened abuse of animals in their homes indicate that male partners use animals to control and frighten women into submission. The Center for Prevention of Domestic Violence in Colorado Springs revealed that 24% of women seeking refuge against domestic violence reported their assailant had abused animals in their presence (Arkow 1996).

In a Wisconsin survey of women using domestic violence prevention services, 86% of women had companion animals; of these, over 80% had experienced maltreatment of their animal by a partner (Arkow 1996). Considering most domestic violence service organizations do not provide shelter for companion animals, it is not surprising that nearly 20% of women in abusive relationships delay entering a shelter due to safety concerns about their animal companion (Ascione, Weber, and Wood 1997). In fact, though 83% of shelter directors acknowledge a link between domestic violence and

animal abuse, less than 28% question clients about the occurrence of animal abuse in their home upon intake evaluation (Ascione, Weber, and Wood 1997).

In the most extensive study to test the graduation hypothesis, official records of criminality were used in a sample of animal abusers brought to the attention of the Massachusetts Society for the Prevention of Cruelty to Animals between 1975 and 1986 (Arluke, Levin, Luke, and Ascione 1999). Subjects were matched by gender, socioeconomic status, age, and residential location to determine a group of control participants. First suggested by Macdonald in 1961 and espoused by other early researchers, the violence graduation hypothesis, in a weak form, suggests that individuals who abuse animals eventually graduate to violence against humans. In a stronger form, this hypothesis suggests that abuse of animals in one life stage predicts interpersonal violence at a later developmental period.

The relationship that may exist between animal abuse and violence is much more complicated, as evidenced by conflicting research findings. While some research has found evidence that the correlation between animal abuse and violence against humans is more than a random coincidence (Felthous 1980; Felthous and Yudowitz 1977; Hellman and Blackman 1966; Kellert and Felthous 1985), other research has concluded that there is no support for the finding that exposure to animal abuse is related to engaging in nonviolent criminal activity or involvement in violent behavior (Miller and Knutson 1997).

The Graduation Hypothesis and Perpetration of Partner Abuse

Ordinary least squares regression was used as the statistical tool throughout the research to summarize the relationships between variables. To examine the graduation hypothesis, a regression model in which 6 independent variables were predictors and partner abuse was the dependent variable was evaluated. This test was used to explore variables in time sequence, and varies somewhat from the regression that will later be examined predicting partner abuse without the inclusion of time elements. The main effects are presented in Table 4. Note that prior to running ordinary least squares regression models presented throughout this project, interaction terms were created for theoretically relevant socio-demographic variables. Results indicated that interactions were not significant and were therefore not included in the regression models.

Animal abuse during the adolescence was a significant predictor of partner abuse in a domestic relationship. The predictive value of animal abuse indicates that those individuals participating in abuse of animals, once cognitive awareness enables them to garner the ramifications of their actions, were more likely to perpetrate a variety of forms of abuse against a partner as an adult. Pet ownership throughout various stages of the life course was a negative predictor of partner abuse.

Table 4: OLS Regression Predicting Graduation Hypothesis for Partner Abuse.

	<u>Unstd. Coefficients</u>	<u>Std. Coefficients</u>	<u>T-Value</u>	<u>P-Value</u>
(Constant)	.465		4.047	.000
Animal Abuse as Teen Index	.221	.149	3.406	.001
Child Victim Index	.08705	.188	4.178	.000
Child Offender Index	.202	.145	3.265	.001
Deviance Index	.07358	.106	2.412	.016
Partner Victim Index	.277	.336	7.726	.000
Pet Ownership Lifetime	-.151	-.164	-3.949	.000

R Square: .351
Adjusted R Square: .341
Std. Error: .2194
F-Test: 35.581

The role of pet ownership suggests that individuals with a nonhuman companion at some point in their life benefit from the socialization process that occurs between species and encourages appropriate treatment of others. Individuals sharing their developmental stages with a nonhuman companion are less likely to engage in violence against an intimate partner.

When predicting partner abuse, participation in illegal activities, regardless of the stage of the life course in which this occurred, was of statistical significance. The role of deviance illustrates that those individuals who used drugs and alcohol, and participated in unnamed illegal activities, were more likely to engage in abuse of an intimate partner than individuals not participating in deviant behaviors. One illegal activity of statistical importance for predicting partner abuse was abuse of children. Regression analysis revealed that adult abuse of a child was a valid predictor for adult abuse of an intimate partner, reinforcing the cycle of violence thesis wherein multiple forms of abuse are hypothesized to occur within the same household.

Being the victim of abuse, either as a child or as an adult, were both valid predictors of abuse of a partner. Those victimized emotionally, physically, or sexually by a parent or other caregiver were statistically more likely to abuse a partner in their adult years. Further, victimization during a domestic relationship was the strongest predictor of abusing one's partner. In combination, animal abuse as an adolescent, childhood victimization, inflicting violence on a child, participation in deviant activities, inflicting

violence on a partner, and failure to own a pet during one's lifetime, explained 34% of the variation in graduating to emotional, physical, or sexual abuse of a domestic partner.

Child Abuse and Animal Abuse

One of the first studies conducted on animal abuse was in 1971 in which case illustrations were provided of anti-social children who abused animals (Tapia 1971). Tapia's (1971) research illuminated the often violent and abusive homes of which these children were a product, and found animal abuse present in follow-up studies two to nine years later (Rigdon and Tapia 1977). In 1995, Barbara Boat outlined theoretically the basis for a link between child abuse and animal abuse, indicating as her primary source of evidence anecdotal reports. Other research suggests that animal abuse can serve as a marker for children who may be experiencing family violence, or as an indicator of future violent behavior (Davies 1998; Miller and Knutson 1997). For example, Hutton (1983) found that of families with a history of animal abuse, 83% were identified as having children at risk of neglect or abuse.

The research linking animal abuse and child abuse was encouraged in part, by the inclusion of animal abuse as a symptom of Conduct Disorder among children in the *Diagnostic and Statistical Manual of Mental Disorders* (APA 1987) and the *International Classification of Mental and Behavioural*

Disorders (WHO 1996). It is believed by many scholars that abuse of animals in childhood socializes children to engage in other forms of violence at later stages in the life course (Flynn 1997). For example, rates of animal abuse as high as 60% in families in which child abuse is present have been found, increasing to 88% in families that are physically abusive to children (DeViney, Dickert, and Lockwood 1983). The linkage of child abuse and animal abuse is espoused by animal welfare organizations and humane education groups, such as the American Society for the Prevention of Cruelty to Animals (ASPCA 1992) and the Latham Foundation (Loar and White 1992; Tebault 1994).

Despite inconsistent empirical support, the notion of the link continues, perhaps as a way to further public concern for animal mistreatment (Arluke, Levin, Luke, Ascione 1999), perhaps to further public concern for child mistreatment (Boat 1995). For example, based on anecdotal data linking domestic violence and abuse of animals, in 1997 the Rhode Island General Assembly created a bipartisan Special Legislative Commission to begin research with the goal of producing statewide legislation that would require the Department for Children, Youth and Families, and animal protection officers to cross report incidents of abuse. As well, the National Research Council and the Federal Bureau of Investigation purport that cruelty toward animals is one childhood behavior that acts as a powerful indicator of violence elsewhere in an individual's life.

The Graduation Hypothesis and Perpetration of Child Abuse

Use of an independent samples t-test already discussed revealed significant differences between men and women on perpetration of abuse against a child, with men more likely to abuse a child emotionally, physically or sexually, or to threaten a child's animal. To examine the graduation hypothesis, a regression model in which 5 independent variables were predictors and child abuse perpetration was the dependent variable was evaluated. The main effects are presented in Table 5. This test was used to explore variables in time sequence, and varied somewhat from the regression later examined testing the generality of deviance hypothesis and predicting child abuse without the use of time measurements.

Animal abuse during the teen phase of the life course was a significant predictor of abusing a child, indicating that those individuals inflicting violence on nonhumans, once mentally mature enough to appreciate the potential consequences, were more likely to perpetrate abuse against a child. Further, negative attitudes toward animals, represented by a dominionistic worldview wherein nonhumans were valued merely for their use for humans, was the strongest predictor of abusing a child. This attitudinal finding leaves room for future research exploring attitudes toward both animals and children and their appropriate roles and status in U.S. society.

Table 5: OLS Regression Predicting Graduation Hypothesis for Abuse of Children.

	<u>Unstd. Coefficients</u>	<u>Std. Coefficients</u>	<u>T-Value</u>	<u>P-Value</u>
(Constant)	.714		7.734	.000
Animal Abuse as Teen Index	.159	.149	3.184	.002
Attitudes Toward Animals Index	-.066	-.208	-4.521	.000
Child Victim Index	.066	.200	4.267	.000
Partner Offender Index	.127	.177	3.667	.000
Children	.071	.182	4.039	.000

R Square: .265
Adjusted R Square: .256
Std. Error: .1667
F-Test: 28.570

Those with children of their own were more likely to engage in abuse of a child, conforming to studies finding most abuse occurs within the home. As well, those who experienced abuse at the hands of their own parents or caregivers during their childhood were more likely to inflict violence on a child during their adult years. Respondents perpetrating abuse against a child were likely to be engaged in perpetrating violence against a domestic partner, again reinforcing the notion of a cycle of violence. In combination, animal abuse as an adolescent, negative attitudes toward nonhumans, childhood victimization, perpetration of abuse against a domestic partner, and having one's own children explained 26% of the variation in graduating to violence against a child.

The graduation hypothesis is thus confirmed when animal abuse occurred during one's adolescent phase of development. Teenage abuse of animals is a significant predictor of later interpersonal violence against a domestic partner or abuse of a child. Application of George Herbert Mead's philosophies to these findings suggests that young children are unable to take the role of the generalized other and thus are unaware of the impact of treating animals poorly. As such, children who engage in experimental abuse of animals do not carry ideologies supportive of violence into later life stages. Teenagers have fully developed their capacity to take the role of the other and thus perpetration of animal abuse is a conscious and informed victimization of another sentient being. The result is a carryover of ideologies that result in mistreatment of children and women at later stages of development.

The findings of this research support the graduation hypothesis on the condition that the individual is an adolescent and thus normally mature enough to garner appreciation for the potential ramifications of violence against sentient beings. Animal abuse occurring during one's childhood phase of development is not a predictor of any form of later violence, potentially due to the experimental nature of the behavior, and a suppressed comprehension of the ramifications.

The Generality of Deviance Hypothesis and Perpetration of Partner Abuse

A 1999 study by Arluke, Levin, Luke, and Ascione sought to examine the extent to which animal abuse was correlated with a myriad of anti-social or deviant behaviors, not limited to violence. The study was a test of the violence graduation hypothesis versus the deviance generalization hypothesis, in which it is believed animal abuse is merely one form among many anti-social behaviors occurring during, and continuing after, childhood in no particular temporal order (Hirschi and Gottfredson 1994; Osgood, Johnston, O'Malley, and Bachman 1988). Results indicated that while animal abusers were significantly more likely than controls to engage in criminal behavior, both violent and nonviolent, animal abusers were also significantly more likely to commit a host of other types of anti-social acts (Arluke, Levin, Luke, and Ascione 1999).

Since the publication of this article in 1999, various animal advocates have reported these findings selectively as evidence of a link between abuse of animals and abuse of humans. Arluke (2002) notes that:

Although my work found strong statistical associations between cruelty and crime, there was no basis to argue, as do many humane advocates, that cruelty is a predictor of subsequent human violence . . . [various animal welfare and rights groups] have labeled me the 'doubter' or the academic 'wet towel' for not getting on board the ideological train with everyone else (Arluke 2002; 373).

The study found no temporal sequence to the events, with animal abuse no more likely to precede than follow other offenses. In fact, merely 16% of the animal abusers graduated to subsequent violent crimes (Arluke, Levin, Luke, and Ascione 1999).

To examine the generality of deviance hypothesis on partner abuse, a regression model in which 5 independent variables were predictors and partner abuse was the dependent variable was evaluated. The main effects are presented in Table 6. Similar to the time sensitive model exploring the graduation hypothesis, victimization as an adult by a domestic partner was the strongest predictor of domestic abuse. Experiencing emotional, physical, or sexual victimization as a child was a predictor of abusing a partner in a domestic relationship. Failure to have a pet throughout the life course was a good predictor, indicating that socialization as a youth with nonhumans may assist in the prevention of future infliction of violence.

Table 6: OLS Regression Predicting Offender Abuse of Partner.

	<u>Unstd. Coefficients</u>	<u>Std. Coefficients</u>	<u>T-Value</u>	<u>P-Value</u>
(Constant)	.522		4.889	.000
Animal Abuse Index	.239	.257	5.679	.000
Child Offender Index	.229	.164	3.827	.000
Child Victim Index	.06921	.099	2.272	.024
Partner Victim Index	.289	.352	8.236	.000
Pet Ownership Lifetime	-.166	-.179	-4.365	.000

R Square: .354
Adjusted R Square: .346
Std. Error: .2186
F-Test: 43.382

Testing the generality of deviance hypothesis and partner abuse, violence against an animal, irrespective of the life course phase, remained a significant predictor. Thus, individuals not reaping the positive social psychological effects of pet ownership, those engaging in abuse of animals and those who experienced abuse as a child by a parent or caregiver, were more likely to perpetrate violence against an intimate partner. In combination, perpetration of animal abuse, childhood victimization, infliction of violence against a child, infliction of violence against a partner, and lack of pet ownership across the lifetime, explained 35% of the variation in abuse of an intimate. While in the graduation model the deviance index was a significant predictor of abuse of an intimate partner, the deviance index was not a significant predictor in the generality of deviance model. This model explained a slightly greater percentage of the variation on partner abuse than did the graduation model, likely due to the increased impact of animal abuse that may occur during any stage of the life course.

The Generality of Deviance Hypothesis and Perpetration of Child Abuse

Using an ordinary least squares regression to examine child abuse irrespective of time elements, there were 6 independent variables of significance. The main effects are presented in Table 7.

Table 7: OLS Regression Predicting Offender Abuse of Children.

	<u>Unstd. Coefficients</u>	<u>Std. Coefficients</u>	<u>T-Value</u>	<u>P-Value</u>
(Constant)	.797		9.879	.000
Attitudes Toward Animals Index	-.061	-.193	-4.139	.000
Child Victim Index	.057	.173	3.601	.000
Partner Offender Index	.116	.162	3.290	.001
Children	.073	.187	4.141	.000
Educational Attainment	-.010	-.092	-2.072	.039
Animal Abuse Index	.113	.169	3.365	.001

R Square: .273
Adjusted R Square: .262
Std. Error: .1670
F-Test: 24.668

As with the time sensitive model exploring the graduation hypothesis and perpetration of child abuse, negative attitudes toward animals was the strongest predictor of abusing a child, implying an attitudinal link not yet explored in social scientific research. While animal abuse during one's teenage years was a predictor of graduating to perpetration of child abuse, removing the sequence of events, violence against an animal during any phase of the life course remained a statistically significant predictor of abusing a child, reinforcing cross-reporting initiatives already begun.

Those victimization as a child and those who have their own children were more likely to perpetrate emotional, physical, or sexual abuse, or threaten a child's animal to frighten or control. Testing a general model of child abuse, perpetration of violence against an intimate partner remained a significant predictor, indicating those who abuse a domestic partner are also likely engaged in abuse of children in the home. As well, those with lower educational attainment were more likely to engage in child abuse.

In combination, perpetration of animal abuse, negative attitudes toward nonhumans, childhood victimization, having a child of your own, perpetration of abuse against a domestic partner, and relatively low educational attainment explained 26% of the variation in abuse of a child. Through the presence of low educational attainment as a statistically significant predictor, this model explained a slightly greater percentage of the variation on child abuse than did the graduation model.

Graduation Hypothesis versus The Generality of Deviance Hypothesis

This research found confirmation of the graduation hypothesis, with respondents who engaged in animal abuse during their adolescence statistically more likely to perpetrate violence against both children and partners in their adult years. Support for the graduation hypothesis, with the contingency that violence against nonhumans occurs during adolescence, provides support for the notion that participation in animal abuse is not merely experimentation or a generality of deviance that one will mature from without future consequences.

All models explored on domestic violence, either child or intimate, reinforce existing cycle of violence research which suggests that if one member of the family is subject to abuse, likely other members are either victims or perpetrators of abuse. What has been added to the analysis is the importance of abuse of animals as part of this network. These findings are relevant for programs seeking early detection and intervention in the lives of potentially violent individuals. Furthermore, the predictive value of negative attitudes toward nonhumans and later abuse of humans provides a foundation for exploring avenues that would explore positive socialization of youth toward both animals and other oppressed groups to aid in the prevention of violence.

V. MASCULINITIES AND THE ABUSE OF NONHUMANS

In 1792, Mary Wollstonecraft published her treatise “A Vindication of the Rights of Women” condemning the sexist notion of rights that had long existed. Although a generally ignored component of her work, Wollstonecraft attempted to establish the abuse of animals as a predictor or risk factor to the abuse of women. In a satirical reply, Taylor (1792) conveyed the anthropocentric or human-centered ideology of the time in an essay entitled “A Vindication of the Rights of Brutes.” Ideologies toward nonhumans began slowly to change and in 1870, coined by a Missouri lawyer named George Graham Vest, the phrase “man’s best friend” (A and E 1998) epitomized the growing interest and perceived harmony in our relationships with nonhumans. Animal protection organizations such as the Society for the Prevention of Cruelty to Animals (SPCA) formed in 1824, began asserting a link between the abuse of animals and the abuse of humans, specifically children, in the late 1800s. In fact, the first child abuse case was brought forth by the American SPCA in 1874, afterward spawning the creation of the American Humane Association in 1877 that continues as an organization promoting the welfare of both animals and children (Arkow 1999).

The human-nonhuman animal bond has existed for centuries in a variety of forms, both detrimental and beneficial to the nonhuman animal, both complex and contradictory. In Western culture, great disparity exists between our treatment of animals and our beliefs about animals, as illustrated

by a few interwoven examples that demonstrate our conflicting views toward the animal world:

Two-thirds of Americans polled agree that an animal's right to live free of suffering should be as important as a person's right to live free of suffering (Francione 2000).

The U.S. Department of Agriculture asserts more than 8 billion animals are killed each year for food. This includes approximately 37 million cows and calves, 4 million sheep and lambs, 102 million hogs, 7.9 billion chickens, 290 million turkeys, 22 million ducks, and 100,000 horses (USDA 1999).

Over 50% of Americans believe it is wrong to kill animals for fur coats or to hunt for sport (Foster 1996).

Each year in the United States, hunters kill approximately 200 million animals (Swan 1995), and approximately 40 million animals worldwide are killed for their fur (Francione 2000).

Over 50% of households have a cat or dog as a companion. Of these, 90% regard their animal companion as a family member (Gallup 1996) and would risk death or injury to save their pet's life (Malmgren 1994).

Such blatant contradictions between belief and action toward nonhumans are illustrative of messages, historical and current, that are mixed as to the acceptable role and treatment of nonhumans (Lockwood 1999; Serpell 1999).

Review of Animal Abuse Literature

Under a global system seeking to maximize accumulation, links between ecological problems and militaristic, patriarchal, hierarchical and authoritarian social structures have intensified. These linkages manifest in oppression of the world's majority, as well as its environment. Global

capitalism requires the structural dichotimization of reality, using hierarchical structures to enforce social polarization. Put differently, global capitalism can be understood as the process of ripping the social fabric of society through both horizontal and vertical integration. Hence, we are confronted with the material reality of nature opposed to, and subordinate to man, and woman subordinate to man.

The notion of capital and unlimited growth of science and technology has led to environmental degradation, and development has further meant the ecological and cultural disintegration of human bonds with nature. Historically, women's intimate knowledge of nature has been both as producers and reproducers of life, and their role was imperative to sustenance of human life globally. The interaction between women and nature has become circumscribed through the specialization and mechanization of agriculture, largely the result of men. Drawing on neo-Marxist assertions, environmental problems can be viewed as a result of a combination of globalization and rapid technological advancement that exploits nature, and in turn degrades women's historical connection to nature, in the name of human progress.

Because exploitation of nature relates to exploitation in society generally, eco-feminists interweave women's oppression with class, race and species oppression. In combination, a political agenda termed the "subsistence perspective" results and includes the development of non-

dominating nature relations and the promotion of freedom and economic equality for women (Mies and Shiva 1993).

During the late 19th century, it was believed that a lack of knowledge about animals had the potential to result in cruelty toward humans (Johnson 1900). Laws developed, unconcerned with the welfare of the nonhuman, and sought to protect human individuals whose character was compromised by witnessing animal abuse (Wolfson 1996). Despite the apparent negative effects of animal abuse, enforcement of laws was, and continues to be, sporadic. Legal interpretations vary widely across jurisdictions, serious sanctions are rarely imposed when convictions do occur, and animal protection organizations are frequently isolated from other social service agencies (Arkow 1999; Fox 1999). Although advances were attained by animal rights activists, and misdemeanor and felony laws were passed in great numbers, the legal status of animals has remained relatively unchanged since animal welfare reforms in the 1800s (Favre and Tsang 1993). Table 8 (AWI 1990: 4) documents the passage of state anti-cruelty laws, since the 1641 statute enacted in Massachusetts Bay Colony.

Because nonhumans were, and continue to be, considered property with no inherent rights or interests, the rationale behind animal welfare laws was protection of human's financial investment and subsequent protection of human property rights (Francione 1996; Paul 1986).

Table 8: Chronological Enactment of U.S. Anti-Cruelty Laws.

1828	New York	1871	Montana
1835	Massachusetts	1872	Colorado
1838	Connecticut	1873	Delaware
1838	Wisconsin	1873	Indiana
1842	New Hampshire	1873	Nebraska
1845	Missouri	1875	Georgia
1848	Virginia	1879	Arkansas
1851	Iowa	1879	Louisiana
1851	Minnesota	1880	Mississippi
1852	Kentucky	1880	Ohio
1854	Vermont	1881	North Carolina
1856	Texas	1881	South Carolina
1857	Rhode Island	1883	Alabama
1858	Tennessee	1883	Maine
1859	Kansas	1884	Hawaii
1859	Washington	1887	New Mexico
1860	Pennsylvania	1887	South Dakota
1861	Nevada	1889	Florida
1864	Idaho	1890	Maryland
1864	Oregon	1891	North Dakota
1867	New Jersey	1893	Oklahoma
1868	California	1895	Wyoming
1868	West Virginia	1898	Utah
1869	Illinois	1913	Alaska
1871	District of Columbia	1913	Arizona
1871	Michigan	1921	Virgin Islands

Beirne (1999) elucidates the historic role of animals:

In the United States and in Britain and in its former colonies, the emergence of legal safeguards against animal abuse at the beginning of the nineteenth century was associated with the growth of capitalist economic relations and with the social, ideological, and juridical processes that sustained them (Beirne 1999:129).

Property interests have always been preeminent, and anti-cruelty statutes have been “limited in ways that effectively protect property interests in animals and protect nonanimal property interests as against animal interests” (Francione 1995:134).

Historically, the very notion of property is related closely to the domestication and ownership of animals. The word ‘cattle’ comes from the root of ‘capital’ and in many European languages ‘cattle’ is synonymous with ‘chattel’ and ‘capital.’ In Spanish the words for ‘property’ and ‘cattle’ are virtually identical, as are ‘money’ and ‘cattle’ in Latin (Francione 1995).

Aside from compromising the best interests of nonhumans, animal protection legislation has direct effects on minority racial groups or those in low class positions. For example, the illegality of dog fighting or efforts to prohibit using animals in religious ‘sacrifices’ frequently reveal more about the criminal justice system’s response to minorities and the lower class, than it does animal protection. The law requires a balance of human and nonhuman interests to determine what is ‘humane’ and what is ‘unnecessary’ suffering. “A legal system that relies primarily on laws requiring ‘humane’ treatment or prohibiting ‘unnecessary’ suffering simply cannot protect beings that are, as a

matter of law, regarded as the personal property of their owners” (Francione 1995: 19).

This status of the animal as property has implications for what is considered ‘cruelty toward animals’ under the law. Though anti-cruelty statutes exist at both the misdemeanor or felony levels, courts frequently do not take these statutes seriously, as evidenced by small fines that produce no deterrent impact. Further, court decisions have disregarded the intention of anti-cruelty laws in ruling that an individual’s property cannot be removed from their possession, regardless of how badly the animal is treated. The exception to this ruling is involvement in animal fighting as it is considered a separate gambling offense (Francione 1995). Thus the shift to anti-cruelty statutes that was to represent a shift from animals as property to concern for animals remains debatable in its effects.

In a number of disciplines, an increasing number of professionals recently acknowledged that companion animals are members of today’s families and must be considered when examining issues of interpersonal violence. Beginning with a rejection of the Cartesian view of animals as machines, contributions to moral philosophy have led to studies of the human-nonhuman animal bond in a wide array of fields from biology to cultural history to feminism. Today’s U.S. pet population continues to rise, with approximately 55 million canines in 35 million American homes (A and E 1998), and 30.1% of the U.S. population with a feline companion (AVMA 1993). Americans spend over \$18 billion maintaining the human-nonhuman

animal bond annually (A and E 1998), making this interspecies relationship of interest to many scholars. It is as part of the human-nonhuman animal bond that animal abuse is of interest.

Definitional Concerns

Defining what constitutes cruelty or abuse is difficult regardless of the victim, though it becomes more difficult when invisibility surrounds culturally accepted forms of animal abuse. Some feminist researchers in domestic violence texts refer to abuse as any behavior a person uses to control a partner, including physical, psychological, and sexual acts (Solot 1997). This definition is legally problematic when applied directly to animal abuse, as human control of animals is often the norm in contemporary societies, rather than a sign of abuse per se. Thus, the focus of cruelty toward animals traditionally was on physical harm, primarily the willful infliction of harm, injury, and intended pain (Kellert and Felthous 1985), since it is the easiest form of violence to recognize. A definition of physical abuse is pervasive in the legal community, which is bound by the continued property status of the nonhuman animal. For the animal activist and protectionist, this definition leaves two salient issues unexplored. Such a definition overlooks acts of neglect including failure to provide food, water or sufficient emotional attention. Humane organizations purport that neglect accounts for approximately 90% of all animal abuse (Solot 1997). As well, a strict physical

definition of abuse does not address the myriad of “contradictions in our culture’s use of animals: the very acts that would be considered perfect examples of cruelty when performed by certain individuals in certain contexts on certain species, but which are culturally acceptable in other situations” (Solot 1997: 260).

Though the researcher’s definition may fall anywhere on the continuum between activist and lawyer, researchers generally tend toward a more conservative, legal interpretation of animal cruelty. For this research a more encompassing definition of companion animal abuse will be used as it more accurately reflects the treatment of nonhumans in American society, absent current legal constraints. Such a definition would include:

. . . the intentional, malicious, or irresponsible, as well as unintentional or ignorant, infliction of physiological and/or psychological pain, suffering, deprivation, and the death of a companion animal by humans. The abuse is based on harmful effects caused by the lack of the fulfillment of basic companion animal needs for their health and well-being. The abuse is thus independent of human intention or ignorance, socially sanctioned or socially rejected norms, and covers both single and repeated incidents (Vermeulen and Odendaal 1995: 249).

The definition of animal abuse employed for this project leans heavily toward the voice of the animal protectionist as it is inclusive of psychological pain or neglect, as well as unintentional infliction of physical pain. Due to the legal status of nonhumans, researchers and animal activists have very different perceptions of what constitutes animal abuse. As a result, definitional ambiguities are prominent throughout the literature. In many instances,

reported acts of abuse tell more about what society perceives to be a problem than what forms of abuse actually affect nonhumans.

The definition of abuse used in this research encompasses a variety of actions deemed by researchers in psychology, sociology and animal protection agencies to be detrimental to animals, though deemed appropriate by current legislation. Though variation exists in anti-cruelty statutes at the state level, there is much similarity and generally the law prohibits any unjustifiable physical pain, suffering or death of an animal (Francione 1995). According to Francione (1995), four different statutory devices work through anti-cruelty statutes to protect institutionalized animal exploitation: (1) many statutes require *mens rea* in a defendant, which is very difficult to prove; (2) statutes contain exemptions that are so broad as to exclude most animal abuse; (3) statutes include only acts of 'unjustified' or 'unnecessary' cruelty; and (4) most statutes have minor penalties that result in minimal deterrent value. Thus, when examining cruelty to nonhumans and attempting to garner an incidence rate, it is important to employ a social scientific rather than a legal definition to portray an accurate picture of the actual treatment of animals in American society, rather than legal limitations.

There is no one legal definition of abuse as it varies by state, no one activist definition as this varies in animal welfare versus animal rightist communities, and no one researcher definition as this varies depending on discipline and philosophical orientation of the researcher. Table 9 attempts to delineate the boundaries that do exist between the three perspectives.

Table 9: Varied Voices on the Issue of Animal Abuse.

<u>Voice</u>	<u>Animal Abuse</u>
Law	Animals are perceived as property not to be removed from owner's possession despite cruelty. An exception is the involvement in fighting as gambling laws are used against such offenders. State governments can seize and destroy or sell any animal treated cruelly. Killing of another person's animal is deemed theft as another individual's property was destroyed without consent. Finally, a legal perspective involves only the intentional abuse of animals.
Activist	Includes all elements of the legal definition that are considered abusive or cruel, but also includes neglect, meaning failure to provide food, water, adequate stimulation. It includes instances of contradiction in society; for example, activists include cruel treatment of animals used for livestock and experimentation, whereas the law specifically excludes these animals from cruel treatment provisions. An activist approach includes both intentional and unintentional abuse.
Researcher	Some researchers include only physical abuse of animals, others include emotional or psychological abuse as well as sexual violations. This approach may include intentional or unintentional abuse, though most frequently focuses on intention as an important component of abuse.

Though research on animal abuse remains in its infant stages, it is important to examine available research findings on incidence rates and the relationship between animal abuse and other forms of violence.

Animal Abuse Statistics in the Literature

Methodological difficulties and the changing definition of animal abuse impact greatly the varied incidence rates prevalent in this area of research. Petrovoski (1997) found 25% of aggressive male criminals, 30% of convicted child molesters, 36% of those convicted for intimate partner assaults, and 46% of those convicted of sexual homicide had abused animals in their past.

In 1997, Miller and Knutson studied university students, reporting that 57% witnessed an act of animal abuse and 20.5% committed an act of abuse. In this dissertation, 51.2% of respondents have witnessed an act of animal abuse, and 33.8% have committed an act of physical abuse against an animal. In 1997, Clifton Flynn surveyed 267 undergraduate university students to determine their involvement in five acts of animal abuse: (1) killing a pet; (2) killing a stray or wild animal; (3) hurting or torturing an animal to tease it or cause it pain; (4) touching an animal sexually; and (5) having sex with an animal. Flynn's research revealed that approximately 18% of respondents had committed at least one act of animal abuse. Males were almost four times more likely than females to have abused an animal (more than 1/3 compared to 1/10 respectively), with whites more likely than

nonwhites to be abusive toward nonhumans (19.4% versus 12.7% respectively).

Abuse of Nonhumans Incidence

The survey explored six measures of animal abuse, ranging from neglect to killing of an animal. The Cronbach's alpha score for the animal abuse index was 0.7. Twenty-eight percent of the sample reported forgetting to provide their animal with food or water, 32.6% had deliberately frightened an animal, 49.5% had given an animal away, 10% had given alcohol or drugs to an animal to explore the potential results, and 33.8% had physically abused an animal by hitting or kicking. Killing of an animal was reported by 30.3% of respondents, with 10.7% of those admitting to killing their own nonhuman companion. Further, 51.2% had observed an individual injure or kill an animal.

Those who engaged in violence against nonhumans were likely to be younger (-.134), and possessed negative attitudes toward both women (-.202) and animals (-.205). As well, those who inflicted abuse against nonhumans were more likely to have been either a victim or a perpetrator of violence during adult years (victimization .207; perpetration .411) or childhood (victimization .345; perpetration .305). In sum, those more likely to engage in violence against nonhumans were young individuals who held negative attitudes toward women and nonhumans, and who had been victimized as a

child and as an adult, and who had perpetrated violence against both a child and an intimate partner.

For many scholars, animal abuse is not an issue in itself, but is of interest only as a catalyst for current or future inter-human conflict. Animal abuse most frequently has been linked to mass or serial murderers (American Law Institute 1993; Miller and Knutson 1997; Skrapec 1996) in the media using anecdotal reports. For instance:

Patrick Sherrill was a postal worker who killed 14 co-workers in 1986. It is believed he stole pets from his neighborhood and allowed his own dog to mutilate them (IACP 1989).

Thomas Lee Dillon, alleged serial killer from Ohio, was known locally for having stabbed, stomped, and shot approximately 1000 cats and dogs (American Law Institute 1993: 17).

The Boston Strangler, Alberto DeSalvo, reportedly shot arrows at trapped cats and dogs (Beirne 1995).

In his youth, Jeffrey Dahmer impaled the head of a dog on a stick, and impaled frogs and cats to trees (Goleman 1991).

In 1992, 12-year-old Eric Smith killed a neighbor's cat. He was made to apologize and do some yard work for the wronged neighbor. In 1993, Eric Smith killed a four-year-old boy and was convicted the following year second-degree murder (Loar 1999: 120).

As a youth, Ted Bundy reportedly engaged in torture of animals with his grandfather (White 1992).

When a cat left footprints on Randy Roth's newly waxed car, he caught the cat and bound her with duct tape to the drive shaft of her owner's car. When the owner started his car, the cat was quickly dismembered. Roth later murdered his wife by drowning her in Lake Sammamish, near Bellevue, Washington (Fox 1999: 306).

Richard Davis, convicted of murdering 12-year-old Polly Klaas after kidnapping her from her home in California, reportedly set fire to cats and used dogs for target practice as a child (Fox 1999: 306).

There are obvious methodological problems with generalizing a link between nonhuman abuse and later human violence when the linkage rests on testimonials and retrospective research, without accounting for problems of slippage or embellishments. Literature has sought to examine if animal abuse is a sign of psychologic defects (Ascione 1993; Ascione, Thompson and Black 1997; Patterson, DeBaryshe and Ramsey 1989), or if youths who abuse animals mature into aggressive or anti-social adults (Ascione 1993; Felthous and Kellert 1987). Further, animal abuse has been identified as a signifier of sibling abuse (Wiehe 1990), child physical abuse (Ascione 1993; Boat 1999; DeViney, Dickert and Lockwood 1983), child sexual abuse (Boat 1995; Friedrich, Urquiza and Beilke 1986; Hunter 1990), and partner abuse (Adams 1995; Arkow 1994; Ascione 1998; Ascione, Weber, and Wood 1997; Browne 1987; Flynn 1999; Murphy 1997; Patronek 1997; Raupp, Barlow, and Oliver 1997; Renzetti 1992).

The Role of Attitudes

Inclusion of animal related concerns into feminist literature has served both to broaden feminism generally and to contribute an unheard voice to masculinist theories of animal liberation. Outside of a specifically feminist purview, David Nibert (2002) roots oppression of women and animals in

economics. He argues, in compelling detail, that the global mistreatment of animals fuels a more general form of human exploitation.

Traditional sociological work focuses on patriarchy and anti-egalitarian attitudes as responsible for the creation of violent men. Moving from this singular focus, critical criminologists explore the notion of multiple masculinities as opposed to traditional sex role research. While some researchers focus on one masculinity as exemplified by John Wayne types, critical criminologists argue that men can choose an alternative definition provided they are willing to live with the consequences of existing outside mainstream society (Schwartz and DeKeseredy 1997).

The changing relationships between women and nature is manifested in many forms, one being the translatability of metaphors across forms of oppression. Nonhuman pejoratives such as bitch, cow, old bitty, catty, dog, and others applied to women with negative connotations illustrate the continued interweaving of oppressions. Such speciesist language disparages women through their alignment with nonhumans who have long been viewed as inferior and subjugated rightfully. The false dichotomy that exists between that which is 'animal' and that which is 'human' serves to legitimate the oppression of both the 'nonhuman other,' and the 'human other' associated with the animal. Thus, the comparison of women to nonhumans assists symbolically in their oppression, (Dunayer 1995) as it often does with race.⁴

⁴ The translatability of metaphors from nonhumans to non-whites is beyond the scope of this work. Speciesist language acts to disparage racial groups in the United States, specifically African Americans. For a thought provoking

Further, Carol J. Adams (1998) argues that absent referents are used to recall the experiences of both women and animals, but not the women or animals themselves. In the context of a meat-eating society, the dead bodies of animals are absent from our language, as are institutionalized values about women. Such referents become structural and are socialized into each generation, serving to inhibit 'seeing' the actual woman (or nonhuman) behind a violent incident. Comparisons such as these between the treatment of women and the environment generally, and its inhabitants specifically, are commonplace in eco-feminist literature.

The interlocking of oppressions between hegemonic masculinities and subordination of nonhumans is explored through the masculinities hypothesis which purports that individuals with negative attitudes toward women are likely to hold negative attitudes toward nonhumans. Such negative attitudes are hypothesized to manifest themselves in an increased likelihood of engaging in a variety of forms of abuse toward both women and animals.

Attitudes Toward Nonhumans

Ecologicistic attitudes toward animals were those that advocated treatment of nonhumans given their sentient nature and an inherent placement of value on animals, rather than an ideology supportive of using nonhumans to meet human needs, regardless the treatment endured. The

analysis of the comparison between human and animal slavery see "The Dreaded Comparison" by Marjorie Spiegel (1988).

attitudes toward animals index had a Cronbach's alpha of 0.8. Positive attitudes toward nonhumans were endorsed by those endorsing positive attitudes toward women (.496). Those with an ecologicistic worldview were more likely to participate in deviant activities (.143) such as drug and alcohol use. An ecologicistic attitude toward animals was also more likely to be possessed by those who have experienced victimization in an adult relationship (.156), which may be an area of exploration for future research.

Positive attitudes toward animals were negatively correlated with the child offender index (-.323), implying that those with positive attitudes toward nonhumans were less likely to perpetrate violence against a child possess. Further, those who offended against a domestic partner (-.097) were more likely to hold negative attitudes toward animals. A more positive attitude toward animals was held by those with higher educational attainment (.211) and those who were younger (-.248), and thus may be slightly over-represented in the sample.

Attitudes Toward Women

Those who possessed positive attitudes toward women as measured by beliefs in equal gender participation in society and the inappropriateness of domestic violence were younger (-.168), had higher educational attainment (.255), and higher family income (.051). Positive attitudes toward women were also correlated with a decreased likelihood of being victimized as a child

(-.108), or victimizing a child later in life (-.323). That is, those who hold negative attitudes toward women were more likely to have been victimized by a parent or other caregiver, and victimize a child during their adult years. These correlations illustrate a general egalitarian worldview that values members of oppressed groups and does not condone mistreatment of less powerful peoples. Interestingly, those with positive attitudes toward women were more likely to have engaged in deviant activities (.130) as measured by the deviance index, and had a greater chance of being victimized by a partner in a domestic relationship (.156). Again, the positive correlation between positive attitudes toward women and adult victimization is grounds for exploration in future social psychologically focused research. The attitudes toward women index had a Cronbach's alpha score of 0.7.

Pet Ownership Differences

To explore the relevance of attitudes in predicting violence, this work addressed mean differences by pet ownership on each index as illustrated in Table 10. Significant differences were found on the child offender index. Individuals who did not have a pet (1.1184) inflicted a greater amount of violence against children as an adult than did those who had a pet (1.0639). This illustrates the potentially positive socialization influences of a nonhuman companion on one's development.

Table 10: Summary Statistics and T-Test for Selected Indices and Pet Ownership.

	Pet Ownership Lifetime	N	Mean	P-Value	T-Value
Animal Abuse Index	Yes	364	6.3545	.525	.050
	No	38	6.3420		
Attitudes Toward Animals Index	Yes	364	2.8907	.022	6.106
	No	38	2.2789		
Attitudes Toward Women Index	Yes	364	3.4931	.000	6.429
	No	38	2.9671		
Child Offender Index	Yes	364	1.0639	.003	-1.650
	No	38	1.1184		
Child Victim Index	Yes	364	1.4185	.762	-1.260
	No	38	1.5439		
Deviance Index	Yes	364	4.6320	.579	1.728
	No	38	4.2894		
Partner Offender Index	Yes	364	1.2381	.071	-2.658
	No	38	1.3596		
Partner Victim Index	Yes	364	1.3590	.413	2.993
	No	38	1.1930		

Further, the presence of an animal companion had significant effects on attitudes toward both nonhumans and women. Those who had a pet (2.8907) reported significantly more positive attitudes toward animals than those who had never had a pet (2.2789), though it should be noted that both groups possessed favorable attitudes. On the attitudes toward women index, those with a pet (3.4931) were statistically more likely to have positive attitudes toward women than those without a pet (2.9671). Again, both groups held favorable attitudes toward women, however the groups who had a nonhuman companion throughout their lives were much more likely to hold such a favorable viewpoint. Correlation data presented earlier revealed a significant and positive correlation between attitudes toward animals and attitudes toward women. Thus, the participation of an animal in a family's socialization process had very positive effects as measured by attitudes toward both animals and women.

Testing the Masculinities Hypothesis

The prediction of violence against nonhumans was not as straightforward as the masculinities hypothesis would suggest through the use of attitudinal measures. Examination of animal abuse included aspects of neglect or emotional abuse, physical abuse, and killing of an animal. These measures were indexed using a four-point scale (alpha 0.7), and

respondents were asked to respond to abuse questions indicating 'never,' 'rarely,' 'sometimes,' or 'often.'

Using an ordinary least squares regression to examine the abuse of animals, 10 independent variables were evaluated. This test was used to explore variables without consideration to time sequence. The main effects are presented in Table 11. The two strongest predictors of abuse of nonhumans were offending against a domestic partner and being male. Offending against a child and being victimized as a child were significant predictors of animal abuse, as was failure to have one's own children. Thus, animal abuse is most likely to be inflicted by a male who was abused as a child, and engages in abuse of both children and his domestic partner.

As the masculinities hypothesis suggests, negative attitudes toward both nonhumans and women were significant predictors of inflicting animal abuse. Also significant was having observed someone injure or kill an animal, regardless of that person's relationship with the respondent. Having a nonhuman companion at some point in the life course was a significant predictor of abusing an animal, falling nicely within the cycle of violence thesis suggesting that multiple forms of abuse occur within the home. Finally, participation in deviance was a significant predictor of animal abuse.

In combination, negative attitudes toward both women and nonhumans, inflicting violence against both children and domestic partners, being victimized as a child, participation in deviant activities, observing someone injure or kill an animal, having a nonhuman companion at some

Table 11: OLS Regression Predicting Nonhuman Abuse.

	<u>Unstd. Coefficient</u>	<u>Std. Coefficient</u>	<u>T-Value</u>	<u>P-Value</u>
(Constant)	.697		4.932	.000
Attitudes Toward Animals Index	-.052	-.111	-2.258	.025
Attitudes Toward Women Index	-.057	-.100	-2.151	.032
Child Offender Index	.197	.132	2.930	.004
Child Victim Index	.058	.118	2.671	.008
Deviance Index	.109	.147	3.339	.001
Partner Offender Index	.253	.236	5.274	.000
Observe Injury/Killing of Animal	.098	.170	4.112	.000
Gender	-.109	-.185	-4.180	.000
Children	-.077	-.134	-3.105	.002
Pet Ownership Lifetime	.151	.153	3.592	.000

R Square: .409
Adjusted R Square: .394
Std. Error: .2256
F-Test: 27.074

point throughout the life course, failing to have children, and being male explained 39% of the variation in abuse of animals. The fact that it takes ten independent variables to explain 39% of the variation on the dependent variable of animal abuse, suggests that there are a numerous factors, not yet explored or examined in existing literature, that contribute to violence against nonhumans.

Support for the Masculinities Hypothesis

Analysis revealed that holding negative attitudes toward animals was a statistically significant predictor of perpetration of violence against children, both inclusive and exclusive of time series variables. Further, negative attitudes toward animals was a statistically significant predictor of violence against nonhumans. Respondents who possessed negative attitudes about the appropriate roles and treatment of nonhumans in American society, were more likely to engage in abuse of animals during some phase of the life course against either an animal or a child.

While feminism as a discipline has been broadened by the inclusion of animal related issues, negative attitudes toward nonhumans was not a predictor of perpetration of violence in a domestic relationship. Instead a dominionistic worldview was a predictor of both child abuse and animal abuse. While scholars advocate the necessity of linking circles of violence through the comprehension of interlocking oppressions, negative attitudes

toward animals do not have the predictive significance for domestic violence that the masculinities hypothesis suggests. Such attitudes do however, become important when exploring child abuse and animal abuse, and were strongly correlated with attitudes toward women. Placing the nonhuman within the theoretical framework of criminology will help explain the complex relationship between human and nonhuman abuse and the role attitudes play in perpetuating such abuse. The linkages between multiple forms of oppression provide a framework for elaborating a masculinities model as applied to oppressions of children and animals.

VI. DISCUSSION AND IMPLICATIONS

The reality of the treatment of nonhumans in American society is obscured by the progressive elimination of animals from human experience and from the academy, specifically from environmental sociology and criminology. In an attempt to rectify this situation, animal related courses have begun to be offered by many major universities in Western countries and animal abuse has been brought to the attention of Congress. When Congressperson Tom Lantos (D-CA) introduced House Resolution 286 to the U.S. Congress, it was a great leap toward giving greater attention to the issue of animal abuse, however the attention was premised on the alleged link between animal abuse and later violence against humans.

This plea to Congress, as well as initiatives by many animal welfare organizations, was made without accurate incidence rates of animal abuse, minimal knowledge on the ways in which victimization varies by species, and without explanation as to why many children experiment with cruelty toward nonhumans but do not graduate to more heinous forms of animal abuse or abuse of humans. In the interest of providing a grounded representation of the linkages between various forms of violence, this research explored the ideological, community and demographic variables that affect the emotional, physical and sexual abuse of all species.

It is imperative to move past the use of special populations as respondents if issues of interlocking violence are to be effectively and

accurately explored. Research must address issues such as who perpetrates animal abuse, how is animal abuse manifested in society, why do some individuals engage in animal abuse, and the frequency of violence toward nonhumans. Though this understanding is certainly complicated by American society's contradictory attitudes toward animals, and further entangled by the temptation to value research on animal abuse based solely on its applicability to humans, this work attempts to overcome such barriers through the use of criminological theoretical foundations.

This research examines the roles of ideological, community, and demographic variables in explaining the link between violence against human and nonhumans, employing a test of the graduation hypothesis, the generality of deviance hypothesis, and the masculinities hypothesis. The graduation hypothesis, the notion that violence escalates from abuse of animals as a child to later aggression toward humans, was partially supported by this work. Animal abuse during adolescence was a significant predictor of later abuse against a domestic partner, and nonhuman abuse at any stage of the life course remained a significant predictor of partner abuse. Further, animal abuse during adolescence, though not during other phases of the life course, was a significant predictor of later abuse of children, thus supporting the graduation hypothesis in a modified form not beginning in childhood. Using this hypothesis, animal abuse can be considered more than an isolated incident with only an animal victim, but an under-recognized component of

family violence, both forms of violence rooted in common origins and influences.

Because teenage engagement in abuse of animals has been illustrated to predict both abuse of children and abuse of an intimate partner, several policy initiatives already begun, such as the Rhode Island Special Legislative Commission and protocols in Guelph, Ontario that support cross reporting of domestic violence and animal abuse should be continued and expanded. Evidence of the cycle of violence was illustrated throughout this research, making cross-reporting of domestic violence and animal abuse important in preventing future abuse. Further, the relevance of attitudinal measures provides a foundation for pursuing educational initiatives that would teach youth appropriate ways of treating nonhumans, children, and women, and affording moral consideration to oppressed groups.

The second hypothesis explored was the generality of deviance hypothesis, highlighting the notion that behaviors, including acts of deviance, follow a predictable path over the life course. Focusing on the role of external factors in influencing deviant behavior, and the finding that criminals do not normally escalate to more serious actions over time, animal abuse is theorized to be one of many forms of deviance in which individuals engage as youths, but from which they mature. The generality of deviance hypothesis, given the significance of animal abuse as a predictor of both child abuse and intimate abuse, was not upheld, indicating that indeed, those who engage in what some individuals consider 'childhood or adolescent experimentation'

with mistreatment of animals are at risk of later abuse against humans. Policies should be implemented and continued that take seriously youth who engage in violence against nonhumans. Laws should be strengthened so that animal abuse is considered a serious offense with potentially serious future ramifications, rather than mere experimentation with species still considered property under current legislation.

The final hypothesis addressed is the masculinities hypothesis, which explores the linkages between oppressions of women and nonhumans. This hypothesis holds that those with negative attitudes toward women are likely to hold negative attitudes toward nonhumans, and thus be more susceptible to engaging in a variety of forms of abuse toward both women and animals. While attitudes toward animals and women were correlated in the expected direction, a dominionistic or patriarchal worldview was not a significant predictor of inflicting partner violence. Negative attitudes toward animals was however, a significant predictor of perpetration of child abuse, both in the time sensitive model and in the model exclusive of time sequencing. In contrast, attitudinal measures did not hold up in accordance to what the masculinities hypothesis would suggest. While there was a statistically significant correlation between attitudes toward women and attitudes toward animals, attitudes toward women had no significant effect on any measures of abuse, either perpetration or victimization. The relationships revealed between negative attitudes toward nonhumans and future abuse, provide empirical justification for teaching youth appropriate treatment of nonhumans in society.

While this is complicated in a society that deems many nonhumans fit for consumption, educational programs about how to treat nonhumans and their impact on our environment and society generally can protect members of all species from violence.

Limitations and Suggestions for Future Research

While the instrument used for this study was a significant improvement over anecdotal testimonies and quantitative assessments of special populations such as prisoners or battered women, it was not without its limitations. First, though the sample revealed much consistency with attributes of the general population, there were a few differences that may have complicated the results. The sample drawn for this project tended to be younger than the general population of Knox County, Tennessee, and thus may have revealed higher rates of deviance than found in most criminological studies exploring the youth-crime link. Because the sample was disproportionately younger and drawn from a city with a major university and several colleges, the sample was also more highly educated than the general population and thus may reveal more progressive attitudes toward both women and nonhumans. It is suspected that the over-sampling of youth and highly educated individuals evens out in a conservative estimation of the hypotheses and thus had no significant influence on the results.

A second limitation was the failure to include a question addressing infliction of violence against an intimate partner as a form of self-defense.

Because the independent samples t-test demonstrated a higher level of victimization for women, and a higher rate of perpetration by men, victimization as an adult may be correlated to actions employed in self-defense. Unfortunately, the instrument did not inquire as to whether perpetration of abuse by women was in response to existing abuse by a male partner. Self-defense is an important avenue of consideration for future research. Inclusion of self-defense questions would be a beneficial addition to replication of this study and would likely have serious implications for rates of female violence perpetration.

The final limitation may have resulted due to poor composition of the questions comprising the attitudes toward women index. Though the instrument was pre-tested and critiqued in a focus group, analysis of this attitudinal measure revealed very positive attitudes toward women held by majority of respondents. In hindsight, perhaps the questions asked were too directional and thus respondents tended to skew toward positive attitudes. Though the questions were constructed after extensive review of other surveys addressing attitudes toward women, more varied questions may have elicited a more even distribution of responses. This skew of findings may become important in retesting the masculinities hypothesis after development of an index that taps the diversity of opinions toward women and their role in American society.

Of special importance for future research is implementation of a similar instrument, for certain in a different segment of the United States, but more

preferably nationally or cross-nationally to assess the impact of socialization on attitudes toward nonhumans and women, in an attempt to prevent potential violence against humans at a later stage in the life course. It would be beneficial to provide youth, both children and especially adolescents, with education addressing appropriate ways of treating animals specifically, and oppressed groups generally. Programs such as Humans and Animals Learning Together (HALT) that occur in Knox County, TN team troubled youth with nonhumans in an attempt to positively socialize both species. Problematic is the lack of program evaluation, thus while this research indicates such programs would be useful, evaluation is absent and thus the change in attitudes of the youth remain hypothetical. The best outcome of such programs may be seen when applied to children ages 5 through 10, as stable attitudes have yet to form.

Implications of the Research

The relationship between nonhuman abuse and later abuse of humans has been brought to the attention of Congress and has been pursued by a variety of animal welfare organizations, such as the Humane Society of the United States. Though such programs were initially developed on the basis of anecdotal evidence, this research provides grounding and validity to programs already underway. The findings of this project reveal that perpetration of violence against nonhumans by adolescents should be of

serious concern to a society seeking to protect both children and women from violence.

Projects such as those underway in Guelph, Ontario wherein abuse is cross-reported between the Guelph Humane Society and Family and Children's Services of Guelph and Wellington County, should be continued with special attention to abuse occurring against animals by teenage youth. While such projects minimally increase paperwork for case workers and require some additional training in recognizing abuse in a different target population, the potential avoidance of violence clearly outweighs this inconvenience. Further, veterinarians confronted with cases of suspected animal abuse should seriously consider breaching usual obligations of client confidentiality under the premise that other forms of abuse may be occurring in the client's home. Now that research of a general population has verified anecdotal evidence and research conducted on special populations, numerous implications are possible to prevent violence against all species.

While this researcher believes that animal abuse should be taken seriously without the existence of support for interlocking oppressions, there are powerful potential repercussions for situations in which animal abuse was perpetrated during one's adolescence. This work provides empirical support for educational and socialization endeavors that encourage positive attitudes toward animals. Though animal abuse should be of concern in and of itself, the predictive impact and potential to avert future violence is provocative.

The established link between domestic violence and nonhuman

violence will initiate and support the continuation of programs that strive for egalitarian and ecologicistic attitudes and behavior to improve the treatment and status of all species. In combination with such programs, legal scholars should continue to challenge current legislation that considers nonhumans property in an attempt to prevent abuses. Through replication and methodological improvement of studies such as this one, science can get closer to unraveling the complex relations between nonhuman and human violence and assist in the prevention of violence that affects all of society.

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APPENDICES

A-1: Survey Instrument

Good evening. My name is _____ and I'm calling from the University of Tennessee. Recently Congress urged greater research attention be given to treatment of animals and types of violence in society. In response to this, I am conducting a survey of Knox County residents, the findings of which will be submitted to Congress to aid policy development. Is it possible to speak with the person home tonight that is over 18, and has had the most recent birthday?

[If the individual indicates their household is unwilling to participate]
Thank you for your time. Have a nice evening.

[If the correct person comes on the line] Good evening. My name is _____ and I'm calling from the University of Tennessee. Recently Congress urged greater research attention be given to treatment of animals and types of violence in society. In response to this, I am conducting a survey of Knox County residents, the findings of which will be submitted to Congress to aid policy development. The survey will take about 10 minutes and I greatly appreciate your willingness to participate.

[If correct individual answered the phone] The survey will take about 10 minutes to complete and I greatly appreciate your willingness to participate.

Before we begin the survey, please know that your participation is voluntary and you may end your participation at any time and for any reason. All information you provide in this survey will remain anonymous and your name will never be associated with the answers you provide. While some of the questions may be considered of a sensitive nature, I want to make sure you understand that we have contacted you via a random phone number generator and even I do not have a way of identifying you or linking you or your phone number with your answers. Should you choose to end the interview prior to completion, the information you have already provided will be destroyed. If you have any questions about the survey, feel free to contact Lisa Anne Zilney at 974-3620. Finally, because some questions are sensitive, you may want to conduct this conversation in private.

To begin I am going to ask you some general questions about pets and some opinion questions. Throughout this survey, please think of an animal as any living creature, not including insects. This includes animals that are domesticated such as cats, dogs, or horses, farm animals such as pigs or cows, as well as wild animals such as snakes, deer, wolves.

1. During any period in your life have you had a pet?
- 1 no
2 yes
- A. How many animals have you had in your lifetime that you considered pets?
- B. Did you have a pet when you were a child?
- 1 no
2 yes
- C. Did you have a pet when you were a teenager, between 13 and 18?
- 1 no
2 yes
- D. Have you had a pet as an adult?
- 1 no
2 yes
- E. Do you have a pet now?
- 1 no
2 yes
- a. How many pets do you have now?

Please indicate if you strongly agree, agree, disagree, or strongly disagree with each statement.

2. It is acceptable to use animals for medical tests.
- 1 strongly agree
2 agree
3 disagree
4 strongly disagree

3. It is acceptable to use animals to test food products and cosmetics.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree
4. People should protect animals even if it means slowing economic growth.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree
5. It is acceptable to use animals for entertainment or competition, such as in a circus or horse race.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree
6. Animals should be protected from cruel treatment.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree

The next section asks about attitudes toward women. Please indicate if you strongly agree, agree, disagree, or strongly disagree.

7. Women should have all the same rights as men.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree
8. The criminal justice system should have stiffer penalties for men who are violent against women.
- 1 strongly agree
 - 2 agree
 - 3 disagree
 - 4 strongly disagree

9. A husband has the right to physically discipline his wife.

- 1 strongly agree
- 2 agree
- 3 disagree
- 4 strongly disagree

10. Women should have the right to control their bodies.

- 1 strongly agree
- 2 agree
- 3 disagree
- 4 strongly disagree

The next questions ask about treatment of animals by you and others. Some questions may be sensitive, but please try to be as honest as possible. Remember that your answers are anonymous. Also, please remember that an animal is any living creature not including insects.

11. Have you ever seen someone injure or kill an animal?

- 1 no
- 2 yes

A. Do you think the injury or killing accidental?

- 1 no
- 2 yes

B. Approximately how many times have you witnessed someone injure an animal?

C. About how many times have you witnessed someone kill an animal?

D. When you saw someone injure or kill an animal, were you a child, a teenager, or an adult? Indicate all stages that apply.

E. Was the animal your pet?

- 1 no
- 2 yes

F. What was your relationship with the person who harmed the animal?

12. Have you ever forgotten to provide food or water for an animal?

- 1 no
- 2 yes

A. Would you say this occurred rarely, sometimes, or often?

- 1 rarely
- 2 sometimes
- 3 often

B. Were you a child, a teenager, or an adult? Please indicate all stages that apply.

C. Was the animal your pet?

- 1 no
- 2 yes

13. Have you ever deliberately frightened an animal?

- 1 no
- 2 yes

A. Would you say this occurred rarely, sometimes, or often?

- 1 rarely
- 2 sometimes
- 3 often

B. Were you a child, a teenager, or an adult? Please indicate all stages that apply.

C. Was the animal your pet?

- 1 no
- 2 yes

14. Have you ever had to give an animal away?

- 1 no
- 2 yes

A. How many times has this happened?

B. Were you a child, a teenager, or an adult? Indicate all stages.

15. Have you ever given alcohol or drugs to an animal to see what would happen?

- 1 no
- 2 yes

A. Would you say this occurred rarely, sometimes, or often?

- 1 rarely
- 2 sometimes
- 3 often

B. Were you a child, a teenager, or an adult? Indicate all stages.

C. Was the animal your pet?

- 1 no
- 2 yes

16. Have you ever hit, kicked, or beat an animal?

- 1 no
- 2 yes

A. Would you say this occurred rarely, sometimes, or often?

- 1 rarely
- 2 sometimes
- 3 often

B. Were you a child, a teenager, or an adult? Indicate all stages.

C. Was the animal your pet?

- 1 no
- 2 yes

17. Have you ever killed an animal?

- 1 no
- 2 yes

A. How many animals have you killed?

B. Were you a child, a teenager, or an adult? Indicate all stages.

C. Was the animal your pet?

- 1 no
- 2 yes

D. Was the death an accident?

- 1 no
- 2 yes

E. Was the kill as part of a hunt for food?

- 1 no
- 2 yes

F. Was the kill as part of a hunt for sport?

- 1 no
- 2 yes

Next I'm going to ask about treatment of you by other individuals. Again, the questions are of a sensitive nature but are essential to improve the well-being of individuals in Knox County. Please remember that all your answers are anonymous. Your response options are never, rarely, sometimes, or often.

18. As a child, did your parents or other care givers ever fail to take care of your emotional or physical needs?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

19. As a child were you hurt physically by your parents or other care givers?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

20. As a child were you touched sexually by a parent or other care giver?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

21. As a child, did a parent or other care giver ever threaten to harm an animal to frighten or punish you?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

A. Was the animal actually harmed or killed?

- 1 no
- 2 yes

B. Was the animal your pet?

- 1 no
- 2 yes

The next questions will ask about incidents that may have occurred during your teenage or adult years between you and someone you were dating, married, or involved with intimately. Your response options are never, rarely, sometimes, or often.

22. Have you ever had a partner hurt you emotionally, by screaming at you or insulting you?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

23. Have you ever had a partner hurt you physically, by hitting or kicking?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

24. Have you ever had a partner touch you sexually against your will?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

25. Have you ever had a partner threaten to harm an animal to control you?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

A. Was the animal harmed or killed?

- 1 no
- 2 yes

B. Was the animal your pet?

- 1 no
- 2 yes

The next section will ask about your treatment of other individuals. The response categories remain: never, rarely, sometimes, or often.

26. Have you ever failed to provide for the emotional or physical needs of a child?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

27. Have you ever physically hurt a child?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

28. Have you ever sexually touched a child?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

29. Have you ever threatened to harm an animal to frighten or punish a child?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

A. Was the animal actually harmed or killed?

- 1 no
- 2 yes

A. Was the animal the child's pet?

- 1 no
- 2 yes

The next questions will ask about incidents that may have occurred during your teenage or adult years between you and someone you were dating, married, or involved with intimately. These are the last set of sensitive questions. Your choices remain: never, rarely, sometimes, or often.

30. Have you ever emotionally hurt a partner by insulting or screaming at them?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

31. Have you ever physically hurt a partner by hitting or kicking?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

32. Have you ever sexually touched a partner against their will?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

33. Have you ever threatened to harm a partner's animal to control them?

- 1 never
- 2 rarely
- 3 sometimes
- 4 often

A. Was the animal actually harmed or killed?

- 1 no
- 2 yes

B. Was the animal your partner's pet?

- 1 no
- 2 yes

I appreciate greatly your cooperation with the previous sensitive questions. The next questions ask about activities you may have engaged in, some of which are against the law.

34. Have you ever engaged in an activity that you knew was illegal?

- 1 no
- 2 yes

A. Were you a child, teenager, or an adult? Indicate all stages.

35. Have you ever been arrested?

- 1 no
- 2 yes

A. How many times have you been arrested?

B. Were you a child, teenager, or an adult? Indicate all stages.

36. Have you ever experimented with drugs?

- 1 no
- 2 yes

A. How often do you use illegal substances?

- 1 often
- 2 sometimes
- 3 rarely

37. Do you drink alcohol?

- 1 no
- 2 yes

A. How frequently do you drink alcohol?

- 1 often
- 2 sometimes
- 3 rarely

The last few questions are to describe the sample of the participants.

38. What is your gender? [Do not ask unless unsure.]

- 1 male
- 2 female

39. What race or races do you consider yourself to be?

- 1 White
- 2 African American
- 3 Native American or Alaskan Native
- 4 Native Hawaiian or Pacific Islander
- 5 Asian

40. Are you of Hispanic origin?

- 1 no
- 2 yes

41. Are you a vegetarian?

- 1 no
- 2 yes

42. What is your age as of your last birthday?
43. Which best describes your current family type?
- 1 never married
 - 2 living with someone as a couple
 - 3 married once
 - 4 married more than once
 - 5 separated
 - 6 divorced
 - 7 widowed
44. Do you have children?
- 1 no
 - 2 yes
- A. How many children do you have?
45. How many adults live in your home?
46. How many children (under age 18) live in your home?
47. How long have you lived in your home?
48. What is the highest level of education you have completed?
- 1 less than high school
 - 2 high school diploma or GED
 - 3 some college, no degree
 - 4 Associate's degree
 - 5 Bachelor's degree
 - 6 Master's degree
 - 7 Professional degree
 - 8 Doctoral degree
49. Which of the following best describes your current employment status?
- 1 employed full time
 - 2 employed part time
 - 3 student
 - 4 retired
 - 5 homemaker
 - 6 unemployed
 - 7 disabled
 - 8 seasonally employed

50. What is your zip code?
51. Have you ever received public assistance?
- 1 no
 - 2 yes
52. This is the last question. Which of the following best describes your annual household income?
- 1 less than \$9,999
 - 2 \$10,000 - \$19,999
 - 3 \$20,000 - \$39,999
 - 4 \$40,000 - \$59,999
 - 5 \$60,000 - \$79,999
 - 6 \$80,000 - \$99,999
 - 7 \$100,000 - \$119,999
 - 8 more than \$120,000
 - 9 refused

Thank you very much for your cooperation with this survey. If you want further information about domestic violence or animal abuse, including the contact information for local or national social service agencies, please call Lisa Anne Zilney at 974-3620, or visit her personal webpage at <http://web.utk.edu/~lzilney>. Thank you again very much and have a nice evening!

A-2: Answers to Potential Questions From Respondents

How long will the survey take to complete?

The survey will take approximately 5 to 7 minutes to complete.

Who is sponsoring the survey?

The survey is part of Lisa Anne Zilney's doctoral dissertation in the Department of Sociology at the University of Tennessee. She received a grant to complete this survey from the William and Charlotte Parks Foundation.

What is the purpose of the study?

In U.S. House Resolution 286, Congress urged greater research attention be given to treatment of animals and types of violence in society. This survey is in response to this resolution and is an attempt to explore these issues in Knox County.

How many people will be participating?

We are surveying approximately 400 Knox County residents.

How did you get my name?

I am unaware of your name or location in Knox County. We randomly dial phone numbers in the County to request that people participate in the study.

How can I be sure the study is authentic?

If you want to contact the principal investigator who is doing this study as a part of her dissertation, you can contact Lisa Anne Zilney at 974-6021. If you want to contact her professor at the University of Tennessee, you can contact Dr. Donald Hastings at 974-7019.

Is this confidential?

Yes. Because we randomly dial phone numbers in Knox County, I have no way of knowing any information about you, other than the information you provide in response to the survey. All information that is released or published will be presented in such a way that no individual response can ever be traced.

Can I get a copy of the results?

You may contact Lisa Anne Zilney via phone at 974-6021, or via email at lzilney@utk.edu. This is a project she is completing for her doctorate in the Sociology Department, thus results will likely be available in May.

What will the results be used for and how will the study help me?

In U.S. House Resolution 286, Congress urged greater research attention be given to treatment of animals and types of violence in society. This survey is in response to this resolution and is an attempt to explore these issues in Knox County. The study will better help to understand issue of domestic violence, child abuse, and animal abuse in your community.

A-3: Local and National Violence Information:

NATIONAL INFORMATION:

National Domestic Violence Hotline - 1-800-799-SAFE (7233)

Domestic Violence Information Center -
<http://www.feminist.org/other/dv/dvhome.html>

Sexual Assault Information Page -
<http://www.cs.utk.edu/~bartley/salInfoPage.html>

National Coalition Against Sexual Assault - 1-717-232-7460

Childhelp USA National Child Abuse Hotline - <http://www.childhelpusa.org/> -
1-800-4-A-CHILD

American Society for the Prevention of Cruelty to Animals - www.aspca.org/

KNOX COUNTY INFORMATION:

Knox County Animal Shelter - 573-9674

The Sexual Assault Crisis Center of Knoxville - 522-7273 (crisis line);
558-9040
(business line); <http://www.hornet.org/sacc/>

Family Violence Helpline - 521-6336 (24-hour)

VITA

Lisa Anne Zilney was born in Kitchener, Ontario on February 9, 1974. She spent her childhood in Kitchener, until moving to Windsor, Ontario in 1993 to pursue a Bachelor of Arts degree in Psychology at the University of Windsor. Windsor brought her in touch with Sylvester, her feline companion. In 1995, her and significant other, Sammy Zahran, headed to Richmond, Kentucky to complete a Masters of Science in Criminal Justice at Eastern Kentucky University. While in Richmond, she worked full time as assistant manager and counselor for the Presbyterian Child Welfare Agency in Berea, assisting state agency girls aged thirteen through seventeen. In Richmond, her first canine companion, Leviathan, joined her life. In 1997, Sammy and Lisa Anne moved to Knoxville, Tennessee to pursue Ph.D.'s at the University of Tennessee in the Department of Sociology. Halfway through her stay in Knoxville, Lisa Anne's second canine companion, Huxley, joined the family, and unfortunately Sylvester died of a rare feline disease. Her areas of interested include criminology, environmental sociology, race, class and gender inequality, feminism in Israel-Palestine, and the human-nonhuman animal bond. Lisa Anne plans to move back to Canada with Sammy, Leviathan and Huxley, to be closer to family and pursue a sociologically related career.

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