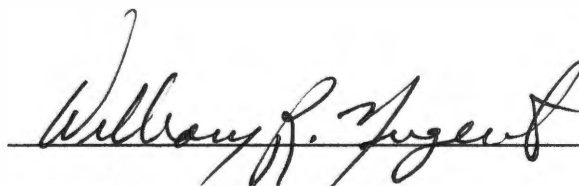


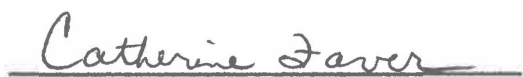
To the Graduate Council:

I am submitting herewith a dissertation written by Elizabeth Bramel Strand entitled "Battered women's experiences with pet abuse: A survey of women in two domestic violence shelters." I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Social Work.

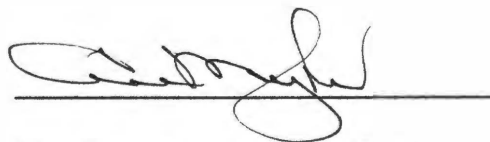
A handwritten signature in cursive script, reading "William F. Nugent", written over a horizontal line.

William Nugent, Major Professor

We have read this dissertation and
recommend its acceptance:

A handwritten signature in cursive script, reading "Catherine Zaver", written over a horizontal line.A handwritten signature in cursive script, reading "David Dwyer", written over a horizontal line.A handwritten signature in cursive script, reading "John C. New, Jr.", written over a horizontal line.

Acceptance for the Council:

A handwritten signature in cursive script, written over a horizontal line.

Vice Provost and Dean of Graduate
Studies

The first part of the thesis is a review of the literature on the topic of the thesis. The second part is a description of the methodology used in the study. The third part is a description of the results of the study. The fourth part is a discussion of the results and their implications. The fifth part is a conclusion.

Thesis
2003b
.59

Thesis 2003b .59

Thesis 2003b .59

Thesis 2003b .59

Thesis 2003b .59

Thesis 2003b .59

Thesis 2003b .59

**BATTERED WOMEN'S EXPERIENCES WITH PET ABUSE:
A SURVEY OF WOMEN IN TWO
DOMESTIC VIOLENCE SHELTERS**

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Elizabeth Bramel Strand

December 2003

DEDICATION

This dissertation is dedicated to the Animal Abuse Task Force (AATF) of Knox County, Tennessee. This task force directs efforts towards identifying the needs of animals that are not being adequately met; to garner resources to meet those needs, and to integrate efforts with those of other organizations that work on issues of family and animal welfare.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank the following people (and animals) for their contributions and support in completing this dissertation.

Dr. Catherine Faver,
for inspiring within me a scholarly interest in animals and teaching me essential scholarly and social work principles.

Dr. William Nugent,
for inviting me to seek my Ph. D., for being an eternally patient student advocate and for his constant willingness to engage in a much needed debate.

Dr. John New,
for providing stable, kind-hearted academic support and much trusted integrity throughout this dissertation process.

Dr. David Dupper,
for demonstrating a belief in my ability to accomplish what I put my mind to.

Dr. Mary Ellen Cox,
for providing statistical, moral, and social support.

Mr. David Neal,
for instilling in me self-trust, humble self-admiration, and stability of spirit.

Mr. George Williams,
for his neighborly support and care.

My Mom and Dad,
Drs. Anne and Allan Strand, for role-modeling the benefits of higher education and for being such excellent parents to their youngest adult child.

My Grandmother,
Lois Walker (Ganee), for her financial support of my education and her love of me.

Dr. Allan E. Strand, III,
my brother, for his brass tacks approach to helping me persevere.

Lastly,
my dogs, Circe and Rufus, for always showing me the importance and joy of my dissertation topic.

ABSTRACT

Since the beginning of empirical exploration about woman battering over twenty-years ago, the bond some battered women have with companion animals has been apparent. However, it is only within the last 5 years that any empirical attention has been directed toward specifically exploring the link between animal abuse and interpersonal violence in the lives of battered women. The purpose of this non-experimental survey design study was to replicate the findings of previous studies on animal abuse in the lives of battered women, as well as to freshly explore the proportion of battered women who are prompted to leave abusive relationships because of concern for the safety of their pets. Additionally a semi-structured interview with a domestic violence worker provided qualitative data about battered women's experiences with animal abuse.

Of the 51 battered women surveyed from two domestic violence shelters, 84% reported having pets, 74% reported that their pets had been threatened, 52% reported that their pets had been harmed, and 14% reported that their pets had been killed. Ninety-one percent of women reported that they worried about their companion animals while in abusive relationships and 60% indicated that this worry affected their decisions to seek shelter. Twenty-six percent of the battered women reported still worrying about their companion animals after coming into the domestic violence shelter. Qualitative findings suggest that battered women without children worry and grieve more deeply about their pets than women with children. Similarly, quantitative results indicated that women

without children were more likely to report that concern for their pets affected their decisions to seek shelter than women with children ($\chi^2(1) = 7.03$, $p=.01$; $\phi = -.42$).

Because of sample limitations, the findings of this study are not generalizable. However, almost all of the estimates observed in this study fall within the range of those found in previous similarly designed research on this topic to date. Based on the findings of this research and taken within the context of the literature base as a whole, implications for considering and attending to animals in the lives of battered women are outlined for both micro and macro social work application. Moreover, based on a critical review of the literature suggestions for future social work research on this topic are presented.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Statement of the Problem	4
Purpose of the Study	5
Significance of the Study	5
Brief Review of Related Literature	5
Highlights of Methodology	8
Research Questions	8
Exploratory Research Questions	9
Operational Definitions	9
Limitations of the Study	10
Brief Summary of Findings	10
II. REVIEW OF RELATED LITERATURE	12
Introduction	12
The Web of Violence	13
Barriers to Leaving	14
Animal Abuse: A Unique Form of Woman Battering	18
Sociological Perspectives on Animal Abuse	20
Legal Perspective on Animal Abuse	25
Defining Woman Abuse and Animal Abuse	27
Types of Animal Abuse	29
Type of Animal Concern	31
Family Violence and Animal Abuse: Empirical Findings	33
Animal Abuse and Battered Women: Empirical Findings	35
Summary: Critique of Battered Women and Animal Abuse Studies	41
Purpose of the Study	46
Research Questions	47
Research Hypotheses	47
Exploratory Research Questions	48
III. METHODS	
Introduction	50
Procedure	50
Sampling	51
Instruments/ Measures	51
Data Analysis	52
IV. RESULTS	
Introduction	60
Sample	60
Research Findings	63

	Page
V. DISCUSSION	84
Introduction	85
Demographics	86
Findings for Research Questions and Hypotheses of this Study	89
Exploratory Research Findings	96
Study Limitations	100
Implications for Social Work Practice	108
Implications for Future Social Work Research	118
 LIST OF REFERENCES	 123
 APPENDIX	 135
 VITA	 143

LIST OF TABLES

Table	Page
1. Carol Adams' Batterer Control Strategies	21
2. Comparative Demographics for Rural Women	62
3. Pet Abuse and Source of Emotional Support	64
4. Threat of Pets and Worry About the Safety of Pets while in the Relationship	67
5. Harm of Pets and Worry About the Safety of Pets while in the Relationship	67
6. Killing of Pets and Worry About Their Safety while in the Relationship	68
7. Overall Harm of Pets and Worry About Their Safety	68
8. Cases of Conditions of Abuse and Worry about Pet while in Abusive Relationship	70
9. In-Shelter Worry about Pets and Abuse of Pets	70
10. In-Shelter Worry about Pets and where Pets are Currently	72
11. Where Pets are Currently	75
12. Race and Concern for Pets in Decision Making	76
13. Presence of Children and Pets in Decision Making	78
14. Abuse toward Pet and Decision Making	78
15. Overall Abuse and Aggregated Decision Making	80
16. Length of Time Women Delayed Leaving Because of Concern for Their Pets	80
17. Concerns Associated with Safe Havens for Pets Program Development	115

LIST OF FIGURES

Figure		Page
1.	A social psychological model of animal abuse	23

Chapter 1: Introduction

It is estimated that 1.5 million women are battered by intimate partners every year (Tjaden & Thoennes, 2000). It is also estimated that approximately 60% of Americans own pets (American Veterinary Medical Association, 2002). Assuming that pet ownership is equally distributed across the population, potentially 900,000 battered women also own pets. Studies exploring battered women and their relationships with their companion animals indicate that approximately 20-25% of women who own pets report that decisions to leave their abusers were affected by concern over the animals (Ascione, 1998; Flynn, 2000b; Faver & Strand, in press). Frequently battered women are affected by being delayed from leaving abusive homes because of worry about their pets. This worry is not surprising given that most pet owners consider their pets to be family members (Stallones, Johnson, Garrity, & Marx, 1990; Triebenbacher, 1998; Cain, 1983). These estimates indicate that every year potentially 225,000 women's decisions to leave abusive homes are affected by concern over companion animals. Researches have just recently begun quantitative exploration of this topic (Ascione, 1997), although it has been mentioned theoretically and anecdotally for some time (Mead, 1964; Adams 1994).

Battered women's concerns over companion animals may delay their leaving because the abuse of these animals is also connected to other human abuse occurring in the household. Empirical studies on violence suggest that where there is violence against animals there is also likely to be violence against people (Arkow, 1999; Deviney,

Dickert, & Lockwood, 1983; Flynn, 2000c; Flynn, 2001). In fact, in the early 1980s, the FBI began paying attention to the link between animal abuse and interpersonal violence when developing profiles after many serial killers demonstrated evidence of animal cruelty in their violent behaviors (Lockwood & Hodge, 1986). Researchers have observed a higher incidence of animal abuse in the childhood histories of violent incarcerated offenders than in non-violent incarcerated offenders (Schiff &, 1999). For example, Merz-Perez, Heide, and Silverman (2001) found that 56% of incarcerated violent offenders reported childhood animal abuse compared to only 20% of non-violent offenders ($\chi^2 = 12.10$, $df=1$, $p= .00$, $N= 90$). Researchers have also found that institutionalized youth and youth seeking mental health services reported animal abuse more often than youth outside of these populations (Ascione, 2001).

The *Diagnostic and Statistical Manual for Mental Disorders* included *cruelty to animals* in its criteria for the diagnosis of *Conduct Disorder* (DSM-III-R, 1987), an adolescent mental health disorder characterized by a persistent disregard for the basic rights of others (Arluke, Levin, Luke, & Ascione, 1999). In conducting research about the link between animal abuse and interpersonal violence in populations of incarcerated adults and institutionalized youth, the co-occurrence of physical abuse and animal abuse in their families of origin is evident (Ascione, 2001). As these studies continue to suggest that animal abuse exists in the family histories of those who are violent offenders, researchers are now turning their attention to the concurrent exploration of animal abuse in violent families, and particularly in the lives of battered women.

As early as 1964, it was speculated that there was a co-occurrence between violence toward animals and violence toward people in families (Mead, 1964). Within the last 20 years, empirical evidence has mounted to support this relationship. In the mid 1980s, a study was conducted indicating that animal abuse occurred in families where there were confirmed cases of child abuse and neglect (DeViney, Dickert, & Lockwood, 1983). A search of the literature on animal cruelty and interpersonal violence reveals that it is only within the last six years that any empirical attention has been given specifically to animal abuse found in domestic violence situations, and only seven studies have been published specifically on this topic. Findings from these seven studies indicate that between 47 and 72% of pet owning battered women report abuse toward their companion animals (Flynn, 2000; Quinlisk, 1999). The preliminary findings of these studies support further empirical inquiry about the link between interpersonal violence and animal abuse among battered women and suggest that domestic violence service providers must give attention to the issue of animal abuse when working with this population (Flynn, 2000a).

Stories that women tell about their experiences with animal abuse within their violent relationships are themselves the best introduction to this topic. For instance Andrea (Flynn, 2000c) said that her husband:

“...would sometimes do to Boomer what he wished he could do to us, and you know, like using the dog as a scapegoat, and, because, there was plenty of times that we were in the middle of a huge fight, and Boomer would just get in the way-just get in the way accidentally, He’d swat at him, kick him, or he’d go like this with his boot, you know, stomp it really loud, you know, right next to Boomers face so that Boomer would run, you know. And the dog didn’t even do anything,

so I really felt like he was trying to intimidate the dog as much as he would try and intimidate the family, you know? So in essence, I guess he treated, uh, the dog, just like the family, too. That's how he treated the family" (Flynn, 2000c, p. 110).

A rural woman relates, "He said that if I left, he would only feed and milk his half of the herd" (Quinlisk, 1999, p. 170). Another woman reports, "Because I was late getting home he put my cat in the microwave. The cat died later that night. I left him the next day and never went back" (p. 170).

Statement of the Problem

Based on both quantitative and qualitative findings about the link between animal abuse and interpersonal violence within the lives of battered women, efforts have been made to address this issue in a practical manner. These efforts have ensued because some battered women delay leaving their abusive relationships because of concern for the safety of their pets (Faver & Strand, in press). Intervention techniques, human service agencies, law enforcement, and the legal system are just now beginning to respond to the abuse of animals as a real concern in combating family violence (Faver & Strand, 2003). However, willingness to include animal abuse within the realm of human consideration and as part of intervention efforts is a step in the process of combating woman-battering that has yet to be fully embraced (Ascione, Weber & Wood, 1997). This sluggishness is driven by both a lack of concern for the intrinsic safety and well being of animals themselves (Flynn, 2001; Solot, 1997) and limited empirical exploration of the topic to date.

Purpose of the Study

The purpose of this study is (a) to replicate previous research on battered women's emotional reliance on their pets, on how abuse of pets affects women's concern for them, and on whether concern for pets affects women's decisions to seek shelter and (b) to explore the differences between women who are prompted to leave as opposed to delay leaving abusive relationships because of concern over the safety of their pets.

Significance of the Study

This research is designed to replicate studies about battered women and their companion animals conducted to date and to freshly explore the proportion of battered women who are prompted to leave their abusive partners because of concern for their pets. Anecdotal evidence suggests that some battered women are prompted to leave their abusers because of concern for the safety of companion animals, but this question has yet to be systematically addressed in an empirical manner (First Strike Video, Humane Society of the United States, 1997). The investigator will also conduct a semi-structured interview with a domestic violence worker to explore battered women's experiences with their companion animals. This type of interview is new to the literature base on animal abuse among battered women. Moreover, the findings of this study have practical application to local efforts in considering battered women's pets in domestic violence treatment interventions.

Brief Review of Related Literature

A *web of violence* as opposed to linear one-way abusive relationships, are frequently present in families with violence (DeViney, Dickert & Lockwood, 1983; McKibben, DeVos, & Newberger, 1989; Solot, 1997). For instance, a battered woman

may become abusive toward her child, and the child may then become abusive toward a pet. Moreover, in that same family the primary batterer may also abuse both the family pet and the child. Research on violence in families generally (Miller & Knutson, 1997; Flynn, 1999a) and violence in the lives of battered women specifically (Ascione, 1998; Flynn, 2000b, Faver & Strand, in press) has confirmed that animals do indeed become victims of abuse in these homes. Although battering by women towards men does occur (Kimmel, 2002), as well as battering within same sex couples (Renzetti, 1992), more frequently battering occurs with women as victims of male violence (Rennison, 2003). Similarly, violence toward animals is more likely to be perpetrated by males than females (Flynn, 2001, Ascione, 2001). Research on animal abuse in families indicates that adults remember both observing and perpetrating animal cruelty during childhood, that males are more likely to be the perpetrators of this abuse than females, and that a childhood history of perpetrating animal abuse is related to more positive attitudes toward interpersonal violence in adulthood (Flynn, 1999a; Flynn, 1999b).

Battered women's decision-making, barriers women experience in leaving, and the length of time it takes for battered women to leave abusive relationships are all factors salient in exploring their concern for their pets. For battered women, leaving abusive relationships appears to be more spiral-like than linear in nature (Fagan, 1989). It is estimated that battered women leave an average of five times before permanently separating from the batterer (Okun, 1986). This process of leaving takes an average of eight years (Horton & Johnson, 1993). Aiding battered women in leaving abusive relationships requires viewing the coming and going as progress in a long decision making process. The *Transtheoretical Model of Change* (Prochaska & DiClemnte, 1932)

outlines specific stages people go through in trying to change something in their lives. Brown (1997) applied this model to battered women's decision making and encouraged making interventions based on the stage women were in during the decision-making process. Battered women sometimes lack confidence in service provider's abilities to provide help. Some report negative experiences with domestic violence services as barriers to seeking help (Gondolf, 2002; Horton & Johnson, 1993). For example, a battered woman who is strongly attached to her bird of 25 years may be told that her only option is to relinquish her pet in order to seek safety at the domestic violence shelter. Her choice may be to stay in the abusive home to maintain the relationship with her constant companion. She may also stay to protect the pet. People's strong attachment to their pets and the danger they will endure to maintain relationships with them has been frequently observed (Singer, Hart & Zasloff, 1995; Burke, 2003; Watt & Madigan, 2003). Understanding barriers that women experience in leaving abusive relationships, how these barriers affect women's decision-making, and how women come to decisions to leave batterers is important in exploring how battered women's concern for their pets affects their decision-making.

Since the beginning of investigation into violence against battered women, the importance of companion animals in battered women's lives has been evident (Walker, 1979). The research on this topic to date suggests that: (a) battered women consider their pets an important source of emotional support (Flynn, 2000b; Faver & Strand, in press) (b) battered women worry about the safety of their pets both within abusive relationships (Ascione, 1998; Flynn, 2000b) and after coming into domestic violence shelters (Flynn, 2000c), (c) animals are indeed abused within battering relationships (Ascione, Weber &

Wood; 1997; Ascione, 1998; Weber, 1998; Flynn, 2000b; Flynn, 2000c, Faver & Strand, (in press); Jorgenson & Maloney, 1999; Quinlisk, 1999) and (d) concern for the safety of companion animals affects women's decision making (Ascione, Weber & Wood; 1997; Ascione, 1998; Weber, 1998; Flynn, 2000b; Flynn, 2000c, Faver & Strand, in press).

Highlights of Methodology

The investigators offered battered women living in two domestic violence shelters an opportunity to voluntarily complete the *Pet Abuse Survey* (PAS) used in this non-experimental dissertation research. This survey was comprised of questions from other measurement tools assessing animal abuse in the lives of battered women and included new questions about animal abuse prompting battered women's decisions to leave. Additionally a semi-structured interview was conducted with a domestic violence worker and the qualitative results of this interview were incorporated into study findings.

Research Questions

This study was guided by the following research questions:

1. Is there a relationship between women's emotional reliance on their pets and the likelihood that the batterer threatened or harmed their pets?
2. Is there a relationship between threat or harm to pets and women's worry about the safety of their pets?
3. Among women who are worried about the safety of their pets, does concern for their pets affect their decision to seek shelter?
4. Among the women who worried about the safety of their pets and reported that the concern affected their decision to seek shelter, how did it affect their decisions?

Exploratory Research Questions

This study also addressed the following exploratory research questions:

1. What happens to the companion animals of battered women when the women enter a shelter?
2. Among the women who worry about the safety of their pets, are there differences between women whose decision to seek shelter is not affected by concern for their pets, women who delay seeking shelter because of concern for their pets, and women who are prompted to seek shelter because of concern for their pets? Specifically, are there demographic differences between these groups? Are there differences in type of harm experienced by their pets?
3. How long do women delay seeking shelter because of concern for the safety of their pets?
4. For those women who leave an abusive household because of concern over the safety of their pets, what experiences prompt them to leave?
5. What types of animals do women report having and how does type of animal affect battered women's experiences with seeking shelter?

Operational Definitions

For the purpose of this dissertation, the following operational definitions are used:

Battered women: Women who have sought shelter in a domestic violence shelter for 12 hours or more.

Animal abuse: Threatening an animal, harming an animal, or killing an animal.

More complete definitions of both battered women and animal abuse are found in the literature review.

Pets: Animals that battered women identify as their companion animals.

Limitations of the Study

There are several limitations to this dissertation research. Aspects of sampling procedures, the sample itself, as well as measurement issues compromise the study findings. Limitations of the questionnaire specific to this study and general problems associated with measurement in the literature base are also addressed. The findings of this study are generalizable only to women living in two domestic violence shelters in East Tennessee.

Brief Summary of Findings

Of the 51 battered women surveyed from two domestic violence shelters, 84% reported having pets, 74% reported that their pets had been threatened, 52% reported that their pets had been harmed, and 14% reported that their pets had been killed. Ninety-one percent of women reported that they worried about their companion animals while in the abusive relationships and 60% indicated that this worry affected their decisions to seek shelter. Twenty-six percent of the battered women reported still worrying about their companion animals after coming into the domestic violence shelter. Qualitative findings suggest that battered women without children worry and grieve more deeply about their pets than women with children. Similarly, quantitative results indicated that women

without children were more likely to report that concern for their pets affected their decisions to seek shelter than women with children ($\chi^2(1) = 7.03, p=.01$; $\phi = -.42$).

Chapter 2: Review of Related Literature

Introduction

Battered women's concern for their companion animals has been anecdotally evident since the inception of formal exploration into domestic violence (Walker, 1979). However, it has been only since the 1990s that theoretical and empirical attention has been given to the abuse of pets as a dynamic in abusive relationships. Although there was anecdotal evidence that women considered their pets in planning their escape from abusive relationships (Walker, 1979), empirical evidence suggests that this indeed occurs for up to 25% of battered women (Faver & Strand, in press).

This review of related literature includes both theoretical and empirical exploration into the issue of battered women's experiences with their companion animals. The literature review will address (a) "the web of violence;" (b) barriers women experience in trying to leave abusive relationships; (c) animal abuse as a unique form of woman battering; (d) sociological perspectives on animal abuse; (e) legal perspectives on animal abuse; (f) defining woman abuse and animal abuse; (g) types of animal abuse; (h) concern based on type of animal. The literature review will also address empirical studies on family violence and animal abuse in general, and then animal abuse for battered women in particular. A methodological critique of battered women and animal abuse empirical studies will follow. The chapter will end with the purpose of this dissertation research, research objectives, research questions, and hypotheses.

The Web of Violence

The *web of violence* holds that family violence is not a linear occurrence but rather a complex web with many victims and perpetrators of violence within one household. There is empirical support that indeed this theory of family violence has merit. For instance, McKibben, DeVos, and Newsberger (1989), in study of children who were admitted to a hospital with signs of physical abuse, found that 54.4% of these children's mothers also had evidence of domestic violence injuries reported in their own medical records. DeViny, Dickert, and Lockwood (1983) studied 53 New Jersey families who were on Child Protective Services caseloads for child abuse and neglect. Sixty percent of the families had at least one member of the family that was abusive toward a family animal and 88% of the physically abusive families reported a history of animal abuse.

Even with this empirical support for the presence of multiple victims of violence within one violent home, there has been a tendency among people combating violence to separate the responses to different types of violence: Violence toward animals is handled by humane officers, violence toward children is handled by child protective services in each state, and violence toward women is handled by domestic violence shelters (Solot, 1997). In recognizing the concept of a web of violence, the presence of violence toward animals can be seen as an indicator to professionals that other types of violence are occurring in a household as well (Arkow, 1999, Flynn, 2000a). In domestic violence situations in particular, the web of violence manifests itself by abuse toward the woman, the child, and the companion animal (Adams, 1995).

Barriers to Leaving

There is evidence that abuse toward animals can play a part in women's decision-making about leaving or staying in abusive situations. One might think that battered women would just leave their abusive situations. The fact is that many battered women do leave, only to return multiple times to their batterers. It is estimated that battered women leave an average of five times before permanently separating from the batterer (Okun, 1986). This process of leaving takes an average of eight years (Horton & Johnson, 1993). In studies assessing animal abuse among pet-owning battered women in domestic violence shelters, Flynn (2000b) found that more than one-fourth of the women had been in a shelter at least one time previously, with one woman reporting having been in a shelter three times in a six-month period. Ascione (1998) found that 46% of the women had been in a shelter before with an average number of stays at 1.9 times (range 1-6 times). This evidence suggests that the process of leaving abusive relationships is spiral rather than linear in nature (Fagan, 1989).

Brown (1997) utilized the *Transtheoretical Model* of behavior change, developed by Prochaska and DiClemente (1982), to describe the process by which battered women decide to leave their abusers and are successful in doing so. The model has five stages that people go through in deciding to make any personal change. These five stages are precontemplation, contemplation, preparation, action, and maintenance.

Precontemplation is characterized by denial of the problem and being defensive and resistant to outside pressures for change. For example, the battered woman may say, "He only hit me because he loves me and is jealous of other men." *Contemplation* is characterized by a person who is more open to feedback about a problem, is ambivalent

about the pros and cons of changing a problem, and is beginning to figure out how to change. For battered women this stage may include increasing emotional and social support to leave. A woman is in the *Preparation* stage when she is ready for action and is planning a change in the next month. In this stage, there must have been some previous small step toward change (a behavioral criterion) such as telling someone about the abuse or leaving the abuser for a night. *Action* is characterized by a person having made an overt behavioral change that lasts for a period of time. For instance, a battered woman in the action phase may have resided in a domestic violence shelter for two days. This stage lasts about six months and is the most vulnerable stage for sliding back into the old behavioral patterns such as returning to the abuser. The *Maintenance* stage lasts about five years and is a process of continued change in behavior rather than an absence of change. A battered woman still has to resist temptations to slide back into old behaviors and thoughts that would allow her to get back into the relationship with the previous batterer or develop a relationship with a new batterer (Brown, 1997).

Brown argues that this model of change more accurately mirrors battered women's true experiences of leaving their abusive relationships. Essentially, it utilizes the social work concepts of both *starting where the client is* and considering battered women's experiences through a *strengths* perspective. In this way, failures, such as returning to the abuser, are reframed into positive incremental steps toward change. Programs using this model are designed to provide battered women what they need according to their stage of change. For instance women in the precontemplation stage will not respond to direct confrontation about being battered, but may respond to a pamphlet with a domestic violence help line and a list of qualities that characterize abusive

relationships, including animal abuse. A woman in the change phase may need more concrete help like clothing, housing, and job training offered in domestic violence shelters. Concrete help would also include providing places for women's companion animals to go while they are seeking help from a domestic violence shelter.

Empirical research about the barriers to leaving that battered women report throughout their decision-making process indicate that there are both external and internal factors. The external barriers include lack of information about services, conflicts about work or transportation, poverty and/or lack of financial independence from the batterer, lack of housing options, lack of education, lack of child care, lack of services to provide help for battered women with multiple problems, negative perceptions of what battered women's services could provide, and battered women's negative experiences with such services (Gondolf, 2002; Short, McMahon, Chervin, Shelley, Lezin, Sloop & Dawkins, 2000; Zweig, Schlichter & Burt 2002). Battered women frequently have multiple issues that cannot be addressed by one service agency. Thus programs that address multiple needs such as substance abuse counseling, sexual assault counseling, prostitution, learning disabilities, and incarceration are needed to help women free themselves of abusive relationships (Zweig, Schlichter & Burt 2002).

Internal barriers that women experience in leaving their abusers include both positive and negative factors. Women report that positive reasons for staying with their abusers include a love for their partner, the wedding vows (if they are married to the abuser), a perception that children ought to be raised in a two-parent home, and a hope that their partners will change (Short et al., 2000). Negative internal factors include emotional dependence on the abusive partner, fear of the batterer's retaliation toward

both the woman and her children for leaving, feeling trapped in the relationship, being ashamed of the abuse, and feeling hopeless that there are any options for freedom. (Short et al., 2000; Gondolf, 2002).

The internal experiences of battered women are important in understanding how they come to the decision to leave their abusers. Short et al. (2000), in a qualitative study of battered women who had been out of their abusive relationships for six months, found that these women reported a shift in perception about the abuse that helped them leave the abusive relationship. Factors that gave the women the strength to leave included having the realization that (a) the violence was not going to end, (b) that the violence was most likely going to escalate, and (c) that it was necessary to begin loving themselves. Additionally, the women cited the importance of friends' and relatives' belief in them as a key factor in mustering the courage and mobilizing the resources to leave (Short et al., 2000).

Evidence suggests that a proportion of battered women perceive concern over the safety of their pets as a barrier to leaving abusive relationships (Flynn, 2001). Therefore, it is important to take companion animals into consideration when planning treatment. Anecdotally, evidence also exists that when women attempt to leave their batterers, the batterers sometimes retaliate by harming the women's companion animals (Ascione, 2000). Recognizing animal abuse both as a factor in the decision-making process and as a perceived and real barrier to women's leaving is important for providing aid to pet-owning battered women.

Animal Abuse: A Unique Form of Woman Battering

Carol Adams (1994), a feminist thinker and writer, outlines how and why animals are abused in families where woman battering also occurs. A typical story cited by Adams as an example of how this animal abuse occurs is:

[Michael] Lowe casually pumped a shot into the dog. The sheepdog ran under the family's truck, cowering in pain as Lowe went back into the house and returned with a .30-30 Winchester rifle. He called to the animal and made her sit in front of him as he fired five more shots, killing the family pet [in front of the family]. Three months later he did the same to his wife. Then he killed himself (Russell, 1990 as cited in Adams, 1994).

Another anecdote taken from the qualitative responses of women in a pilot study conducted by Faver and Strand, (in press) demonstrates the *why* of pet abuse by woman batterers:

We had a cocktil [respondent's spelling], and it got really attached to me. At first it didn't seem to like me, but after a while it started following me everywhere. I think it made my husband jealous. We moved to a new apartment and it started chirping all the time, and he kept saying he was going to kill it. One night my husband had been drinking and the bird wouldn't be quiet. I had a vet appointment the next day to see if he was sick, but my husband threw it against the wall. It didn't die at first. It was later on. He wouldn't let me take him to the Doc. I just had to stay there and watch him suffer." (Faver & Strand, 2001, unpublished).

Adams (1995) argues that batterers' abuse toward animals must be considered a unique form of battering that deserves attention not only because it harms women psychologically, but also because it harms animals. "When a batterer harms or executes an animal, he not only affects the woman, he also affects the animal. The results of such double control and such power over two living beings necessitates closer attention" (Adams, 1995, p. 59). When a batterer abuses a woman's pet, he is harming not only the last meaningful relationship the woman might have, but also the sense of self that the woman gains through that relationship. The woman's sense of helplessness is reinforced as she finds herself unable to protect her pet, and her right to feel sad is squelched because she is not allowed to openly grieve the loss of her companion. Sometimes batterers force women to participate in the abuse of a companion animal. For instance,

He would tie me up and force me to have intercourse with our family dog. The dog was a big German shepherd, and the first time he told me to do this, I thought I'd vomit. He would get on top of me and hump the dog, while the dog had its penis inside me. I used to cry sometimes. I didn't want to do it. I mean, the dog seemed like another child of mine. It was such a part of our family. But every time I would protest, I would get beaten and tied up and then he would force me to do it anyhow " (Walker, 1979, p. 120).

In these instances both the woman and the animal are sexually violated by the batterer who objectifies them as instruments for his sexual entertainment. Women may consider these sexual acts morally reprehensible and by being forced to engage in these acts their inability to protect themselves or those they love is reinforced. This type of

incident promotes battered women's feelings of guilt, helplessness, and shame (Adams, 1995).

Adams (1995) argues that there are nine different control strategies related to pet abuse that batterers use to control their victims. They all fit into one category called *control strategies*, yet many of the strategies overlap and serve different purposes. Table 1 shows these strategies divided into three distinct categories: Enhancement of batterer dominance; Promotion of victim helplessness; and Maintenance of exclusivity in the battering relationship. The first category outlines ways that batterers make themselves feel powerful through abuse of animals; the second outlines ways that batterers ensure and promote battered women's sense of helplessness, and the third outlines ways that batterers secure exclusivity in the battering relationship through abuse of pets. These categories certainly have areas of overlap. For instance, when batterers demonstrate their power by abusing animals, they are also teaching submission to battered women. Yet, understanding the underlying intention of batterers' decisions to abuse a family pet is useful in categorizing animal abuse as a unique form of woman battering. The underlying intentions of batterers also have implications for sociological and feminist explanations of animal abuse.

Sociological Perspectives on Animal Abuse

A sociological analysis of animal abuse takes into consideration the social and cultural norms that propagate and correlate with abuse towards animals. This type of analysis affords a more complete context for explaining why batterers may be drawn to

Table 1

Carol Adams' Batterer Control Strategies^a

<u>Control Strategy</u>	<u>Explanation of Strategy</u>
<i>Enhancement of batterer's dominance</i>	
Demonstrate Power	The batterer demonstrates his power over the woman by showing that no one in the family (including pet) is safe from his violence.
Force Participation in the Abuse	The batterer forces the woman to participate in the abuse of the pet objectifying both woman and animal as instruments for his gratification.
Confirm His Power	The act of abusing an animal provides the batterer with a sense of power and satisfaction.
Perpetuate a Context of Terror	The batterer uses animal abuse as a way to control the woman without using violence towards her.
<i>Promotion of victim helplessness</i>	
Teach Submission	The batterer uses animal abuse to incite fear in the woman and gratitude for being allowed to live. For example a batterer made his wife "... watch him dig her grave, kill the family cat, and decapitate a pet horse." ^b
Prevent Separation (Table continues)	The batterer does something that appears unintentional to put the pet at risk. The batterer may also explicitly state or implicitly threaten that the pet will be in danger if she leaves. ^c

Table 1 (cont.)

Carol Adams' Batterer Control Strategies^a

<u>Control Strategy</u>	<u>Explanation of Strategy</u>
Punishment for Leaving	The batterer harms the animal when the woman leaves and finds a way for her to know that the pet has been harmed.
<i>Maintenance of exclusivity in the battering relationship</i>	
Isolate From Network of Support	The pet-woman relationship can become the final meaningful relationship through which the woman gains her sense of self. When the pet is killed or harmed, the woman's sense of self is destroyed, promoting guilt and fear.
Express Rage at Self-Determined Action	Any form of self-determined action on the part of the woman infuriates him and the batterer expresses this rage through violence toward the pet.

^a Adams, C.J. (1995). "Woman-Battering and Harm to Animals". In Animals and Women: Feminist Theoretical Explorations. (pp. 55-84). Durham, NC: Duke University Press; ^b Jones, 1980, p. 280 as cited in Adams, 1995, p. 71; ^c Adams does not include overt forms of separation violence, but anecdotal evidence suggests that it does exist, so it is included by this author.

abuse women's pets. Agnew (1998) includes both sociological and psychological factors to explain animal abuse. In this theory, demographic and sociocultural factors, individual traits such as empathy and coping with stress, type of animal, and cognitive methods of justifying animal abuse all interact in creating events of abuse toward non-human animals (see Figure 1). For instance, the ability to separate oneself from the sensory atrocities of factory farming is one means of cognitively justifying eating meat; it is much easier to eat chicken when one does not see the way that chickens are housed and treated in factory farms. Likewise, the extent to which a child's exploratory abusive behaviors of an animal

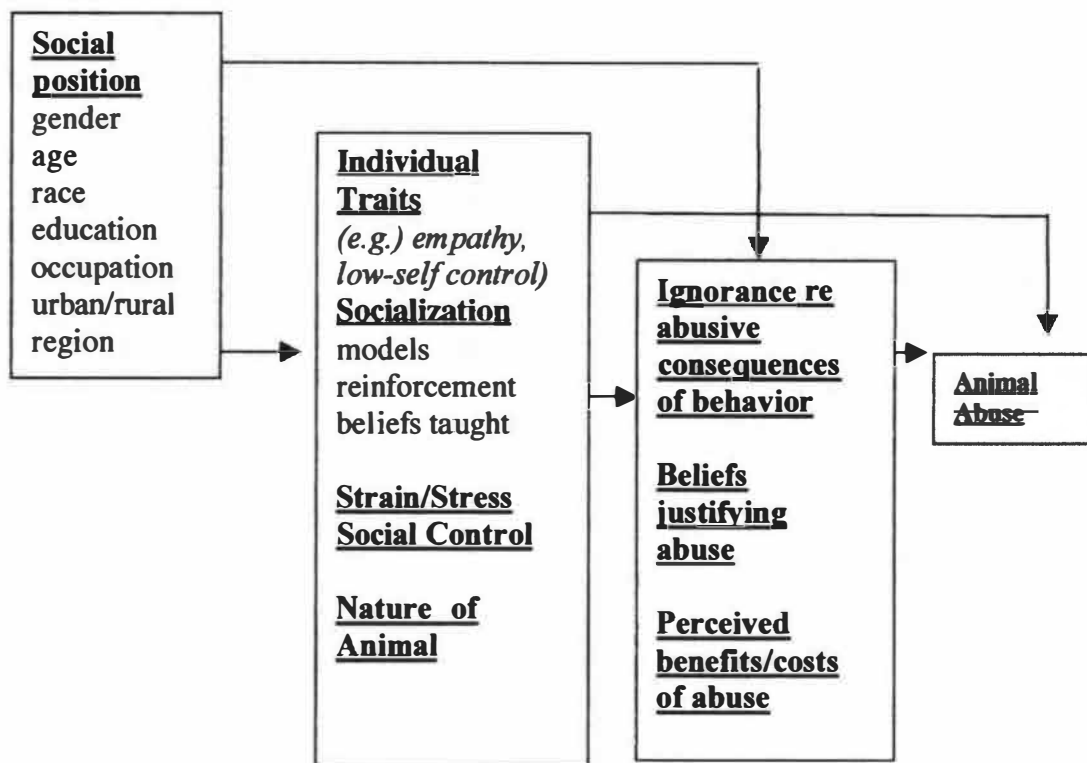


Figure 1. A social psychological model of animal abuse.

From "The causes of animal abuse: A social-psychological analysis" by R. Agnew, 1998, *Theoretical Criminology*, 2(2), p. 182.

are met with minimization or even praise from the parents is the extent to which that child, as an adult, will abusively take boredom or aggression out on an animal at whim. Furthermore, a religious belief that separates animals and people on the premise of sentience (i.e. animals are non-sentient creatures and human beings are sentient) justifies extending moral consideration to people's right to live but not to animal's right to live.

Flynn (2001) examined empirical data to identify the sociological factors implicated in animal cruelty. These factors included gender, age, socioeconomic status, childhood socialization, peer group influence, animals as family members, societal norms, religious beliefs, social power, inequality, and patriarchy to explain how and when animal abuse is most likely to occur. Flynn's findings suggest that animal abuse is

much more likely in males than females, with the average offender being male and around age 30. Adults who are animal abusers are more likely to commit abuse alone, whereas adolescents are more likely to commit animal abuse in groups. Adults frequently commit animal abuse for the purpose of protecting the family from an aggressive animal or to control members of the family. Adolescents are more likely to commit animal abuse for the thrill of expressing violence. For instance, an adult may kill a dog that appears threatening and aggressive while an adolescent might kill a cat with a group of his friends for fun. Flynn reports that there are a disproportionate number of animal abusers in the lower socio-economic classes and in households where the mothers work in blue-collar jobs. Children socialized in families where the father uses corporal punishment are also more likely to report their own perpetration of animal cruelty.

Flynn (2001) includes societal norms in his analysis by suggesting that, "America's historical legacy of honoring and protecting both family privacy and property rights, the rights of animals--as long as animals legally are considered property--always will be outweighed by the rights of human property owners--who, all too often, are also their abusers" (Flynn, 2001, p. 78). Because most families consider their pets to be family members and because pets are arguably the least powerful members of the family, they are often subjected to abuse by multiple members of a violent family (Loar, 1999).

Flynn (2001) also says that public attitudes about animals and violence toward animals affect the prevalence of animal abuse. The higher the level of socially acceptable violence toward animals, the higher the level of non-acceptable violence toward animals, as explained by a *cultural spillover theory* (Straus, 1991; 1994). As Agnew (1998) suggests, Flynn (2001) also agrees that the type of animal and biases toward that animal

also affect animal abuse. Cats, for instance, are more likely to be abused than dogs. Flynn also argues, like Agnew, that the Judeo-Christian tradition promotes the objectification and the abuse of animals, by placing *men* in dominion over animals.

Flynn (2001) suggests a feminist perspective in exploring the causes of animal abuse, as well, arguing that the inequality of social power between animals and humans is a factor in animal abuse. "Animals are the only victims of systematic discrimination and exploitation who truly cannot speak on their own behalf" (p. 79).

Legal Perspective on Animal Abuse

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

Mahatma Gandhi

Much of what is considered morally appropriate and morally reprehensible on a social level is determined by how the legal system responds to the issue. For example, over time, the legal system changed its view of family violence and now considers it within the realm of law rather than a private family matter about which the state should remain ignorant (Pleck, 1989). Because of the similarity in the dependent nature of animals and children, it was on the premise of an anti-cruelty statute protecting animals that the first child was removed from an abusive home. Little Mary Ellen was removed in 1873 because Henry Bergh, founder of the Society for the Prevention of Cruelty to Animals (SPCA), argued that she was a *little animal* and deserved the same protection as beasts of burden and companion animals offered by the anti-animal cruelty laws of the late 1800s (Wheeler, 1874). Thus, at one time, our legal system recognized the

similarities between animals and children in their dependent nature and did not differentiate the need to intervene in cases of cruelty according to species.

Now our legal system attends more readily to cruelty directed toward humans and does not make adequate efforts to protect animals against cruelty. As of 1998 there were only 21 states that considered animal abuse to be a more serious crime warranting a felony level penalty. As of 2000, 33 states now have felony level statutes for animal abuse (American Humane Association, 2000).

Lacroix (1999) argues that by taking animal abuse seriously in the legal system, we are not only extending moral consideration to the life of animals themselves, but we are also engaging in a more holistic way of combating family violence--responding to the web of violence. It is customary for the legal system to respond to the differences between child abuse, woman battering, and animal abuse with different laws and in different courts, instead of responding to the similarities that exist between all these forms of violence. Lacroix emphasizes that “anti-cruelty laws foster the moral principal that non-human animals should be treated humanely, provided adequate food and shelter, and not subjected to needless pain” (Lacroix, 1999, p. 62) and that enforcing these laws also reinforces and promotes societal moral codes that are intolerant of violence toward all beings.

Defining both woman abuse and animal abuse, however, is complex. Societal norms are directly related to how laws are written and enforced. There has been conflict and change in defining both women abuse and animal abuse. An exploration of these issues follows.

Defining Woman Abuse and Animal Abuse

There has been some conflict among researchers about how woman abuse should be defined. The definition of woman abuse reflects the theoretical understanding of its root cause. Healy & Smith (1998) in a *National Institute of Justice Research in Action* report on battering programs outline three different theoretical models used in intervention strategies for domestic violence. They are: the feminist approach, the family systems approach, and the psychotherapeutic approach. The feminist model was most widely and exclusively used early in the development of programs and research on domestic violence. This model holds that woman abuse is due to the patriarchal organization of our culture, which supports the subordination of the feminine by masculine domination. The family systems approach sees the problem of woman battering as rooted in maladaptive interpersonal family interactions and would support a family therapy or couples counseling intervention approach. The psychotherapeutic model sees the problem of woman battering as a pathological functioning within the individual and would intervene through individual counseling. Because ideally research should emerge from practice, the definitions of woman battering used in these intervention approaches would also be reflected in what researchers measure as outcomes for a positive resolution to woman battering.

Defining woman abuse as just a physical act leaves out all of the psychological trauma and predisposing factors that lead to woman battering. However, as it becomes increasingly apparent that multiple factors contributing to women getting into and staying in abusive relationships are complex and broad, reflecting feminist, family system, and psychological issues, researchers and practitioners call for the use of interdisciplinary

teams that incorporate all of these root causes of woman abuse into intervention strategies (Zweig, Schlichter & Burt, 2002; DeKeseredy & Schwartz, 2001).

The following definition of woman abuse reflects this broad theoretical understanding of what causes and constitutes woman abuse:

Woman abuse is the misuse of power by a husband, intimate partner (whether male or female), ex-husband, or ex-partner against a woman, resulting in a loss of dignity, control and safety, as well as a feeling of powerlessness and entrapment experienced by the woman who is the direct victim of on-going or repeated physical, psychological, economic, sexual, verbal, and/or spiritual abuse. Woman abuse also includes persistent threats or forcing women to witness violence against their children, other relatives, friends, pets, and/or cherished possessions by their husbands, partners, ex-husbands, or ex-partners (DeKeseredy & MacLeod, 1997, p. 5).

DeKeseredy and MacLeod's definition is the conceptual definition used for this dissertation. The operational definition for woman abuse in this dissertation is women who have sought safety in a domestic violence shelter for 12 hours or more.

Defining animal abuse is also a complex issue. The difficulty researchers have in measuring and understanding animal abuse can be attributed to the variety of ways that people define the phenomenon (Arluke & Lockwood, 1997). What may be animal abuse to one person may be just a cultural norm to another. For instance, some people would consider hunting to be abusive to animals and other people would consider it an important, culturally accepted, recreational activity, and still others would view it as an activity for sustenance.

This definition of animal abuse, provided by a sociologist, is a more liberal view of violence toward animals: "Any act that contributes to the pain or death of an animal or that otherwise threatens the welfare of an animal" (Agnew, 1998, p. 179). Defining animal abuse in this way would preclude eating meat, hunting, and factory farming. Factory farming is a mass agricultural method used to acquire the most product in the least amount of space and with the least amount of cost. This inevitably is at the expense of the quality of life for farm animals (Singer, 1990), and would be considered animal abuse according to this definition.

The next definition, provided by a developmental psychologist, reflects a more conservative approach to defining animal abuse: "Socially unacceptable behavior that intentionally causes unnecessary pain, suffering, or distress to and/or death of an animal" (Ascione, 1993, p. 28). This would allow hunting and humane methods of using animals for food, but would not allow setting a dog on fire or skinning a kitten in front of children. The latter definition is used in operationalizing animal abuse in the empirical studies reviewed in this paper. It is also the definition used in this dissertation.

Types of Animal Abuse

Understanding the indicators and types of animal abuse that have been observed by veterinarians and domestic violence workers is salient in understanding battered women's concerns for vulnerable pets. Munro (1999), in describing the signs and symptoms of the battered pet, identify diagnostic features and clinical signs of Non-Accidental-Injury (NAI) to animals. The diagnostic features include: (a) the account of the incident does not match the injury observed by the veterinarian; (b) the owner refuses to comment on how the injury happened; (c) the owner shows a lack of concern for the

animal's injuries; and (d) the owner delays in seeking veterinary treatment for the pet. The clinical signs of NAI to animals include: (a) multiple fractures to multiple bones all at different stages of healing; (b) bruising; (c) eye injuries; (d) Munchausen's syndrome by proxy; (e) drowning; (f) asphyxiation; and (g) administration of poison or drugs (Munro, 1999).

Analysis of data collected at intake about animal abuse from *The Center for Prevention of Domestic Violence* in Colorado Springs, Colorado (Jorgenson, & Maloney, 1999) revealed direct and indirect forms of animal abuse that reflect these categories of NAI. The direct forms include:

...kicking the dog or cat, throwing the dog or cat across the room or into objects, shooting the animal with a pellet gun, taking the animal into a field and shooting it with the human victim present, breaking the pet's legs or neck, hanging the family pet, cutting the cat's ears with scissors and burning its tail, and putting the dog in the corner and tying weights to it (Jorgenson, & Maloney, 1999, p. 144).

Indirect forms of animal abuse include:

Abandonment of the family pet, neglecting to feed and water farm animals, threatening to take the family pet away if the victim does not comply, taking pets to be euthanized to retaliate against the human victim, threatening to kill and cook the pet rabbit, mysterious disappearances of pets, intentionally over feeding fish..." (Jorgenson, & Maloney, 1999, p. 145).

These forms of animal abuse are evident in the stories battered women tell about the abuse of their companion animals and explicitly identifying them is important in

educating domestic violence workers, veterinarians, and society as a whole about what actually constitutes animal abuse.

Type of Animal of Concern

The type of animals owned by battered women must also be taken into consideration when exploring women's concerns for their safety. This is not only for the purpose of understanding better the abuse itself, but also because the type of animal a battered woman owns may affect her ability to leave an abusive situation. Leaving an abusive relationship and finding a home for a pet goldfish is different from trying to find a home for two horses or a herd of cattle. Of the 58% of pet-owning households in this country, 36.1% own dogs, 31.6% own cats, 4.6% own birds, 1.7% own horses, and .5% own livestock. It is estimated that multiple pets within one household are becoming more common. For instance, the average number of horses per horse-owning household is 2.9 and the average number of cats is 2.1 (AVMA, 2002). This suggests that battered women may own a wide variety of pet types and that each woman may own more than one pet.

Although logically the type of pet is certainly an issue in understanding battered women's concerns for their pets, very little has been done to explore this issue empirically. Most of what has been completed are simple frequencies of the types of pets owned by battered women. For instance, Ascione (1998) found that 68% of in-shelter battered women owned more than one pet and that the pets were mostly cats and dogs, although horses, fish, birds, chickens, rabbits, and a goat were also mentioned as pets in this study. Faver & Strand (in press) found that women owned dogs, cats, birds, rabbits, horses, iguanas, lizards, fish, and snails as pets. Flynn (2000b) did not ask battered women about the kinds of pets they owned in a survey of battered women in a domestic

violence shelter. In a second qualitative study using a sample (N=10) from the same domestic violence shelter, Flynn (2000c) found that all 10 women owned cats or dogs. Quinlisk (1999) reports that women owned dogs, cats, birds, turtles, dairy cows, pigs, beef cattle, sheep, goats, turkeys, and rabbits. No empirical literature explores how type of pet affects women's concern over their companion animals in seeking shelter.

Some theoretical attention has been given to this issue. Lembke (1999) discussed the special concerns of battered women in rural environments about animal abuse:

The culture of farming communities, among families who have known each other for three or four generations and intermarried for good measure, is that one goes along to get along.... There is a certain tolerance for eccentricity, a deep respect for personal privacy, a high sense of autonomy, and a weighty reluctance to interfere in the business of another, especially in social matters (Lembke, 1999, p. 235).

Therefore, when neighbors see that a herd is starving or a local veterinarian finds unexplained injuries on the bodies of horses, social norms and fear of retribution result in the abuse going unreported. There are fewer domestic violence shelters for women and children and fewer animal shelters for animals in rural environments, making women's ability to leave abusive situations and abused animals to receive shelter more difficult. In an empirical study, Faver and Strand (in press) argue that rural battered women may have stronger attachments to their companion animals because of social isolation. Their research found that more rural than urban women report that their partners have threatened (58.8% vs. 41.7%) or actually harmed (58.8% vs. 37.5%) their pets. In

addition, more rural than urban women (41.2% vs. 16.7%) report that concern for their pets has affected their decision about leaving or staying in the home with their batterers.

Empirical research on violence in families generally and violence in the lives of battered women specifically has confirmed that animals do become victims of abuse in these homes. General findings about violence towards animals in families indicates that adults do remember observing and perpetrating animal abuse during childhood, that males are more likely to be the perpetrators of this abuse than females, and that a childhood history of perpetrating animal abuse is related to more positive attitudes toward interpersonal violence in adulthood. Empirical findings specific to animal abuse in the lives of battered women confirm that: (a) battered women consider their pets an important source of emotional support, (b) battered women worry about the safety of their pets both within the abusive relationships and after coming into domestic violence shelters, (c) animals are indeed abused within battering relationships, and (d) concern for the safety of companion animals affects women's decision making. A detailed review of empirical studies on family violence and animal abuse follows as well as a critique of the studies on battered women and animal abuse.

Family Violence and Animal Abuse: Empirical Findings

Raupp, Barlow and Oliver (1997) conducted a study using picture sorting and interviewing to see whether college students regarded corporal punishment of animals to be an indicator of family violence. Using a purposive self-selected sample of 63 college students, the researchers found that gender affected family violence ratings with females being more likely than males to rate pictures of threatened animals and threatened

children as indicators of family violence. Sixty-one percent (38 of 63) of the participants stated that the pictures reminded them of events in their own lives, and 16% (10 of 63) of respondents stated that they had witnessed companion animals being abused in their own childhood homes. Twenty-nine percent (18 of 63) of the respondents reported that they had experienced or heard of an adult using a companion animal to discipline a *child's* misbehavior (e.g. a pet was given away to discipline a child). Forty-two percent (26 of 63) of the respondents reported that they also knew of times when a *companion animal's behavior* was used as a reason for disciplining a child (e.g. a child was punished for a pet soiling the floor). Although the findings of this study do support that women are more sensitive to violence against both children and animals, and that violence existed in the home lives of participants, the sample suffered from self-selection bias, should be cautiously interpreted, and cannot be generalized to the larger college age population.

In a study assessing animal abuse in childhood and later attitudes toward interpersonal violence, Flynn (1999) found that 17.6% (47 of 267) of undergraduates had perpetrated at least one incident of animal abuse during childhood and that males were four times more likely to have abused animals than females. Undergraduates who reported a history of abuse toward animals during childhood had significantly more positive attitudes about corporal punishment for children ($M = 2.18$) than those who had not committed animal abuse during childhood ($M = 1.81$, $p < .05$). This relationship maintained its significance while controlling for the variables of race, belief in biblical literalism, and gender. Additionally, 7% (19 of 267) of the respondents who agreed that it was all right for a husband to slap his wife also were three times more likely to have committed animal abuse as children. Males who experienced corporal punishment by

their fathers as children were also more likely to have engaged in animal abuse (Flynn, 1999a; Flynn, 1999b). The self-selected nature of the sample begs the question of how non-participants would have responded to the survey questions. However, these findings support the existence of a link between violence toward animals and attitudes of violence toward people.

Animal Abuse and Battered Women: Empirical Findings

The following several studies have specifically assessed the nature and effect of abuse toward animals in the lives of battered women. In a study of 38 women living in a domestic violence shelter in Utah, Ascione (1998) found that 74% of the women had owned a pet during the last 12 months. Seventy-one percent of the women reported that the spouse had threatened to harm the pet and 57% reported that their batterers had actually harmed the pet. Thirty-two percent of the women also reported that their children had committed violence toward animals. More disturbing is the fact that 18% of the women reported that they had delayed seeking shelter because of concern for the welfare of the companion animal. This is the first peer-reviewed study and subsequent publication about battered women and their pets. The study suffered from a small and unrepresentative sample limited to a specific geographical area, making generalizations beyond that area inappropriate.

Faver & Strand (in press) surveyed a voluntary sample of 61 battered women from domestic violence shelters and community support groups in both rural and urban settings. In this sample 82% of the women had owned a pet within the last 12 months. Forty-eight percent of the pet-owning women reported that their partners had threatened

their pets and 46.3% reported that their batterers had actually harmed their pets. Approximately 28% of the women reported that concern for the safety of their pets affected their decision about seeking shelter. Although the differences between rural and urban women were not statistically significant (probably due to small sample size) there were some trends worth reporting. Urban women had more children than rural women and were more likely to have completed high school. Rural women were more likely to be married than urban women were. More rural women reported that their pets had been both threatened (58.8% vs. 41.7%) and actually harmed (58.8 % vs. 37.5 %) than urban women. Additionally, more rural than urban women reported that concern for their pets affected their decision to seek shelter (41.2% vs. 16.7%). Logistic regression analyses indicated that women (both rural and urban) who reported that their pets were threatened were seven times more likely (Odds Ratio 7.1, CI 1.42- 42.659, $p=.02$) to report that concern for their pets affected their decision to seek shelter. Likewise, women who reported actual harm of their pets were eight times more likely (Odds Ratio 7.9, CI 1.63- 49.76) to report that concern for their pets affected their decision to seek shelter. Again this study suffers from self-selection bias and a limited geographical area, making generalization to the larger battered women's population inappropriate.

Flynn (2000b), in a study of 107 women seeking help in a domestic violence shelter in South Carolina, found that 40.2% (43 of 107) of the women currently owned pets. Pet-owning women were more likely to be white, employed, and married to husbands who were also employed. Approximately 47% (20 of 43) of pet-owning women stated that their partners threatened or actually harmed their companion animals. Forty-five percent (9 of 20) of pet-owning women reported that their pets were threatened, 55%

(11 of 20) stated that their companion animals had been both threatened and harmed. In this study, Flynn also reports that the bond to the companion animal was stronger for women without children than women with children and that women with stronger bonds were also more likely to report abuse toward the animal. This may be an indicator that the stronger the bond the more likely an abuser would be to use threats of harm toward the animal to control and coerce the woman (Adams, 1995). Forty-five percent (9 of 20) of pet-owning women that reported pet abuse had children and were also more likely to report abuse of their children. This finding provides more empirical support for the web of family violence.

Flynn also found that 40% (17 of 43) of women with companion animals still worried about their pets while in the shelter and that women who reported animal abuse were four times more likely to express worry over their companion animals. Fifty-two percent of the pets (23 of 43) were still with abusive partners, 19% (8 of 43) of the pets were with family members, .06% (3 of 43) were with friends of battered women, 12% (5 of 43) had been relinquished, .04% (2 of 43) had died, and .02% (1 of 43) had been abandoned. Like Ascione (1998), Flynn also found that 19% (8 of 43) of the women delayed seeking shelter because of concern for their companion animal and that all eight of these women's animals had been abused. Sixty-three percent (5 of 8) of these women had delayed seeking shelter for two months.

Flynn (2000c) also conducted a qualitative study of 10 women from the same domestic violence shelter in South Carolina. The women were chosen by the director of the domestic violence shelter as appropriate for the study (i.e. the women had companion animals, wanted to participate, and participation was not going to be detrimental to their

treatment). Through one-hour semi-structured interviews with each of the 10 pet-owning women, Flynn found that all the women considered their pets to be family members and that each of the women still worried about their pets after coming to the shelter. Eight of the women reported that their pets had been abused. The types of animal abuse reported by these women were psychological abuse, physical abuse, and sexual abuse. From the women's comments Flynn identified that animals were used to *triangulate* men's attempts to gain power and control in the relationship. For example, "Laura recounted the time her husband, 'picked up the cat and slung it across the room' because, 'he knew it would hurt me to see my cat fall,'" (Flynn, 2000c, p. 109). Additionally, Flynn found evidence that men would use animals as scapegoats for their rage, seeing the animals as extensions of the women. One woman named Andrea stated, "So, yeah, I mean and it was like an extension of me, you know? And you know, maybe he abused the dog cause he couldn't, didn't want to go to jail for abusing me, I guess" (Flynn, 2000c, p. 111).

Quinlisk (1999) reviewed findings that came out of a community initiative (*The LaCrosse County Community Coalition Against Violence*) to incorporate assessment of animal abuse as part of the violence-detecting procedures in domestic violence situations. After a pilot study of a sample of 17 women in a domestic violence shelter the questionnaire was distributed to shelters statewide ending with a sample of 72 women. Fourteen percent (10 of 72) of the women had no pets; 18% (13 of 72) reported having pets but no abuse; and 68% (49 of 72) reported having pets and having experienced incidents of pet abuse. Eighty-eight percent (43 of 49) of the pet-owning women reported that the animal abuse had occurred in front of them and 76% (37 of 49) of the women reported that the animal abuse had occurred in front of their children. Fifty-four percent

(20- total N not reported) of these pet-owning women with animal abuse and with children also reported that their children had imitated the violence by perpetrating animal abuse toward family companion animals. Quinlisk sent the same survey out again one year later and found in a sample of 32 women that 9%(3 of 32) did not have any pets, 19% (6 of 32) had pets but did not report any violence toward them, and 72% (23 of 32) reported some violence toward pets. Sixty-five percent (15 of 23) of the women witnessed the animal abuse, 43% (10 of 23) of the children witnessed the animal abuse, and 48% (N not reported) of the children copied the abuse toward animals. The study is limited by non-experimental program evaluation design, no reported response rate, and no information about how non-respondents differed from survey respondents. Quinlisk (1999) also conducted a survey assessing animal abuse from men who had perpetrated domestic violence (N not reported). Eighty percent of these men were court ordered into treatment and 100% denied perpetrating animal abuse even when they admitted to spousal and child abuse. Fifteen percent of the men admitted to some animal cruelty as children, one-third admitted to coercing the family by threatening to give away companion animals, and 30% reported that they had been similarly threatened as children. One man did report loving his dogs very much, emphasizing that if his wife would just obey him as the dogs did, there would be no problem. Fifty percent of these men reported that they had guns in the home and engaged in hunting as sport.

In data collected through the *Center for Prevention of Domestic Violence* in Colorado Springs, Colorado, Jorgenson and Maloney (1999) analyzed reports of animal abuse in the three components of their domestic violence program. In the Advocacy Program, which addressed domestic violence issues for women still living in the

community, out of 7,264 intakes over a three-year period, 12% (872 of 7,264) reported that their animals had been threatened, abused, or killed by their batterers. In the Safehouse Program, a shelter for women seeking safety from abusive relationships, out of 810 intakes over a three-year period, 15.5 % (126 of 810) reported that their animals had been abused or killed by their batterers. In MOVE, the program component to treat the abusers themselves, out of 1,354 intakes only .9% (121 of 1,354) of the abusers acknowledged any form of animal abuse. This may be an indicator of both a cultural understanding of what constitutes animal abuse and a denial among the abusers themselves of committing animal abuse (Agnew, 1998; DiVeney, Dickert, & Lockwood, 1983; Faver & Strand, in press; Raupp, Barlow and Oliver, 1997). No response rate was recorded in this study.

A study conducted in Utah compared 101 women in five domestic violence shelters with a nonrandom sample of 60 women in the area who had no history of domestic violence (Weber, 1998). Seventy-two percent (73 of 101) of the women in the shelters reported that their partners either had threatened to harm or had actually harmed their pets, and 54% (55 of 101) reported that the pets had actually been hurt or killed. In contrast, 15% (9 of 60) of the non-shelter comparison group reported partners' threats or actual harm to pets, and 5% (3 of 60) reported that the pets had actually been hurt or killed. Approximately 23% (23 of 101) of the women in the shelter said that they did not seek shelter sooner because of concern for their pets. In addition, while only 3% (2 of 60) of the non-shelter women reported that their children had witnessed pet abuse, 62% (63 of 101) of the mothers in the shelters reported that their children had observed abuse of their pets. Finally, reports of the women in the shelters indicated that men who both

threatened and committed animal abuse were more physically aggressive toward women than those men who only threatened abuse or who did not abuse animals.

Using a feminist participatory research model, Renzetti (1992) obtained a sample of 100 battered lesbians through advertising her study to women's organizations, mainstream newspapers, gay and lesbian organizations, and gay and lesbian national and local newspapers across the United States and Canada. Of the 200 requests for survey packets, 100 useable surveys were returned (50% response rate). Thirty-five percent of the battered women in this study reported living with their own or their partner's children, and 30% of these children were also abused by the batterer. Renzetti found that 38% of battered lesbians with pets (does not report N for pet-owning women) reported that the batterer had also abused their pets. These findings provide empirical support for the web of violence extending to the lesbian community.

Summary: Critique of Battered Women and Animal Abuse Studies

Sample

The sample sizes used in the studies assessing animal abuse in the lives of battered women are small and homogeneous with regard to race, geographical location, and sexual orientation. This caused several limitations in the generalizability of the findings and in the findings themselves. Sample sizes ranged from 38 (Ascione 1998) to 7,264 (Jorgenson & Maloney, 1999). This distribution is skewed due to the outlier of 7,264 found in the program evaluation conducted by Jorgenson & Maloney (1999). When considering only peer-reviewed studies and one dissertation of battered women and their pets, as opposed to data gathered from community initiatives to combat violence

(Quinlisk, 1999; Jorgenson & Maloney, 1999), the mean sample size was 87. Having a small sample size makes detection of small effects on variables of interest (animal ownership, animal abuse, and concern for pet in decision making) difficult. This problem may have been responsible for the attenuated effects between rural and urban women on several variables in Faver and Strand (in press).

All of the samples used in this literature base are biased by self-selection. Since all the samples are non-probability samples and there has been no analysis of non-respondents, it is unknown how non-respondents would have differed from respondents on variables of interest as well as confounding effects. Two of the studies had a 100% response rate from their shelter populations (Ascione, 1998, Flynn, 2000b); however, Faver and Strand (in press), Quinlisk (1999), and Jorgenson and Maloney (1999) used voluntary samples without reporting response rates. Perhaps women who chose to complete the surveys were *pet lovers* and may therefore have been more attached to their pets, making their concern for their pets greater, thereby inflating survey results. It could be that women who did not choose to complete the survey had animals and had experienced animal abuse, but were not affected by it in their decision making because they were not highly attached pet owners. Another explanation could be that pet-owning battered women were too traumatized by animal abuse to voluntarily participate.

Self-selection may also account for biases due to sample homogeneity. Most of the women in all the samples were White (Flynn 2000b, 2000c; Faver & Strand, in press) or they do not report racial demographics (Ascione, 1998, Quinlisk, 1999; Jorgenson & Maloney, 1999). Only Flynn (2000b) examined the correlation between pet ownership and race, finding that Whites are significantly more likely to own pets than African

Americans, Hispanics, or Asians. This finding is partially supported by Brown (2002), who reported that Whites have more pets, more types of pets, and are more attached to their pets than African Americans. Samples in this literature base are also biased by sexual orientation. Although there is evidence that battering occurs in same sex relationships, there is only one study (Renzetti, 1992) extending the study of pet abuse in domestic violence to the lesbian population, and no studies assessing it in the gay population.

Design

All except one study design in this literature base are non-experimental survey designs (Flynn, 2000b, 2000c; Ascione, 1998; Faver & Strand, [in press]). Two of the studies are results from community initiatives to combat violence (Quinlisk, 1999; Jorgenson & Maloney, 1999). Two exceptions are the quasi-experimental studies by Ascione, Weber, and Wood (1997) and Weber (1998), which used a sample of non-battered community women drawn from newspaper ads and flyers as a comparison group for their samples of battered women living in domestic violence shelters. Another strength of these studies is that the researchers also used more than one respondent per family by asking children about animal abuse in the home as well, whereas the majority of other studies use the battered women as the sole respondents (Flynn, 2000b,c; Faver & Strand, in press).

Measurement

The way in which questions about animal abuse in the lives of battered women have been asked in this literature base has changed over time. For instance, in the program evaluation conducted by Jorgenson and Maloney (1999), women were asked initially if animal abuse had ever occurred while in their relationships, but women frequently answered “no,” only to report later that indeed their partners had hit and kicked their pets. Thus the question was changed to, “Has an animal you care about ever been hurt?” which elicited more reports of abuse from women. Additionally, during the data collection period of this evaluation, the researchers added a question about the batterers’ threats to animals because they recognized through anecdotal stories of battered women that threats to animals was a way in which batterers gain power and control. (Jorgenson & Maloney, 1999). Some studies combine hurting and killing pets into one category (Ascione, 1998; Quinlisk, 1999; Faver & Strand, in press) and some separate threats to pets, hurting pets, and killing pets into three distinct categories (Flynn, 2000b).

Ascione (1998) used the *Battered Partner Shelter Survey (BPSS)- Pet Maltreatment Assessment* to assess animal abuse in the lives of in-shelter battered women. Regarding women’s decision making, this instrument included the question, “Did concern over your pet’s welfare keep you from coming to this shelter sooner than now?” but was later changed to read, “Does concern over your pet affect your decision making about staying with or leaving your partner?” (Domestic Violence Pet Abuse Survey [DVPAS], Ascione, 2000). This form of the question assessing pet abuse as a factor in battered women’s decision making about staying in or leaving abusive relationships taps into the idea that some women may be prompted to leave because of

abuse toward their animals. However, the response alternatives were “yes,” “no,” and “if yes please explain.” Therefore it was unclear if a “yes” response indicated leaving the relationship or staying in the relationship because of concern for the welfare of a pet.

Thus far there have been no estimates of reliability or validity reported for the use of these measures. This is due in part to the infancy of these instruments and research, and in part because no author has undertaken such a study. A test-re-test reliability study would help ascertain how reliable the questions on animal abuse and decision making are. A validity study is also called for; however, such a study will be difficult to design because of disagreement on definitions of animal abuse and lack of a mandated reporting system for animal abuse. The study conducted by Ascione, Weber, and Wood (1997) did support the construct validity of questions about animal abuse by comparing in-shelter battered women with a community sample of non-battered women showing differences in the trends of reported animal abuse (battered women reporting more abuse and more severe abuse than community women). However, as stated earlier, whether these differences were significant was not reported.

Only two research reports written from the same research project triangulated measures and informants. Ascione, Weber and Wood (1997) and Weber (1998) used the *Child Behavior Check List* (CBCL; Achenbach, 1991), and the Conflict Tactics Scale (CTS; Straus, 1993), and the *Children’s Observation and Experience with Their Pets* (COEP) Survey (Ascione & Weber, 1995) as primary instruments in their studies comparing in-shelter battered women (with and without children) and community women (with and without children) on experiences with animal abuse.

Data Analysis

Descriptive statistics and chi-square analyses are the primary analyses used in this literature base (Ascione, 1998, Ascione, Weber, and Wood, 1997; Quinlisk, 1999; Jorgenson & Maloney, 1999) When comparing two groups of battered women, estimates of interest (threat to pets, harm of pets, killing of pets, women's decision making) frequently showed trends but significant differences were either not reported (Ascione, Weber, & Wood, 1997) or were not found (Faver & Strand, [in press]). Only one study (Faver & Strand [in press]) utilized a regression analysis to assess how threat and harm of pets affected women's decision making about leaving or staying in abusive relationships. What is needed is a study that considers how much variance pet abuse explains among all the other factors that battered women consider in leaving their abusive relationships.

Purpose of the Study

The overall purpose of this dissertation research is:

- 1) To replicate previous research on battered women's emotional reliance on their pets, on how abuse of pets affects women's concern for their pets, and on whether concern for pets affects women's decisions to seek shelter
- 2) To explore the differences between women who are prompted to leave as opposed to delay leaving abusive relationships because of concern over the safety of their pets.

This purpose will be addressed by the following research questions and hypotheses.

Research Questions

1. Is there a relationship between women's emotional reliance on their pets and the likelihood that the batterer threatened or harmed their pets?
2. Is there a relationship between threat or harm to pets and women's worry about the safety of their pets?
3. Among women who are worried about the safety of their pets, does concern for their pets affect their decision to seek shelter?
4. Among the women who worried about the safety of their pets and reported that the concern affected their decision to seek shelter, how did it affect their decisions?

Research Hypotheses

1. Women who report that their pets were very important sources of emotional support during the abusive relationship will also be more likely to report that their partner threatened or harmed their pets than women who reported that their pets were not important sources of emotional support.
2. Women who report that their pets have been threatened, harmed, or killed by their batterers will be more likely to report that they worried over the safety of their pets while in the abusive relationship than women whose pets have not been threatened, harmed, or killed.

3. Women who report abuse of their pets will be more likely to report worrying over their pets after coming into the shelter than women who do not report abuse of their pets.
4. Among women who are worried about the safety of their pets, in response to the question, “Did concern over the safety of your pet(s) affect your decision to seek shelter?” a higher percentage will say “no” than “yes.”
5. Concern for pets is more likely to delay women from seeking shelter than it is to prompt them to seek shelter.

Exploratory Research Questions

The investigation was also driven by the following exploratory research questions:

- (1) What happens to the companion animals of battered women when the women enter a shelter?
- (2) Among the women who worry about the safety of their pets, are there differences between women whose decision to seek shelter is not affected by concern for their pets, women who delay seeking shelter because of concern for their pets, and women who are prompted to seek shelter because of concern for their pets? Specifically, are there demographic differences between these groups? Are there differences in type of harm experienced by their pets?
- (3) How long do women delay seeking shelter because of concern for the safety of their pets?

- (4) For those women who leave abusive households because of concern over the safety of their pets, what experiences prompt them to leave?
- (5) What types of animals do women report having and how does type of animal affect battered women's experiences with seeking shelter?

Chapter 3: Methods

Introduction

The data for this study are taken from a larger study assessing battered women's concern for their companion animals. In May of 2002, the director of a domestic violence shelter in a rural area of Tennessee agreed to collect data about battered women and pet abuse in three parts of the domestic violence program. The three program components were *Court Advocacy*, *Crisis Hot Line*, and *In-Shelter Services*. This study utilized only the in-shelter data because the number of surveys received through the other two programs were too few for analysis. In May of 2003, the director of another domestic violence shelter in an urban area of Tennessee agreed to collect data on pet abuse among in-shelter victims of domestic violence. The research design used for this study was a non-experimental cross-sectional survey design.

Procedure

All women who entered the rural domestic violence shelter between May 2002 and July 2003 (14 months) were invited to voluntarily complete the "Pet Abuse Survey" (PAS) (See Appendix). Beginning in May 2003, all women who entered the urban domestic violence shelter were also invited to voluntarily complete the PAS. One domestic violence worker in each shelter administered the survey to women. A consent form was attached to every survey that reviewed the purpose of the study, emphasized that completion or non-completion of the survey would not affect the services provided by the domestic violence shelter, that women could skip questions they did not wish to answer, and that by filling out the survey women were agreeing to participate. In

addition, the researchers' contact information was on the consent form so that women would be able to communicate with them if they had specific questions (see Appendix). No women contacted the researchers. The procedures for this study were approved by the University of Tennessee Institutional Review Board.

Sampling

All women who came to live at the domestic violence shelters during the specified data collection periods were given the opportunity to complete the PAS during their stay. In both the rural and urban shelters, one domestic violence worker was assigned to administer the PAS to women who entered. These domestic violence workers tracked which women had and had not completed the survey, ensuring that every battered woman was given the opportunity to complete one survey during her time at the domestic violence shelter. The domestic violence workers administered the survey upon intake, unless they determined that doing so was clinically contra-indicated for particular women. If the survey was not administered at intake the assigned domestic violence worker administered the survey at another more suitable time during the battered woman's stay.

Instruments/Measures

The Pet Abuse Survey (PAS) was adapted from compiling the items of two surveys used in other studies assessing animal abuse among in-shelter battered women (Ascione, 1998; Flynn, 2000b). One additional question was added to the PAS used in this study that was not on either of the other surveys. The question, "Did concern over the safety of your pet(s) affect your decision to seek shelter?" has been used on the other two instruments; however, the response categories were "yes--delayed my seeking shelter"

and “no.” For the “yes--delayed my seeking shelter” response, the following time categories were included in this dissertation research: less than one week, 1-2 weeks, 3-4 weeks, 5-8 weeks, more than 8 weeks, other (please describe_____) (Flynn, 2000b).

Anecdotal evidence suggests that some women are prompted to leave their abusers due to the abuse of an animal (Humane Society of the United States, First Strike Video, 1997). The logic behind a woman being prompted to leave is, “I can understand him hitting me. I did something wrong. This animal, however, is innocent so therefore the batterer’s behavior must be unacceptable.” This aspect of concern for companion animals affecting women’s decisions to leave their abusers has not yet been assessed in the empirical literature. Therefore, the researchers added “yes--prompted me to seek shelter” as a response category to this question along with a space for them to describe in their own words how it prompted them to leave.

Additionally, in May of 2003 efforts were made to collect information on the number and types of pets women owned. The original and the revised survey with the additional question about number and types of companion animals are found in the Appendix.

Data Analysis

Data analysis procedures have been listed under each research question and its related hypothesis. Exploratory research questions are followed by the analysis used.

Research Question 1

Is there a relationship between women’s emotional reliance on their pets and the likelihood that the batterer threatened or harmed their pets?

Hypothesis 1. Women who report that their pets were very important sources of emotional support during the abusive relationship will also be more likely to report that their partner threatened or harmed their pets than women who reported that their pets were not important sources of emotional support.

Analysis. Percentage differences and appropriate non-parametric measures of association were used to explore this hypothesis. A chi-square statistic was used to test this hypothesis. Source of emotional support was a categorical variable with three categories: very important, somewhat important, and not at all important. Initially, “threat,” “harm,” and “kill” of the companion animal were treated as individual dichotomous variables (threat=yes/no; harm=yes/no; and kill= yes/no); respondents were instructed to check all that applied. “Threat,” “harm,” and “kill” were then collapsed into one dichotomous variable measuring overall abuse: yes (threat/harm/kill) and no (no threat/harm/kill).

Research Question 2

Is there a relationship between threat or harm to pets and women’s worry about the safety of their pets?

Hypothesis 2a. Women who report that their pets have been threatened, harmed, or killed by their batterers will be more likely to report that they worried over the safety of their pets while in the abusive relationship than women whose pets have not been threatened, harmed, or killed.

Analysis. Percentage differences and appropriate non-parametric measures of association were used to explore this hypothesis. A chi-square statistic was used to test this hypothesis. Worry over the companion animal was a dichotomous yes/no variable.

“Threat,” “harm,” and “kill” of the companion animal were treated both as individual dichotomous variables (threat=yes/no; harm=yes/no; and kill= yes/no) and as one dichotomous variable measuring overall abuse: yes (threat/harm/kill) and no (threat/harm/kill). A binary logistic regression was used to assess the relationship between several possible conditions of threat/harm/kill and worry over the safety of a pet. “Threat” of a companion animal was treated as an independent dichotomous variable and “harm” and “kill” were collapsed into one variable called “harm.” The first condition was coded 0 and indicated no reported animal abuse. The second condition was threat/no harm and was coded as 1. The third condition was harm/no threat and was coded as 2. The fourth condition was threat/harm and was coded as 3.

Hypothesis 2b. Women who report abuse of their pets will be more likely to report worrying over their pets after coming into the shelter than women who do not report abuse of their pets.

Analysis. Percentage differences and appropriate non-parametric measures of association were used to explore this hypothesis. A chi-square statistic was used to test this hypothesis. Worry over the companion animal after coming into the shelter was treated as a dichotomous yes/no variable. “Threat,” “harm,” and “kill” of the companion animal were treated both as individual dichotomous variables (threat=yes/no; harm=yes/no; and kill= yes/no) and as one dichotomous variable measuring overall abuse: yes (threat/harm/kill) and no (threat/harm/kill).

Research Question 3

Among the women who are worried about the safety of their pets, does concern for their pets affect their decision to seek shelter?

Hypothesis 3. Among the women who are worried about the safety of their pets, in response to the question, “Did concern over the safety of your pet(s) affect your decision to seek shelter?” a higher percentage will say “no” than “yes.”

Analysis. A frequency distribution was used to assess this hypothesis.

Research Question 4

Among the women who worried about the safety of their pets and reported that the concern affected their decision to seek shelter, how did it affect their decisions?

Hypothesis 4. Concern for pets is more likely to delay women from seeking shelter than it is to prompt them to seek shelter.

Analysis. A frequency distribution was used to assess this hypothesis.

Exploratory Research Question 5

What happens to the companion animals of battered women when the women enter a shelter?

Analysis. A frequency distribution was used to assess where women reported their pets were when they entered the domestic violence shelter. Categories included: with a family member, with a friend or neighbor, with my partner/ex-spouse, no longer alive, taken to an animal shelter, given pet away, no current pets, other (please describe). For the “other” category, new categories were generated as needed based on women’s responses.

Exploratory Research Question 6

Among the women who worried about the safety of their pets, are there differences between women whose decision to seek shelter was not affected by concern for their pets, women who delay seeking shelter because of concern for their pets, and

women who are prompted to seek shelter because of concern for their pets? Specifically, are there demographic differences between these groups? Are there group differences in the type of harm experienced by their pets?

Analysis. Several different tests were used to explore this research question. Percentage differences and appropriate non-parametric measures of association were used to explore differences in women's decision making based on their race. A chi-square statistic was used to test for significant differences. The categorical level variable measuring decision making had three categories: No= did not affect decision, Yes= yes--delayed decision, *and* yes-- prompted decision. Because only three women reported that they were prompted to seek shelter because of animal abuse, the "yes" categories were collapsed, creating the dichotomous variable: No= did not affect decision/ Yes= delayed seeking shelter or prompted me to seek shelter. Race was measured using six response categories: "White, Hispanic, Asian, American Indian, Black American, Other". Because of the low number of women in many of the categories, this variable was collapsed into two categories: White women and Women of Color.

Percentage differences and appropriate non-parametric measures of association were used to explore differences in women's decision making based on whether children were present in the relationship. A chi-square statistic was used to test for significant differences. Decision making was treated as a dichotomous variable: No= did not affect decision/ Yes= delayed seeking shelter or prompted to seek shelter. The presence of children in the relationship was also a dichotomous variable: "yes" (children under 18) and "no" (no children under 18).

A multinomial logistic regression was used to assess the group differences in women's decision making based on age. Decision making is measured using three response categories: "No= did not affect decision; yes= delayed seeking shelter; yes=prompted seeking seek shelter." Age is measured in years.

A 3 x 4 contingency table was used to assess group differences in women's decision making based on level of violence against pets. Percentage differences and appropriate non-parametric measures of association were used to explore group differences in women's decision making based on the presence of animal abuse. Chi-square statistics were used to test for significant differences. Decision making was treated both as a multi-categorical level variable (No=did not affect decision; Yes=delayed seeking shelter; Yes= prompted seeking shelter) and a dichotomous variable (No= did not affect decision/ Yes= delayed seeking shelter and prompted to seek shelter). "Threat," "harm," and "kill" of the companion animal were treated both as individual dichotomous variables (threat=yes/no; harm=yes/no; and kill= yes/no) and were collapsed into one dichotomous variable measuring overall abuse: yes (threat/harm/kill) and no (threat/harm/kill).

Exploratory Research Question 7

How long do women delay seeking shelter because of concern for the safety of their pets?

Analysis. A frequency distribution for grouped data was used to assess this exploratory question. Length of delay was measured by days and weeks.

Exploratory Research Question 8

For those women who left the abusive household because of concern for the safety of their pets, what experiences prompted them to leave?

Analysis. The qualitative responses of women who were prompted to leave were reported.

Exploratory Research Question 9

What types of animals do women report having and how does type of animal affect battered women's experiences seeking shelter?

Analysis. A semi-structured interview with the domestic violence worker who administered the surveys in the rural shelter was conducted to explore this research question. The rural domestic violence shelter served both rural and urban women. The questions used in the interview are as follows:

1. In your experience what types of animals do battered women own?
2. What is the range in number of animals that battered women own?
3. What do you think is the most common animal battered women own?
4. What are some of the stories you have heard battered women tell about their animals?
5. What are some of the stories that battered women tell about their batterers abuse towards their animals?
6. What are some of the concerns battered woman have expressed about their animals?
7. Did you notice any difference between concerns expressed by battered women on the crisis hotline, in the court advocacy program, or in the shelter?

8. Did you notice any differences between rural and urban women in their experience with animals with regard to the:

- a) number of animals they own?
- b) types of animals they own?
- c) types of abuse witnessed?
- d) type of bond they have?

9. What was the experience like for women completing the surveys?

- a. Did anything make them feel uncomfortable?
- b. Did you notice any questions that the battered women had difficulty answering honestly?
- c. Did the battered women seem uncomfortable remembering the animal abuse?

(10) Did you notice any differences in the types of relationships battered women had with pets based on whether women had children or not?

(11) Are there any changes you would make to your experience of the research process?

(12) Are there any other observations about battered women and their pets that you would like to share?

Chapter 4: Results

Introduction

The investigator offered battered women living in two domestic violence shelters an opportunity to voluntarily complete the *Pet Abuse Survey* (PAS) used in this non-experimental dissertation research. This survey was comprised of questions from other measurement tools assessing animal abuse in the lives of battered women and also included new questions about animal abuse prompting battered women's decisions to leave. A description of the obtained sample, the results of four research questions and five exploratory research questions are reported below. Additionally, the qualitative results of a semi-structured interview with a domestic violence worker about battered women's experiences with their pets are partially reported.

Sample

Fifty-one surveys were completed by women in two domestic violence shelters. Women in the rural shelter made up 80% (41 of 51) of the sample, and women in the urban shelter made up 20% of the sample (10 of 51). The average age for women in the sample was 38 years old, with a minimum age of 22 and a maximum age of 57. Forty-seven percent (24 of 51) of the women reported that they did not have children under 18 while in the abusive relationship; 41% (21 of 51) reported that they did; 12% (6 of 51) of women did not report whether or not they had children. Fifty-seven percent of the sample was White (29 of 51), 8% was Hispanic (4 of 51), 2% was Asian (1 of 51), 18% was Black (9 of 51), and for 16% (8 of 51) race was not reported. Of the 43 women who

reported on race 33% (14 of 43) of the women were Women of Color, and 67% (29 of 43) were White women.

When comparing the current sample of rural women (N= 41) to the demographic results of a six-year trend study of clients in the same rural shelter (Cherry & Hargrove, 2002, unpublished manuscript), the women in the current sample were found to be slightly older, have fewer children, and represent more Women of Color than what has been observed over the past 6 years. Sample estimates and statistical examination of differences between the two samples are presented in Table 2.

Over this 6 year period, the average number of women served per year by the rural shelter was 61. It was assumed that this would be the number of women served during the data collection period. Given this assumption, attempts were made to collect data from 50 women which would have represented slightly more than 80% of the women served during this period. The obtained number of surveys was 41 making the response rate 67% (based on the average number of women served per year for the last 6 years). However, when taking into consideration all of the 212 women actually served by the rural domestic violence shelter in the past year, the current response rate is 19%. The director of the shelter believed that a majority of the 212 women served were only in the shelter for less than 12 hours and were not administered the PAS. However, director was not able to provide information on the proportion of women that were only in the shelter for 12 hours.

The response rate of urban women was 38% (10 of 26) during the one month data collection period between May 2003 and June 2003. Of the 26 women served in the urban shelter 73% were White, 12% were Black, and 15% did not report their race. The

Table 2

Comparative Demographics for Rural Women

Sample	Age	Children	White Women	Women of Color
Current sample	Mean = 38 22-57	43% (16 of 37)	64% (29 of 43)	32% (14 of 43)
Trend study sample	Mean = 33 18-64	81% (148 of 183)	91% (167 of 183)	9% (16 of 183)
Tests of Difference	t = 3.29, p < .0005; CI 2.02-7.97	t = 4.84 p = .001 CI 21%-55%	t = 4.57 p = .001 CI 1%-44%	t = 3.99 p < .001 CI 8%-38%

Note: Cherry & Hargrove (2002). A longitudinal trend study in East Tennessee, Unpublished Manuscript

average age was 41 years old. Of the 10 women who completed surveys, 80% were White, 20% were Black, and the average age of respondents was 39 years old.

For the total sample, 84% (43 of 51) of the women reported having pets while in the abusive relationship (one woman did not answer), and 45% (23 of 51) reported that they currently had pets. Beginning in May 2003 women were asked what types of pets they owned. Complete data were obtained about the type and number of pets women owned on 16 surveys. Among these 16 women there were 11 dogs, six cats, one rabbit, two birds, and one pot-bellied pig. No women reported having horses or fish. The range in number of pets owned by individual women was 1 to 5, with the average being 2 pets owned per woman.

Of the 43 women who reported either having a pet while in the abusive relationship and/or currently having a pet, 74% reported that their pets had been

threatened (32 of 43), 52% reported that their pets had been harmed (22 of 43), and 14% reported that their pets had been killed (6 of 43). The PAS instructed women to check each animal abuse category that reflected their experience with violence toward their pets, therefore women were allowed to indicate more than one type of animal abuse. Sixty percent (26 of 43) of the women reported that their decision to seek shelter was affected by concern for their companion animal.

Research Findings

Research Question 1

Is there a relationship between women's emotional reliance on their pets and the likelihood that their batterers threatened or harmed their pets?

Hypothesis 1. Women who report that their pets were very important sources of emotional support during the abusive relationship will also be more likely to report that their partner threatened or harmed their pets than women who reported that their pets were not important sources of emotional support.

Analysis. This hypothesis was not supported. When treating "threat," "harm," and "kill" both as individual dichotomous variables and as an aggregated variable measuring overall abuse (yes= threat/harm/kill; no= no threat/harm/kill), the results of chi-square analyses were not statistically significant (see Table 3). All 43 of the women who indicated they currently had pets, or had pets during the abusive relationship, also reported that their pets were either somewhat important (28%, 12 of 43) or very important (72%, 31 of 43) sources of emotional support for them while coping with the

Table 3

Pet Abuse and Source of Emotional Support

Overall abuse	Not at all important	Somewhat important	Very important
Yes	0%	91.7% (11)	84% (26)
Threat/Harm/Kill			
No	0%	8.3%(1)	16% (5)
Threat/Harm/Kill			
Totals	0%	100% (12)	100% (31)

Note: Over all abuse: $\chi^2(1) = .438$, $p = .508$; $\phi = -.10$;

Fisher's exact = .659

Threat: $\chi^2(1) = 1.05$, $p = .307$; $\phi = -.16$; Fisher's exact = .456

Harm: $\chi^2(1) = .343$, $p = .588$; $\phi = .09$; Fisher's exact = .736

Kill: $\chi^2(1) = 1.69$, $p = .199$; $\phi = -.20$; Fisher's exact = .325

abusive relationship. No women reported that their pets were “not at all important” sources of emotional support. Therefore a comparison between women who considered their pets very or somewhat important sources of emotional support and women who considered their pets not at all important sources of emotional support could not be made.

Percentage differences indicate that of the women who reported that their pets were abused (37), more women considered their pets as “somewhat important” sources of emotional support than “very important” sources of emotional (92% vs. 84%) in dealing with the abuse. Moreover, of the women who did not report abuse of their pets (six), more indicated that their pets were very important sources of emotional support than

somewhat important sources of emotional support (16% vs. 8%) in dealing with the abuse.

The lack of statistically significant findings for the chi-square analyses is likely due to a lack of variability and subsequent truncation in the variable measuring emotional support. Additionally, the small sample size may be the cause for statistically non-significant findings. A *post hoc* power analysis indicated that with the sample size of 43, and the observed small effect size ($\phi = .10$) statistical power for this analysis was only .09. In order to achieve statistical power of .80 with the observed effect size, a sample of 775 would have been needed. A medium effect size of at least .50 would have been required to achieve a statistical power of .80 with a current sample size of 43.

Research Question 2

Is there a relationship between threat or harm to pets and women's worry about the safety of their pets?

Hypothesis 2a. Women who report that their pets have been threatened, harmed, or killed by their batterers will be more likely to report that they worried over the safety of their pets while in the abusive relationship than women whose pets have not been threatened, harmed, or killed.

Analysis 1. This hypothesis was partially supported. Using a chi-square analysis and the phi coefficient while treating the variables of "threat," "harm," and "kill" as separate dichotomous variables, women's reports that their pets were threatened ($\chi^2(1) = 11.40, p = .001; \phi = .52$) or harmed ($\chi^2(1) = 4.2, p = .04; \phi = .32$) were significantly related to women's concern about the safety of their pets while in abusive relationships.

Women's reports that their pets had been killed, however, were not significantly related to women's worry about their pets while in the abusive relationship ($\chi^2(1) = .72, p = .40$; $\phi = .13$). All the women who reported that their pets had been threatened, harmed, or killed also reported that they worried about their pets. There was no exception to this (see Tables 4, 5, and 6).

Analysis 2. When analyzing the data by aggregating the three variables of "threat," "harm," and "kill" into one variable indicating overall abuse of pets (see Table 7), the relationship between women's worry about their pets while in abusive relationships and overall harm directed toward the pet was statistically significant ($\chi^2 = (1) 27.87, p < .00$; $\phi = .76$).

Analysis 3. The current data as well as data from previous research suggest that women experience different conditions of abuse toward their pets. For instance, some women report verbal threat of their pets but no harm, or harm of their pets but no verbal threat. A binary logistic regression was used to assess how different conditions of abuse towards pets were related to worry about the safety of pets while women were in abusive relationships. There were four conditions of the independent variable explored: women who reported threat of pet only (Threat/No harm), women who reported harm of pet only (No threat/Harm), women who reported both threat and harm of pets (Threat/Harm), and women who reported that their pets had been neither harmed nor threatened (No Threat/No Harm). Whether women worried about their pets while in the abusive relationship

Table 4

Threat of Pets and Worry About the Safety of Pets while in the Relationship

Worry about safety of pet	Threat of pet	
	Yes	No
Yes	100% (31)	66.7% (8)
No	0%	33.3% (4)
Totals	100% (31)	100%(12)

Note: $\chi^2(1) = 11.40$, $p < .001$; $\phi = .52$; Fisher's exact = .004

Table 5

Harm of Pets and Worry About the Safety of Pets while in the Relationship

Worry about safety of pet	Harm of pet	
	Yes	No
Yes	100% (21)	81.8% (18)
No	0%	18.2% (4)
Totals	100% (21)	50% (22)

Note: $\chi^2(1) = 4.21$, $p = .04$; $\phi = .32$; Fisher's exact = .108

Table 6

Killing of Pets and Worry About Their Safety while in the Relationship

Worry about safety of pet	Killing of pet	
	Yes	No
Yes	100% (6)	89.2% (33)
No	0%	10.8% (4)
Totals	100% (6)	100% (37)

Note: $\chi^2(1) = .720$, $p = .40$; $\phi = .13$; Fisher's exact = 1.00

Table 7

Overall Harm of Pets and Worry About Their Safety

Worry about Safety of pet	Threat/Harm/Kill	
	Yes	No
Yes	100% (37)	33.3% (2)
No	0%	66.7% (4)
Totals	100% (37)	100% (6)

Note: $\chi^2(1) = 27.20$, $p = .00$; $\phi = .76$; Fisher's exact = .000

was a dichotomous (0 = no, 1 = yes) dependent variable. The reference category was women who did not report any threat or harm of their pets. Ultimately, the logistic regression could not be done because there were not enough cases in each condition. None of the women who reported that their pets were threatened, or harmed, or both reported that they did not worry about their pets while in the relationship (see Table 8).

Hypothesis 2b. Women who report abuse of their pets will be more likely to report worrying over their pets after coming into the shelter than women who do not report abuse of their pets.

Analysis. This hypothesis was not supported (see Table 9). A relationship between women's worry about their pets after coming to the shelter and whether or not their pets had been abused was not statistically significant ($\chi^2(1) = .33, p = .60; \phi = .09$). The response categories for whether women were worried about their pets were: "yes," "no," and "no current pets." The N for this analysis was 29 because 14 of the 43 pet-owning women indicated that they did not currently have pets. When treating each of the pet abuse variables individually, instead of aggregating them into one variable measuring abuse, these relationships were still not statistically significant.

However, percentage differences do indicate a trend in the predicted direction. Women who reported abuse of their pets were also more likely to report that they still worried about their pets after coming to the shelter (40%; 10 of 25) than women who did not report animal abuse (25%; 1 of 4). A *post hoc* power analysis indicated that with the

Table 8

Cases of Conditions of Abuse and Worry about Pet while in Abusive Relationship

Worry about pet	Conditions of abuse				Totals
	Yes Threat/ No Harm	No Threat/ Yes Harm	Yes Threat/ Yes Harm	No Threat/ No Harm	
Yes	14	6	17	2	39
No	0	0	0	4	4
Totals	14	6	17	6	43

Table 9

In-Shelter Worry About Pets and Abuse of Pets

Worry about pets now	Threat/Harm/Kill	
	Yes	No
Yes	40% (10)	25% (1)
No	60%(15)	75% (3)
Totals	100% (25)	100%(4)

Note: $\chi^2(1) = .33$, $p = .60$; $\phi = .09$

current sample of 29 and small effect size ($\phi = .10$), the statistical power for this analysis was only .08. To achieve statistical power of .80, with the observed small effect size, a sample of 775 would have been needed for this analysis. With the current sample size of 29, a medium effect size of .50 or greater would have been needed to achieve a statistical power of .80.

An additional *post hoc* analysis was used to explore if women's worry about their pets was related to the perceived current level of threat to pets (see Table 10). Women were asked to report where their pets were while the women were in the domestic violence shelter. There were 8 response categories: with a family member, with a friend, with partner/ex-spouse, no longer alive, taken to animal shelter, given pet away, no current pets, and other. Complete data for both variables were available for 27 women. The results of this analysis were not statistically significant ($\chi^2(1) = .8302, p = .14; \phi = .554$); however, there were some notable trends in the observed percentage differences. For instance women whose pets were with family members were about as likely to worry (43%; 3 of 7) as not worry (57%; 4 of 7) about their pets. Women whose pets were with friends were half as likely to worry (33%; 3 of 9) than not worry (67%; 6 of 9) about their pets. One-hundred percent (4) of the women whose pets were with the batterer were worried about them, and 100% of women whose pets were no longer alive, as expected, did not feel worry. Only 20% (1 of 5) of women who had given their pets away worried about them; 80% (4 of 5) reported no current worry about their pets.

Table 10

In-Shelter Worry about Pets and where Pets are Currently

Worry about pets now	Where are pets now?					
	With family member	With friend or neighbor	With partner/ ex-spouse	No longer alive	Given pet away	Other
Yes	43% (3)	33% (3)	100% (4)	0%	20% (1)	0%
No	57% (4)	67% (6)	0%	100%	80% (4)	100%(1)
Total	100% (7)	100% (9)	100% (4)	100% (1)	100% (5)	100% (1)

Note: $\chi^2(5) = 8.302$, $p = .14$; $\phi = .554$

Research Question 3

Among women who are worried about the safety of their pets, does concern for their pets affect their decision to seek shelter?

Hypothesis 3. Among the women who are worried about the safety of their pets, in response to the question, “Did concern over the safety of your pet(s) affect your decision to seek shelter?” a higher percentage will say “no” than “yes.”

Analysis. This hypothesis was not supported. Of the women who reported that they worried over the safety of their pets while in the abusive relationship ($N = 39$) a higher percentage of women reported that this concern *did* affect their decision to seek

shelter than *did not* affect their decision. Sixty-six percent (26 of 39) of women reported that concern for their pets affected their decision to seek shelter, whereas only 33% (13 of 39) reported that it did not affect their decision. An approximate 95% Confidence Interval (CI) for this difference is 0%-60% (CI .30±.30). These results are consistent with the converse of the above hypothesis, as well as with no relationship between women's decision to seek shelter and women's worry for their pets. This finding is surprising and is in contrast with what has been reported in the research literature thus far. Further comments on this discrepancy will follow in the discussion section.

Research Question 4

Among the women who worried about the safety of their pets and reported that the concern affected their decisions to seek shelter, how did it affect their decisions?

Hypothesis 4. Concern for pets is more likely to delay women from seeking shelter than it is to prompt them to seek shelter.

Analysis. This hypothesis was supported. Of the women who reported that concern for their pets affected their decision to seek shelter (N= 26), 88% (23 of 26) reported that this concern delayed them from leaving abusive relationships, whereas only 12% (3 of 26) reported that this concern prompted them to leave; an approximate difference of 76% (95% CI = 51% - 100%).

Exploratory Research Question 5

What happens to the companion animals of battered women when the women enter a shelter?

Analysis. The most reported outcome for pets was placement with a friend or neighbor (N = 11). The next most common outcome for pets was relinquishment by giving the pet away (N = 9); only 2 pets had been relinquished to animal shelters. Eight pets were placed with family members of battered women; 8 pets were reported dead. Four pets were still with the abusive partner. For the “other” category, one woman reported that she “moved out of town with the dog,” and another reported that the animal was at a “safe place for pets,” (see Table 11).

Exploratory Research Question 6

Among the women who worry about the safety of their pets, are there differences between women whose decision to seek shelter was not affected by concern for their pets, women who delay seeking shelter because of concern for their pets, and women who are prompted to seek shelter because of concern for their pets? Specifically, are there demographic differences between these groups? Are there differences in type of harm experienced by their pets?

Race. The investigator did not find a statistically significant relationship between battered women’s race and concern for their pets in the decision-making process (see Table 12). Because of the low number of pet-owning women who identified themselves as Hispanic (4) or Black (8), and because the one woman who identified herself as Asian did not own a pet, the variable of race was aggregated into two categories of race: “Women of Color” and “White women.” Because of the low number of women (3) reporting that abuse of their pets prompted them to leave the abusive relationship, the variable measuring concern for pets was also collapsed into a dichotomous “yes - delayed or prompted decision to leave,” and “no - did not affect decision to leave” (see Table 12).

Table 11

Where Pets are Currently

Where is the pet now?	N	%
With a family member	8	16.3
With a friend or neighbor	11	22.4
With ex-partner/spouse	4	8.2
No longer alive	8	16.3
Taken to animal shelter	2	4.1
Given pet away	9	18.4
No current pets	5	10.2
Other	2	4.1
Total responses	49	100*

Note: * The table percentages are based on 49 responses obtained from 43 women. Women with multiple pets could indicate multiple pet placements or dispositions.

Table 12

Race and Concern for Pets in Decision Making

Concern affected decision	Women of Color	White Women
No	50% (5)	26% (7)
Yes	50% (5)	74% (20)
Totals	100% (10)	100% (27)

Note: $\chi^2(1) = 1.93$, $p = .17$; $\phi = -.228$

When comparing Women of Color and White women, White women were more likely to report that their decisions to seek shelter were affected by concern for their pets than Women of Color (74% vs. 50%). White women were half as likely as Women of Color to report that it did not affect their decision (26% vs. 50%)

A *post hoc* power analysis indicated that with the current sample of 37 for this analysis and the small effect size ($\phi = .22$), the statistical power for this analysis was .30. To achieve statistical power of .80, with the observed small effect size, a sample of 150 would have been needed for this analysis. With the current sample size of 37, a medium affect size of $\phi = .42$ or greater would have been needed to achieve a statistical power of .80.

Children. There was a statistically significant relationship between whether or not women reported having children under 18 living with them during the abusive relationship and whether concern for their pets affected their decision to leave the abusive relationship ($\chi^2(1) = 7.03$, $p = .01$; $\phi = -.42$). Specifically, women who reported not having children were more likely to indicate that their decision to seek shelter was effected by concern for their pets than women who reported having children (85% vs. 45%) (see Table 13).

Age. Using a multinomial logistic regression, the investigator assessed the relationship between women's concern for their pets as it pertained to decision making and their age. The dependent variable, women's concern for their pets, was a multinomial variable with three categories: No-- did not affect decision, yes-- delayed decision, and yes-- prompted decision. The independent variable, age, was an interval level variable representing age in years. The results of the analysis were not statistically significant ($\chi^2(2) = .223$, $p = .894$), specifically indicating that women's age did not have any effect on whether they considered their pets in their decision to leave the abusive relationship.

Abuse toward pet. There were no statistically significant relationships between women's reports of any forms of abuse and their decision making about leaving the abusive relationship (see Table 14). This finding was maintained when aggregating both the abuse variables and the decision-making variables into dichotomous yes/no variables (yes = threat, harm, or kill/ no = none of these; yes = prompted or delayed decision/ no = did not affect decision). Aggregated percentage differences do indicate that women

Table 13

Presence of Children and Pets in Decision Making

Concern affected Decision	Children under 18 present in relationship	
	Yes	No
No	55% (11)	15% (3)
Yes	45% (9)	85% (17)
Totals	100% (20)	100% (20)

Note: $\chi^2(1) = .7.03$, $p=.01$; $\phi = -.42$

Table 14

Abuse toward Pet and Decision Making

Decision making	Threat	Harm	Kill	None
No	30% (9)	29% (6)	17% (1)	67% (2)
Yes – delayed	65% (20)	62% (13)	83% (5)	33% (1)
Yes – prompted	7% (2)	10% (2)	0% (0)	0% (0)
Totals	100% (31)	100% (21)	100% (6)	100% (3)

Note: Threat $\chi^2(2) = 2.783$, $p=.25$; $\phi = .26$
 Harm $\chi^2(2) = .913$, $p=.63$; $\phi = .15$
 Kill: $\chi^2(2) = 2.02$, $p=.40$; $\phi = .23$
 None: $\chi^2(2) = 1.50$, $p=.50$; $\phi = -.20$

whose pets were abused were more likely than women whose pets were not abused to report that their decision to leave the abusive relationship was affected because of concern for their pets (68% vs. 33%) (see Table 15). Given that the current effect sizes observed are all small (.15-.26), and that the total sample for this analysis was $N = 40$, the highest level of statistical power obtained for this analysis was .10. Medium effect sizes of .50 or greater would have been required to achieve a statistical power at the .80 level with the current sample size. Additionally, with the observed small effect sizes, a sample of 775 would have been needed to achieve statistical power at the .80 level.

Exploratory Research Question 7

How long do women delay in seeking shelter because of concern for the safety of their pets?

Findings. Twenty-three women reported that their decision to leave abusive relationships was delayed because of concern for their companion animals. One woman who reported that she was prompted to leave the abusive relationship because of concern for her pet also reported the length of time she delayed while trying to find a housing option for her companion animal. Therefore the total N for this analysis is 24 instead of 23 (see Table 16). Most women reported that the length of time they delayed was between 1-2 weeks (29%; 7 of 24) and 3-4 weeks (33%; 8 of 24). Seventeen percent (4 of 24) indicated that they delayed more than two months, 13% (3 of 24) reported that they delayed departure 5-8 weeks, and only one woman reported delaying less than one week. The one woman who chose the “other” category, remarked that she had gone back and forth between seeking shelter and returning to her abusive partner for 30 years.

Table 15

Overall Abuse and Aggregated Decision Making

Decision Making	Threat/Harm/Kill	
	Yes	No
Yes (prompted/delayed)	68% (25)	33% (1)
No	32%(12)	67% (2)
Totals	100% (37)	100%(3)

Note: Over all abuse: $\chi^2(1) = 1.43$, $p=.23$; $\phi = .19$

Table 16

Length of Time Women Delayed Leaving Because of Concern for Their Pets

Length of delay	N	%
Less than 1 week	1	4
1-2 weeks	7	29
3-4 weeks	8	33
5-8 weeks	3	13
More than 8 weeks	4	17
Other	1	4
Total	24	100

Exploratory Research Question 8

For those women who leave an abusive household because of concern over the safety of their pets, what experiences prompt them to leave?

Findings. The three women who indicated that they were prompted to leave because of concern over the safety of their companion animals reported threats of abuse, fear of abuse, and actual abuse as the experiences that prompted their departure. One woman wrote that her batterer “threatened to mutilate the animals.” Another woman stated that she left, “in fear that he would hurt my dog.” The final response reflected actual harm, as the woman stated that her “... dog was given a poison packet out of a box to chew on.”

Exploratory Research Question 9

What types of animals do women report having and how does type of animal affect battered women’s experiences with seeking shelter?

Findings. The investigator conducted a semi-structured interview with the domestic violence worker who collected most of the data. This interview yielded the following qualitative responses to the questions listed in the methods section. The domestic violence worker indicated that in her experience the majority of battered women own “cats, dogs, and birds” and that most women own two or three pets, having one dog and two cats or, “vice versa.” She reported that the range in numbers of animals was from 0 to 7 per woman. She reported that the most common type of animal was the dog. Most of the quantitative results about pets confirm the domestic violence worker’s reports. Complete data on types and number of pets were collected on 16 surveys. Among the battered women in this sample there were 11 dogs, 6 cats, 1 rabbit, 2 birds, and one pot-

bellied pig. The range in number of pets observed in this sample was from 0-5. The most common animals owned by the women in this sample were dogs.

Additionally she noted that rural women seem to have more animals than urban women, but that the types of animals, the types of bonds, and the types of abuse toward the animals were the same for rural and urban women. When asked specifically if she had ever worked with battered women who were concerned about farm animals, she reported that in the three years she had been at the domestic violence shelter she had not experienced such a case.

In reporting the types of animal abuse battered women have experienced the domestic violence worker indicated that most reports were threats such as, "...If you leave me I will do this to Spot or Scottie or whatever their animal's name is." She reported that some batterers:

...have actually killed the animal. [They]...will kick, pick up something and hit the animal with it, or any number of things and that's to get back at the one that they're trying to hurt... especially if the woman leaves. It's like, you know, you left this animal so I'm going to harm it because you're not here for me to harm you. It's a vicious cycle that goes from one extreme to the next. So the animal in a sense becomes the surrogate victim. And it's a shame. You know because just like a child, this animal has really nothing in this argument or whatever and no way to defend itself.

She also noted more specific stories of animal abuse such as batterers pulling out pet's toenails, "dogs shot and killed, burnt, beaten with baseball bats, thrown against the wall...[and] hit with beer bottles."

In the worker's experience battered women have expressed concern over their pets while at the shelter such as:

Is he hurting them? Are they being fed? Has he dropped them off somewhere...

[Battered women] grieve over animals just like they would a human being and that's sad to watch too. They're grieving over that and they really don't know what the perpetrator is doing to that animal if anything. And that puts fear into them as well. So, they're here and not only is there turbulence in their lives in terms of trying to find a place to be but there's also the added feelings of worry and fear and guilt over their animals. Additionally, battered women who have children frequently have to reassure their children that the pet is all right even when the battered woman is not sure that this is true. The worker reports that women will sometimes put themselves at risk to find out if the pet is all right. Many women will drive by the house when the batterer is not supposed to be home to see if they can catch a glimpse of the pet to make sure that it is still alive and looking well-cared for.

Chapter 5: Discussion

Introduction

This study was designed to replicate the findings of seven other studies assessing animal abuse among battered women residing in domestic violence shelters. The requirement of replication in scientific human behavioral research has been acknowledged as a crucial aspect of achieving the reliability and generalizability of research findings (Johnston & Pennyacker, 1980). Replication research can also provide information useful for intervention in a local region. Additionally, new efforts were directed toward determining the proportion of women who were prompted to leave abusive environments because of concern for the safety of their pets. Lastly, a semi-structured interview with a domestic violence worker responsible for data collection provided indirect qualitative information about the experiences of battered women with their pets. This component of the study constitutes a new contribution to the methodology in the literature base on battered women and their companion animals.

Initially, replicated findings are reviewed comparing the results of this research with the results of findings in the literature on battered women and animal abuse to date. Attention then focuses on reviewing the findings of specific research questions and hypotheses posed in this study. The limitations of the study and implications for the interpretability of these findings will follow. Lastly, implications for social work micro practice, macro practice, and future research will conclude the chapter.

Demographics

The demographic information gathered in both the existing literature on pet abuse in domestic violence situations and in this study pertained to age, race, and the presence of children in the home.

Age and Race

Compared to the demographic information in the previous research literature, the average age for women in this study ($M = 38$) was slightly older with a smaller range in ages than found in previous studies. Ascione (1998) reported a mean age of 30.2 years with a range in age as 20-51 years old. Ascione, Weber, and Wood (1997) reported a mean age for shelter women of 32 years old and for community women of 33 years old with a range for the entire sample of 17-57 years old. For Flynn (2000) the range in age was 17-61 years old; the mean age was 32 years old. In a qualitative study, Flynn (2000b) reported the sample age range as 27 to 47 years old; the mean was not reported. Faver & Strand (in press), in a study conducted within the same geographic region as the present study, reported that the mean age for rural women was 37 and for urban women was 36; the range in age for the entire sample was 19-72. Although the age range in Faver and Strand's study was greater than in the present study, the mean age was similar.

With regard to racial demographics the results of the current study indicate that 57% of the sample were White, 18% were Black, 8% were Hispanic, and 2% were Asian. Although three of the studies on pet abuse in domestic violence situations did not report on race (Ascione, 1998; Quinlisk, 1999; Jorgenson & Star, 1999), it appears that this sample was similar to other samples with regard to racial diversity. For instance Ascione, Weber, and Wood (1997) reported that 66%-72% of women in their sample were White,

and Flynn (2000) reported that 60% of women in that sample were White. Faver & Strand (in press) found that 79% of sampled battered women were White and 21% were Women of Color. In the sample gathered for this study 67% of women were White and 33% were Women of Color. Thus there were slightly fewer Women of Color in this sample than in the sample gathered from the same geographic region.

Children

The highest estimate of women with children found in this literature base is the qualitative study by Flynn (2000c) where 70% (7 of 10) of women reported having children while in the abusive relationship. In the same geographic area Flynn (2000c) also found that out of 107 women, 62% reported having children. The lowest estimate is 43% reported in both Ascione, Weber, & Wood (1997) as well as Faver & Strand (in press). In this study 41% of women reported having children under 18 living with them while in the abusive relationship. This finding is on the low side when considering the literature base as a whole; however compared to the study in the same geographic location (Faver & Strand, in press), just slightly less women in this study reported the presence of children.

Pets

There are a few variables of interest that have been assessed in most of the literature on battered women and their pets. These variables of interest have been pet ownership; reports of threats, harm, and actual killing of companion animals; and the number of pet-owning women who report that concern for their pets affected their decision making.

Pet Ownership

Pet ownership among battered women in domestic violence shelters has varied greatly. The highest estimate of pet ownership found was 90% (Ascione, Weber, and Wood, 1997) and the lowest was 40% (Flynn, 2000). Generally, 65-85% of women in these samples reported having had a pet within the last 12 months, having a pet currently (Quinlisk, 1999; Ascione, 1998), or having a pet while in the abusive relationship. Ascione (1998) reported that 74% of surveyed women had pets currently or within the last 12 months. Quinlisk (1999) reported that 68% of women had pets and in Quinlisk's follow-up study, 72% of women reported having pets. In the study conducted in the same geographical region as this research, Faver & Strand (in press) found that 82% of women owned pets. In the sample collected for this study, 84% of women reported that they had pets while in the abusive relationship, and 45% stated that they currently had pets. Therefore the estimate of pet ownership found in this study is high, but similar to research conducted in the same geographic area (Faver & Strand, in press), and lower than the highest estimate reported in the literature as a whole (Ascione, Weber & Wood, 1997).

Pet Abuse

Findings from this study indicated that 74% of women reported that their pets had been threatened by the batterer, 52% reported that their pets had been harmed, and 14% reported that their pets had been killed by the batterer. These findings are similar to other estimates of animal abuse, although each study measured or reported animal abuse differently. For example, Ascione (1998) found that 71% of women indicated that their pets had been threatened with harm or actually harmed or killed within the abusive

relationship. Ascione, Weber, and Wood (1997) indicated that about 52% of women in the shelter reported that their pets had been threatened and if the women had children they were more likely to report pet abuse (69%) than if they did not have children (44%). Flynn (2000) reported that 47% of surveyed women reported threat or harm to their pets, but in a qualitative study surveying women from the same shelter the estimate rose to 80% reporting that their pets had been abused. Faver & Strand (in press) found that 49% of women reported that their pets had been threatened and 46% reported that their pets had been actually harmed. Quinlisk reported between 68% and 72% of respondents indicated that their pets had been abused in some manner. The percentage range of animal abuse reports among pet-owning battered women living in domestic violence shelter were from 44% (Ascione, Weber, & Wood, 1997) to 80% (Flynn, 2000c). Thus, findings in this study on the presence of animal abuse, although high, do fall within the estimates of animal abuse observed by previous studies thus far.

Concern for Pets and Decision Making

In the current study 60% (N=26 of 43) of women reported that concern for their pets affected their decisions to seek shelter. This estimate is very high compared to other studies. Ascione (1998) found that 18% of the women studied acknowledged that concern for their pets affected their decision. Ascione, Weber, and Wood (1997) found that about 23% of shelter women reported that concern for their pets affected their decision to seek shelter. For the women whose pets had been abused, 29% indicated that this harm had affected their decision to seek shelter. Flynn (2000) reported that only 7% of 107 battered women respondents indicated that concern for their pets affected their decision to seek shelter, but 5 of those 8 women delayed for two months. Flynn (2000c) in a qualitative

study found that 40% of women (4 of 10) reported that their decisions to seek shelter were affected by concern over their companion animals. Faver & Strand (in press) found that 27% of women reported that concern for their pets affected their decision to seek shelter. Therefore, the findings in the current study indicate that substantially more women considered the safety of their pets when deciding to leave abusive relationships.

Findings for Research Questions and Hypotheses of this Study

Generally, statistically significant findings indicated that women who reported abuse of their pets while in the abusive relationship also reported worry over their pets during the relationship. Additionally, women with children reported that their decision to seek shelter was less likely to be affected by concern for their pets than women without children. Qualitative findings also supported these findings as well as offer new insight into the grief women experience when they are separated from their pets.

Pets as Source of Emotional Support and Pet Abuse

It was hypothesized that women who reported that their pets were very important sources of emotional support during the abusive relationship would also be more likely to report that their pets were threatened or harmed than women who did not consider their pets important sources of emotional support. Although this hypothesis was not supported through a chi-square analysis, the percentage differences do demonstrate a noteworthy trend. No women indicated that their pets were *not at all important* in dealing with abusive relationships, suggesting that all women felt some social support from the relationships with their companion animals. Qualitative findings gathered through the interview with the domestic violence worker suggest that battered women do develop close bonds with their pets based on trust and empathy in the relationship with the

animal. As the shelter worker said:

...Their animals are comforts to them that they can actually sit and talk to maybe their dog or their cat because they sit and listen and even though they don't talk back it seems like the animals truly understand how they're feeling and that means a lot to a battered woman...., when you're in pain. And that's the biggest thing is that they truly trust the animals that they have.

In support of Adams' (1995) theory about pet-abuse as a specific form of battering, the domestic violence worker also stated that in her experience batterers attempt to destroy the closeness of the bond battered women have with their pets. This occurs through both general companion animal abuse as a *demonstration of power* and abuse of the pet as a *form of separation violence*. The domestic violence worker explained:

Pet abusers will kick, pick up something and hit the animal with it, or any number of things and that's to get back at the one that they're trying to hurt. And, abusers will do that a lot and especially if the woman leaves. It's like, you know, you left this animal so I'm going to harm it because you're not here for me to harm you. It's a vicious cycle that goes from one extreme to the next. So the animal in a sense becomes the surrogate victim. And it's a shame. You know because just like a child, this animal has really nothing in this argument or whatever and no way to defend itself. Just like a child, it's a bad situation.

One of the factors that Adams clarified is the effect that helplessness to protect the pet has on a woman's sense of self. The domestic violence worker had certainly experienced this in her observations of pet-owning battered women:

I can't imagine what it does to a battered woman to have to witness that vulnerable creature in pain – it has to be devastating....I mean you would do for it like you would for your own child and it would have to be devastation. Knowing that you're just as helpless as that animal that's getting beat up, just like the animal can't help you when you are, you know? So that would be rough.

Pet Abuse and Worry over Pets

It was also hypothesized that women who report that their animals have been abused would also be more likely to report that they worry over their pets while in an abusive relationship. Three different analyses were used to assess this relationship in order to determine if there would be a difference in findings depending upon how the concept of abuse was conceptualized.

Initially the three items assessing abuse were analyzed treating them as three independent forms of abuse. Using this method the findings were statistically significant indicating that women who reported that their pets were threatened and women who reported that their pets were harmed were also more likely to report worry about their pets while in abusive relationships. However, whether women's pets were killed was not related to worry about their pets in the abusive relationship at a statistically significant level. Perhaps once the pet was killed there was no need to worry over him or her any longer. Another possible explanation may have been that there were not enough women who reported that their pets were killed to make the analysis valid (N= 6).

The abuse variables were then aggregated into one variable measuring overall

abuse. Through this analysis the statistically significant relationship between abuse towards pets and worry about pets while in an abusive relationship was maintained. This finding provides support for the idea that any types of animal abuse that women experience, be it threat, harm, or killing of a companion animal, affects a women's worry over that animal while in a relationship. This finding may also be an artifact of the data, as threat and harm of pet were significantly related to women's worry and therefore may compensate for the non-significant findings between threat or harm and killing the pet when aggregating all the variables into one overall variable measuring abuse.

Lastly, to explore if different conditions of abuse (e.g. threat of a pet, but no actual harm) had an effect on women's worry over pets while in the relationship, a binary logistic regression was attempted. Unfortunately the data were skewed with 39 women reporting that they worried about the pet while in the abusive relationship and only 4 pet-owning women reporting that they did not, thus making this analysis invalid (see Table 8)

It was also hypothesized that women who reported abuse of their pets would also be more likely to report that they worried over their pets after coming to a shelter. This hypothesis was not statistically supported, however percentage trends are in the predicted direction (see Table 9). Women who reported abuse of their pets were also more likely to report that they still worried about their pets after coming to the shelter than women who did not report animal abuse (40% vs. 25%). Moreover, for those women who were not worried over their pets while in the domestic violence shelter (N= 18), more reported that their pets had not been abused than abused (75% vs. 60%) This finding supports Flynn's (2000c) finding that women continued to worry about their pets while seeking help in domestic violence shelters. In this study women continued to worry about their pets even

though most companion animals were reported to be with family members or friends.

A *post hoc* analysis assessing women's worry about their pets based on where the pets were while women sought shelter provided interesting preliminary findings. All the women whose pets were with the batterer still worried about their pets. Women whose pets were with family members were equally likely to worry over their pets as not, whereas if the pet was with a friend, women were more likely not to be worried. As would be expected, all the women whose pets were no longer alive also reported no worry providing support for the validity of results. Perhaps some family members and friends would be less able to protect the pet from the batterer, causing the women to worry. Further exploration of this issue may have practical application in arguing for the development of programs that provide safe haven for the pets of battered women. More discussion on this topic will follow.

Qualitative data also suggest that women continue to worry about their pets after entering a shelter. Moreover, battered women experience grief over the separation from the pet. This worry and grief was very apparent to the domestic violence worker who stated:

They grieve over animals just like they would a human being and that's sad to watch. ...They really don't know what the perpetrator is doing to that animal if anything. And that puts fear into them as well. So, they're here and not only is there turbulence in their lives in terms of trying to find a place to be but there's also the added feelings of worry and fear and guilt over their animals. ...Their biggest fear is – is he hurting them because I'm not there. He has threatened them

and they've remembered the threats. He's threatened to hurt us but he would do this to Spot or whatever. And they can't keep him from doing that.

An added worry for battered women is trying to reassure their children about the safety of their pets. According to the domestic violence worker, women will often have to reassure their children that the pet is all right even when they are unsure of their pets' safety. This adds an extra burden to women's worry about their pets. "[The pets' safety]... is a big concern of the women here and even the children. Because the children have heard these threats. They'll say, you know, Mommie, is he hurting my dog, or my cat?" In many instances this has prompted women to take their children by the house to check on the safety of the pet, even when there is clearly potential danger in doing so. The shelter worker explained:

The mom tries to reassure the child as best as possible. You know if we can just go down to the house and check. Because you know a lot of the times our clients here will – well, if they have to leave their pets at home and they have fenced in yards - they can kind of drive by the house when the perpetrator's not there and just see the cat or dog and see that they're okay and so that's a relief...

Decision Making

A surprising finding was that more women reported that concern over their pets did affect their decision to seek shelter than did not. Sixty percent of pet-owning women reported that their decisions to seek shelter were affected by concern over their pets. This finding is markedly different from the findings of all the other studies in this literature base which indicate that between 7% (Flynn, 2000) and 26% (Faver & Strand, in press)

of women report that concern for their pets affected decision making. These results could be attributed to an increased level of comfort felt by women in acknowledging their pets as factors in their decision-making process because they knew that the domestic violence worker would not think the concerns were *silly*. Additional explanations for this finding will follow in the limitations section of the study.

It was also hypothesized that of the women who reported that their decision to seek shelter was affected by concern for their pets, more women would report that concern delayed them seeking shelter than prompted them to seek shelter. This hypothesis was supported as 23 of 26 women (88%) reported that concern for their pets delayed their seeking shelter and only 3 of 26 (12%) reported that they were prompted to seek shelter. Although the numbers are low, there is evidence that a very small proportion of women were prompted to seek shelter because of their batterers' abuse toward their pets. The domestic violence worker did report that for some women the abuse of the pet was enough for them to decide to leave the relationship. She stated:

Yes, we've had a couple of stories....where the perpetrator would be very angry with the children's animal and when the woman saw that it was just verbal abuse at home but the woman saw that abuse toward the animal, she was like, "Well either I'm next or my children are." So she got the pets and kids and she got out. Verbal and emotional and mental abuse is enough but before it got to the physical she was able to get out and it was just absolutely wonderful. It wasn't the abuse directed at her; it was the aggression toward the pet...And when you've got that type of parental love and you can see that sometimes it does put that little light on

upstairs and you'll see that it's time to get out or somebody's really going to get hurt. It doesn't happen often but when it does it's a great success story.

When battered women wrote their own responses about being prompted to leave because of pet abuse three categories were reflected. Battered women indicated that the batterers' threats of animal abuse and actual abuse towards their pets prompted them to seek shelter. Additionally one battered woman described an internal fear of animal abuse as the factor that prompted her decision to leave.

Exploratory Research Findings

Exploratory research questions provided additional information on what happened to women's pets after they entered shelters and how long they delayed entering shelters because of concern for their pets. Additional questions addressed whether there were any differences in women's decision making about coming to a domestic violence shelter based on demographic differences or differences in the type of animal abuse women experienced.

Most women's pets were left with friends or neighbors when they entered domestic violence shelters (see Table 11). The next most common response was that pets were given away. One woman was able to visit her pet in a home that provided a safe place while the woman was in the process of making arrangements to be re-united with her beloved companion in an environment safe for them both. The domestic violence worker reported:

We did have somebody that would house the pets for a while and the women could go over and visit their pets and feed them and walk them and stuff like

that and then when they did move out of here they were able to take their pets with them and that was a reassuring kind of thing. They didn't like being separated but we would explain like, okay you're in this shelter to be safe and he or she is in that shelter to be safe and most of the time when they got that through their mind and they got their mind a little bit clearer to see that and knew that they could take the animal home soon, you know it was a big help.

Twenty-three women reported that their decision to seek shelter was delayed because of concern for their pets. Most women reported that they delayed seeking shelter up to a month because of concern for their pets. Three women waited almost two months and four women waited even longer. Only one woman delayed less than a week and one other woman reported that she delayed but went back and forth to the abuser for 30 years. In the only other study that assessed how long women delayed departure from their abusers (Flynn, 2000), only 8 of 107 women delayed at all, but 5 of them delayed for over two months. The findings in this study indicate that more women delayed longer than what has been observed in the literature thus far. Additionally, an analysis of qualitative data from the domestic violence worker indicates that she felt women were even hesitant to answer that question honestly. She explained:

I would sit with them while they filled them [the surveys] out and it was like, did you hesitate coming to shelter? And it's like – let me think about this and you know they wanted to say yes but they would say no or maybe just say maybe just like one or two days or whatever it was that was on their minds. I think that was the hardest one.

Perhaps the battered women felt guilty for basing their decision about leaving on concern for companion animals. Perhaps they felt silly because of how strong their feelings were towards their animals. As pets receive more attention as a factor in battered women's decision making about leaving, the feelings, thoughts, and nature of the human-animal bond behind their decisions deserve attention. The domestic violence worker believed that women were somewhat hesitant to share these internal experiences. Empirically exploring these internal experiences of the human-animal bond for battered women and normalizing these experiences is warranted in future research.

There were no statistically significant relationships between women's decision-making and their age, race, or the type of animal abuse experienced. There was a statistically significant relationship between women's decision making and whether or not women had children under 18 living with them while in the abusive relationship. Specifically, women who reported having children while in the abusive relationship were more likely to report that their decision to seek shelter was *not* affected by concern for their pets than women without children. There is certainly evidence in the human-animal bond literature that people without children will often be more bonded to their pets and consider their pets as children (Planchon & Templer, 1996; Gosee & Barnes, 1994). This suggests that women with children might consider the child's well-being before a pet's well-being in decision making, whereas women without children may consider their animals more as children when they are making decisions to protect the *family*. The domestic violence worker certainly recognized this trend in her in-shelter observations of pet-owning battered women without children. She stated, "They would just break down and start crying. You would think they were talking about a child until you realized that

this is their animal.” This phenomenon was initially surprising to the domestic violence worker. She went on to describe in more detail the special bond between childless battered women and their pets:

The ones that didn't have children, actually this is going to sound crazy, but I've seen several women show more concern and more love for their animals than I've seen them give towards their children because I mean this pet has been their whole life. And when it's taken away especially the ones that can never have children or whatever then these animals become their kids....I mean, you've seen people do that and this is their baby and if someone hurts them, oh, they're crushed....There's a big difference because usually the women with children and animals they're more - they love their animals, they care for them, they feed them, but their main concern is the children, which that's the way it should be. But the ones without children, their main concern is their animal and that is their life. You can touch me but don't you touch my little puppy. And that's just the way it is.

The domestic violence worker also reported that pet-owning battered women without children found the abuse of the pet and the separation from the pet especially difficult and emotional. She also suggested that the social isolation childless women may experience and the social contact offered by their pets may explain some of the grief over being separated from the companions and feeling worried about their pets' well-being while in the domestic violence shelter. She stated:

[Pet-owning battered women without children] do have a tendency to cry a whole lot more because they don't know what is happening to their pet if they have to leave it at home with their perpetrator. And in the back of their minds they know

that these threats can be taken very seriously because it may have already happened once and they have that fear that it'll happen again and there's nothing they can do. That doesn't happen often but it does with some of the women that don't have children. They are just extremely close because all they've had is this animal to talk to because they know what's going to happen when Mr. So-and-So gets home. And, so when Mr. So-and-So's gone eight to 12 hours a day all they have is this little animal to talk to or to confide in.

Study Limitations

Sampling

A limitation to the generalizability of these research findings comes from the sampling procedure used in this study. Although it was intended that every woman who entered both the rural and the urban domestic violence shelters would be asked to complete the survey during the data collection periods, in the rural domestic violence shelter only 41 of 212 women were actually asked to complete the survey, making the response rate for this shelter only 19%. Ten of the 26 women served in the urban shelter completed the survey during the data collection period, making the response rate for the urban shelter 38%. This has significant implications for the interpretability and generalizability of the research results, as it is not possible to know, for instance, how women who were not asked to complete the study differ from the women who did. The domestic violence worker reported that most of the women who were not asked to complete the survey were at the shelter for only a short period of time (e.g. 12 hours). It is possible that some of these women sought help at the domestic violence shelter for a short time because they were worried about the safety of their pets. Variables of interest

such as pet abuse and concern for pets in decision making could therefore have been over or under represented.

Moreover, samples were collected in a small geographic location, making it appropriate to generalize findings only to the population of battered women seeking in-shelter help in this same geographical area. Data were collected from both rural and urban shelters, expanding the sampling frame somewhat to include women from different physical settings; however, the group sizes were too unequal to make statistical comparisons (rural N= 41, urban N= 10). Initially, data were to be collected through both the *Crisis Hot-Line* and the *Court Advocacy* programs. Here again, too few surveys were collected to meaningfully analyze these responses. Lastly, surveys were not randomly administered; rather, battered women who completed surveys were self-selected.

Small Sample Size

The size of the sample in this study is a significant limitation. As demonstrated in the results section, *post hoc* power analyses indicated that sample sizes of up to 775 women would have been needed to find statistical significance with the observed small effect sizes in some of the analyses. On variables where the effect sizes were large, the sample size of 51 was sufficient to find statistical significance. This was the case in testing the hypothesis, “Women who report that their pets have been threatened, harmed, or killed by their batterers will be more likely to report that they worried over the safety of their pets while in the abusive relationship than women whose pets were not abused.” Effect sizes for threat of pet and harm of pet were large and statistically significant, whereas whether the effect size for the pet being killed was medium and not statistically significant.

Bias in Measurement Procedures

One factor that had been proposed as a strength of the study design was that the domestic violence worker would administer all the surveys to the women while they were in the shelter. This may have weakened the study design for two reasons. The domestic violence worker was an advocate for the human-animal bond as well as the for the humane treatment of animals and people. During her interview she stated, “[Animal abuse]... should be a concern for everybody.... It’s just as bad as abusing a child or any human being. You just don’t abuse.” This attitude may have been responsible for surprising findings of this study. Additionally, after a community organizing event by the local animal abuse task force and the local coalition against family violence, a poster about domestic violence and animal abuse was brought to the domestic violence shelter as a gift of support for the domestic violence worker’s willingness to collect research data. For part of the data collection period this poster was on display so that battered women in the shelter could see it. Eventually the domestic violence worker put the poster in a closet. This poster may have affected both women’s responses and the domestic violence worker’s own feelings about animal abuse and domestic violence. The increased sensitivity may have influenced the way in which the domestic violence worker collected data from the battered women. These two factors may have skewed the results on women’s reports of and worry over animal abuse.

Implications of these study limitations may have contributed to no women reporting that their pets were unimportant sources of emotional support during abusive relationships. Moreover, essentially no women reported that they did not worry about their companion animals while in abusive relationships. Lastly, 68% of the pet-owning

women who reported abuse also reported that concern for the safety of their pets affected their decision to seek shelter. This estimate is much higher than what has been observed in previous studies. These skewed findings may have been an artifact of the data collection procedures.

The Measurement Tool

There are three limitations in instrumentation used in this research and other research on this topic. One was an error unique to the way in which the investigators wrote the questionnaire. The last two limitations reflect a more general problem in the measurement tools used in the research literature on this topic to date.

The first limitation is that an error in the measurement tool created a constant instead of a bivariate relationship between women's worry about pets while in the abusive relationship and women's concern over the safety of their pets during decision making. Women who did not worry about their pets during abusive relationships were asked to skip the question about decision making. This resulted in disallowing women who did not worry about their pets to answer whether concern for their pets affected their decision to seek shelter.

More than likely women who did *not* worry about their pets while in abusive relationships would also have been more likely to say that their decisions to seek shelter were *not* affected by concern for their pets. This error may have also been responsible for the low number of women reporting that they were prompted to leave because of abuse of their pets. For example, women who were prompted to leave could have reported that they did not worry about their pets because they protected the pets. Perhaps these women immediately found a home for their pet when there was a threat of abuse. Because these

women did not worry about their pets, having protected them, they did not have the opportunity to report that concern for their pets affected their decisions to seek shelter.

Lack of Variance in Pet Bonding

There are several measures that assess the human animal bond. Research suggests that women who are more bonded to their animals also grieve more intensely over the loss of their pets (Planchon & Templer, 1996). Research also suggests that women who are more bonded to their pets are also more likely to report abuse of their pets and worry about their pets (Flynn, 2000). Yet, the most pervasive item assessing the human-animal bond in the literature has been limited. This item has read, "In dealing with the abuse, how important has your pet been as a source of emotional support?" with response categories of "somewhat important," "very important," or "not at all important." There were too few response categories in this item to observe variance in the human-animal bond with any precision. Additionally, this item limits the assessment of the human-animal bond between battered women and their pets to the context of the abusive relationship. Measuring the battered woman-pet bond more generally would provide valuable information about how pets may serve as a source of social support for battered women and also may demonstrate more precisely what types of bonds are more likely to be associated with abuse. These issues, although beyond the scope of this study, are valuable areas for further exploration into battered women's experiences with their pets.

Imprecision in Measuring Animal Abuse

Lack of variance and imprecision in the measurement of animal abuse is another limitation of the measurement in this and all research on this topic thus far. The questionnaire used to measure animal abuse on the PAS has three items: "Threatened to

harm your pet” “Actually harmed your pet,” and “Killed your pet.” Respondents were instructed to check all that apply. Some women indicated only that the pet was killed. Others indicated that the abuser both threatened and killed the pet. In the first scenario, the abuser might have come home one day and impulsively killed a woman’s pet without ever having threatened to do so. In the second scenario, the abuser might have threatened to harm the pet and then later acted on that threat. The effect these two different scenarios have for battered women’s experience of and worry over their animals is unknown. For instance, are women in the second condition (threats and killing of their pets) more likely to feel guilt than women whose animals were unexpectedly killed by the batterer? Moreover, how do the different conditions of animal abuse experienced by women affect their decision making in seeking shelter?

In part, the imprecision of measuring animal abuse comes from the quagmire of defining animal abuse. Different people have different views of what constitutes animal abuse. As discussed in the literature review, this is due to personal traits , personal preferences, and societal messages about the treatment of animals. These differences seem to be related to individual’s gender, race, and economic status as both Agnew (1998; see Figure 1) and Flynn (2001) suggest. Societal messages and personal ideas about the definition of animal abuse affect (a) how perpetrators of animal abuse view their own behavior, (b) how the legal system both defines animal abuse in the laws and responds to animal abuse in the courts, (c) how battered women understand abuse of their animals, and (d) how domestic violence service providers respond to this issue in treatment planning. Developing more uniform definitions of animal abuse and more standardized reporting procedures, as the Child Abuse Prevention and Treatment Act of

1974 (CAPTA) set out to do in combating child abuse, will help in empirically observing animal abuse with more accuracy.

However, developing more uniform definitions of animal abuse requires very careful consideration. It is important to distinguish types of violence towards animals by paying attention to (a) where animal abuse constructs diverge, (b) where they converge, and (c) which constructs are missing. For instance in the PAS, animal abuse was measured by the question, “Has your partner ever threatened to harm your pet(s), actually harmed your pet(s), or killed your pet(s)? (Check all that apply).” It is not yet clear how these behaviors of animal abuse actually co-vary. Moreover, where does psychological abuse fall into these measurement items? Qualitative data suggests that neglect is a form of animal abuse (Quinlisk, 1999), yet it is not captured in these questions. Measuring abuse toward animals while keeping these issues in mind will help contribute to more precise measurement of the construct.

Another issue in measuring animal abuse in the lives of battered women is the batterer’s intention in abusing a pets. Adams’ (1995) argues that animal abuse is a unique form of woman-battering. Through abusing women’s pets, batterers enhance their own dominance, promote battered women’s sense of helplessness, and ensure exclusivity in battering relationships (see Table 1). Therefore, from a measurement perspective, the batterers intentions are an important factor to measure in supporting the argument that animal abuse is a unique form of woman-battering. Ascione, Weber, and Wood (1997) came closer to assessing intentionality in animal abuse by asking if the animal was disciplined for a particular behavior or if the violence toward the pet was not related to pet behavior at all. Their findings suggest that women in shelters were more likely to

report that the abuse was not related to the animal's behavior than non-battered women.

Lastly, there could be an underlying continuum of the human-animal bond on which abuse of animals exists. In other words, the *human-animal bond* might reflect not just the sweet and loving nature of people's relationships with pets but also the more sinister, such as people's abusive relationships with animals (Melson, 2001). Perhaps a continuum of the human-animal bond begins with people whose bonds with their animals take on a negative quality through abuse, ending with those people who are extremely loving and caring toward their companion animals. All of these issues surrounding how animal abuse is understood, defined, and measured have yet to be captured in the research on battered women and abuse of their pets. Developing measurement tools that better define and measure animal abuse is warranted.

Even with current research limitations, new findings resulting from inquiry into whether women were prompted to leave because of animal abuse and the qualitative data from the domestic violence worker provide new insights into battered women's experiences. This is especially true for pet-owning battered women without children. Moreover, the limitations provide new insight into how battered women may respond to inquiries about animal abuse when they are in a shelter where domestic violence workers are sensitive to animal abuse as a specific form of women battering.

Attention will now turn to the implications of these research findings as well as the findings of the literature base as a whole, for social work micro- and macro-practice, and for future social work research on the topic.

Implications for Social Work Practice

In 2000, the 106th Congress of the United States issued a concurrent resolution encouraging federal agencies to support more research on the connection between animal abuse and interpersonal violence and urging social workers and other mental health professionals to evaluate and monitor carefully individuals who abuse animals in an effort to prevent violence against humans (H.Con. Res. 338, 2000). This joint resolution marked the beginning of federal attention to the ways in which the link between interpersonal violence and animal abuse can serve as a diagnostic tool for identifying and assessing interpersonal violence. It also supports expanding ecologically sensitive social work assessments in consideration of the human-animal bond.

Even though there is evidence that women consider their companion animals to be important in their lives (Flynn, 2000a, 2000b), and concern for the welfare of their companion animals has an effect on their decisions to seek shelter (Ascione, 1998; Flynn, 2000), many domestic violence shelters do not yet have a formalized way of determining if a woman is concerned about a companion animal. Moreover, even though there is evidence that children from abusive homes are more likely to engage in animal abuse (Ascione, 2001), many mental health professionals are not assessing children's observance or participation in animal abuse during psychosocial assessments.

Battered women who are in the process of leaving abusive households are in transient situations. Studies exploring the characteristics of pet ownership and bonding among the homeless population may provide insight into the ways in which pets affect people in transient situations. These studies establish the importance of considering the

presence of animals and the strength and nature of the human-animal bond in people's social environments. For instance, in a study conducted with a pet-owning homeless population, Singer, Hart, and Zasloff (1995) found that 69% of the acutely homeless population wished to be re-housed and that 96.6% said that they would never live without their animals. This suggests that the bond that homeless women have with their animals can outweigh the desire to find housing for battered women. Kidd and Kidd (1994) found that homeless pet owners were extremely attached to their companion animals and viewed their companion animals as their only source of love and companionship. They also found that many homeless pet owners would ensure the health and well-being of their pets over and above the health and well-being of themselves. This is similar to findings that many battered women who have strong attachments to their companion animals both experience pets as their sole source of social support and will not leave their abusers because of pets even if their own well-being is at stake.

The empirical and anecdotal evidence examined thus far suggests that social work practice, guided from an ecological perspective, has an obligation to consider the continuum of the human-animal bond in people's lives and begs the following questions:

1. How can this bond between women and their pets aid in developing increased well-being for battered women?
2. How can this bond between family members and pets, if it takes on a violent quality, inform social work professionals about interpersonal violence present in the home?
3. How can social workers consider peoples' pets in interventions and treatment planning?

Answering these questions has implications for both micro- and macro- social work practice as well as for future social work research. The following two sections draw freely from a recent article by Faver & Strand (2003) addressing implications of animal abuse in the lives of battered women for social work practice.

Implications for Social Work Micro Practice

The first issue in incorporating the findings of this literature base in social work micro practice is asking questions about animal abuse on all domestic violence intake assessments. Ascione, Weber, and Wood (1997b) distributed a nationwide survey to 49 large overnight domestic violence shelters in 49 states and found that 84.4% of shelters personnel stated that women discussed the incidence of animal abuse when they entered shelters. Eighty three percent of shelter personnel stated that they witnessed a co-occurrence of animal abuse and domestic violence in the populations that they serve and estimate that this co-occurrence exists 44% of the time. Sixty three percent reported that children also discussed witnessing animal abuse in their homes. Even with these high percentages, only 27.1% of shelter personnel asked about animal abuse in their intake surveys. Thus it is clear that asking questions of battered women about the presence and abuse of animals is important in discovering barriers in leaving the batterer as well as emotional problems associated with animal abuse.

Social workers must incorporate questions about animal abuse in all psychosocial assessments across a variety of settings. Domestic violence shelter staff members, telephone crisis line workers, domestic violence court advocates, and law enforcement officers should all be asking battered women whether they have a companion animal, whether the animal has been abused or threatened, and whether battered women are

worried about the safety of their pets. Social workers in outpatient and inpatient mental health settings, as well as school social workers, should include questions about pets and animal abuse in psychosocial assessments. Ecologically sensitive psychosocial assessments should include pet sensitive questions such as: “How many pets are in your home?” “How many pets have been in your home during the past five years?” “Where are your pets now?” “Has anyone ever harmed a pet in your home?”

Social workers must take an active role in educating domestic violence professionals, teachers, law enforcement officials, child and adult protective service workers, animal control and humane society workers, attorneys, veterinarians and the general public about the link between domestic violence and animal cruelty. Although many service providers for battered women become aware that their clients’ companion animals have been harmed or that clients worry about their animals, these professionals may not recognize the scope of the problem.

Lack of awareness of the link between animal cruelty and family violence could lead to the following oversights:

1. Teachers may have a sense that animal cruelty is a sign of behavioral and emotional problems for children, but they may not know that animal cruelty can be an indicator of family violence.
2. Law enforcement professionals may not consider animal cruelty to be a sign of family violence. This could result not only in an inadvertent neglect of domestic violence cases, but also in a resistance to facilitating the safe placement of battered women’s pets.

3. Child and adult protective service workers may not ask about animal cruelty and thus miss the opportunity to gather more detailed information about the scope of violence occurring within a household.
4. Animal control and humane society workers, not informed about the link, will not be alert to the signs of interpersonal violence occurring in a household in which they are investigating reports of animal cruelty.
5. Attorneys may miss the opportunity to create stronger legal cases against batterers in courts of law.
6. Veterinarians who suspect animal cruelty in a patient may not recognize signs that the pet owner is also abused.
7. Finally, the general public, some of whom may be victims of family violence, would benefit from knowing that abuse of animals is a specific form of domestic violence as well as an indicator that there may be an emotional, behavioral, or family problems for child animal abusers.

Social workers need to establish working relationships with animal welfare agencies such as humane societies, animal control officers, and veterinary clinics. These organizations are frequently the first to be informed of animal cruelty. If close collateral contacts are cultivated with these agencies, it is more likely that social workers will be alerted to animal cruelty cases in which family violence could also be occurring. In addition, these collateral contacts can prove invaluable in finding care for the pet of a battered woman or a homeless family seeking shelter.

Implications for Social Work Macro Practice

On the social work macro level, considering the link between animal abuse and interpersonal violence has several implications for community organizing and advocacy for pet sensitive policies. Generally, separate organizations address child maltreatment (child protective services), woman battering (domestic violence shelters), and animal abuse (humane societies). In light of the evidence that animal abuse is linked to both child abuse and woman battering, human and animal welfare organizations could strengthen prevention efforts and service delivery through greater collaboration and cooperation. Social workers who are engaged in management and community practice must make efforts to create coalitions whereby all the service agencies designed to combat family violence are represented and help to develop open lines of communication between them.

Just as a social worker in micro practice must help a battered women who is strongly attached to her pet find housing that will accept animals, social workers engaged in macro practice must help change housing policies regarding pets so that more battered women can be re-united with their pets in safe housing. Battered women often have difficulty finding affordable housing and women with companion animals may have even greater difficulty finding affordable housing that accepts pets. Of the 4,203,000 federal/state housing facilities, only 10% allow pets for all people (Hart & Kidd, 1994). Although there has been some progress ensuring that elderly and individuals with disabilities are able to keep pets in federal and state subsidized housing, women, adolescents, and children are not covered under this legislation (Hart & Kidd, 1994).

Given the positive effects that can occur as a result of the human-companion animal bond, such as decreased depression, loneliness, and improved health (Gunter, 1999), and given the fact that many of these battered women in shelters report still being worried about their companion animals (Flynn, 2000a, Flynn, 2000b), the importance of helping women stay with companion animals while leaving abusive situations is salient in treatment planning. Grassroots community organizing must be used to develop interdisciplinary task groups that develop safe haven programs to care for battered women's pets during their transition into safe, pet friendly housing (Faver & Strand, 2003). These task groups require that rigid boundaries between agencies, interagency turfing, and agencies defensively protecting their boundaries must be dismantled in order to combat family violence holistically with all agencies working together.

Safe haven programs for pets utilize animal welfare agencies, veterinarians, and individuals willing to shelter animals for women seeking freedom from domestic violence situations (Ascione, 2000). For instance, Firmani (1997) reports on several programs developed to house pets for domestic violence victims, for the elderly, and HIV/AIDS patients needing out-of-the-home medical assistance. A resource manual has been published to guide communities in the development of safe haven programs. This manual reports on the results of in-depth interviews with 21 domestic violence shelters and 20 animal welfare agencies that have been or are preparing to operate shelters for battered women's animals (Ascione, 2000). *Safe Havens for Pets* (Ascione, 2000) outlines the programs that currently exist and includes some of the financial and ethical issues that have arisen out of these efforts (see Table 17). The cost of sheltering women's animals, the provision of veterinary care, and re-uniting animals with their owners who

Table 17

Concerns Associated with Safe Havens for Pets Program Development

Concern	Description
Locating pet shelters	Who will be willing to shelter the pets of battered women?
Financial issues	Who will pay for the cost of food and veterinary care for battered women's pets?
Pet ownership	Who actually owns the pet and how is this determined?
Safety	How can we protect people who shelter battered women's pets from batterers who want to seek access to the women through finding the animal?
Confidentiality	How do we keep the location of the pet confidential? Does this mean that the battered woman cannot visit with the pet while being sheltered?
Transportation	Who will transport the pet from the violent home to the shelter?
Length of stay	How long will the pet be sheltered for the battered woman?
Post-shelter housing	Where can women find affordable housing with their pets?
Ethical concerns	If the battered woman chooses to return to the batterer, what is the ethical obligation of the animal shelter to protect the pet from future abuse?
Legal contacts	Who will develop legal contracts between women and animal shelterers to address these concerns?

Note: Adapted from Ascione, F. R. (2000). *Safe Havens for Pets: Guidelines for Programs Sheltering Pets for Women who are Battered*. Utah State University: Geraldine Dodge Foundation.

return batterers are all difficult concerns that arise out of this work. Through this survey, Ascione (2000) found that the mean years of operation for these programs was 1.4 years and the oldest formal program was 5 years old, yet informal care of pets had been taking place for the last 20 years.

Social workers must advocate for legislation and policies that identify and sufficiently intervene in cases of animal abuse. This advocacy would support increased penalties for animal cruelty, court-ordered psychological evaluation for convicted animal abusers, and required cross-reporting between human and animal welfare agencies. All 50 states currently have statutes that declare animal cruelty a misdemeanor, but only 33 states carry statutes that make animal cruelty a felony (American Humane Association [AHA], 2000). Some states increase penalties from a misdemeanor to a felony with repeated animal cruelty offenses (e.g. Virginia §3.1-796.122, AHA, 2000). Felony level penalties for animal cruelty can increase the legal advantage that prosecutors have in seeking conviction against batterers. Additionally, court ordered psychological evaluation for perpetrators of animal cruelty can help to identify abusers who are also committing partner and child abuse in the home (e.g. Minnesota § 343.20 et seq., AHA, 2000).

On the state and local levels, social workers should advocate for legislation that requires cross-training and cross-reporting between animal (animal control; humane societies) and human welfare agencies (child and adult protective services; law enforcement). Cross-training refers to teaching animal welfare professionals to recognize signs of child and adult abuse, and teaching human welfare professionals to recognize

signs of animal cruelty. Cross-reporting means that if abuse of an animal is investigated, the animal welfare professional will report the investigation to human welfare services, if people also appear to be at risk in the home. Likewise, if a report of child, partner, or elder abuse is investigated, it will be reported to the local animal welfare agency if an animal is present in the home. As an effort to mandate cross-reporting, Florida has recently introduced the Family Violence/Cross-Reporting bill into the 2002 legislature, but passage of the bill is still pending (Florida, S282 and H0077). Several states have attempted to mandate cross-training and cross-reporting between human and animal welfare professionals, only to have these bills die in committee (e.g., Virginia H.B. 2256). Legislation in two states allows humane society officers who observe child abuse during an animal cruelty investigation to remove that child from the home (District of Columbia § 22-801; Ohio § 959.01). Legislation in two other states requires veterinarians to report suspected animal abuse (e.g. Minnesota § 346.37 subd. 6; West Virginia § 7-10-4A, AHA, 2000). Although these statutes are good first steps, it is important that more states adopt cross-reporting legislation to effectively intervene in the web of violence.

Social workers must take an active role in grassroots organizing, program development, and program evaluation to address the needs of battered women who are concerned about their companion animals. As can be seen in Table 17, there are many issues associated with ensuring that battered women's pets are removed from abusive homes, safely sheltered, included in treatment planning, and re-united with their women caretakers. Addressing these issues requires that human and animal welfare agencies work together to ensure that battered women's concern for their companion animals does not interfere with their ability and willingness to seek shelter. These types of services,

however, require the coordinated efforts of domestic violence shelters, animal shelters, law enforcement officials, and attorneys.

Implications for Future Social Work Research

Social workers must contribute to the knowledge base about the link between domestic violence and animal abuse through empirical research. In light of the limitations of the existing studies on pets and domestic violence, additional research is called for in three areas. The first area continues to explore the scope of the problem, the second to develop more precise methods of measuring constructs, and the third to conduct longitudinal research that examines women's concern about their pets throughout their involvement with the domestic violence system.

In the first area-- exploring the scope of this problem more fully- results need to be more generalizable and more robust. Although replication research has provided some evidence for reliable estimates about pet abuse in the lives of battered women, research that samples battered women across geographic regions will allow more generalizability of findings. Moreover, future studies should use more racially heterogeneous samples; some evidence exists that battered women's ownership of animals and reports of animal abuse are significantly related to race (Flynn, 2000). Additionally, in this study there was evidence that Women of Color and White women considered their pets in their decision making differently. It is also possible that battered women's reports of animal abuse may also be related to socio-economic status as level of income has been associated with animal abuse generally (Flynn, 2001). Research that explores battering and animal abuse within homosexual relationships is also needed in sampling more heterogeneous populations. In conducting more rigorous exploration of domestic violence and animal

abuse, research designs need to use comparison groups and triangulation of respondents and measures as used by Ascione, Weber, & Wood, (1997). Moreover, in order to detect the small effect sizes of some of the variables of interest, obtaining larger samples will be essential in future research.

As discussed in the limitations section, more precise and reliable methods of measuring both the human-animal bond and animal abuse are warranted. There are many measures that assess the human animal bond that allow greater variance in the level of the bond as well as more precision in assessing what factors contribute most to the bond (Poresky, 1997; Poresky, Hendrix, Mosier, & Samuelson, 1987; Bryant, 1990; Zasloff, 1996). Through the use of these measurement tools more questions can be answered about the relationships among animal abuse, worry over pets, and decision making within the context of women's bonds with their pets. For instance, there is some evidence that commitment to pets is different than attachment to pets. Commitment refers to the willingness of an owner to continue caring for a pet even when the pet has problems or the owner's life situation makes keeping the pet difficult. Attachment to pets is more reflective of the emotional bond people report having with their pets. People can be high on a commitment factor, but low on the attachment factor. Therefore, using more precise measurement of the bond will provide insight about how women that are more committed to their pets are different than women who are more attached to their pets in terms of variables of interest concerning animal abuse (Voith, 1985).

Measuring animal abuse more precisely is also warranted and raises a number of questions:

1. Is animal abuse on a continuum that stretches from neglect of pets to verbal threats of harm to actual harm or killing a pet?
2. Is there a qualitative difference between verbal threats toward women about animals such as saying, “I am going to nail that dog to a tree,” and the batterer yelling, “I am going to kill you” directly at the pet?
3. What is the difference between a batterer stomping his foot near a cat, throwing a beer can at a cat, and actually hitting a cat and how do these differences affect women’s reaction to the abuse?
4. Do all these activities fall under one category called “animal abuse” or are there two categories such as “verbal animal abuse” and “physical animal abuse.”
5. Where do psychological abuse and neglect fall into these animal abuse categories?

The domestic violence worker, when asked what she would add to the questionnaire, suggested that she would have allowed women to report more specifically the nature of the animal abuse. She stated:

I might put in there, “If you can answer this [whether or not a pet had been abused] could you please tell us how.” You know to kind of get an idea of how – you know are they [the pets] physically being abused or are they being shot or being thrown out of car windows or whatever the case might be and see where the majority of abuse is. Is it physical, is it neglect and so this would break down more the different possibilities of abuse....Kind of break it down into a scenario

of what is the most abuse. Which category does it fall under? Neglect, psychological, physical.

Including more questions about the nature of the animal abuse in future measurement questionnaires will be important in more precisely defining and measuring the construct.

Lastly, research that examines what actually happens to women and their pets when they leave abusive homes is needed. Women often come to a domestic violence system by seeking orders of protection taken out against their batterers, through a crisis hot line, or through a law enforcement call for domestic disturbance. Collecting data on the presence of pets, abuse of pets, worry about pets, and whether pets are considered a barrier to leaving an abusive relationship are all appropriately assessed in any of these entry points into the domestic violence system. Future research questions answered through data collection in these settings are: (a) What proportion of battered women with pets return to their abusers? (b) What proportion of battered women with pets leave their abusers but have no option except to relinquish their pets? (c) What proportion of battered women who leave their abusers are successfully re-united with their pets in permanent housing? Moreover, future studies should assess how attachment to a companion animal and the desire to be reunited with a pet may aid a woman in becoming independent for the purpose of preserving the bond with the companion animal.

Longitudinal studies that follow pet-owning battered women throughout their time within the domestic violence system would provide helpful information about how these women perceive and rely on the relationships with their pets. The level of

attachment and commitment that battered women have toward their pets could affect battered women's decision making about leaving their abusers, returning to their abusers, and finding independent housing arrangements. Exploring the relationships between attachment to pets, commitment to pets, and battered women's decision making is valuable in informing domestic violence service delivery workers about how to incorporate pets into treatment planning. Information about which types of women-animal bonds are supportive for woman attempting to leave abusive relationships would be helpful. Not all women with pets will respond to efforts at maintaining the human-animal bond, but for the women who do, this relationship could be the deciding factor in accomplishing freedom, especially if workers in the domestic violence system are sensitized to the potential benefits of the relationship.

LIST OF REFERENCES

List of References

- Achenbach, T. M. (1991). *Child Behavior Checklist for Ages 4-8*. University of Vermont, Burlington.
- Adams, C. J. (1994). Bringing peace home: A feminist philosophical perspective on the abuse of women, children, and pet animals. Hypatia: A Journal of Feminist Philosophy, 9, 63-84.
- Adams, C.J. (1995). "Woman-Battering and Harm to Animals". In Animals and Women: Feminist Theoretical Explorations. (pp. 55-84). Durham, NC: Duke University Press.
- Agnew, R. (1998). The causes of animal abuse: A social-psychological analysis. Theoretical Criminology, 2, 177-209.
- American Humane Association. (2000). *Cruelty statutes: A Study of the United States Cruelty Statutes*. (Report No. AM1101 RO697). Englewood, CO: American Humane Association.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (third ed. revised). Washington, DC: Author.
- American Veterinary Medical Association. (2002). U.S. Pet Ownership and Demographics Sourcebook. Schaumburg, IL: Center for Information Management.

- Arkow, P. (1999) The relationship between animal abuse and other forms of family violence. Family Violence and Sexual Assault Bulletin, 29-34.
- Arluke, A., Levin, J., Luke, C., & Ascione, F. (1999). The relationship of animal abuse to violence and other forms of anti-social behavior. Journal of Interpersonal Violence, 14(9), 963-975.
- Arluke, A. & Lockwood, R. (1997). Guest editors introduction: Understanding cruelty to animals. Society and Animals, 5(3), 183-193.
- Ascione, F. R. 2001 (September). *Animal Abuse and Youth Violence*. Bulletin. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Ascione, F.R. (2000). Safe havens for pets: Guidelines for programs sheltering pets for women who are battered. Utah State University: Geraldine Dodge Foundation.
- Ascione, F. (1993). Children who are cruel to animals: A review of research and implications for developmental psychopathology. Anthrozoos, 6, 226-247.
- Ascione, F.R. (1998). Battered women's reports of their partners and their children's cruelty to animals. Journal of Emotional Abuse, 1(1), 119-133.
- Ascione, F.R., Weber, C.V., & Wood, D.S. (1997). The abuse of animals and domestic violence: A national survey of shelters for women who are battered. Society and Animals, 5(3), 205-218.

Ascione, F. R. & Weber, C. (1995). Children's Observation and Experience with Their Pets (COEP). Logan: Department of Psychology, Utah State University.

Brown, J. (1997). Working toward freedom from violence: The process of change in battered women. Violence Against Women, 3(1), 5-26.

Bryant, B.K. (1990). The richness of the child-pet relationship: A consideration of both benefits and costs of pets to children. Anthrozoos, 3(4), 253-261.

Burke, S. (2003, April 18) Arrest in dog rescue outrages pet lovers. Tennessean.
Retrieved October 14th, 2003 from <http://cgi.tennessean.com/cgi-bin/print/pr.pl>

Cain, A.O. (1983). A study of pets in the family system. In Aaron Katcher and Alan Beck (Ed.), New Perspectives on Our Lives with Companion Animals. (pp. 72-81).
Philadelphia, PA: University of Pennsylvania Press.

Cherry, D. J. & Hargrove, C. H., (2002). *A longitudinal trend study in East Tennessee*.
Unpublished manuscript.

DeViney, E., Dickert, J., & Lockwood, R. (1983). The care of pets within child abusing families. The International Journal for the Study of Animal Related Problems, 4, 321-329.

DeKeseredy, W. S. & MacLeod, L. (1997). Woman abuse: A sociological story. Toronto: Harcourt Brace.

- DeKeseredy, W. S. & Schwartz, M. D. (2001) . Definitional issues. In Claire M. Renzetti, Jeffrey L. Edleson, & Raquel Kennedy Bergen (Eds.) Sourcebook on Violence Against Women, (pp. 23-34). Thousand Oaks: Sage Publications.
- Fagan, J. (1989). Cessation of family violence, in Family Violence, Eds. Lloyd Ohlin & Michael Tonry, pp. 377-426, Chicago, IL: University of Chicago Press.
- Faver, C. A. & Strand, E. B. (in press). Battered women and animal abuse: A pilot study, Journal of Interpersonal Violence 39(2).
- Faver, C. A., Strand, E. B. (2003) Domestic violence and animal cruelty: Untangling the web of abuse. Journal of Social Work Education, 39(2),237-253.
- Firmani, D. (1997). Helping preserve the human-animal bond. Animal Sheltering, Jan.-Feb.,15-18.
- Flynn, C. (1999a). Exploring the link between corporal punishment and children's cruelty to animals. Journal of Marriage and the Family, 61, 971-981.
- Flynn, C.P. (1999b). Animal abuse in childhood and later abuse support for interpersonal violence in families. Society and Animals, 7(2), 161-172.
- Flynn, C.P. (2000a). Why family professionals can no longer ignore violence toward animals. Family Relations, 49(1), 87-95.
- Flynn, C.P. (2000b). Woman's best friend: Pet abuse and the role of companion animals in the lives of battered women. Violence Against Women, 6(2), 162-177.
- Flynn, C.P. (2000c). Battered women and their animal companions: Symbolic interaction

- between human and nonhuman animals. Society and Animals, 8(2), 99-127.
- Flynn, C. P. (2001). Acknowledging the “zoological connection”: A sociological analysis of animal cruelty. Society and Animals, 9(1), 71-87.
- Gondolf, E. W. (2002) . Service barriers for battered women with male partners in batterer programs. Journal of Interpersonal Violence, 17(2), 217-227.
- Gosse, G. H. & Barnes, M. J. (1994) . Human grief resulting from the death of a pet. Anthrozoos, 7(2), 103-112.
- Gunter, B. (1999). *Pets and people: The psychology of pet ownership*. London: Whurr Publishers, Ltd.
- Hart, L.A., & Kidd, A.H. (1994). Potential pet ownership in United States rental housing. *Canine Practice*, 19, 24-28.
- Healy, K. M. & Smith, C. (1998) . Batterer programs: What criminal justice agencies need to know. National Institute of Justice *Research in Action*, NCJ report #171683.
- Horton, A., & Johnson, B. (1993). Profile and strategies of women who have ended abuse. Families in Society: The Journal of Contemporary Human Service, 74 (8), 481-492.
- The Humane Society of the United States (HSUS). *First Strike Campaign Video*. 8 minutes, 30 seconds. Item no. AV60. Available from First Strike Campaign, The Humane Society of the United States, 2100 L St., NW, Washington, DC 20037.

- Johnston, J. M. & Pennypacker, H. S. (1980). Strategies and Tactics of Human Behavioral Research. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Jorgenson, S., & Maloney, L. (1999). Animal abuse and the victims of domestic violence. In F. R. Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 143-158). West Lafayette, Indiana: Purdue University Press.
- Kidd A. H., & Kidd, R.M. (1994). Benefits and liabilities of pets for the homeless. Psychological Reports, 74, 715-722.
- Kimmel, M. (2002). "Gender symmetry" in domestic violence, Violence Against Women, 8(11), 1332-64.
- Lacroix, C.A. (1999). Another weapon for combating family violence. In F. R. Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 62-79). West Lafayette, Indiana: Purdue University Press.
- Lembke, L. (1999). Animal abuse and family violence in the rural environment In F. R. Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 228-240). West Lafayette, Indiana: Purdue University Press.
- Lockwood, R., & Hodge, G.R. (1986). The tangled web of abuse: The links between cruelty to animals and human violence. The Humane Society News, Summer, 1-6. The Humane Society of the United States.
- Loar, L. (1999). "I'll only help you if you have two legs," or, Why human service professionals should pay attention to cases involving cruelty to animals. In F. R.

- Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 120-136). West Lafayette, Indiana:
- Mead, M. (1964) . Cultural factors in the cause and prevention of pathological homicide. Bulletin in the Meninger Clinic, 28, 11-22.
- Melson, G. F. (2001). Why the wild things are: Animals in the lives of children. Cambridge, Massachusetts: Harvard University Press.
- McKibben, L., De Vos, E., & Newberger, E.H. (1989). Victimization of mothers of abused children: A controlled study. Pediatrics, 48(3), 531-535.
- Miller, K.S., & Knutson, J.F. (1997). Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. Child Abuse & Neglect, 21(1), 59-82.
- Munro, H. M. C. (1999). The battered pet syndrome. In F. R. Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 199-208). West Lafayette, Indiana: Purdue University Press.
- Okun, L. (1986). Woman abuse: Facts replacing myths. Albany: State University of New York Press.
- Planchon, L.A & Templer, D. I. (1996) . The correlates of grief after death of pet. Anthrozoos 9(2-3), 107-113.
- Pleck, E. (1989). Criminal approaches to family violence, 1640-1980, in Family Violence, Eds. Lloyd Ohlin & Michael Tonry, pp.19-58, Chicago, IL: University of

Chicago Press.

Poresky, R.H. (1997). The companion animal bonding scale: Internal consistency and factor structure when administered by telephone. Psychological Reports, 80, 937-939.

Poresky, R.H., Hendrix, C., Mosier, J.E., & Samuelson, M.L. (1987). The companion animal bonding scale: Internal reliability and construct validity. Psychological Reports, 60, 743-746.

Prochaska & DiClemente (1982). Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy :Theory , Research and Practice, 19, 276-288.

Quinlisk, J.A. (1999). Animal abuse and family violence. In F. R. Ascione & P. Arkow (Eds.), Child Abuse, Domestic Violence, and Animal Abuse. (pp. 169-175). West Lafayette, Indiana:

Raupp, C.D., Barlow, M., & Oliver, J.A. (1997). Perceptions of family violence: Are companion animals in the picture? Society & Animals, 5(3), 219-237.

Rennison, C. M. (2003, February). *Intimate partner violence, 1993-2001*. Bureau of Justice Statistics Crime Data Brief, United States Department of Justice, Office of Justice Programs, report # 197838.

Renzetti, C.M. (1992). Violent Betrayal: Partner Abuse in Lesbian Relationships. Newbury Park, CA: Sage Publications.

Schiff, K.G., & Ascione, F.R. (1999). Animal relations in childhood and later violent

- behavior against humans. Acta Criminologica, 12(2), 25-33.
- Short, L. M.; McMahon, P. M.; Chervin, D. D.; Shelley, G. A.; Lezin, N.; Sloop, K. S.; Dawkins, N. (2000). Survivors' identification of protective factors and early warning signs for intimate partner violence. Violence Against Women, 6(3), 272-285.
- Singer, P. (1990). Animal Liberation. Avon Books, Inc. New York.
- Singer, R.S., Hart, L.A., & Zasloff, R.L. (1995). Dilemmas associated with rehousing homeless people who have companion animals. Psychological Reports, 77, 851-857.
- Solot, D. (1997). Untangling the animal abuse web. Society and Animals, 5(3), 257-265.
- Stallones, L., Johnson, T.P., Garrity, T.F., & Marx, M.B. (1990). Quality of attachment to companion animals among U. S. adults 21-64 years of age. Anthrozoos, 3(3), 171-176.
- Straus, M. A. (1993). Conflict Tactics Scales forms. Durham: Family Research Laboratory, University of New Hampshire.
- Tjaden, P. & Thoennes, N. (2000) *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey*, National Institute of Justice, report # 181867
- Triebenbacher, S.L. (1998). Pets as transitional objects: Their role in children's emotional development. Psychological Reports, 82(1), 191-200.

U.S. House. (2000). 106th Congress, 2nd Session, House Congress Resolution 338.

Concurrent resolution expressing the sense of the Congress regarding the link between violence toward animals and violence toward people (3/25/00). Retrieved from Lexis-Nexis Congressional Universe.

Voith, V. L. (1985) Attachment between people and their pets: Behavior problems of pets that arise from the relationship between pets and people. Veterinary Clinics of North America: Small Animal Practice, 15(2), 289-295.

Walker, L. (1979) . The Battered Woman. New York: Harper Perennial.

Watt, A. & Madigan, M. (2003, January 21). Dog owner dies in bushfire rescue bid. Nationwide News Pty Limited Courier Mail (Queensland, Australia). Retrieved October 14, 2003, from Lexis Nexis TM database.

Weber, C.V. (1998). A descriptive study of the relation between domestic violence and pet abuse. Dissertation Abstracts International.

Wheeler, E. A. (1874). The Story of Mary Ellen: Which started the child saving crusade throughout the world. Publication of the American Human Society, online at www.americanhumane.org

Zweig, J. M.; Schlichter, K. A.; Burt, M. R. (2002). Assisting women victims of violence who experience multiple barriers to services. Violence Against Women, 8(2), 162-180.

Zasloff, L. R. (1996) . Measuring attachment to companion animals: A dog is not a cat is not a bird, Applied Animal Behavior Science,47(1-2), 43-48.

APPENDIX

**PET ABUSE SURVEY
INFORMED CONSENT**

We are inviting women to answer some questions that will help us understand the needs of women who are in situations like yours. We are interested in knowing whether you have had any pets and whether they were threatened or hurt in your home. It will take about 5 minutes or less to answer these questions. Participation in this study is entirely voluntary; it is your choice. Your decision about whether to answer these questions will not affect the help or services you receive. If you start to answer the questions, you can stop at any time or skip any questions you don't want to answer. Your name and identity will not be connected to your answers. Your responses are confidential. The information you provide will be included with the information of everyone else who answers these questions.

We hope you will decide to participate in this study. There are no direct benefits to you from answering these questions. However, the answers you provide may help us to make it easier for women who are battered to find a safe place for their pets and themselves.

If you have any questions about this study, please feel free to call us at the number listed below. When we finish the study, we will provide a summary of the results to Serenity Shelter which will be available to you. You may also contact Elizabeth Strand if you want us to send you a copy of the summary.

Thank you for your help.

Catherine A. Faver, Ph.D., Principal Investigator
Elizabeth B. Strand, LCSW, Co-Investigator (contact person)
The University of Tennessee
College of Veterinary Medicine
Veterinary Social Work Services
Knoxville, TN 37996-4543
Telephone: 865-974-7192

In-Shelter Questionnaire
University of Tennessee College of Social Work
Pets and Interpersonal Violence Questionnaire
Adapted from Flynn, 2000

1) Have you ever had any pets in this relationship?

_____ yes
_____ no

2) Do you currently have any pets?

_____ yes
_____ no

***If responses were "yes" to either question #1 or question #2,
please ask the following three questions***

3) In dealing with the abuse, how important has your pet been as a source of emotional support?

_____ very important
_____ somewhat important
_____ not at all important

4) Has your partner ever threatened to harm your pet(s), actually harmed your pet(s), or killed your pet(s)? (Check all that apply)

_____ threatened to harm your pet(s)
_____ actually harmed your pet(s)
_____ killed your pet(s)
_____ none of these

5) In the relationship with your abuser, have you worried about the safety of your pet(s)?

_____ yes
_____ no

*** If response was "yes" to question # 5, please ask question # 6**

- 6) Did concern over the safety of your pet(s) affect your decision to seek shelter?
___ no (Go to Question # 9) ___ yes- prompted me to seek shelter
___ yes- delayed my seeking shelter

___ less than one week
___ 1-2 weeks
___ 3-4 weeks
___ 5-8 weeks
___ more than 8 weeks
___ other (please describe _____)

Please explain: _____

- 9) Have you had children, under 18, living with you during the relationship with your abuser?

___ yes
___ no

- 10) Has your child ever threatened to harm your pet, actually harmed your pet, or killed your pet? (Check all that apply)

___ threatened to harm your pet
___ actually harmed your pet
___ killed your pet
___ none of these

- 11) Where is your pet now?

___ with a family member
___ with a friend or neighbor
___ with my partner/ex-spouse
___ no longer alive
___ taken to the animal shelter

___ given pet away
___ no current pets
___ other (please describe _____)

- 12) Do you worry about your pet's safety, now?

___ yes ___ no current pets
___ no

13) Have you already completed a survey about pets from the Crisis Hot Line or through a Court Advocate?

☐ yes

☐ no

14) What is your age _____?

Do not ask, but observe
race:

☐ Caucasian

☐ Hispanic

☐ Asian

☐ American Indian

☐ Black American

☐ Other

Thank you for your participation

In-Shelter Questionnaire-R
University of Tennessee College of Social Work
Pets and Interpersonal Violence Questionnaire
Adapted from Flynn, 2000

1) What is your age _____?

2) Have you ever had any pets in this relationship?

_____ yes

_____ no

3) Do you currently have any pets?

_____ yes

_____ no

Do not ask, but observe
race:

_____ Caucasian

_____ Hispanic

_____ Asian

_____ American Indian

_____ Black American

_____ Other

***If responses were "yes" to either question #2 or question #3,
please ask the following four questions***

4) Please list the number of pets you have had in this relationship or currently have under each pet category:

# of dogs	# of cats	# of rabbits	# of fish	# of birds	# of horses	Other (please note type and #)

5) In dealing with the abuse, how important has your pet been as a source of emotional support?

_____ very important

_____ somewhat important

_____ not at all important

6) Has your partner ever threatened to harm your pet(s), actually harmed your pet(s), or killed your pet(s)? (Check all that apply)

_____ threatened to harm your pet(s)

_____ actually harmed your pet(s)

_____ killed your pet(s)

_____ none of these

7) In the relationship with your abuser, have you worried about the safety of your pet(s)?

___ yes

___ no

*** If response was "yes" to question # 7, please ask question # 8***

8) Did concern over the safety of your pet(s) affect your decision to seek shelter?

___ no (Go to Question # 9) ___ yes- prompted me to seek shelter

___ yes- delayed my seeking shelter

___ less than one week

___ 1-2 weeks

___ 3-4 weeks

___ 5-8 weeks

___ more than 8 weeks

___ other (please describe

Please explain:

9) Have you had children, under 18, living with you during the relationship with your abuser?

___ yes

___ no

10) Has your child ever threatened to harm your pet, actually harmed your pet, or killed your pet? (Check all that apply)

___ threatened to harm your pet

___ actually harmed your pet

___ killed your pet

___ none of these

11) Where is your pet now?

___ with a family member

___ with a friend or neighbor

___ with my partner/ex-spouse

___ no longer alive

___ taken to the animal shelter

___ given pet away

___ no current pets

___ other (please describe__

_____)

12) Do you worry about your pet's safety, now?

☐ yes

☐ no current pets

☐ no

Thank you for your participation

VITA

Elizabeth Bramel Strand earned a BA in Religion with a concentration in Latin from the University of the South, Sewanee, TN in 1992. She then taught Latin and English until she was accepted into the Masters of Science in Social Work program at the University of Tennessee, graduating in 1998. She worked as a family therapist until she earned her license as a clinical social worker in 2000. She began her Ph.D. in Social Work at the University of Tennessee in 2000 and during her tenure there focused on community organizing for anti-racism and anti-animal abuse efforts. During this period Elizabeth was also instrumental in beginning the Veterinary Social Work Services program, a partnership between the College of Social and the College of Veterinary Medicine to enhance, support, and inform both professions.