12-2018

Cost of Caring: The Effects of Euthanasia on Animal Shelter Workers

Kim L. Nguyen-Finn
The University of Texas Rio Grande Valley

COST OF CARING: THE EFFECTS OF EUTHANASIA ON ANIMAL SHELTER WORKERS

A Dissertation

By

KIM L. NGUYEN-FINN

Submitted to the Graduate College of
The University of Texas Rio Grande Valley
In partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2018

Major Subject: Rehabilitation Counseling

COST OF CARING: THE EFFECTS OF EUTHANASIA ON ANIMAL SHELTER WORKERS

A Dissertation
by
KIM L. NGUYEN-FINN

COMMITTEE MEMBERS

Dr. Noreen Graf
Chair of Committee

Dr. Ralph Carlson
Committee Member

Dr. Roy Chen
Committee Member

Dr. Irmo Marini
Committee Member

Dr. Alfonso Mercado
Committee Member

December 2018

ABSTRACT

Nguyen-Finn, Kim L., Cost of Caring: The Effects of Euthanasia on Animal Shelter Workers. Doctor of Philosophy (PhD), December, 2018, 150 pp., 16 tables, 1 figure, references, 126 titles.

This mixed-methods study focused on animal shelter workers, a population that has often been overlooked in research and clinical practice, and the emotional strains of the task of euthanasia. The effects of employment in a kill or no-kill shelter, participation in euthanasia, and number of years employed on mental health issues of substance abuse, anxiety, depression, secondary traumatic stress, and burnout were examined. A three-way MANOVA was conducted to test the hypothesis that there is a cell effect among the type of shelter employed in, participation in euthanasia, and years of experience on mental health, which was not supported by the results. There was, however, a main effect of participation in euthanasia on mental health. Univariate tests also showed statistically significant effects of participation in euthanasia on burnout and secondary traumatic stress. In addition, the lived experiences of animal shelter workers who perform euthanasia were explored and themes identified. Animal shelter workers identified coping strategies that helped mitigate the impact of occupational stress.

DEDICATION

This study is dedicated to the individuals who found a vocation helping companion animals.

ACKNOWLEDGEMENTS

Much gratitude is given to my dissertation chair, Dr. Noreen Graf, who believed in this project and patiently guided me through to completion. This could not have been completed without her support. I have also been fortunate to have had a wonderful committee comprised of Drs. Roy Chen, Alfonso Mercado, Ralph Carlson, and Irmo Marini, each of whom were encouraging while providing much needed critique and advice. I am grateful for these amazing individuals.

I had questioned my intelligence and sanity numerous times during the course of this project, and I am eternally grateful for some spectacular friends who provided me with love and support. Each member of my framily kept me going. Specifically, I thank Dr. Edwin Aguilar who repeatedly and publicly called out my time-wasting on social media and told me to get back to work.

Many thanks to my husband, Matt, who patiently tolerated an extremely stressed-out wife for a very long time. He's a trooper and a keeper.

Thank you most especially to my beloved child, Alex, without whom I am nothing. I am also glad to say that the pain of Alex's birth is no longer the worst I've experienced. The gestation and birth of this dissertation was far worse.

Thank you to my mother, Nguyen Thi Thu Le, who instilled in me the drive to keep furthering my education. I inherited her perseverance and strength (and stubbornness) for which I am grateful.

A very special thank you to my father, Charles Richard Finn, who was so thrilled I was returning to school to pursue a doctorate that he gifted me his brand new, souped-up MacBook Pro for me to do schoolwork on. You're the best, Dad. This was all for you.

TABLE OF CONTENTS

Page

ABSTRACT…… iii

DEDICATION……iv

ACKNOWLEDGMENTS…….…….. v

TABLE OF CONTENTS……..…… vii

LIST OF TABLES……..ix

LIST OF FIGURES……. x

CHAPTER I. INTRODUCTION…….……1

Statement of the Problem…….3

Purpose of the Study……..…….……. 5

Definition of Terms…….…….8

Limitations of the Study……..……..….16

CHAPTER II. REVIEW OF LITERATURE……..…….. 17

Compassion Fatigue…….……..…….... 17

Animal Euthanasia in the United States ……..……..26

CHAPTER III. METHODOLOGY……..……..….. 36

Sample…….……..…….36

Instuments…….……. 36

Recruitment Procedure…..……..……..……42

Research Design……..……..……43

CHAPTER IV. RESULTS……52

Quantitative Results…….……. 52

Qualitative Results……. 72

CHAPTER V. DISCUSSION…….....107

Summary of Findings…….……..107

Comparison with Other Research.…….…….. 110

Implications……..…….……...114

Limitations……..……..…….…….. 125

Conclusion…….……...126

REFERENCES…… 130

APPENDIX…….....141

BIOGRAPHICAL SKETCH……...150

LIST OF TABLES

Page

Table 1: Quantitative Sample Composition… 54

Table 2: Mental Health Scores 57

Table 3: Pearson's for Five Measures of Mental Health 59

Table 4: *t* Test for Mental Health - Participation in Euthanasia 60

Table 5: *t* Test for Mental Health - Type of Shelter 60

Table 6: *t* Test for Mental Health - Length of Employment 61

Table 7: Prevalence of Participation in Euthanasia in Type of Shelter 62

Table 8: Multivariate and Univariate ANOVA *F* Ratios for Mental Health Measures 63

Table 9: Exploratory Factor Analysis Results 65

Table 10: Pearson's for Four Factors 67

Table 11: *t* Test for Four Factors - Participation in Euthanasia 68

Table 12: *t* Test for Four Factors – Type of Shelter 68

Table 13: *t* Test for Four Factors – Length of Employment 69

Table 14: Multivariate and Univariate ANOVA *F* Ratios for Four Factors 70

Table 15: Qualitative Sample Composition 73

Table 16: Preliminary Themes 78

LIST OF FIGURES

Page

Figure 1: Flowchart of Convergent Parallel Design 51

CHAPTER I

INTRODUCTION

Compassion fatigue (CF) is the multidimensional strain or depletion resulting from frequently working with people who are in significant emotional distress (Figley, 2006). Compassion fatigue is often experienced by first responders and individuals who work in the helping professions (Figley, 1995). Euthanasia technicians and other animal shelter workers (ASW) who participate in euthanasia are also at risk for experiencing compassion fatigue due to the work they perform (American Veterinary Medical Association [AVMA], 2000). In their 2000 Report of the AVMA Panel on Euthanasia, the American Veterinary Medical Association recognized the emotional strain of euthanasia on professionals, especially those working in animal control facilities where the practice of euthanasia is performed in large numbers. The veterinarian and animal shelter fields recognize what is referred to as the "caring-killing paradox" as a contributor to the strain experienced by workers (Arluke & Sanders, 1996, p. 85; Humane Society of the United States [HSUS], 2013, p. 69; Reeve, Rogelberg, Spitzmüller, & DiGiaomo, 2005). As Arluke and Sanders (1996) explained, workers enter the field because they want to care for and help animals; however, they recognize that part of the job entails euthanizing animals. For animal shelter workers, then, their compassion for the animals they care for is compounded by the distress and fatigue experienced from the act of euthanizing those animals. Having high levels of compassion, coupled with regularly working with distressed

animals – some of whom must be euthanized – make animal shelter workers exceptionally vulnerable to compassion fatigue (Figley, 1995, p. 15).

Not only are the rates of compassion fatigue high, but the rate of suicide ideation for animal rescue workers are similar to those of firefighters and police officers (Tiesman et al., 2015). Tiesman et al. (2015) studied the rate of those who died by suicide in a workplace setting. As the researchers stated, one reason people choose to die by suicide at work may be to spare family members from having to discover the body. According to the researchers, the average rate of suicide at the workplace for adults in America is 1.5 individuals per million people. For those who are protective service personnel, such as police, the number rises to 5.3 per million. Animal control workers and those in similar occupations die by suicide at the workplace at a rate of 5.1 per million. The researcher was not be able to state definitively why the rate of those who die by suicide while at the workplace is higher for these occupations.

Veterinarians are another group of animal care workers who have high rates of suicidal ideation and depressive episodes. Nett et al. (2015) surveyed 10,254 veterinarians in the United States, 68.6% of whom practice exclusively in small animal medicine. Small animals are often considered companion animals and make up the population of animal shelters. Of the respondents, 10.9% of females and 6.8% of males had serious psychological distress according to their scores on the Kessler-6 psychological distress scale. This compares to 4.4% of females and 3.5% of males in the general adult population in the United States who meet that criteria (Nett et al., 2015). Respondents also reported symptoms experienced since they initially became a veterinarian. Incidences of suicide ideation since graduation from veterinarian school occurred in 19.1% of females and 14.4% of males, compared to suicide ideation for the general population of adults in the United States of 7.1% for females and 5.1% for males. Veterinarians in the study

who experienced depressive episodes since graduation were 36.7% of females and 24.5% of males, which is higher than the lifetime prevalence of depression in adults in the United States (22.9% and 15.1% respectively). Veterinarians, however, fared better than the general population in regards to the rate of suicide attempts. Of the veterinarians surveyed, only 1.4% of females and 1.1% of males attempted suicide. The rate in the United States for suicide attempts are 3.0% of females and 1.6% of males.

Statement of the Problem

Phenomenological qualitative studies often utilizes bracketing, whereby the researcher explains their experience with the phenomenon so the reader may attain a fuller picture of the study (Creswell, 2013, p. 78-79). Moustakas (1994, p. 104) also stated that the history the researcher has of the phenomenon can guide the research question. For these reasons, the following information about the genesis of this project is provided.

This study addresses a population that is often overlooked in research and underserved in clinical practice. The population was first introduced to the author of this study in 2014 when an open/unrestricted intake, high-kill shelter in South Texas requested a compassion fatigue workshop for its staff who participate in euthanasia. It was explained to the author that the entire medical staff had recently refused to euthanize a litter of kittens despite them being incurably ill, and had shortly thereafter refused to euthanize any of the animals. The administrative staff reported being concerned about the mental health of the medical staff due to the strains of the job, and stated that no discussion of burnout or compassion fatigue had been organized for the staff in the history of the shelter. Despite having been a licensed professional counselor for 16 years, this was the first time the author had worked with animal shelter employees and knew little about the nature of their jobs. The author conducted a compassion fatigue workshop was

conducted by the author for approximately one dozen staff members. Especially shocking for the author was not how intensely the strain of euthanizing companion animals affected the employees, but how much abuse they were subjected to by the public for conducting euthanasia and how they were negatively affected by that abuse. For example, one female employee shared how a man walking outside the shelter property shouted through a fence that she was a murderer while she was working alone on the grounds. The employee reported feeling shocked and distressed by those actions, and repeatedly replayed the incident in her mind. Other employees also reported trauma-like symptoms. A few reported having nightmares on a regular basis. Two reported having difficulty seeing any animal outside of work because they found themselves visually scanning each animal's health to determine if it was healthy enough to avoid euthanasia. Some reported mood swings and irritability. Others reported relationship difficulties or occasionally withdrawing from friends and family. When asked about their coping mechanism, for many, the first answer was to drink alcohol.

In the years following this initial workshop, the author has periodically conducted compassion fatigue workshops for shelters in Texas. Issues that continuously arise are the emotional distress frequently experienced by staff, feeling unsupported and misunderstood by the public, feeling administration is unsympathetic or otherwise contributes to their distress, and difficulty coping with the distress of the job. In preparation for these compassion fatigue workshops at animal shelters, research of the existing literature and consultation with colleagues were conducted. However, information regarding the topic of compassion fatigue and effective treatment interventions were found to be scarce, pointing to a need for research in this area.

Purpose of the Study

To better assist animal shelter workers affected by the emotional strains of the profession, a greater understanding of their mental health needs is warranted. The purpose of this research was to examine the mental health issues that impact the lives of animal shelter workers and explore their lived experiences. Specifically, this study explores the mental health experiences of the animal shelter workers, and identifies coping strategies that animal care workers utilize to mitigate the impact of occupational stress.

Research questions:

1. What are the levels of the mental health issues (defined as comprised of levels of depression, anxiety, substance use, burnout, and secondary traumatic stress) of animal shelter workers?
2. Do animal shelter workers who participate in euthanasia of animals experience more mental health issues (defined as comprised of depression, anxiety, substance use, burnout, and secondary traumatic stress) than those animal shelter workers who do not participate in euthanasia?
3. What is the interaction effect between the job function at an animal shelter (participate in euthanasia or not) and the type of shelter employed in on mental health (kill or no-kill)?
4. What is the interaction effect between the job function at an animal shelter (participate in euthanasia or not) and the number of years at current job on mental health?
5. What is the interaction effect between participation in euthanasia, number of years at current job, and the type of shelter (kill or no-kill) employed in on each of the mental

health issues assessed (levels of depression, anxiety, substance use, burnout, and secondary traumatic stress)?

6. What are the lived work experiences of animal shelter workers as regards to the euthanasia of animals?
7. How do animal shelter workers cope with the stress that may accompany the euthanasia of animals at their workplace?

Independent variables:

Participation in euthanasia (Yes, No), Nominal

Number of years at current job (< 5 years, ≥ 5 years), Nominal

Type of shelter employed in (Kill, No-Kill), Nominal

Dependent variables:

Anxiety score, Interval

Depression score, Interval

Substance use score, Interval

Burnout score, Interval

Secondary Traumatic Stress, Interval

The dependent variables listed above, in combination, comprise the variable Mental Health Issues.

Research hypotheses:

There is a difference based on the type of shelter employed in on mental health (Kill; No-Kill).

H_1: $\tilde{\mu}_{\text{Kill}} \neq \tilde{\mu}_{\text{NoKill}}$

There is a difference based on participation in euthanasia on mental health (Yes, euthanize; No, does not euthanize).

H_1: $\tilde{\mu}_{\text{yes}} \neq \tilde{\mu}_{no}$

There is a difference based on years at current job on mental health (Less than 5 years; 5 or more years).

H_1: $\tilde{\mu}_{< 5 \text{ yrs}} \neq \tilde{\mu}_{\geq 5 \text{ yrs}}$

There is a cell effect based on the type of shelter employed in and participation in euthanasia on mental health.

H_1: $\tilde{\mu}_{\text{Kill, yes}} \neq \tilde{\mu}_{\text{Kill, no}} \neq \tilde{\mu}_{\text{NoKill, yes}} \neq \tilde{\mu}_{\text{NoKill, no}}$

There is a cell effect based on the type of shelter employed in and years of experience on mental health.

H_1: $\tilde{\mu}_{\text{yes, <5 yrs}} \neq \tilde{\mu}_{\text{yes, } \geq 5 \text{ yrs}} \neq \tilde{\mu}_{\text{no, <5 yrs}} \neq \tilde{\mu}_{\text{no, } \geq 5 \text{ yrs}}$

There is a cell effect based on euthanasia and years of experience on mental health.

H_1: $\tilde{\mu}_{\text{yes, <5 yrs}} \neq \tilde{\mu}_{\text{yes, } \geq 5 \text{ yrs}} \neq \tilde{\mu}_{\text{no, <5 yrs}} \neq \tilde{\mu}_{\text{no, } \geq 5 \text{ yrs}}$

There is a cell effect among the type of shelter employed in, participation in euthanasia, and years of experience on mental health.

H_1: $\tilde{\mu}_{\text{Kill, <5 yrs, yes}} \neq \tilde{\mu}_{\text{Kill, } \geq 5 \text{ yrs, yes}} \neq \tilde{\mu}_{\text{NoKill, <5 yrs, yes}} \neq \tilde{\mu}_{\text{NoKill, } \geq 5 \text{ yrs, yes}} \neq \tilde{\mu}_{\text{Kill, <5 yrs, no}} \neq \tilde{\mu}_{\text{Kill, } \geq 5 \text{ yrs, no}} \neq \tilde{\mu}_{\text{NoKill, <5 yrs, no}} \neq \tilde{\mu}_{\text{NoKill, } \geq 5 \text{ yrs, no}}$

This study expands upon the literature concerning the mental health impact and needs of animal shelter workers who perform euthanasia.

Definition of Terms

Considerable research has focused on compassion fatigue as a cost of professionally caring for others (Simpson & Starkey, 2006; Smith, 2009; Stebnicki, 2007). The Oxford Dictionary (2015, para. 1) defines compassion as the "sympathetic pity and concern for the sufferings or misfortunes of others." Boyatzis, Smith, and Blaize (2006) took this definition a step further and added *action* in response to others' feelings as a component of compassion. They defined compassion as requiring three components: "(1) empathy or *understanding* the feelings of others; (2) *caring* for the person (e.g., affiliative arousal); and (3) willingness *to act* in response to the person's feelings" [emphasis added] (Boyatzis, Smith, & Blaize, 2006, p. 13). In addition, the authors stated that compassion towards others must be demonstrated in the absence of any expectation of a reward or benefit. Reich (1989), in defining the concept of compassion, acknowledges that the Latin roots of the word translates as "to suffer with." *Compassion*, he stated, is the choice to experience another's suffering with them after understanding that person's experience. Similarly, Reich (1989) asserted the importance of compassionate *behavior,* which he states is a component of compassion and is defined as the action one is willing to engage in response to being compassionate to other's distress.

The terms *compassion fatigue* and *empathy fatigue* are often used interchangeably in the literature to describe dysfunction related to the emotional demands of one's profession. Figley (1995, p. 1) stated: "There is a cost to caring." Compassion, as defined earlier, is experiencing another's suffering with him/her. Empathy, as defined by the Oxford Dictionary (2018, para. 1), is "the ability to understand and share the feelings of another." This definition of empathy does

not suppose that the individual must have experienced the same or similar circumstance to understand what the other person is experiencing.

Compassion fatigue can be described as the multidimensional strain or depletion from frequently working with people who are in significant emotional distress. The Oxford Dictionary (2018, para. 1) defined compassion fatigue as "indifference to charitable appeals on behalf of those who are suffering, experienced as a result of the frequency or number of such appeals." Figley (2002, p. 1434) does not define compassion fatigue as feeling indifferent, but that which produces a *reduction* in "our capacity or our interest in bearing the suffering of others." Compassion fatigue, according to Lynch and Lobo (2012), has been used in the literature interchangeably with secondary traumatic stress, vicarious traumatization, and burnout. Authors frequently view compassion fatigue as related to, but separate from, burnout (Ray, Wong, White, & Heaslip, 2013; Sprang, Clark, & Whitt-Woosley, 2007; Thompson, Amatea, & Thompson, 2014), which Maslach, Schaufeli, and Leiter (2001, p. 399) described as "a psychological syndrome in response to chronic interpersonal stressors on the job."

In this study, the terms compassion and compassion fatigue will be used. Compassion satisfaction is also referred to in this study. This concept can be viewed as the antithesis of compassion fatigue. Stamm (2010) described compassion satisfaction as the positive feelings that are derived from performing one's work. By contrast, symptoms of compassion fatigue include generalized anxiety, depression, and lack of sleep (Cerney, 1995). Compassion fatigue is also described as being comprised of burnout and secondary traumatic stress. Stamm (2010) defined burnout as the experience of feelings of depression, frustration, exhaustion, and anger. Secondary traumatic stress (STS) is defined by Stamm (2010) as the negative, distressing feeling that arises from fear and experiencing work-related trauma. Figley and Roop (2006, p. 22) described

secondary traumatic stress as systemic trauma that caregivers who help victims, or the "primary trauma survivors," experience. The primary trauma survivors, according to the authors, experience symptoms that may meet the criteria for posttraumatic stress disorder. The caregivers, or "secondary trauma survivors," also exhibit symptoms that meet the criteria for posttraumatic stress disorder (Figley & Roop, 2006, p. 22).

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) describes posttraumatic stress disorder (PTSD) as having potentially varied symptoms (American Psychiatric Association [APA], 2013). Some common symptoms include: intrusive and recurrent memories of the traumatic event(s) that are distressing and may take the form of flashbacks or dissociation, active efforts to avoid the distressing memories, difficulties with mood (i.e., anger, irritability, fear, sadness), cognitive difficulties (i.e., problems with concentration or memory), feeling estranged from others, diminished interest in once pleasurable activities, and possible sleep disturbance. PTSD is considered a trauma- and stress-related disorder, and can involve direct or indirect exposure to violence or death. Figley and Roop (2006) also stated that one form of PTSD is compassion fatigue, the result of the demand to compassionately help animals or other people who are suffering.

Substance abuse has been associated with past trauma (Cook et al., 2005), and the excessive use of substances is frequently viewed as a maladaptive coping mechanism (Smith, 2007). The DSM-5 defines substance use disorders as based on a pattern of behaviors that are related to the chronic use of an intoxicating substance and cause social, cognitive, emotional, physiological, and/or occupational problems (APA, 2013).

Those with depressive disorders, according to the DSM-5, commonly exhibit symptoms of sadness, irritability, feelings of emptiness, and cognitive difficulties which can impair an

individual's ability to function (APA, 2013). Additionally, the DSM-5 defines anxiety as a response to a perceived future threat and anxiety disorders are mental health conditions whereby an individual response is disproportionately excessive for the trigger or perceived threat (APA, 2013).

The term euthanasia, according to the American Veterinary Medical Association (AVMA, 2013), is comprised of the Greek words *eu* (good) and *thanatos* (death), and is used to describe the ending of an animal's life to end pain and suffering. At an animal shelter, euthanasia may be performed by certified euthanasia technicians and those under the immediate supervision of a veterinarian (AVMA, 2017). The euthanasia methods and procedures must also be carried out in accordance with the *AVMA Guidelines for the Euthanasia of Animals*. The *AVMA Guidelines for the Euthanasia of Animals: 2013 Edition* noted the duty to euthanize in cases to include, but not limited to, when it is in the animal's welfare and it is done in as painlessly, rapidly, and distress-free as possible. The AVMA also described what it considers acceptable euthanasia methods for animals. These humane standards help to minimize the symptoms of compassion fatigue among animal shelter workers who must perform euthanasia on a large scale and on a regular basis (AVMA, 2013). Acceptable means of euthanasia, according to the AVMA, are inhaled anesthetics administered via a chamber (i.e., isoflurane, sevoflurane), intravenous or intraperitoneal injection (i.e., sodium pentobarbital), gunshot in extreme emergency situations, and penetrating captive bolt (the piston-like devices that are used in meat-processing facilities that kill or render unconscious animals with one blunt blow to the head) (AVMA, 2013). Gunshot and penetrating captive bolt are not recommended by the AVMA in shelter situations and when other, more humane methods are available. The AVMA also states that gas chambers should not be used on a routine basis, and only in unusual, large-scale

situations such as a natural disaster. The Humane Society of the United States (HSUS, 2013) draws upon the AVMA standards of acceptable humane euthanasia methods in an animal shelter setting, and appears stricter in terms of what they consider unacceptable, inhumane approaches that should never be considered. Unacceptable methods in an animal shelter under any circumstance include carbon monoxide administered via a gas chamber, electrocution, drowning, gunshot, cervical dislocation, decompression chamber, severing the spinal cord, and exsanguination (SHUS, 2013).

The methods of euthanasia chosen varies between states, as each regulate how euthanasia is performed. States may allow for the use of compressed carbon monoxide gas, oral administration, injectable agents, and/or inhalant anesthetics (AVMA, 2017). Texas only allows the use of sodium pentobarbital injections for dogs and cats in an animal shelter (AVMA, 2017). If the animal in the shelter is other than a dog or cat, Texas requires the euthanasia is in accordance to AVMA Guidelines for the Euthanasia of Animals. These guidelines also include criteria for evaluating euthanasia methods that were developed by a panel of experts convened by the AVMA (AVMA, 2013). The guidelines are:

(1) ability to induce loss of consciousness and death with a minimum of pain and distress;

(2) time required to induce loss of consciousness;

(3) reliability;

(4) safety of personnel;

(5) irreversibility;

(6) compatibility with intended animal use and purpose;

(7) documented emotional effect on observers or operators;

(8) compatibility with subsequent evaluation, examination, or use of tissue;

(9) drug availability and human abuse potential;

(10) compatibility with species, age, and health status;

(11) ability to maintain equipment in proper working order;

(12) safety for predators or scavengers should the animal's remains be consumed;

(13) legal requirements; and

(14) environmental impacts of the method or disposition of the animal's remains.

(AVMA, 2013, p. 10)

Injections, while considered quicker and more humane that other known methods, are a much more intimate experience for putting down an animal than the use of a gas chamber as the person must be in immediate proximity while the animal is dying. This close proximity can cause greater stress on those performing the euthanasia, but can also help workers (HSUS, 2013). Those who perform euthanasia may feel "generally heartened" by being able to physically comfort the animals during their last moments, which falls in line with the sixth criteria of the AVMA (2013, p. 10): "compatibility with intended animal use and purpose," by helping to reduce the animals' distress (HSUS, 2013, p. 2).

Figley and Roop (2006) reported that an industry-wide definition of animal shelter has not been adopted. However, the authors reported the criteria of the Human Society of the United States for an animal shelter, which was adopted for this study. The criteria are:

1. A regular 501(c)(3) nonprofit organization
2. An organization that operates an animal-shelter facility with a fixed address and maintains it primarily for the purpose of sheltering animals
3. One that handles about a hundred companion animals a year
4. One that maintains regular visiting hours for the general public

(Figley & Roop, 2006, p. 41)

The definition of a no-kill shelter is more difficult to determine. Commonly, it is assumed that "no-kill" means a shelter does not euthanize at all. While "no-kill" generally means that no healthy or treatable animal is euthanized, there is no universally agreed upon definition (Avanzino, 2003). According to the Association of Shelter Veterinarians (ASV, 2017), shelters that are considered to have the no-kill designation have a live-release rate of at least 90%. They define live release rate as the calculation of "the number of animals leaving a facility by means other than euthanasia or in-shelter death" (ASV, 2017, p. 4). Maddie's Fund, an animal welfare foundation, has as one of its goals a "no-kill nation" (Avanzino, 2003, para. 2). Their definition of no-kill shelters are those that do not kill animals who are considered healthy and treatable, and euthanize only animals who are deemed unhealthy and untreatable according to the definitions in *The Asilomar Accords*. In other words, the no-kill shelters do not euthanize animals for space purposes, as do other shelters.

Written in 2004 in collaboration with representatives from Maddie's Fund, The Humane Society of the United States, American Society for the Prevention of Cruelty to Animals, American Humane Association, and others, *The Asilomar Accords* set what the participants hope to be industry standard definitions and procedures for calculating live release rates (The Asilomar Accords, 2004). Healthy animals, according to *The Asilomar Accords*, are those eight

weeks and older who have not displayed a temperamental or behavioral issue that would make it unsuitable for adoption or pose a safety risk, and no known medical condition that adversely affects the health of the animal. Those who are not currently healthy but can become healthy if provided medical or behavioral care are considered treatable. Animals with manageable conditions are those who cannot be cured but with long-term care can live a satisfactory quality of life and will pose no health or safety risk to humans or other animals. *The Asilomar Accords* define unhealthy and untreatable dogs and cats as those who pose a health or safety risk if placed for adoption due to behavioral issues, suffering from a medical issue that cannot be cured or managed so that the animal's quality of life does not suffer, or are under eight weeks old and not likely to become healthy.

No-kill shelters often operate on a managed intake basis, which involves scheduled appointments for admission to balance the release of animals at the shelter (ASV, 2017). Oftentimes, shelters that operate on a managed admission basis offer alternatives to the community during the waiting period, accept animals on an emergency basis, and may accept animals from animal control facilities and municipalities on an open admission basis. Limited intake shelters are private organizations that can limit admissions based on specific criteria and are not obliged to accept animals from animal control entities. Conversely, open admission shelters often have contracts with animal control or municipalities or are run by animal control. While these shelters are generally viewed as accepting any animal into the shelter, according to the ASV (2017), open admission shelters may limit owner surrenders, limit hours of admissions, and limit geographical areas from which intakes are accepted.

Limitations of the Study

This study relied on self-reports by animal shelter workers about their symptoms of mental health conditions. Some individuals may not have felt comfortable sharing information about their mental health, and thus may not have been honest in their self-report. Individuals also may have been purposefully or subconsciously deceptive regarding their mental health condition, and either under- or over-estimated the severity of their mental health difficulties. This may have negatively affected the internal validity of the study.

According to some of the shelter directors and managers who provided feedback to the researcher, many of the shelter workers did not have email addresses and could not forward the surveys. In addition, employee turnover has excluded some potential respondents such as novice employees – those most affected by the caring-killing paradox (Arluke & Sanders, 1996) – who may have chosen to not continue working at the animal shelter.

In addition, because mental illness is a complex phenomenon, the causes of which are either unknown or comprised of a combination of genetic, biological, social, psychological, and environmental factors, this study cannot state definitively that euthanasia causes any of the mental health difficulties examined in this study.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Much of the literature on compassion fatigue as an occupational hazard had been conducted with mental health professionals, specifically trauma counselors (Figley, 2002; Simpson & Starkey, 2006; Smith, 2009). Other studies have found compassion fatigue to also affect child protection services workers (Anderson, 2000) and first responders such as law enforcement personnel and emergency room nurses (Figley, 1995).

Compassion Fatigue

Figley (1995) describes compassion fatigue as resulting from working with individuals who have experienced trauma, and empathizing with those individuals. Recent discovery of mirror neurons may help explain the ability to empathize with others' distress (Winerman, 2005). Mirror neurons fire when an individual performs an action and when an individual witnesses someone else perform that same action. Winerman stated that because mirror neurons fire regardless if the individual themselves perform the action or if they witness an action performed, mirror neurons may account for why people feel pain when others feel pain. Essentially, people view others as similar to themselves, and when they witness someone in distress, mirror neurons cause the mimicking of emotional and physiological responses of distress. Tyler (2012) examined the limbic model of systemic trauma, another theory that explains how distressing emotions can transfer between individuals. The limbic system is the portion of the brain that is

responsible for higher cognitive function, memory, and emotion. According to Tyler (2012, p. 129), the traumatized individual experiences "raw, unprocessed emotions" including fear, guilt, sadness, and anger when the amygdala is activated. Those emotions are projected outward, and those who care for the traumatized individual are exposed to the distressing emotions and may absorb the projected emotions. Tyler believes an individual who works with numerous traumatized people projecting powerful and distressing emotions will likely experience neurobiological and psychological changes similar to the helpee's experience.

Individuals who routinely work with those who have experienced trauma, are exposed to the horrors of life on a regular basis. Cerney (1995) asserted that when workers are faced with the painfully horrific and traumatic experiences of other people, there will be an emotional and psychological toll on the workers. The author stated that this negative impact is especially true when community members or bystanders are perceived to be uncaring.

Compassion Fatigue in the Caring Professions

As stated previously, Stamm (2010) stated that compassion fatigue is composed of secondary traumatic stress and burnout. Secondary traumatic stress is described by her as the resulting distress of experiencing the trauma of others while on the job. Beck (2011) reviewed the literature on incidences of secondary traumatic stress among nurses who work with traumatized patients. In her review of seven studies – five consisted of a sample of only nurses and two included other healthcare workers as well as nurses – secondary traumatic stress was found to occur at a significant rate in each of the studies.

More recent studies reported similar results. Munger, Savage, and Panosky (2015) explored vicarious trauma among correctional health nurses. The Professional Quality of Life (Pro-QOL) was administered to 205 nurses who work with violent offenders at correctional

facilities to assess levels of secondary traumatic stress, which the authors equated with vicarious trauma. The researchers found that those who experienced violence in the workplace had higher levels of burnout stress (31.7%) than those who did not (13.6%). The same is true for secondary traumatic stress. Nurses who experienced violence in the workplace (approximately 66%) had moderate to high risk for secondary traumatic stress compared to those who did not experience violence in the workplace (6.3%).

Nurses who did not regularly experience violence in the workplace were studied by Hegney, Craigie, Francis, Aoun, and Hegney (2014a). The authors examined the emotions of anxiety and depression, and perceived stress, as contributing factors to compassion fatigue and compassion satisfaction in registered nurses in Australia. This mixed-methods study also examined additional factors impacting these variables and described how increasing resiliency is a key strategy to increase compassion satisfaction in nurses (Hegney, Craigie, Francis, Aoun, & Hegney, 2014b). Resiliency has been defined as a person's ability to rebound after experiencing adversity and is considered a dynamic interaction process between personal traits and one's social and environmental circumstances (Di Fabio & Saklofsky, 2018; Masten, 2007). Hegney and colleagues (2014a) utilized the Professional Quality of Life Scale version 5 (ProQOL-5) and the Depression Anxiety Stress Scale (DASS). The ProQOL-5 was used to assess compassion fatigue (comprised of burnout and secondary traumatic stress) and compassion satisfaction. The DASS measures symptoms of depression, anxiety, and stress/tension and is comprised of 42 items. ANOVA and t-test correlations were conducted to measure the levels of correlation on the scores of these two scales with demographic information of respondents. The authors found that 15.2% of the registered nurses studied experienced moderate to high anxiety and 13.6% reported symptoms of depression. Compared to normative data of Australian and British adults, the

number of respondents reporting anxiety was higher than that of the general population (average score for general population on DASS: 7-9%). The authors concluded that increased anxiety may raise the respondent's risk for compassion fatigue. Hegney and colleagues also found a significant negative correlation between level of depression and compassion satisfaction.

Keidel (2002) discussed occupational stress associated with working as hospice caregivers. The author stated that, like those in other professions that regularly deal with death and dying, a frequently cited reason for hospice caregivers' decision to take time away from their jobs is that they have "reached the limits of his or her capacity to care" (Keidel, 2002, p. 200). In addition, the author described how compassion fatigue and burnout in hospice caregivers affects them in multiple other ways. Occupationally, workers are impaired and their job performance suffers. On an interpersonal level, workers' relationships suffer. Symptoms of reduced attention span, concentration difficulties, irritability, withdrawal, and heightened anxiety were found to contribute to the difficulties workers experience in various aspects of their lives.

In addition to stress, researchers have studied the risk of developing compassion fatigue, secondary trauma, and other mental health issues among hospice workers. One study examined compassion fatigue and levels of anxiety and depression among hospice workers in Minnesota (Whitebird, Asche, Thompson, Rossom, & Heinrich, 2013). This study also utilized the ProQOL (R-III version) to measure compassion fatigue and burnout. The authors used the Generalized Anxiety Disorder (GAD-7) Scale to measure symptoms of anxiety, the Patient Health Questionnaire 8 (PHQ-8) to measure symptoms of depression, and the Short Form-12 Health Survey Version 2 (SF-12). The SF-12 provides physical health and mental health composite scores. The authors reported that based on the mental health composite scores of the SF-12, the hospice workers studied scored "slightly below average" compared to the scale's norms (M =

46.1, SD = 9.9) (p. 1536). In addition, anxiety and depression symptoms were moderately correlated to compassion fatigue and burnout. However, the respondents' scores for compassion fatigue and burnout were less than the ProQOL's norms. The authors posited that prevention might account for the lower than average scores for compassion fatigue and burnout. Given general awareness about the stressful nature of hospice work, the researcher speculated institutional and social supports may be in place to offset occupational stress.

Alkema, Linton, and Davies (2008) surveyed 37 hospice care workers who were employed by one of two home hospice agencies. The survey was comprised of the Professional Quality of Life (Pro-QOL-RIII) and the Self-Care Assessment Worksheet (SCAW) instruments. The authors found a strong positive relationship between burnout and compassion fatigue ($r = .761$, $p < .05$), as well as a negative correlation between compassion fatigue and compassion satisfaction ($r = -.300$, $p < .05$). Results also indicated a significant positive correlation between compassion satisfaction and emotional care ($r = .375$), a healthy work-life balance ($r = .320$), and spiritual care ($r = .294$). These results buttress Hegney, Craigie, Francis, Aoun, and Hegney's (2014a) finding that building resiliency is key to increasing compassion satisfaction.

Breen, O'Conner, Hewitt, and Lobb (2013) also studied healthcare professionals experiencing occupational stress and secondary trauma. The authors stated that those who work in "'high-death' contexts" (p. 60) are especially at risk. In their qualitative study utilizing a semi-structured interview format, they sampled 38 health professionals who work in palliative care and with patients who have cancer, and included psychologist, social workers, chaplains and pastoral care workers, nurses, group facilitators, and a medical doctor. Four themes emerged from the grounded theory analysis of participant responses related to loss and grief, working with families, and self-care.

Of particular interest is the theme "Emotional demands and associated self-care." While the work is satisfying, Breen and colleagues (2013) reported bereavement and palliative care can be very emotionally taxing for the health professionals working with patients with cancer and their families. As well, they emphasized the importance of self-care for professionals. Participants noted the importance of being empathetic and building emotional connections with their patients. However, these things that make them successful healthcare providers put them at risk for emotional exhaustion.

In their study of 630 hospice palliative care workers and volunteers, Slocum-Gori, Hemsworth, Chan, Carson, and Kazanjian (2011) found negative correlations between compassion satisfaction and burnout ($r = -0.531$, $p < .001$) and compassion satisfaction and compassion fatigue ($r = -0.208$, $p < .001$). The authors also reported a strong positive correlation between compassion fatigue and burnout ($r = 0.532$, $p < .001$). These results highlight the importance of increasing job satisfaction to help mitigate the effects of compassion fatigue.

Other studies have examined the effects on helping professionals caring for those experiencing trauma reactions. Goldblatt (2009) utilized a phenomenological method to study nurses who helped women who had been abused. Twenty-two female Israeli nurses were interviewed regarding a variety of topics including screening, approaching, and treating abused women; thoughts, feelings, attitudes, and reactions related to experiences working with abused women; perceptions of intimate partner relationships; and, impact of working with abused women on intimate relationships and parental roles. Goldblatt (2009, p. 1650) used the term "emotional labour" to describe the strain of experiencing compassion and empathy for those they cared for, at the same time feeling anger, helplessness, and criticism towards their patients. The main theme identified in this study was the difficulty the nurses had keeping their professional

duties from invading their personal lives. Feelings of frustration, perceptions of role inadequacy, and a sense of responsibility towards those they are caring for further compound the stress reactions experienced by the nurses.

Trauma and stress have been recognized to negatively affect individuals physiologically, cognitively, emotionally, psychologically, and socially. Being close to those with symptoms of posttraumatic stress disorder (PTSD), a type of trauma and stress-related disorder, have also been demonstrated to correlate with symptoms of secondary trauma stress (STS), in which symptoms are similar to PTSD but without direct exposure to a traumatic event. Ahmadi, Azampoor-Afshar, Karami, and Mokhtari (2011) surveyed 100 veterans with symptoms of PTSD and their spouses and found through the Pearson correlation coefficient that the severity of PTSD symptoms among veterans had a positive correlation with the severity of their spouses' secondary trauma stress symptoms ($r = .371$, $p = .0001$). In addition, the authors reported that the duration of symptoms of PTSD for veterans significantly predicts spouses' STS ($r = .284$, $p = .01$). Ahmadi and colleagues (2011) posit that because family members are closest to veterans, they will logically be affected by the PTSD symptoms experienced by veterans.

Mental health providers for veterans with posttraumatic stress disorder have also been studied for stress and burnout. McGeary, Garcia, McGeary, and Finley (2014) surveyed 138 psychologists and clinical social workers who provide counseling for the Veterans Health Administration. Utilizing the Maslach Burnout Inventory – General Survey (MBI-GS), the authors found that respondents in general exhibited moderate levels on the Exhaustion (EXH) subscale ($M = 15.0$, $SD = 7.9$), high levels on the Cynicism (CYN) subscale ($M = 11.3$, $SD = 8.0$), and moderate levels on the Professional Efficacy (PE) subscale ($M = 29.3$, $SD = 5.5$). EXH subscale includes questions such as "I feel burned out from my work," CYN asks questions

related to how significant employees believe their jobs are, and the PE subscale measures how effective individuals feel at their jobs. McGeary and colleagues (2014) also found using independent samples *t* test that those reported having used sick days for either physical or mental health concerns had higher Exhaustion scores (n = 120; M = 15.93, SD = 7.52) compared to those who did not use sick days (n = 18; M = 8.61, SD = 7.45), t = -3.86, $p < .001$. Those reported having used sick days for either physical or mental health concerns also had higher Cynicism scores (n = 120; M = 12.00, SD = 8.08 and n = 18; M = 6.94, SD = 6.48, respectively), t = -2.530, p = .013. The authors also found a small predictive relationship between burnout and the use of maladaptive coping mechanisms of consuming alcohol or caffeine or smoking tobacco.

In their meta-analysis of 41 studies of job burnout and secondary traumatic stress among those who provide professional care for survivors of trauma, Cieslak et al. (2014) found a positive association between burnout and secondary traumatic stress and that there was a large effect size (weighted r = .69, r^2 = .48). Gender was found to be a moderator, as the association was stronger in samples that consisted of mostly females (r^2 = .48) than samples that were mostly male (r^2 = .37).

Child protective service (CPS) workers investigate and address reports of abuse and neglect of children on a regular basis. Because of the level of occupational stress CPS workers experience, they are at risk for burnout (Anderson, 2000). Anderson (2000) studied CPS workers and supervisors who had been employed for at least two years (M = 7.5 years). The author explored their level of burnout and coping strategies. Of the 151 respondents, 62% scored high on Emotional Exhaustion on the Maslach Burnout Inventory (MBI). Emotional Exhaustion is one of the three subscales of the MBI and is defined as “feelings of being emotionally over-

extended and exhausted by one's work" (Anderson, 2000, p. 842). Coping strategies were measured by the Coping Strategies Inventory (CSI), which examines Engaged Coping (actively and directly managing stressors) and Disengaged Coping (coping by avoidance of stressors). The authors found that those who used Disengaged Coping were more likely to also experience higher levels of Emotional Exhaustion ($F = 4.016$, $p < .05$). Engaged Coping was, conversely, positively associated with a sense of Personal Accomplishment on the MBI ($F = 4.067$, $p < .001$). Disengaged Coping was negative associated with Personal Accomplishment ($F = -2.430$, $p < .05$).

Compassion Fatigue Among Animal Care Workers

Figley's (1995) definition of compassion fatigue could be extended to working with traumatized sentient beings, including animals at shelters whose deaths due to euthanasia are "prevalent and never-ending" (Figley & Roop, 2006, p. 43). The AVMA (2000) recognized how animal shelter professionals often become attached to the animals they work with. The love and concern for animal welfare by shelter employees, as cited in studies, may increase risk for secondary trauma reactions when faced with cases of animal cruelty or trauma. This concern for animals in their care parallels healthcare workers reactions to caring for their traumatized patients. In his case study, Arluke (1991, p. 1177) reported one worker who stated "I've seen dogs hung in alleys, cats with firecrackers in their mouths or caught in car fan belts." Witnessing the suffering of others, animals included, can have a toll on individuals, as Arluke (1991) pointed out. While healthcare professionals in general are at high risk of absorbing their patients' distressing emotions, animal healthcare professionals have the added burden of performing euthanasia on their patients.

Animal Euthanasia in the United States

According to the American Society for the Prevention of Cruelty to Animals (ASPCA, 2016a), approximately 2.7 million companion animals are euthanized each year in the United States within the 13,600 community animal shelters (ASPCA, 2016b). While many animals enter shelters as owner surrenders, the ASPCA report twice the number enter as strays. Some also enter as rescues from animal hoarders, puppy mills, dog fighting rings, and other traumatizing situations. Owners surrender their companion animals for a variety of reasons, including place of residence does not allow pets, allergies, behavioral problems, and not enough time to care for the pet (ASPCA, 2016a). The ASPCA (2016b) also estimate that approximately 7.6 million animals are taken to shelters annually.

Companion animals are euthanized because they have serious health problems, are elderly, are unadoptable due to behavioral problems, or were in an overcrowded shelter too long without getting adopted or fostered out. Rollin (2011) coined the term “convenience euthanasia” to describe the killing of healthy animals for other-than-humane reasons. Arluke (1991) also reported euthanasia is performed as an alternative to the stressful conditions of living in cages in shelters for long periods of time or being placed in an abusive or neglectful home environment.

Veterinarians and other animal shelter workers who perform euthanasia oftentimes enter the field because of their love for animals. Rollin (2011) cited concern for animals as one reason individuals choose to work in the animal shelter field, and Arluke (1991, p. 1177) referred to most shelter workers as “animal people” and “animal lovers.” This love for and concern for animals who are suffering coupled with the requirement to euthanize animals on a regular basis place animal care workers at risk for compassion fatigue.

Animal Shelter Workers

In their mixed-methods study investigating compassion fatigue among nonhuman animal-care professionals, Rank, Zaparanick, and Gentry (2009, p.41) reported one animal control officer stated "You don't have to kill your patients" in comparison to other healthcare workers. The authors defined nonhuman animal-care professionals as individuals who work in animal-related fields such as animal laboratories, veterinarian clinics, humane societies, animal shelters, animal control, and animal rescue groups. They found contributing factors of compassion fatigue included frequent euthanasia, witnessing the maltreatment and abuse inflicted upon animals, limited organizational financial resources, administration who were insensitive to the needs of the personnel, high volume of homeless animals, as well as personal and work conflicts.

The sources of chronic fatigue that Rank, Zaparanick, and Gentry (2009) found were also identified in an earlier study by White and Shawhan (1996). The researchers likewise highlighted the emotional distress of animal shelter workers who perform euthanasia. Among the difficulties faced are anger at the general public for the cruelty and indifference towards animals, pet overpopulation, and condemnation or ignorance of shelter work. In their mixed-methods study, the researchers found that animal shelter employees are generally better at coping with the task of euthanizing animals who are old or infirmed than those whose deaths resulted from shelter overpopulation. One worker was reported stating: "My anger goes to people who refuse to acknowledge their part in this crisis" (p. 848) in reference to euthanasia resulting from the overpopulation of unwanted animals. Also reported among participants were nightmares, increased appetite, difficulty with interpersonal relationships, feelings of frustration, and depression. In addition, shelter workers described the physical symptoms they experience. One

reported an ulcer and high blood pressure, and another said "when forced to participate [in euthanasia], I feel dizzy" (p. 848) as if they will pass out. Aside from chronic illnesses, moral stress and ethical dilemmas were also cited as issues in Rollin's (2011) work on animal euthanasia. Euthanasia performed on healthy animals may pose problems different from killing because of threat to quality of life. *Moral stress*, he stated, is not as easily alleviated through traditional stress management strategies such as relaxation skills and confiding in others.

One difficulty euthanasia technicians face when trying to talk with others in their personal lives about the emotional and physical demands of their work are the reactions they receive. In an ethnographic case study of one shelter, Arluke (1991, p. 1178) found that commonplace questions and comments posed to shelter employees such as, "How can you kill them if you care about animals so much?" and "I love animals; I couldn't do that." These statements suggest that workers do not care about the welfare of the animals and/or are indifferent to their deaths. Comments such as these may also further alienate shelter workers from their personal relationships. Donald and Powell (1989) wrote that euthanasia technicians often feel isolated from those who do not perform euthanasia, whether they be other shelter workers or friends and family, due to the perception that others cannot fathom what the job entails. According to the authors, some workers who do not perform euthanasia condemn workers who perform euthanasia without acknowledging the conditions that brought about its necessity.

There may be some factors that mitigate the traumatic stress experienced by those who care for and euthanize animals. Rohlf and Bennett (2005) surveyed 148 individuals who work with animals. Of these, 25% worked in an animal shelter. The others were identified as veterinarians in private practice, veterinary nurses in private practice, and research staff. The

majority of the respondents (71.3%) reported that their reason for working at their current position was "love, respect, or empathy with animals" (Rohlf & Bennett, 2015, p. 208). The authors also reported that scores on the Impact of Event Scale-Revised (IES-R), a measure of traumatic stress, was negatively correlated with satisfaction with social support (r = -.231, p < .01), meaning those who had more satisfying social supports were less likely to experience symptoms of traumatic distress, such as nightmares, avoidance behaviors, and an exaggerated startle response. The longer one was employed, the less likely the employee experienced symptoms of trauma, as the two scores were also negatively correlated (r = -.209, p < .01). However, being concerned about animal deaths (circumstances including hunting, experimental research, product testing, pain relief from injury or illness, and pest control) was positively associated with trauma symptoms (r = .393, p < .01). This indicates the possibility that the higher the level of compassion an individual has for animals, the more likely they are to experience negative stress reactions to the trauma inflicted on animals.

Increased risk for other mental health issues. Figley and Roop (2006) list secondary traumatic stress consequences for animal care professionals as including, among others, loss of meaning, decreased self-esteem, preoccupation with trauma, repeatedly imagining the trauma, a sense of apathy, thoughts of harming self or others, feelings of anxiety, numbness, depression, experiencing an emotional roller coaster, becoming withdrawn, having nightmares, changes in sleep and appetite, and self-harm behaviors. Cerney (1995) likewise reported that generalized anxiety, depression, and hyposomnia are symptoms of compassion fatigue. Many of those personal impacts of secondary trauma are also symptoms of depression, anxiety, and posttraumatic stress disorder, as listed in the DSM-5 (2013). Discussing veterinarians, a related animal care occupation, Goldberg (2019) reported that multiple prior studies found veterinarians

to be at an especially high risk for anxiety, depression, and thoughts of suicide. While studies of veterinarians pre-entry into the profession are scarce, Goldbert (2019) noted that there is no evidence to date to suggest that high numbers of individuals with serious mental health issues are entering the profession to account for the high levels of depression and anxiety found among veterinarians. Fournier and Mustful (2019) stated that animal care professionals, which includes shelter workers, may enter psychological treatment for issues directly or indirectly related to their jobs. However, as the authors reported, there is a lack of literature on how mental health professionals may best assist.

Anxiety and depressive disorders have been reported to be associated with alcohol use disorder and cannabis use disorder, and depressive disorders are associated with tobacco use disorder (APA, 2013). Figley and Roop (2006) also stated that the abuse of substances including tobacco and alcohol are common negative coping mechanisms for those who are affected by secondary traumatic stress, which would then raise concern for substance use disorders among that population. Other researchers have agreed. Cook et al. (2005) found an association between past incidences of trauma with substance use disorders, and Smith (2007) viewed substance abuse as a negative or maladaptive coping mechanism frequently utilized by those who have a history of trauma.

Coping strategies of animal shelter workers. The prevalence of substance abuse employed as a coping mechanism by those experiencing secondary traumatic stress reactions warrants an exploration of coping strategies utilized by animal shelter workers. Healthy and maladaptive coping strategies utilized by animal shelter workers were examined in Baran et al.'s (2009) qualitative study. The authors analyzed the survey responses of 242 euthanasia technicians in animal shelters across the United States. The question "What recommendations

would you give to someone who is just starting out in this career field? That is, what would you tell them to do, or not to do, to deal with the euthanasia-related aspects of this job?" was posed to participants (Baran et al., 2009, p. 84). The questions generated 342 strategies from respondents, which were then grouped into 26 categories. The largest percentage of recommendations to novice shelter employees (15.7%) were classified in the coping category "vent your feelings" (Baram et al., 2009, p. 85). That category included crying and talking about feelings. The second largest category (15.3%) was "alter your emotional attachment level," with advice such as "do not get attached to any animal," "do not become uncaring," and "do not build up a wall" (Baram et al., 2009, p. 85). The third most frequent (14.1%) was "know that euthanasia is sometimes the best option," and suggestions include "try to remember they're not getting hit by cars or slowly starving to death" (Baram et al., 2009, p. 85). Categories were then grouped into eight broader groups of coping strategies, four of which were for coping while on the job and four for coping outside of work. The categories for coping while on the job were:

1. Competence or skills strategies (ex., "practice proper euthanasia techniques")
2. Euthanasia behavioral strategies (ex., "have someone else euthanize special pets")
3. Cognitive or self-talk strategies (ex., "don't blame yourself")
4. Emotional regulation strategies (ex., "acknowledge your feelings")

   (Baran, et al., 2009, p. 86)

Categories of coping strategies while outside of work were:

1. Separation strategies (ex., "seek a diversion")
2. Get-help strategies (ex., "seek external help")
3. Seek long-term solution strategies (ex., "learn about and promote responsible pet ownership")

4. Withdrawal strategies (ex., “know that the job is not for everyone”)

(Baran et al., 2009, p. 86)

Likewise, Rogelberg et al. (2007) surveyed 305 employees consisting mostly of private shelters in the United States in their qualitative study of attitudes and experiences with euthanasia among animal shelter workers. The researchers were particularly interested in how animal shelter management can help workers cope with the strains of the euthanasia, and analyzed the responses to the survey question “Please tell us what you think shelter management should or could so to assist shelter workers in dealing with euthanasia-related stress?” (Rogelberg et al., 2007, p. 335). Most commonly (13.17% of respondents) indicated that they wanted management to “be supportive and encourage support from others” ((Rogelberg et al., 2007, p. 337). Comments included:

- I would say make other employees who don’t euthanize keep their mouths shut
- Back people up. Let them know why we do this everyday. We are the good guys. Don’t let anyone make them feel guilty for it
- More understanding from management and coworkers who do not perform euthanasia

Giving the impression that they are understanding of the strains of the job, showing concern for the employees, and demanding that others refrain from criticizing those who euthanize were recommended for animal shelter administrators. The second-most frequent recommendation category the researchers identified was “counseling and professional help” (12.35%) (Rogelberg et al., 2007, p. 337). Examples of responses are:

- Counselor brought in monthly to those who need it
- Counselor to talk to – especially during kitten season

- Offer counseling for employees with a professional. Whenever they feel the need – so each have an understanding ear that will not judge them for the duties they have to perform

This was related to the category "support groups and meetings" by which 7.82% of responses indicated that employees would like management to offer periodic support and debriefing groups where employees may talk about workplace issues that are troubling them, release emotions, and find support among their peers.

Surveying 54 of the animal shelter managers in the United States, Anderson, Brandt, Lord, and Miles (2013), found that most (74%) understood that euthanasia leads to staff burnout, however that same percentage also cited lack of funding as the principal obstacle to providing support programs to employees. Common programs that were offered were: training and education (48.1% of shelters), rotation of staff who participate in euthanasia (38.9%), informal peer support (38.9%), breaks after euthanasia (35.1%), and private and comfortable euthanasia rooms (22.2%) (Anderson, Brandt, Lord, & Miles, 2013, p. 574). While the study by Rogelberg et al., 2002, p. 337) indicated 12.35% of employees wanted management to provide professional counseling including support groups, only 3.7% of the managers in Anderson, Brandt, Lord, and Miles's (2013) reported that their shelters provided support groups for their euthanasia technicians.

While these studies have generated helpful suggestions for both animal shelter workers who participate in euthanasia and their administration, insufficient evidence remains in the literature to develop evidence-based stress management and compassion fatigue programs. Scotney, McLaughlin, and Keates (2015) conducted a systematic review of the literature focusing on occupational stress or compassion fatigue among a broad range of animal care

workers, including veterinarians. The authors found that the 12 articles identified lacked consistent definitions and terms and varied greatly in research methods and recommended further research.

Conclusions

Occupational stress has been shown to have a profound effect on animal workers, both on the job and personally. Past research has shown that the experience of trauma, including vicarious trauma, is associated with burnout, compassion fatigue, and symptoms of depression and anxiety. The perception of not having the personal resources or institutional support to help cope with those stressors can compound the problem experienced by individuals. Animal shelter workers who must participate in euthanasia as part of their jobs must continually care for companion animals who have been abused, neglected, and otherwise traumatized. As found by Reeve et al. (2005), the job task of euthanasia among animal shelter workers has been shown to have a significant negative association with their overall mental health. Other previous research have demonstrated that animal care occupations, especially those that involve euthanasia, linked to increased risk for suicide and difficulties with anxiety and depression. The difficulties experienced by animal shelter workers and their common perception that others outside of the profession do not understand their experience as cited in the literature point to the need to further study the taxing effects of euthanasia.

While multiple studies examined compassion fatigue and burnout in various professions, there are few studies on compassion fatigue among animal shelter workers and fewer that examine the numbers of those who report symptoms of mental illness such as anxiety, depression, and substance abuse. This study attempts to address the gaps in the literature by examining the lived experiences of animal shelter workers and the level of mental health

symptoms (as defined by scores on depression, anxiety, substance use, burnout, and secondary traumatic stress instruments) of both animal care workers who participate in euthanasia and those who do not participate in euthanasia.

CHAPTER III

METHODOLOGY

Sample

The sample consisted of 192 animal shelter workers throughout the United States. Employees who do and do not perform euthanasia were included. Participants were employed at shelters that define themselves as open admission kill shelters or managed admission no-kill shelters. The majority of the shelters were either run by municipalities or had contracts with municipalities for animal control. Rescue organizations and rescue groups that can limit the number of animals they take in, choose which animals they accept, and not perform euthanasia were excluded from the study. Participants in the qualitative study had participated in euthanasia in some way, either in the present or the past.

Instruments

Four instruments that assess various mental health issues were utilized to identify symptoms of anxiety, depression, substance abuse, and compassion fatigue among participants. These four instruments comprised the quantitative survey. A separate qualitative survey was developed that consisted of five open-ended questions regarding participants' jobs and intended to explore participants' work experiences. Each of the separate surveys began with the same demographic questions. Prior to the study, a panel of nine mental health professionals was consulted to assess the length of time required to complete the survey instruments and provide content validity. These professionals possessed between seven to 26 years of experience in the

mental health field. Four of the professionals were counselor educators in addition to being clinicians. The time estimated to complete the instruments was 10-15 minutes.

Demographic Questions

Participants were asked a series of demographic questions to gather information about the characteristics of the sample. These were presented at the beginning of the quantitative and qualitative surveys. The questions were:

1. Gender? (male/female)
2. What race/ethnicity do you most identify with? (white/Caucasian, Hispanic, black/African-American, Asian/Pacific Islander, Native American/American Indian, Other, Decline to answer)
3. Highest educational level completed? (Less than high school, High school diploma/GED, Some college, Associate's degree/Technical certificate, Bachelor's degree, Master's degree, Doctorate/MD/JD)
4. What is your religious affiliation/denomination? (ex., Protestant, Catholic, Buddhist, Muslim, Decline to answer) (open)
5. How important is religion/spirituality in your life? (Extremely important, Very important, Moderately important, Slightly important, Not at all important)
6. What is your job title at the shelter? (open)
7. Do you work for a "no kill shelter"? (yes/no)
8. Do your job duties include participation in euthanasia in any way? (yes/no)
9. Number of years at current job? (open numerical)
10. Are you a pet owner? (yes/no)

11. Are you CURRENTLY receiving professional counseling for any work-related issues? (yes/no)

Generalized Anxiety Disorder 7-Item Scale (GAD-7)

The GAD-7 is a brief, 7-item measurement that assesses for symptoms of generalized anxiety disorder. A 4-point Likert scale ranging from 0 = "Not at all sure" to 3 = "Nearly every day" is used for respondents to identify symptoms experienced within the last two weeks. Questions include "Feeling nervous, anxious, or on edge," "Not being able to stop or control worrying," "Trouble relaxing," and "Feeling afraid as if something awful might happen." Combined scores from 5 to 9 indicate mild anxiety, 10 to 14 indicate moderate anxiety, and 15 to 21 is severe anxiety. In addition, the developers of the GAD-7 recommend clinicians conduct further evaluation if the score is 10 or greater (Spitzer, Williams, & Kroenke, n.d., p. 6).

Results of a study on the instrument found that it demonstrated reliability and validity (Spitzer, Kroenke, Williams, & Lowe, 2006). Internal consistency was shown to be high with a Cronbach's $\alpha = .92$ and test-retest reliability high ($r = .83$). Construct validity was assessed through a comparison with the 20-Item Short Form Health Survey (SF-20), and was found to have a strong association, as pairwise comparisons were significant between the SF-20 scale and corresponding GAD-7 severity levels. Construct validity was also assessed through comparison of the score on the instrument with disability days, clinic visits, and difficulty attributed to symptoms, and found to be associated. Convergent validity demonstrated correlations with the Beck Anxiety Inventory ($r = .72$) and anxiety subscale of the Symptom Checklist-90 ($r = .74$). This study also showed through factor analysis that it did not assess for depression, although symptoms of depressive disorders and generalized anxiety disorder often co-exist, making the GAD-7 a useful clinical tool.

CAGE-Adapted to Include Drugs (CAGE-AID)

The CAGE-AID is an instrument that was adapted from the CAGE, which is used to assess for alcohol abuse and dependency, to include drugs. It was developed to parallel the criteria for substance abuse and dependency in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV) (Brown & Rounds, 1995). The measure uses four dichotomous questions that ask for a "Yes" or "No" response. A "Yes" response on any of the questions indicate a positive screen:

1. Have you ever felt that you ought to cut down on your drinking or drug use?
2. Have people annoyed you by criticizing your drinking or drug use?
3. Have you ever felt bad or guilty about your drinking or drug use?
4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?

A study by Dyson, Appleby, Altman, Doot, Luchins, and Delehant (1998) on adult psychiatric patients found that the CAGE-AID had a sensitivity for detecting current substance use disorders of 88% and a specificity of 55%. In a study on adolescents by Couwenbergh, Van Der Gaag, Koeter, De Ruiter, and Van Den Brink (2009), Receiver Operating Characteristic analysis of the self-report version demonstrated that there is a 99.6% probability that an adolescent with a substance use disorder will score higher than someone without a substance use disorder on the instrument. Brown and Rounds (1995) also reported on the psychometric properties of the CAGE-AID and showed high criterion validity and internal consistency reliability. When respondents answer one or more questions affirmatively, the Cronbach's alpha of the CAGE-AID is .77 showing acceptable internal consistency. Two or more responses of the CAGE-AID demonstrated a Cronbach's alpha of .85.

Patient Health Questionnaire (PHQ-9)

The PHQ-9 is a 9-item instrument from Pfizer, Inc., and has been shown to be a reliable and valid (construct and criterion validity) measure of severity of depression (Kroenke & Spitzer, 2002; Kroenke, Spitzer, & Williams, 2001; Martin, Rief, Klaiberg, & Braehler, 2006). Utilizing a 4-point Likert scale ranging from 0 = "Not at all" to 3 = "Nearly every day," respondents answer questions of symptomology experienced within the last two weeks such as "Feeling down, depressed, or hopeless," "Feeling tired or having little energy," and "Trouble concentrating on things, such as reading the newspaper or watching television." The interpretation of scores is as follows:

5 – 9: Mild depression

10 – 14: Moderate depression

15 – 19: Moderately severe depression

20 – 27: Severe depression

Kroenke, Spitzer, and Williams (2001) studied the instrument's validity and found it to be both reliable and valid, as well as a useful tool for research and clinical application. Criterion validity was assessed by comparing results of the PHQ-9 for 580 patients with structured interviews conducted by mental health professionals. A receiver operating characteristic (ROC) analysis was performed and found a score of .95 which indicates a strong likelihood that the measure discriminates well between those who have a depressive disorder and those who do not. Construct validity was assessed by comparing the PHQ-9 to the 20-item Short Form Health Survey (SF-20). Pairwise comparisons were found to have a high significance, and mental health correlations were strong at $p = .73$.

Professional Quality of Life Scale (ProQOL), Version 5

Developed by Stamm (2010), the ProQOL has been widely utilized to examine compassion fatigue among workers of a variety of professions, including health care workers and first responders (ProQOL.org, 2016). Compassion fatigue, according to Stamm (2010), is comprised of two parts: burnout and secondary traumatic stress. Individual variables examined are burnout and secondary traumatic stress. The ProQOL scale is comprised of three sections: compassion satisfaction, burnout, and secondary traumatic stress. Each of the three subscales utilizes a 5-point Likert scale. Scores of each of these three sections of the ProQOL can be interpreted individually or in combination. Because this study is not concerned with compassion satisfaction, that section was not added to the survey or addressed.

The interpretations for the sums of the raw scores for both the burnout and secondary traumatic stress scales are below:

22 or less:	Low level of burnout/secondary traumatic stress
Between 23 and 41:	Average level of burnout/secondary traumatic stress
42 or more:	High level of burnout/secondary traumatic stress

Open-ended questions

Five open-ended questions were included at the end of the assessment battery to explore the phenomenon of working at an animal shelter and being required to euthanize animals. Questions were developed upon reflection of the compassion fatigue workshops conducted by the author in a shelter in South Texas for personnel who participate in euthanasia and based on common themes that had arisen during the workshops. These questions were:

1. Please share why you chose to work with shelter animals?
2. What is your view of euthanizing animals?

3. If you assist in the euthanasia of animals, what are other people's (not your coworkers') reactions to that part of your job? (write N/A if this does not apply to you)
4. If you assist in euthanasia of animals, how is your life affected by euthanasia?
5. How do you cope with the stressors of your job?

Recruitment Procedure

For the quantitative portion of the study, animal shelters throughout the United States were identified through an internet search engine and Petfinder.com, an online database of adoptable animals, animal shelters, and rescue groups. Invitations for participation were sent to employees of shelters explaining the purpose of the study and asking for their participation, along with a link to the Quantitative survey instrument through Qualtrics. Employees who do and do not perform euthanasia were asked to participate for comparison of the two groups.

Vagle (2015) instructs researchers to select participants for qualitative phenomenological research who have lived through the phenomenon to be studied and will likely provide rich and detailed descriptions of their experiences. As all of the participant pool were equally likely to fit that description, a random selection of the shelter employees was selected to receive an additional link to the Qualitative survey instrument. This process also allowed for the participants in the qualitative portion of the study to come from a varied range of shelters. Two $100.00 gift cards were raffled as incentive to complete the survey instrument(s).

Approval from the University of Texas Rio Grande Valley's Institutional Review Board was gained prior to conducting the data collection.

Research Design

This study employed a non-experimental descriptive research design, as none of the independent variables were manipulated. Consistent with some of the past research on animal shelter workers who perform euthanasia (Rank, Zaparanick, & Gentry, 2009; White & Shawhan, 1996), this study utilized a mixed-methods design to address the mental health of animal shelter workers. Both quantitative and qualitative data are important for this study. A convergent parallel mixed methods design was used, involving the collection of quantitative and qualitative data in parallel, separate analysis, and then the data is merged. According to Creswell and Clark (2011), one of the purposes of the convergent parallel design is to synthesize quantitative and qualitative findings to develop a more thorough understanding of the phenomenon. The quantitative and qualitative assessments gathered different, but complimentary, information about animal service workers, which is then compared and contrasted with each other. In this study, data from mental health screening questions were used to examine the risk for certain mental illnesses among animal shelter workers. The qualitative data was used to further explore the essence of their experiences. The reason for collecting both quantitative and qualitative data is that each type of data is valuable to gaining a greater understanding of the lived experiences of animal shelter workers.

The philosophical assumption of the convergent mixed methods design is pragmatism. Creswell and Clark (2011) describe pragmatism as placing paramount importance on the practical, real-world problems being addressed over the methods used. This philosophy also recognizes the possibility of multiple realities and perspectives to issues, which can be explored in a mixed method paradigm. Morgan (2011) further describes John Dewey's Model of Inquiry as a method of exploring human experience in a pragmatist orientation. The steps involved in his

concept are identify the problem, consider the nature of the problem, offer a solution, consider possible effects of the solution, and then take action. Within this process, the researcher considers their beliefs about the nature of the problem and reflects on their chosen actions and the likely consequences of those actions. This dynamic process of inquiry, according to Morgan (2011), can allow the researcher to also address social justice concerns, which seeks to remove barriers and promote advocacy and empowerment for individuals. Morgan (2011) stated that both pragmatism and social justice posit that individuals' actions are based on their beliefs, and allows for belief systems to change, which can in turn change individuals' actions.

The qualitative portion of the study utilized the phenomenological approach to explore in-depth the phenomenon of working in an animal shelter for both those required to participate in the euthanasia of animals and those who are not. Phenomenology, according to van Manen (2007, p. 12), is thoughtful, non-prejudicial reflection into the lived experiences of humans, or "in-seeing" into others' existence. Indeed, phenomenology arose from the work of Edmund Husserl, largely considered the Father of Phenomenology, and was a critique of naturalistic or objectivist psychology (Husserl, 1981a; Kockelmans, 1994). In naturalistic or objectivist psychology, inquiry into human consciousness is strictly empirical in nature and it is understood that hard science is the means to uncover truths (Husserl, 1981a). However, phenomenology is the thoughtful inquiry into people's lives that concerns itself with *pure* consciousness rather than strict objectivity, and recognizes the importance of individuals' perceptions of phenomenon. As Husserl stated, "Perception as immediate presentness. Recollection as immediate pastness." (Husserl, 1981b, p. 170). In other words, knowledge is based in experience.

Phenomenological research allows the research question to emerge from an intense personal interest and history on the part of the researcher (Moustakas, 1994). This past

knowledge of the phenomenon is then *bracketed*, or phenomenological reduction performed. Husserl describes bracketing as epoché and instructs researchers to acknowledge one's past history with the phenomenon of interest as the *exterior* of the experience in order to remove themselves from the *intentional interior* (Husserl, 1994). As he stated: "The experienced "exterior" does not belong to one's intentional interiority, although certainly the experience itself belongs to it as experience – *of* the exterior" (Husserl, 1994, p. 111). Through the act of phenomenological reduction, researchers can remove themselves from their experiences to understand the lives of others (Kockelmans, 1994).

In addition, the research question in phenomenological inquiry does not seek to address causation or predictions but reveal the full essence of participants' lived experiences with vivid descriptions (Moustakas, 1994). Husserl views *essence* as describing "that which is to be found in the very own being of an individual and tells us 'what' it is" (Kockelmans, 1994, p. 58). A common approach to conducting existential-phenomenological research for psychological and health sciences studies follows these steps: (1) participants' descriptions of their experiences are separated into units, (2) the units are expressed by the researcher in related psychological concepts, and (3) a general description of the lived experiences is then created by the researcher based on the concepts (Dowling, 2007). Colaizzi's method, which Dowling (2007, p. 135) reported is commonly employed by nursing researchers, adds a fourth step of asking participants "How does my descriptive results compare with your experiences?" This study employs these four steps.

Data Analysis

Quantitative analysis. The sample composition and demographics were assessed using frequency distributions of the participant variables. The open-ended demographic questions were

transformed into nominal or ordinal data. Religious affiliation were grouped manually based on responses to Christianity, Judaism, Buddhism, Taoism, Wicca/Paganism, Unaffiliated, None/Science, Decline to answer. Job titles at the shelter were converted to binary nominal data (Management/Supervisory, Non-supervisory). The number of years at current job were converted to binary ordinal data (Less than 5 years, 5 or more years).

The present study also utilized exploratory and confirmatory data analysis side by side (Tukey, 1977). That is, descriptive statistics, means, standard deviations, trimmed means, skewness, kurtosis, intercorrelation matrix table, box and whisker plot, stem-leaf plots, and hypothesis testing were conducted concurrently to ensure the statistical data analysis has fidelity with the phenomenon.

A three-way factorial (2 x 2 x 2) multivariate analysis of variance (MANOVA) was utilized to analyze the obtained data for the five dependent variables. The first factor is Shelter Type, which has two levels: Yes (kill shelter); No (no-kill shelter). The second factor is Euthanasia, with the following levels: Yes (participates in euthanasia); No (does not participate in euthanasia). The third factor is Years of Experience, which also has two levels: < 5 (under five years experience); ≥ 5 (five or more years of experience). The five dependent measures are anxiety, depression, substance use, burnout, and secondary traumatic stress scores.

A MANOVA allows for the comparison of mean vectors on the dependent variables for the groups of participants. When conducting a MANOVA, the independent variables must be categorical. For this reason, the number of years performing euthanasia were transformed from a ratio scale to categorical. Two levels or categories of years worked will be developed from the open participant responses: < 5 and ≥ 5. Although there are differing opinions on the number of years worked to be considered novice and experienced workers, the numbers are aligned with

other researchers' delineations (Crespo, Torres, & Recio, 2004; Vollmer, Spada, Caspar, & Burri, 2013). For the MANOVA, the scores of the dependent variables must be continuous (interval or ratio). All of the dependent variables for this study are in interval scaling, as they are evenly distributed and normatively distributed. As a follow-up procedure to the MANOVA, univariate ANOVAs were run on each of the dependent variables.

Due to the number of items in the quantitative instrument, a factor analysis was conducted to identify any underlying factors and reduce the variance within the five dependent variables. After running the factor analysis, a MANOVA and follow-up univariate tests were conducted on the identified factors.

The significance level for the MANOVA was set to .05; confidence intervals were at 95%. The power was set at .80. The effect size was set at .25 for medium size. A power analysis was conducted in G*Power, version 3.0.10, to determine a sufficient sample size for the quantitative portion of the study. The results indicated that the minimum desired number of subjects is 144. As a general rule, desired sample sizes are calculated by allotting 20 subjects for each group. As there are 8 groups in the MANOVA, a minimum of 160 subjects was desired.

Qualitative analysis. There is no set procedure for determining an appropriate sample size for a qualitative study and the size can vary significantly (Creswell, 2013; Vagle, 2016). Vagle (2016) does not provide a number, but instead suggests researchers interested in phenomenological research review past studies to get a sense of the number of participants those researchers utilized to remain consistent. Vagle also asserts that the specific parameters of the study, including research questions and types of participants, can guide the sample size. For this study, the data collection was terminated at 42 participants, when saturation appeared to be

reached. Saturation, according to Glaser and Strauss (2006), is when repetition frequently occurs in the data and it appears no new data is arising that can add to the theory.

The qualitative data were analyzed using a phenomenological approach described by Creswell (2013) to answer the research question "What are the lived experiences of animal shelter workers." The first question, "Please share why you chose to work with shelter animals" was asked to explore what about working at an animal shelter appeals to employees and what influences their retention. Analysis of the second to fourth open-ended survey questions were asked to assist in gaining a broader, in-depth understanding of the phenomenon. These questions are:

2. What is your view of euthanizing animals?
3. If you assist in the euthanasia of animals, what are other people's (not your coworkers') reactions to that part of your job? (write N/A if this does not apply to you)
4. If you assist in euthanasia of animals, how is your life affected by euthanasia?

The purpose of the fifth question, "How do you cope with the stressors of your job?", was to identify coping mechanisms utilized by animal shelter workers.

The data for the open-ended questions were examined and a list of significant statements developed. Identified statements formulated meanings, which were then clustered into broader themes. Themes were integrated into a description of the phenomenon. A textural description of what the participants experienced as animal shelter workers, including verbatim responses, were reported. A structural description that reflects on the context and settings of the phenomenon of being an animal shelter worker was also included in the analysis. The textural and structural descriptions were combined to provide the essence of working as an animal shelter worker, for

both those who are involved in the euthanasia of animals and those who are not. The results of the qualitative portion were then merged with the quantitative results for comparison and contrast.

A phenomenological approach was also used to explore the research question of how animal shelter workers, especially those who perform euthanasia, cope with the stressors of their jobs in a more in-depth manner than the quantitative analysis allows. After reading through the written statements for the final qualitative question "How do you cope with the stressors of your job?", significant phrases were identified relating to coping mechanisms utilized. These phrases were organized into clusters pertaining to common themes noted from the responses. These themes were then used to describe how the participants reported how they cope with the stresses of participation in the euthanasia of companion animals.

Verification of results were achieved through comparisons with the existing literature on animal shelter workers and euthanasia technicians and using an adequate sample. Deviant or contradictory cases were examined and accounted for to avoid researcher bias in interpretation of the data. This method of triangulation may provide validity of the results. Respondent validation was also conducted through member checking. Member checking, according to Koelsch (2013), is a method of achieving transactional validity in which the subjects may confirm the stories told by the researcher(s) are their own. Saldana (2016) especially recommends that solo investigators employ the process of member checking to validate results. In this method, a focus group is convened, and members are asked to comment on the preliminary analysis of descriptions and/or themes. The member checking was conducted with a focus group of eight employees of an animal shelter in Texas, all of whom participate in euthanasia in some way. A shelter was chosen that had participated in the quantitative and qualitative portions of the survey and was in a

location convenient to the researcher. The director of the shelter was contacted for assistance, who then identified all of the staff members who were qualified to be a member of the focus group. These individuals were then invited to the focus group. As incentive to provide feedback and reimbursement for their time, the participants were each compensated with a five-dollar gift card and entered into a raffle for a chance to win a $25 gift card. The focus group sample consisted of those employees who chose to attend. Consistent with the suggestion by Creswell (2013), participants were presented with the preliminary analyses including descriptions and themes and encouraged to share their views of the preliminary analyses including what may be missing. This further checked for researcher bias and assumptions, and allowed for re-analysis of the data. Also utilizing procedures adopted by Koelsch (2013), a semi-structured interview was conducted during the focus group that entailed the following steps: participants were provided with an explanation of the study and purpose of the member checking, provided with informed consent, explained the preliminary findings, inquired about the accuracy of the preliminary findings, solicited reactions to the findings, and asked if there were anything else participants wished to share with the researcher.

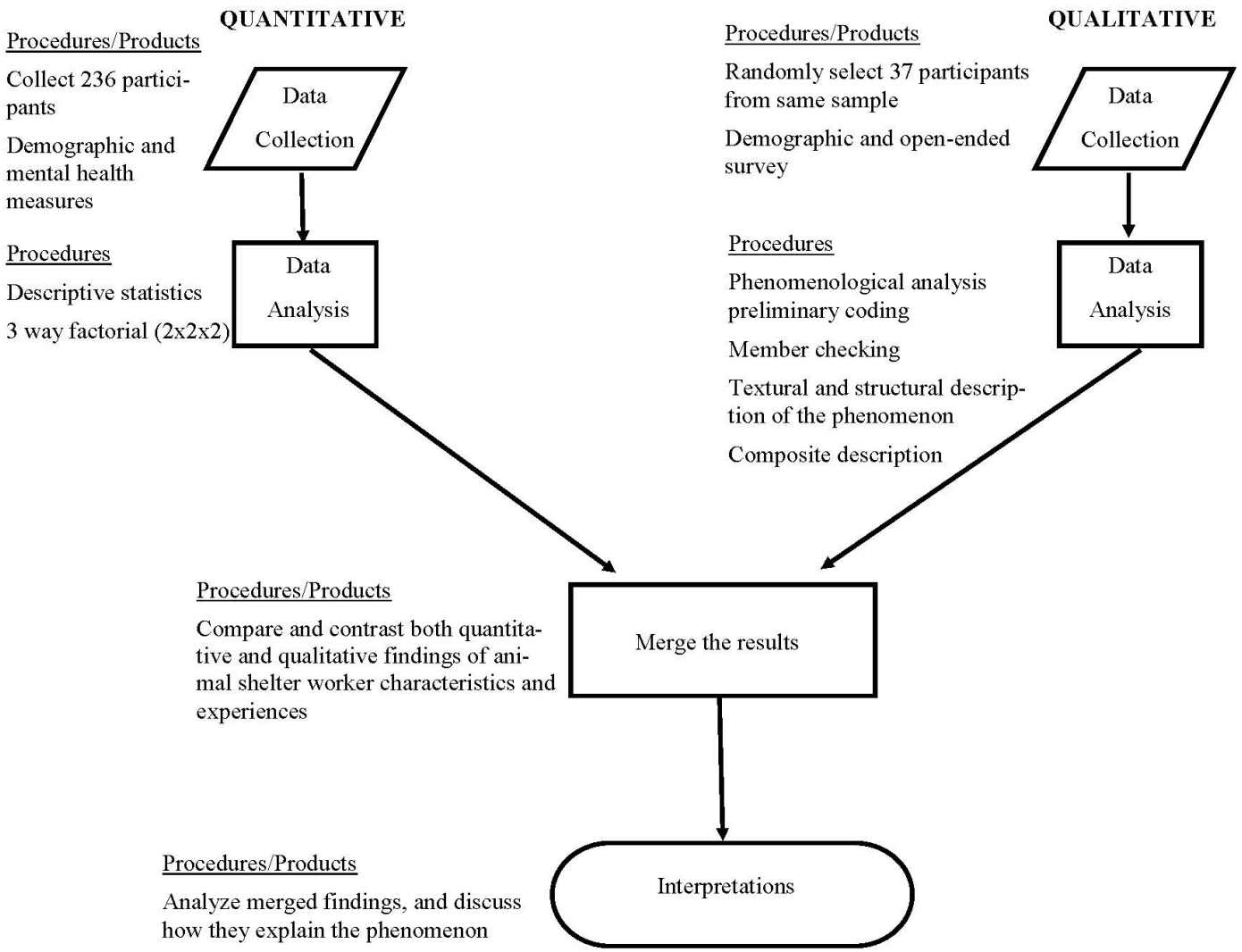

Figure 1. Flowchart of convergent parallel design as applied to present study.

CHAPTER IV

RESULTS

Quantitative results

Sample Composition and Demographics

The survey was initially attempted by 236 individuals, however, only 192 individuals completed the demographics questions. Attrition for the survey was low. Survey responses fell as the questions progressed, and are as follows: GAD-7 (N = 187), CAGE-AID (N = 185), PHQ-9 (N = 185), STS [of ProQOL (N = 175)], and BO [of ProQOL (N = 174)].

After cleaning the dataset for missing responses, the sample was predominately comprised of females (87% females, 14.3% males; N = 192). Race/ethnicity (N = 192) were identified as: 87% white/Caucasian, 7.8% Hispanic, 1% black/African American, 1% Asian/Pacific Islander, 1% Native American/American Indian, 1.5% Other, and 0.5% declined to answer. Participants reported the highest educational level they achieved (N = 192) as follows: 0.5% less than high school, 14.1% high school diploma/GED, 23% some college, 13.1% Associate's degree/Technical certificate, 38.2% Bachelor's degree, 9.4% Master's degree, and 1.6% Doctorate/MD/JD.

The respondents of the quantitative portion were comprised of 50.5% Christians (n = 93), 17.4% unaffiliated religious including atheist/agnostic (n = 32), 17.4% no religion/science (n = 32), and 8.2% declined to answer (n = 15). The remainder reported to be Wiccan/pagan (n = 7), Jewish (n = 2), Buddhist (n = 2), and Taoist (n = 1). Most respondents reported that religion or

spirituality held at least some importance for their lives. Nearly 30.4% (*n* = 58) reported religion/spirituality being extremely or very important to them; 43.5% (*n* = 83) reported religion/spirituality being moderately or slightly important; and, 26.2% (*n* = 50) reported that religion/spirituality was not at all important.

Participants predominately held jobs that did not involve supervisory or management duties (*n* = 121; 63%). Thirty-seven percent of the participants (*n* = 71) reported that they held supervisory or management positions. Nearly 59% of respondents (n = 113) have worked at their current job for less than five years. A little more than 41% (*n* = 79) have worked at their current position for five or more years. Most surveyed participate in euthanasia in some way as part of their job duties (64.6%, *n* = 124). The remaining 35.4% of respondents (*n* = 68) reported that they do not participate in euthanasia. This suggests that some of the managerial staff who responded to the survey also participate in euthanasia. The type of shelter (no kill/kill) respondents worked for were more evenly split. Employees of no-kill shelters comprised 45.3% (*n* = 87) of the sample, while employees of kill shelters totaled 54.7% (*n* = 105) of the sample. The participants were also overwhelmingly pet owners, with 96.9% (*n* = 186) reporting that they own at least one pet. Only six reported (3.1%) not owning a pet. Nearly 4% (*n* = 7) reported that they are currently receiving professional counseling for work-related issues, while a little more than 96% (*n* = 185) reported not receiving counseling for work-related issues.

Table 1

Quantitative Sample Composition

Characteristic	Frequency	Percentage
Gender		
Females	162	85.7
Males	27	14.3
Race/Ethnicity		
White/Caucasian	167	87
Hispanic	15	7.8
Black/African American	2	1
Asian/Pacific Islander	2	1
Native American/AI	2	1
Other	3	1.6
Decline to answer	1	0.5
Educational Level		
Less than high school	1	0.5
High school diploma/GED	27	14.1
Some college	44	23
Associate's/Certificate	25	13.1
Bachelor's	73	38.2
Master's	18	9.4
Doctorate/MD/JD	3	1.6
Religious Affiliation		
Christianity	93	50.5
Unaffiliated	32	17.4
None/Science	32	17.4
Decline to answer	15	8.2
Wicca/Paganism	7	3.8
Judaism	2	1.1

(continued)

Table 1 (continued)

Quantitative Sample Composition

Characteristic	Frequency	Percentage
Buddhism	2	1.1
Taoism	1	0.5
Religious Importance		
Extremely important	29	15.2
Very important	29	15.2
Moderately important	41	21.5
Slightly important	42	22
Not at all important	50	26.2
Job Position/Title		
Management/Supervisory	71	37
Non-supervisory	121	63
Years at Current Position		
Less than 5 years	113	58.9
5 or more years	79	41.1
Participate in Euthanasia		
Yes	124	64.6
No	68	35.4
Type of Shelter		
No-kill shelter	87	45.3
Kill shelter	105	54.7
Pet Ownership		
Pet owner	186	96.9
Not pet owner	6	3.1
Professional Counseling		
Receiving	7	3.6
Not receiving	185	86.4

Descriptive Statistics

Mental health scores on each of the dependent variable scales were predominately within the normal to low range. A score of two or higher on the CAGE-AID indicates possible alcohol and/or drug abuse and dependence. The majority of participants scored a zero (75.1%, *n* = 139) on the CAGE-AID, while 9.7% (*n* = 18) scored 1. A total of 15.2% (*n* = 28) scored 2 to 4 points total indicating concern for possible alcohol or substance abuse and dependence. The Substance Abuse and Mental Health Services Administration (2017) reported that 8.4% of adults in the United States have a substance use disorder in the past year. They included alcohol illicit drugs, marijuana, and prescription pain reliever use in their report. A slight majority of scores on the GAD-7 indicated symptoms consistent with an anxiety disorder. Nearly 46% of respondents did not meet the criteria for anxiety (*n* = 85). Approximately 28% of respondents met the criteria for mild anxiety (*n* = 53), 14.4% of participants listed symptoms consistent with moderate anxiety (*n* = 27), and 11.8% (*n* = 22) had scores that indicated severe anxiety. The number of participants whose scores were consistent with anxiety were higher than that of the general population. According to the National Institute of Mental Health (2017), 18.1% of adults in the United States experience any anxiety disorder each year. The data is derived from the National Comorbidity Survey Replication (NCS-R). A little more than half of the scores on the PHQ-9 indicated symptoms consistent with a depressive disorder. Almost 48% of participants did not meet the criteria for a depressive disorder on the scale (*n* = 88). However, 28.6% (*n* = 53) had scores that represented mild depression, 10.8% (*n* = 20) measured moderate depression, 9.8% (*n* = 18) measured moderately severe depression, and 3.2% (*n* = 6) measured severe depression. This is in contrast to the report from the Centers for Disease Control and Prevention's National Center for

Health Statistics (2018) that stated 8.1% of adults in the United States over 20 years of age had depression during a two-week period.

Approximately 56% of participants scored low on the Secondary Traumatic Stress subscale of the ProQOL (n = 98). Approximately 43% scored within the average range for Secondary Traumatic Stress (n = 76), and 0.6% scored high (n = 1). Secondary traumatic stress is related to anxiety, according to Stamm (2010). Average scores on the subscale indicate moderate levels of secondary traumatic stress for helpers. Higher scores on the Secondary Traumatic Stress subscale is not necessarily an indication that the individual has a traumatic stress disorder, but is cause for concern regarding the individual's elevated risk level. On the Burnout subscale of the ProQOL, 56.1% (n = 74) scored low and 57.5% (n = 100) scored within the average range. None of the participants scored high on the Burnout subscale. Stamm (2010) stated that the higher the scores on the Burnout subscale, the higher the individual's risk for burnout. Burnout, according to Stamm (2010), is related to depression. Low scores indicate more positive feelings the individual has about her or his ability to work effectively. Average scores are considered the average, or moderate, level of burnout for helpers.

Table 2

Mental Health Scores

Scale/Scores	Frequency	Percentage
CAGE-AID		
0	139	75.1
1	18	9.7
2-4 (meets criteria)	28	15.2
GAD-7		
Did not meet criteria	85	45.6

(continued)

Table 2 (continued)

Mental Health Scores

Scale/Scores	Frequency	Percentage
Mild anxiety	53	28.4
Moderate anxiety	27	14.4
Severe anxiety	22	11.8
PHQ-9		
Did not meet criteria	88	47.6
Mild depression	53	28.6
Moderate depression	20	10.8
Moderately severe	18	9.8
Severe depression	6	3.2
Pro-QOL STS subscale		
Low	98	56.1
Average	76	43.3
High	1	0.6
Pro-QOL BO subscale		
Low	74	42.5
Average	100	57.5
High	0	0

The relationship among dependent variables was addressed through Pearson's product-moment correlation coefficients. If the null hypothesis of no relationship between variables was rejected, the strength of the relationship was addressed through the obtained correlation coefficient squared. A weak correlation was found for substance abuse (CAGE-AID) and anxiety (GAD-7), $r(181) = .24$, $p < .01$. Pearson's product-moment correlation coefficients also established that there were strong linear relationships between depression (PHQ-9) and anxiety, $r(181) = .79$, $p < .01$, secondary traumatic stress and anxiety, $r(172) = .68$, $p < .01$, and burnout

and anxiety, $r(171) = .64$, $p < .01$. Depression and substance abuse were found to have a very weak linear relationship, $r(183) = .16$, $p < .05$. A moderate correlation was found between depression and secondary traumatic stress, $r(174) = .57$, $p < .01$. A Pearson's product-moment correlation coefficient yielded a moderate relationship between depression and burnout, $r(173) = .61$, $p < .01$, and secondary traumatic stress and burnout, $r(173) = .67$, $p < .01$. No relationship was found between substance abuse and secondary traumatic stress, nor with substance abuse and burnout.

Table 3

Pearson's Product-Moment Correlation Coefficients for Relations Between Five Measures of Mental Health

	1	2	3	4	5
1. CAGE-AID	-				
2. GAD-7	.24**	-			
3. PHQ-9	.16*	.79**	-		
4. STS subscale (ProQOL)	.11	.68**	.57**	-	
5. BO subscale (ProQOL)	.13	.64**	.61**	.67**	-

Note. *$p < .05$. **$p < .01$. STS = Secondary traumatic stress. BO = Burnout.

Two independent samples case *t* tests were utilized to compare the kill and no-kill groups on each of the five dependent variables. No mean differences between those who work for a no-kill shelter and those who work for a kill shelter was found in any of the dependent variable scales. Likewise, no mean differences between those who work under five years and those who work for over five years were found for scores in any of the five dependent variables. However, *t* tests used to compare the euthanasia and no euthanasia groups demonstrated mean differences (*p*

< .01). There is a mean difference on secondary traumatic stress between groups, those who participate in euthanasia (M = 23.67) and those who do not participate in euthanasia (M = 19.74), $t(173) = 3.76$, $p < .01$. In addition, there is a mean difference between groups who participate in euthanasia (M = 24.83) and do not perform euthanasia (M = 22.20) on burnout, $t(172) = 2.73$, $p <$ .01.

Table 4

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Do and Do Not Participate in Euthanasia*

	Yes		No					
Mental Health Measure	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
CAGE-AID	.54	1.08	.49	1.03	183	.30	.76	.19
GAD-7	6.95	5.74	5.87	5.63	185	1.25	.21	.19
PHQ-9	6.63	5.59	5.74	5.67	183	1.04	.30	.16
STS	23.67	6.93	19.74	6.25	173	3.76	.00	.60
BO	24.83	6.06	22.2	6.28	172	2.73	<.01	.43

Note: Yes = Participation in euthanasia, No = Does not participate in euthanasia.

Table 5

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Work for a No-Kill and Kill Shelter*

	Yes		No					
Mental Health Measure	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
CAGE-AID	.48	1.11	.56	1.03	183	-.49	.63	.07
GAD-7	6.32	6.16	6.75	5.34	185	-.51	.61	.07

(continued)

Table 5 (continued)

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Work for a No-Kill and Kill Shelter*

	Yes		No					
Mental Health Measure	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
PHQ-9	5.86	5.40	6.71	5.80	183	-1.03	.31	.15
STS	22.2	7.11	22.23	6.81	173	-.03	.98	.00
BO	23.39	6.08	24.23	6.40	172	-.89	.38	.14

Note: Yes = Work in no-kill shelter, No = Work in kill shelter

Table 6

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Have Worked for Less than Five Years and Those Who Have Worked for Five or More Years*

	< 5		≥ 5					
Mental Health Measure	*M*	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
CAGE-AID	.54	1.06	.50	1.08	183	.26	.80	.04
GAD-7	6.75	5.74	6.27	5.69	185	.57	.57	.08
PHQ-9	6.38	5.69	6.23	5.56	183	.18	.85	.03
STS	22.2	6.98	22.23	6.91	173	-.03	.98	.00
BO	23.47	6.15	24.25	6.41	172	-1.01	.32	.16

A chi-square test of independence was utilized to assess the association between working in a no-kill or kill shelter and participation of euthanasia or not participation in euthanasia. An association between working for a kill shelter and participation in euthanasia was observed, $\chi^2(1) = 7.76$, $p < .01$. The effect size was found through the Cramer's φ, which found a weak

correlation, Cramer's φ = .20. This means that those who work in a kill shelter have a slightly higher chance of assisting in euthanasia than those who work in a no-kill facility.

Table 7

*Prevalence of Participation in Euthanasia in Working for a "No Kill" Shelter (*n *= 87) and Working for a Kill Shelter (*n *= 105)*

	No Kill Shelter		Kill Shelter			
	n	%	*n*	%	$\chi^2(1)$	*p*
Participation in Euthanasia	47	54	77	73.3	7.76	<.01

Statistical Analysis

A three-way factorial (2 x 2 x 2) multivariate analysis of variance (MANOVA) was conducted with three independent factors: type of shelter, participation in euthanasia, years at current job, and the five dependent variables: substance abuse, depression, anxiety, secondary traumatic stress, burnout.

Assumptions for the three-way MANOVA can be assumed. The assumptions were: (1) the dependent variables were continuously valued; (2) the independent variables consisted of two or more categorical groups; (3) there were independence of observations, that is, the participant groups were independent; (4) There was a linear relationship between the dependent variables for each group of the independent variables as an investigation of a scatterplot matrix demonstrated; (5) there was no multicollinearity, as assessed by Pearson correlation; (6) there were no univariate or multivariate outliers, as assessed by an inspection of the box and whiskerplots; (7) there was multivariate normality; (8) there was an adequate sample size; (9)

there was homogeneity of variance-covariance matrices; and, (10) there was homogeneity of variances.

There was no interaction effect between type of shelter, participation in euthanasia, and years at current job on the combined dependent variables, $F(5, 155) = .80$, $p > .05$, Wilks' $\Lambda = .975$, partial $\eta^2 = .025$. There was, however, a main effect of participation in euthanasia, $F(5, 155) = 3.10$, $p < .05$, Wilks' $\Lambda = .909$, partial $\eta^2 = .091$.

Follow-up univariate analysis of variance tests were conducted. These showed an interaction effect between participation in euthanasia and secondary traumatic stress, $F(1, 159) = 14.25$, $p < .05$, and between participation in euthanasia and burnout, $F(1, 159) = 7.36$, $p < .05$. No other between-subject effects were found.

Table 8

Multivariate and Univariate Analyses of Variance F *Ratios for Types of Shelter x Participation in Euthanasia x Years on the Job Effects for Mental Health Measures*

Variable	MANOVA $F(5, 155)$	ANOVA $F(1, 159)$				
		CAGE-AID	GAD-7	PHQ-9	STS	BO
Type of shelter (A)	.27	.05	.77	.16	.92	.15
Participation in euthanasia (B)	3.10*	.53	2.18	1.06	12.81*	6.31*
Years on the job (C)	.47	.08	.09	.05	.20	.49
A*B	1.20	.65	.20	2.66	1.08	1.23
A*C	.86	1.89	3.29	2.47	1.74	1.65
B*C	.37	.83	.00	.00	.16	.52
A*B*C	.80	.80	1.44	.56	2.67	.99

Note. $*p \leq .01$

Cronbach's alpha was conducted to address the amount of total variance in a scale that is due to measurement error or content sampling error. Each scale manifested high reliability. The GAD-7 (anxiety) was found to have excellent internal consistency (7 items; $\alpha = .92$). The PHQ-9 (depression) demonstrated good internal consistency (9 items; $\alpha = .89$). The CAGE-AID (substance abuse) showed good internal consistency (4 items; $\alpha = .81$). The Burnout subscale of the ProQOL demonstrated acceptable internal consistency (10 items; $\alpha = .79$). The Secondary Traumatic Stress subscale of the ProQOL was found to have good internal consistency (10 items; $\alpha = .86$).

An exploratory factor analysis was conducted on the items of each of the five dependent variable scales. This was an attempt to explore a possibly lower number of underlying factors or dimensions among the dependent measures. A Mental Health Issues instrument was not developed through the factor analysis due to multiple items having dissimilar scales. The extraction method was the principal component analysis, and a Varimax rotation with Kaiser normalization was used. The factor analysis initially loaded eight factors. Three additional runs of the factor analysis were conducted, for a total of four itinerations. The final run loaded four factors. These comprised four new scales based on the factor loadings identified as Anxiety_Scale, Drugs_Scale, Burnout_Scale, and TraumaWork_Scale. Reliability was assessed for each of the new scales using Cronbach's alpha. Each scale demonstrated reliability. The Anxiety_Scale was found to have excellent internal consistency (9 items; $\alpha = .91$). The Drugs_Scale demonstrated good internal consistency (4 items; $\alpha = .81$). The Burnout_Scale demonstrated acceptable internal consistency (3 items; $\alpha = .73$). The TraumaWork_Scale was also found to have acceptable internal consistency (2 items; $\alpha = .70$).

Table 9

Summary of Exploratory Factor Analysis Results

	Factor Loadings			
Item	Anxiety	Drugs	Burnout	TraumaWork
Feeling nervous, anxious, or on edge	**.77**	.12	.12	.28
Not being able to stop or control worrying	**.74**	.09	.15	.12
Worrying too much about different things	**.78**	.07	.23	.11
Trouble relaxing	**.79**	.06	.32	.13
Being so restless that it's hard to sit still	**.77**	.13	-.02	.25
Becoming easily annoyed or irritable	**.63**	.07	.29	.34
Trouble falling asleep, or sleeping too much	**.65**	.02	.36	-.13
Trouble concentrating on things, such as reading the newspaper or watching television	**.68**	.07	.20	.22
Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	**.73**	.08	-.01	.03
Have you ever felt that you ought to cut down on your drinking or drug use?	.05	**.83**	.19	-.01

(continued)

Table 9 (continued)

Summary of Exploratory Factor Analysis Results

Item	Factor Loadings			
	Anxiety	Drugs	Burnout	TraumaWork
Have people annoyed you by criticizing your drinking or drug use?	.03	**.73**	.13	-.09
Have you ever felt bad or guilty about your drinking or drug use?	.12	**.89**	.01	.08
Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?	.14	**.70**	-.10	.14
I am happy.	.18	-.03	**.75**	.05
I feel trapped by my job as a [helper].	.29	.07	**.72**	.23
I feel "bogged down" by the system.	.29	.11	**.71**	.23
As a result of my [helping], I have intrusive, frightening thoughts.	.26	.06	.26	**.77**
I can't recall important parts of my work with trauma animal victims.	.19	.03	.12	**.82**

Note: Factor loadings over .40 appear in bold.

A Pearson product-moment correlation coefficient found a relationship between Anxiety_Scale and Drugs_Scale, $r(182) = -.25$, $p < .01$. A relationship was also found between Anxiety_Scale and Burnout_Scale, $r(175) = .58$, $p < .01$. Anxiety_Scale was also demonstrated by the Pearson correlation to have a relationship with TraumaWork_Scale, $r(175) = .47$, $p < .01$. Those who scored high on Burnout_Scale was demonstrated by a Pearson correlation to score

higher on the Drugs_Scale, $r(175) = .19$, $p < .05$. A relationship was also found between Burnout_Scale and TraumaWork_Scale, $r(176) = .44$, $p < .01$.

Table 10

Pearson's Product-Moment Correlation Coefficients for Relations Between Four Factors of Mental Health

	1	2	3	4
1. Anxiety_Scale	-			
2. Drugs_Scale	.25**	-		
3. Burnout_Scale	.58**	.19*	-	
4. TraumaWork_Scale	.47**	.13	.44**	-

Note. *$p < .05$. **$p < .01$.

Two independent samples case *t* tests were utilized to compare the kill and no-kill groups on each of the four new scales. No mean differences between those who work for a no-kill shelter and those who work for a kill shelter was found on any of the scales. There was a mean difference between those who have worked under five years ($M = 6.40$) and those who have worked for over five years ($M = 7.54$) on Burnout_Scale, $t(175) = -2.743$, $p < 0.1$. No other mean differences were found for number of years worked on scores for the other scales. Independent samples *t* tests on participation in euthanasia demonstrated a mean difference for TraumaWork_Scale between those who participate in euthanasia ($M = 3.24$) and those who do not ($M = 2.68$), $t(168) = 2.66$, $p < .05$. Levene's test indicated unequal variances ($F = 5.42$, $p = .2$), so degrees of freedom were adjusted from 175 to 168.

Table 11

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Do and Do Not Participate in Euthanasia*

Mental Health Measure	Yes		No					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
Anxiety_Scale	8.43	6.74	7.47	6.46	182	.94	.35	.15
Drugs_Scale	.54	1.08	.49	1.03	183	.30	.76	.05
Burnout_Scale	7.21	2.59	6.24	2.93	175	2.30	.02	.35
TraumaWork_	3.24	1.65	2.68	1.16	175	2.66	<.01	.40

Note: Yes = Participation in euthanasia, No = Does not participate in euthanasia.

Table 12

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Work for a No-Kill and Kill Shelter*

Mental Health Measure	Yes		No					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	*Cohen's d*
Anxiety_Scale	7.95	7.24	8.20	6.14	182	-.25	.80	.04
Drugs_Scale	.48	1.11	.56	1.03	183	-.49	.63	.07
Burnout_Scale	6.51	2.61	7.15	2.86	175	-1.54	.13	.23
TraumaWork_	2.91	1.53	3.14	1.49	175	-.98	.33	.15

Note: Yes = Work in no-kill shelter, No = Work in kill shelter

Table 13

Two Independent Samples Case t *Test – Group Differences for Mental Health Between Those Who Have Worked for Less than Five Years and Those Who Have Worked for Five or More Years*

Mental Health Measure	< 5		≥ 5		*df*	*t*	*p*	*Cohen's d*
	M	*SD*	*M*	*SD*				
Anxiety_Scale	8.21	6.51	7.91	6.87	182	.31	.76	.05
Drugs_Scale	.54	1.06	.50	1.08	183	.26	.80	.04
Burnout_Scale	6.40	2.67	7.54	2.75	175	-2.74	.01	2.54
TraumaWork_	3.12	1.55	2.90	1.44	175	.96	.34	.15

A three-way factorial (2 x 2 x 2) multivariate analysis of variance (MANOVA) was again conducted with the three independent factors: type of shelter, participation in euthanasia, years at current job. This time, the scales identified through the factor analysis were utilized as the dependent variables. There was no interaction effect between working in kill/no kill shelter, participation in euthanasia, and years at current job on the dependent variables, $F(4, 161) = .78$, $p > .05$, Wilks' $\Lambda = .98$, partial $\eta^2 = .019$. There was not, unlike the previously run MANOVA, a main effect of participation in euthanasia, $F(4, 161) = 1.94$, $p > .05$, Wilks' $\Lambda = .95$, partial $\eta^2 = .046$. However, analysis yielded a main effect of number of years on the job, $F(4, 161) = 2.98$, $p = .02$, Wilks' $\Lambda = .93$, partial $\eta^2 = .069$.

Follow-up univariate analysis of variance tests identified four between-subjects effects. Interaction effects were found between participation in euthanasia and Burnout_Scale, $F(1, 164) = 5.37$, $p < .05$, and participation in euthanasia and TraumaWork_Scale, $F(1, 164) = 5.38$, $p < .05$. An interaction effect was found between years on the job and Burnout_Scale, $F(1, 164) =$

4.69, $p < .05$. An interaction effect was also found between the type of shelter (no-kill, kill) and participation in euthanasia on Burnout_Scale, $F(1, 164) = 5.48$, $p < .05$.

Table 14

Multivariate and Univariate Analyses of Variance F *Ratios for Types of Shelter x Participation in Euthanasia x Years on the Job Effects for New Measures*

Variable	MANOVA $F(4, 161)$	ANOVA $F(1, 164)$			
		Anxiety_Scale	Drugs_Scale	Burnout_Scale	TraumaWork
Type of shelter (A)	.32	.70	.00	.06	.09
Participation in euthanasia (B)	1.94	1.32	.24	5.37*	5.38*
Years on the job (C)	2.98	.11	.01	4.69*	1.43
A*B	1.61	1.24	.43	5.48*	.67
A*C	1.27	2.61	1.39	2.91	.01
B*C	.42	.06	1.29	.13	.00
A*B*C	.78	2.09	.47	.70	.68

*Note. *p < .05*

Tests of Hypotheses

The three-way MANOVA on the five dependent measures was used to analyze the data. The null hypotheses were tested with a multivariate *F* distribution at the .05 level of significance. The hypothesis that there is a difference based on the type of shelter employed in on mental health (Kill; No-Kill) (H_1 $\tilde{\mu}_{\text{Kill}} \neq \tilde{\mu}_{\text{NoKill}}$) was not supported. No main effect of the type of shelter was found on mental health, $F(5, 155) = .27$, $p > .05$, Wilks' $\Lambda = .991$, partial $\eta^2 = .009$.

The hypothesis that there is a difference based on participation in euthanasia on mental health (Yes, euthanize; No, does not euthanize) (H_2: $\tilde{\mu}_{\text{yes}} \neq \tilde{\mu}_{no}$) was supported, as there was a main effect of participation in euthanasia on mental health, $F(45.\ 155) = 3.10$, $p > .05$, Wilks' $\Lambda = .909$, partial $\eta^2 = .091$.

The results do not support the hypothesis that there is a difference based on years at current job on mental health (Less than 5 years; 5 or more years) (H_3: $\tilde{\mu}_{< 5\text{ yrs}} \neq \tilde{\mu}_{\geq 5\text{ yrs}}$). No main effect of years at current job on mental health was found, $F(5.\ 155) = .47$, $p < .05$, Wilks' $\Lambda = .985$, partial $\eta^2 = .015$.

The results do not support the hypothesis that there is a cell effect based on the type of shelter employed in and participation in euthanasia on mental health (H_4: $\tilde{\mu}_{\text{Kill, yes}} \neq \tilde{\mu}_{\text{Kill, no}} \neq \tilde{\mu}_{\text{NoKill, yes}} \neq \tilde{\mu}_{\text{NoKill, no}}$). No interaction effect was found, $F(5, 155) = 1.20$, $p > .05$, Wilks' $\Lambda = .963$, partial $\eta^2 = .037$.

The hypothesis that there a cell effect based on the type of shelter employed in and years of experience on mental health (H_5: $\tilde{\mu}_{\text{yes, <5 yrs}} \neq \tilde{\mu}_{\text{yes, } \geq 5\text{ yrs}} \neq \tilde{\mu}_{\text{no, <5 yrs}} \neq \tilde{\mu}_{\text{no, } \geq 5\text{ yrs}}$) was not supported. No interaction effect was found, $F(5, 155) = .86$, $p > .05$, Wilks' $\Lambda = .973$, partial $\eta^2 = .027$.

The hypothesis that there is a cell effect based on euthanasia and years of experience on mental health (H_6: $\tilde{\mu}_{\text{yes, <5 yrs}} \neq \tilde{\mu}_{\text{yes, } \geq 5\text{ yrs}} \neq \tilde{\mu}_{\text{no, <5 yrs}} \neq \tilde{\mu}_{\text{no, } \geq 5\text{ yrs}}$) was also not supported. No interaction effect was found, $F(5, 155) = .37$, $p > .05$, Wilks' $\Lambda = .988$, partial $\eta^2 = .012$.

The hypothesis that there is a cell effect among the type of shelter employed in, participation in euthanasia, and years of experience on mental health (H_1: $\tilde{\mu}_{\text{Kill, <5 yrs, yes}} \neq \tilde{\mu}_{\text{Kill, } \geq 5\text{ yrs, yes}} \neq \tilde{\mu}_{\text{NoKill, <5 yrs, yes}} \neq \tilde{\mu}_{\text{NoKill, } \geq 5\text{ yrs, yes}} \neq \tilde{\mu}_{\text{Kill, <5 yrs, no}} \neq \tilde{\mu}_{\text{Kill, } \geq 5\text{ yrs, no}} \neq \tilde{\mu}_{\text{NoKill, <5 yrs, no}} \neq \tilde{\mu}_{\text{NoKill, } \geq 5\text{ yrs, no}}$) was not supported, $F(5, 155) = .80$, $p > .05$, Wilks' $\Lambda = .975$, partial $\eta^2 = .025$.

Qualitative Results

Sample Composition and Demographics

Of the 42 responses to the qualitative portion, 31 were usable for this study. The other 11 respondents did not answer more than the demographic questions, and were thus removed from analysis. Females accounted for 90.3% (n = 28) of the sample. The majority of the respondents were white/Caucasian (80.6%, n = 25), and the remaining identified as Hispanic (19.4%, n = 6). Most respondents reported attaining Some college (30%, n = 9). Others reported a High school diploma/GED (23.3%, n = 7), Associate's degree/technical certificate (16.7%, n = 5), Bachelor's degree (20%, n = 6), Master's degree (6.7%, n = 2), and Doctoral/MD/JD (3.3%, n = 1). The most frequent response to religious affiliation/denomination was Christianity (50%, n = 15) to include Catholic, Methodist, Protestant, and Baptist. The sample also consisted of three unaffiliated/Atheists (10%) and one Buddhist (3.3%). Four individuals (13.3%) reported no religion. Seven (23.3%) declined to answer. Over half of the respondents (55.8%, n = 17) reported that religion/spirituality was moderately to extremely important to them. Five (16.1%) reported religion/spirituality was slightly important, and 9 (29%) reported it not at all important. Of those who gave their job titles, 12 (40%) identified as managers or other supervisory staff, and 18 (60%) were various other staff members. The respondents were nearly split on the type of shelter they work at: 40% (n = 12) work for a no-kill shelter and 60% (N = 18) work for a kill shelter. Most of the respondents reported that they are currently involved in euthanasia in some way (80%, n = 24 versus 20%, n = 6 who are not currently involved in euthanasia but may have been in the past). Seventeen (56.7%) have been working for less than 5 years; 13 (43.3%) for five or more years. Nearly all of the respondents were pet owners (93.3%, n = 28). Only two (6.7%) stated they do not own pets. Two respondents (6.7%) reported that they currently receive

professional counseling for any work-related issues, as opposed to 28 (93.3%) who said they do not.

Table 15

Qualitative Sample Composition

Characteristic	Frequency	Percentage
Gender		
Females	28	90.3
Males	3	9.7
Race/Ethnicity		
White/Caucasian	25	80.6
Hispanic	6	19.4
Educational Level		
High school diploma/GED	7	23.3
Some college	9	30
Associate's/Certificate	5	16.7
Bachelor's	6	20
Master's	2	6.7
Doctorate/MD/JD	1	3.3
Religious Affiliation		
Christianity	15	50
Unaffiliated	3	10
Buddhism	1	3.3
None	4	13.3
Decline to answer	7	23.3
Religious Importance		
Extremely important	4	12.9
Very important	5	16.1
Moderately important	8	25.8
Slightly important	5	16.1

(continued)

Table 15 (continued)

Qualitative Sample Composition

Characteristic	Frequency	Percentage
Not at all important	9	29
Job Position/Title		
Management/Supervisory	12	40
Non-supervisory	18	60
Years at Current Position		
Less than 5 years	17	56.7
5 or more years	13	43.3
Participate in Euthanasia		
Yes	24	80
No	6	20
Type of Shelter		
No-kill shelter	14	40
Kill shelter	18	60
Pet Ownership		
Pet owner	28	93.3
Not pet owner	2	6.7
Professional Counseling		
Receiving	2	6.7
Not receiving	28	93.3

Preliminary Coding

A preliminary analysis was conducted to identify main themes that arose from the qualitative data. Codes, or words or short phrases, were identified that captured the essence of the texts written by the participants in response to the open-ended questions. Subcodes were

identified that appeared to merit further refinement from the codes. Categories were then formed by synthesizing common codes. Similar categories were finally grouped together in themes.

Five themes were identified through the concepts that derived from the data. These were: (1) Individuals choose to work at an animal shelter because the job is personally rewarding; (2) Animal shelter workers view euthanasia as an unfortunate necessity; (3) Reactions from people outside of animal shelter work are mixed; (4) Euthanasia impacts animal shelter workers personally; and, (5) Coping mechanisms are employed by animal shelter workers to help deal with the stress of the job.

THEME 1: Individuals choose to work at an animal shelter because the job is personally rewarding. This theme arose from the question asking why the animal shelter workers chose their profession. Three main categories of responses were identified: the desire to help animals, a general love for animals, and wanting to make a difference through their work.

THEME 2: Animal shelter workers view euthanasia as an unfortunate necessity. Animal shelter workers identified a variety of opinions regarding the euthanasia of companion animals. Some only accept euthanasia in limited cases. One such case was for medical issues, identified as: a means to end the animals' suffering, health issues that cannot be treated and continues to decline, and a major injury to the animal that cannot be addressed. Others viewed euthanasia as a required response to extreme aggressiveness that cannot otherwise be managed. Another acceptable reason for euthanasia that was a response to aggressive temperaments that cannot be addressed through behavioral training. Pet overpopulation was also cited as an acceptable reason for euthanasia by some participants. Participants noted that herd health must be maintained through the euthanasia as an overcrowded facility enables the swift spread of infectious diseases, thereby putting the entire shelter at risk from a potentially fatal illness.

Others noted that limited shelter resources could be focused on those who are deemed more easily adoptable, thereby ensuring at least a few are saved from the overpopulated shelters. Euthanasia was also considered by some participants as an acceptable alternative to homelessness. They stated that strays are more at risk for experiencing abuse and trauma, and more likely to contract diseases. Therefore, euthanasia would save the animals from a miserable, dangerous experience on the streets.

Other animal shelter workers listed circumstances euthanasia are not acceptable. Euthanasia as a response to overpopulation or space issues was cited as unacceptable by some of the respondents. Some stated that companion animals should never be euthanized if they are healthy – only those severely injured or in declining health should be euthanized. One asserted that animals should not be euthanized due to behavioral issues.

THEME 3: Reactions from people outside of animal shelter work are mixed. Animal shelter workers have encountered a variety of responses regarding their professions from friends, family, and the general public. Many animal shelter workers have encountered those who do not understand the work that they do, often telling the workers that they could never do their jobs. Others have expressed anger and repulsion towards the animal shelter workers and the shelters. Related to this, staff reported being called names and ridiculed, and have gotten into arguments with others. The respondents also reported that others have expressed understanding towards their work, such as through communicating their pity for the animal shelter workers or stating that workers must have a "strong character." Others have verbalized to the animal shelter workers that they understood the reasons for euthanizing companion animals.

THEME 4: Euthanasia impacts animal shelter workers personally. Some of the animal shelter workers stated that their personal reactions to euthanasia sometimes depend on why the

animal had been euthanized. Respondents reported that euthanasias deemed by them to be necessary or for humane reasons are easier to deal with than those done for other reasons. Animal shelter workers reacted more negatively to euthanasias performed due to people-error. Respondents also reported on their specific personal reactions. Negative reactions were nightmares or flashbacks related to euthanasia, emotional distress (crying, sadness, anger, feelings of helplessness), and questioning one's faith or religious beliefs. Some of the animal shelter workers also reported that the public's perception of them and their work can have negative impacts on the respondents. They cited feelings of defeat and experiencing unnecessary stress. Others reported that they try not to let the strains of euthanasia affect them at all.

THEME 5: Coping mechanisms are employed by animal shelter workers to help deal with the stress of the job. Animal shelter workers reported both active and passive coping mechanisms employed to help them manage distress from work. Active coping mechanisms included a variety of healthy coping mechanisms related to engagement with others including their own animals, engaged mental and creative activities, distractions, and focusing on body-engaged activities. Unhealthy active coping mechanisms reported employed by a handful of the animal shelter workers were drinking and smoking. Passive coping mechanisms utilized by some of the animal shelter workers were disconnecting from work once home via phone or email, keeping busy, and disconnecting from work by not having pets of ones own. One respondent reported not engaging in any coping mechanisms for work-related stress.

Table 16

Preliminary Themes

Themes/Categories/Codes	
THEME 1: Individuals choose to work at an animal shelter because the job is personally rewarding.	
CATEGORY: ASWs want to help animals.	*n* = 13
CATEGORY: ASWs love animals.	*n* = 10
CATEGORY: ASWs want to make a difference.	*n* = 7
THEME 2: Animal shelter workers view euthanasia as an unfortunate necessity.	
CATEGORY: ASWs are accepting of euthanasia in only certain cases.	*n* = 26
CODE: Accepting due to medical issues	*n* = 17
SUBCODE: A means to end suffering	
SUBCODE: Declining, untreatable health	
SUBCODE: Major injury to the animal	
CODE: Accepting due to behavioral issues related to an aggressive temperament	*n* = 10
CODE: Accepting due to pet overpopulation	*n* = 4
SUBCODE: Herd health maintained by euthanizing animals that may infect others with potentially fatal illness	
SUBCODE: Save others by focusing resources on those who may be more easily adopted	
CODE: Accepting due to pet overpopulation	*n* = 4
SUBCODE: Herd health maintained by euthanizing animals that may infect others with potentially fatal illness	

(continued)

Table 16 (continued)

Preliminary Themes

Themes/Categories/Codes	
SUBCODE: Save others by focusing resources on those who may be more easily adopted	
CODE: Accepting as an alternative to homelessness	*n* = 2
SUBCODE: Strays are more at risk for experiencing abuse or trauma	
SUBCODE: Strays are more likely to contract disease	
CATEGORY: ASWs believe euthanasia is not acceptable under certain circumstances.	*n* = 4
CODE: Animals should not be euthanized due to overpopulation/space issues	*n* = 4
CODE: Animals should not be euthanized when they are healthy	*n* = 3
CODE: Animals should not be euthanized as a response to behavioral issues	*n* = 1
THEME 3: Reactions from people outside of animal shelter work are mixed.	
CATEGORY: ASWs have encountered those who are not understanding.	*n* = 13
CODE: Others tell ASWs that they could not do their jobs	*n* = 5
CODE: Others express repulsion/anger at the work and ASWs	*n* = 4
SUBCODE: ASWs have been called names/ridiculed	*n* = 4
SUBCODE: ASWs have gotten into arguments with others	*n* = 1
CATEGORY: ASWs have experienced <u>understanding</u> from others.	*n* = 4
CODE: Others have expressed pity for ASWs	*n* = 2
CODE: Others verbalized understanding reasons for euthanasia	*n* = 1

(continued)

Table 16 (continued)

Preliminary Themes

Themes/Categories/Codes	
CODE: Others said the worker must have a "strong character"	*n* = 1
THEME 4: Euthanasia impacts animal shelter workers personally.	
CATEGORY: The personal reactions to euthanasia sometimes depend on why the animal had been euthanized.	*n* = 6
CODE: Euthanasias deemed necessary/humane are easier to deal with	*n* = 5
CODE: Euthanasia due to people error more negatively affect ASWs	*n* = 2
CATEGORY: Personal reactions to euthanasia can be negative.	*n* = 19
CODE: Nightmares/flashbacks are experienced	*n* = 3
CODE: ASWs experience emotional distress	
SUBCODE: Crying/Sadness	*n* = 10
SUBCODE: Anger	*n* = 1
SUBCODE: Feeling of helplessness	*n* = 1
CODE: Question faith/religion	*n* = 2
CATEGORY: Public perception can have a negative impact on animal shelter workers.	*n* = 2
CODE: ASWs experience feelings of defeat	*n* = 1
CODE: ASWs undergo unnecessary stress	*n* = 1
CATEGORY: Some animal shelter workers try not to let the strains of euthanasia affect them.	*n* = 5
THEME 5: Coping mechanisms are employed by animal shelter workers to help deal with the stress of the job.	

(continued)

Table 16 (continued)

Preliminary Themes

Themes/Categories/Codes	
CATEGORY: Active coping mechanisms	
CODE: Healthy	*n* = 26
Engagement with Others	
SUBCODE: Spending time with friends and family	*n* = 13
SUBCODE: Spending time with own animals	*n* = 9
Engaged Mental and Creative Activities	
SUBCODE: Participating in hobbies/creative outlets	*n* = 2
SUBCODE: Finding comfort in faith/religion	*n* = 1
SUBCODE: Reading	*n* = 1
SUBCODE: Focusing on positives	*n* = 1
SUBCODE: Engaging in meditation	*n* = 1
Distracted Mental Activities	
SUBCODE: Watching TV	*n* = 1
SUBCODE: Playing	*n* = 1
SUBCODE: Watching movies computer games	*n* = 1
Focus on Body-Engaged	
SUBCODE: Exercising	*n* = 6
SUBCODE: Enjoying spa days	*n* = 1
SUBCODE: Cooking	*n* = 1

(continued)

Table 16 (continued)

Preliminary Themes

Themes/Categories/Codes	
SUBCODE: Eating healthy	*n* = 1
CODE: Unhealthy	*n* = 4
SUBCODE: Drinking	*n* = 4
SUBCODE: Smoking	*n* = 1
CATEGORY: Passive coping mechanisms	
CODE: Disconnecting from work once home via phone or email	*n* = 6
CODE: Keeping busy	*n* = 2
CODE: Disconnecting from work by not having pets of one's own	*n* = 1
CATEGORY: No coping mechanisms employed	*n* = 1

Member Checking of Preliminary Analysis

After conducting the preliminary analysis, the results were validated through the use of member checking. A focus group of eight employees of an animal shelter in Texas was convened to provide member checking of the preliminary analysis, which consisted of themes, categories, codes, and subcodes. This shelter, according to a long-term employee of the shelter and a member of the focus group, is considered a high kill shelter and euthanizes approximately 70% of the animals it takes in, down from 90% in the last few years. The individuals in the focus group were included in the original prospective participant pool and had been solicited to complete the survey instrument. Because completion of the survey was anonymous, confirmation of completion of the instrument was not attained. Focus group members were presented with the research questions, and feedback on the identified themes and underlying categories, codes, and

subcodes were discussed one at a time. Members of the focus group were asked to comment if they agreed with the initial findings and provide information that they found missing. Notes of participant responses were taken during the interview, and a recording was made that was later used to augment the notes. The length of the focus group meeting was approximately one hour. Focus group members agreed with all of the identified themes of the preliminary analysis.

THEME 1: Individuals choose to work at an animal shelter because the job is personally rewarding. Regarding this theme, members stated "Helping animals is the main thing" and "We're all here for the same reason." One member added that traditional office work is not appealing to her, and said she likes going home and knowing she made a difference. All of the members voiced agreement with this statement, which solicited a discussion on how they make a difference in animals' lives. Regardless if an animal must be euthanized or may possibly be adopted, members reported that their goal is to care for the animals, to "give them some love, at least for that short amount of time." In congruence with one participant response in the data that read "If I become attached to one of the animals I euthanize it is harder but I get over it," members were in agreement with each other that euthanization is more difficult if one has bonded with the animal and especially if present for the procedure. Also making the process more difficult is when the animals "don't leave that well," meaning that they cry and whimper on the way to the euthanasia room or resist being taken to the room. Examples of member statements were "the animals know," "they feel it," and "it's horrible."

THEME 2: Reactions from people outside of animal shelter are mixed. In response to this theme, members likewise stated that most reactions from others, including friends and family, are not understanding. Members stated that it means a great deal to them when a member of the public makes an effort to understand their work or chooses to help the shelter in some

way. However, focus group members reported that they perceive these instances to be rare. Similar to some of the data, members reported having arguments with family members about their work. Those in the focus group also reported being harassed by members of the public, including being spat on or physically threatened and assaulted, which they say makes not only their jobs but their ability to cope more difficult. One member pointed out his frustration with the public thusly: “People are so quick to call us killers and murderers and all these things on Facebook, but no one is quick to come in and help us out.” Members reported critical media coverage and a lack of volunteers, fosters, rescue interest, and donations as exacerbating factors to their frustration.

Members of the focus group volunteered additional information that was not present in the original data regarding their attitudes of people from within the shelter. Not only do they experience a lack of support from the general public, but they perceive a lack of support from their city commission and members of their shelter’s Board of Directors, which compounds an already difficult work situation. City officials, member said, have been critical of the shelter but have not passed laws, such as mandatory spay and neuter laws, that would reduce pet overpopulation and thus the number of euthanasias performed. Focus group members said this lack of constructive action to address criticisms that the shelter is euthanizing too many animals confounds them. Members of the Board of Directors also have not always made decisions in the best interest of the shelter, reported those in the focus group. For example, they stated that Board members have periodically taken an interest in one animal, and demand the shelter not euthanize that animal and hold it indefinitely. Focus group members theorized that this may be the result of public interest in one animal, and board members’ attempt to concede to public appeal and garner approval. However, such an act puts other animals at risk. As one member explained, for

each day an animal that is not as adoptable is kept, one highly adoptable animal per day may be euthanized because there is no space available. In addition, the risk to other healthy, adoptable animals being euthanized may continue for the months the one animal is housed at the shelter. This, the participants asserted, is selfish on the part of board members. The perception among the staff is that those board members who do this are focusing their concern on the perception of the public for themselves personally, and not for the betterment of the shelter and all of the animals they serve. Because the Board of Directors ultimately makes staffing decisions for the shelter, employees feel impotent against board members' demands. Criticisms also come from rescue groups. A rescue group is a private organization that takes in animals and works with a network of individuals to foster the animals until they are adopted. Members volunteered that criticisms are routinely made against their and other shelters by rescue groups which, as one member stated, "add to the fire." Member frustrations likewise arise when the rescue groups that are critical of the shelter only agree to accept highly adoptable dogs, described as small, cute, and fluffy dogs. However, members stated that they believe rescues should instead work to save unadoptable dogs – the main ones the shelter staff must euthanize. As the shelter and rescue groups should be working together, members stated that they believe that instead of publicly criticizing the shelter, they should instead refocus the conversation to how the community can help save the animals' lives.

Some focus group members made additional comments concerning criticisms from coworkers. They reported that there have been issues in the past when staff members question those who made the decision to euthanize particular animals. Once the difficult decision has been made to euthanize an animal, members stated that they need to move on refocus on other job tasks so that they can better cope. However, this is difficult to do when a coworker becomes

critical of their decision, and oftentimes leads to the staff member second-guessing themselves and feeling remorseful. Criticisms, members say, also lead them to keep their thoughts and emotions suppressed, as they learn that not talking about work issues mean less criticisms.

THEME 3: Animal shelter workers view euthanasia as an unfortunate necessity. In response to this theme, the focus group members stated that the community that is critical of the workers was also responsible for the animal control problem that the shelter is attempting to address. While some participants in the original data (13.3% of responses for this theme) found overpopulation/space issues to be unacceptable reasons for euthanasia, members of the focus group said it is an unfortunate reality. The members explained that the geographical area for which they serve is known for a public that has not properly cared for their animals. Members stated that individuals routinely chain their dogs outside, refuse to spay or neuter their pets, do not vaccinate, routinely dump unwanted dogs, and allow their pets to roam the streets. Animal abuse and dog fighting are also not unheard of in the area. All of these factors contribute to the high intake rate of the shelter, which in turn contributes to the high euthanasia rate. Members also stated that euthanizing an animal is more bearable if that animal is sick. This was consistent with the statement of the original 56.6% of responses provided for this theme. The members reported being heartened, however, by the positive response to their vaccination clinic, which they would not have imagined possible a few short years ago.

THEME 4: Euthanasia impacts animal shelter workers personally. Regarding this theme, members provided statements such as “Euthanasia changes you” and “It’s difficult to remember how we were before… before we started euthanizing.” Crying spells including at work, bizarre and disturbing dreams about animals, invasive and persistent thoughts about the animals at the shelter, feelings of guilt and helplessness from not being able to do more, and

anger were reported by various members of the focus group. One member reported that he has "gone in and out of PTSD." The member explained that he was in "a dark place," and lost compassion for other people and animals, blaming in part that he was the only one performing the euthanasia in the shelter for several years and citing the help of his coworkers for "bringing (him) back."

One member reported that two weeks prior, a member of the public had not adhered to shelter rules for the handling of animals and inadvertently spread parvovirus, a highly contagious and potentially fatal viral infection. It is not feasible, they said, to separate the infected animals for treatment and risk the further spread of the disease, so they were required to euthanize the entire floor of dogs, which then brought on more criticism against the shelter and its staff. The focus group members reported incidences such as that trigger feelings of anger and frustration. Members also stated that they are sad when animals arrive at the shelter and they can identify that it will likely be euthanized. One reported "I already know which dogs will get adopted, which will go to rescue, which will get fostered, and which will get euthanized." One member said that she thinks of her own dogs, and often wonders about their chances of being saved from euthanasia should they become lost.

Ultimately, the goal of euthanasia is to provide the animals with "a good death," as one of the members stated. He said that staff want to do their job well, so the process of death is as quick and as painless as possible. As others agreed, "You want to be good at it because you want their death to be quick" and "It's a relief when they go quickly." This "good death" helps them cope with the stress of euthanasia. Members discussed how they must mentally prepare themselves before they can perform the euthanasia. The longer they work in the field, the more ability they gain to put aside their feelings and cope with the stressors of the job, members stated.

It was further clarified that some will invariably have a more difficult time coping with euthanasia than others, and how veteran staff members endeavor to help novice staff cope.

THEME 5: Coping mechanisms are employed by animal shelter workers to help deal with the stress of the job. Addressing this theme, a member agreed with one of the coded coping mechanisms in the data: focus on the positives. This member stated that he sometimes tells others, "I've killed millions, but I've saved thousands," preferring to focus his attention on those he has been able to save. His comment regarding coping mechanisms came after some initial silence from members when asked about their response to this theme. The first member to respond stated initially that she did not have any coping mechanisms, while in the same sentence reported engaging in such as spending time with loved ones and exercising. After a discussion by the staff, many agreed that they use healthy coping mechanisms, and most often employ the strategy of separating work and home life. Comments included "I go home and love the crap out of my animals." Members also shared how some will not euthanize those animals they know they will have an affinity towards and consequently more difficulty coping. For example, one will not euthanize cats while another will not euthanize puppies. They have also learned to allow someone else to perform the euthanasia when they feel distressed. As members stated, "When you get fatigued, hand it over to someone else" and "Know what your limit is." In this vein, staff have learned to help each other cope.

Members further volunteered that because they work at a high kill shelter and euthanize on a regular basis, they have had to "get stronger" mentally and emotionally so they can protect themselves from the strain of euthanasia. Members explained that they believe there is a difference in shelter culture for high kill and low/no-kill shelters. Those in low/no-kill shelters, they explained, are accustomed to saving animals, which results in more emotional difficulty

when an animal must be euthanized. One member reported seeing the differences in shelter culture firsthand, having worked at no-kill shelters in the past.

Witnessing euthanasia. At the conclusion of the focus group, one of the members asked me to witness the euthanasia of an animal. This was, as the individual explained, so that I could experience a moment of what they experience on a daily basis, enabling a better perspective of the lives of those who perform euthanasia. The other members agreed, and stated that in order to truly understand the data I had already collected, it was important to receive information from experiencing euthanasia first-hand. I was overcome with ambivalence. My first, instinctual reaction was the desire to say "no thank you," to inform them that simply talking to and surveying euthanasia technicians and reading about the procedures were enough to truly understand their lived experience. My other, more logical side knew that I could gain valuable research data if I accepted the offer. I was also concerned that saying no would give the member checking participants the impression that I was repulsed by their work and in some way judging them, thereby losing their trust. A few voiced concern for how I might react to viewing the euthanasia, reminding me that "it changes you." Their concern for my well-being was heartening, but it also provoked a feeling of shame. I am the counselor, I thought, and my job is to help individuals feel better. But before me are individuals who are caring for me. At the same time, I did not want to give the impression that I was only concerned about their lives on a surface level and was repelled by their work. More importantly, the data I might collect from witnessing euthanasia could provide more richness and depth to the study by augmenting the validation procedure of the member checking.

Participation of the researcher in this manner has its support in the literature. As Boland (1985, as cited in Bygstad & Munkvold, 2007, para. 4) stated, "When the phenomenologist

studies a person, she does not look *at* them, but *with* them in a dialogue searching for understanding." Cresswell and Miller (2000) had stated that solid evidence can be collected through the combined efforts of both the researcher and participants. The participant-researcher is also not unlike autoethnography, which is a qualitative research approach whereby the researcher is also the subject (Cresswell, 2013). Autoethnographies relate the personal story of the subject-researcher and derives from that a larger, cultural meaning. In addition, reflexivity commands researchers to be aware of how the research process itself changes not only the researcher but the research process (Palganas, Sanchez, Molinas, & Caricativo, 2017). Descriptions of the procedures and emotional responses were thus included in the analysis of the process. Ellis and Bochner (2000, p. 752) describe a technique called "emotional recall" in which the qualitative researcher remembers the emotions experienced during data collection to assist in remembering other specifics. Additionally, Ellis and Bochner (2000) assert that qualitative researchers must be able to move in and out of the self to describe their experience for the reader and analyze the greater cultural context of the phenomenon. Further, Palganas, Sanchez, Molinas, and Caricativo (2017) state it is not possible for the researcher to remain completely outside of the data while conducting qualitative research, and acknowledgement of the researcher's experiences allows for reflexivity to be included in the study's findings as it can challenge assumptions and increase scientific rigor.

Because of these reasons and my desire to have a clearer understanding while removing my own preconceptions – and against my aversion to the idea of witnessing the death of an animal, I agreed. Three staff members, one of whom was not present for the focus group, accompanied me. I then became a participant-researcher during the member checking validation process, on the level of passive participation, which helped to sensitize me to the experience of

the animal shelter workers. My experience, and reactions thereof, then became additional data that needed to be integrated into the member checking validation process.

Walking through the white corridors into the back room where euthanasia is performed, I imagined how it must be like for someone new to the job, mentally preparing her/himself for this part of the job duties. I found my breathing became accelerated, and I had to focus on slowing down my breath – both to keep from panicking and to avoid giving the impression I was distressed. As we walked further towards the back, the echoes of the dogs barking and people talking that were so loud at the front reception area got more muffled. As we entered the kennels, one of the staff members apologized for the stench. At that moment, the lack of what I can only describe as pungent dog smell struck me. I had been to other shelters and kennels that reeked of this distinctive odor, but the scent was faint – nearly undetectable - at this visit. When I responded to the employee that I do not smell anything foul, he appeared surprised and said that most everyone who comes to the shelter comments about the strong dog odor. I brushed it off that perhaps I had gotten used to the smell or the staff are working diligently to clean the facility.

One of those accompanying me asked if I had ever experienced euthanasia, to which I responded no. However, that was not true – it occurred to me a short time later that I had experienced euthanasia once before when I made the painful decision to put down my cat nearly ten years ago. Clearly, this was something I preferred to not think about. After informing the staff of how I had actually witnessed euthanasia and the circumstances – at one point my voice cracking, they expressed their condolences for the loss of my cat and explained how euthanasia at the veterinarian's office is different from euthanasia at an animal shelter. Animals at the veterinarian's office are sedated first and often provided with a painkiller, allowing them to already be asleep prior to the intravenous injection. This provides for as speedy and pain-free a

death as possible, avoids possible resistance from the animal, prevents spontaneous seizure activity, and prevents less pleasant effects of death such as the release of bodily fluids. Shelter animals, I was informed, are often euthanized without sedation and certainly without painkillers, and some resist the process making it more emotionally difficult for the employees. Sometimes, animals are euthanized with an injection in the abdominal cavity, a process called intraperitoneal injection. They informed me that the process of death is slower with this method than with intravenous injections as the chemicals must first be absorbed in the tissue. This, I was told, is used when the vein is difficult to find, such as with a young kitten. It was further explained to me how these methods are improvements to the inhumane methods that were utilized as recently as 15 years ago in the county. Then, animals were shot, caged and then submerged in water, or thrown in a pit with other animals that was subsequently covered with dirt. Fifteen years prior sounded rather recent, and I winced as I imagined the methods being performed on terrified dogs and cats.

The workers I accompanied informed me that their goal is to provide the animals with three things: love; compassionate care for the short time the animals are housed at the shelter; and a quick and painless death, or a "good death." Entering the euthanasia room, the employees said they cannot explain specifically how, but they sense the animals know they are going die and "act differently." The door of the room was closed, and the various sounds throughout the shelter were hushed. The room was small but large enough to fit the four of us, two extra-large, white chest freezers, three shelving units holding an assortment of crates – some filled with a cat or dog, a desk that held various medical equipment, and above the desk a hanging IV bag filled clear liquid that I assumed was either the drug used for euthanasia or a sedative. Above the desk

were also wall-mounted storage cabinets. Next to and atop the freezers were a few additional crates that each had a cat in them.

One of the euthanasia technicians asked me if I was okay witnessing the death of one of the cats. I scanned the room and saw there was one black cat. My beloved cat, for whom I had to make the painful choice of euthanasia, was solid black. Anyone but the black one, I told them, my voice again cracking, as I further stated "My cat was black." One of the cats in a crate on top of one of the freezers was a tiny gray kitten and could not have been more than three weeks old. This was the one chosen. Someone asked me again if I was okay, noting that gray is close to black. It was not close enough in my mind, and the procedure continued. This kitten was ill, and not being weaned yet, would not have been able to live on its own. The first humane euthanasia I witnessed was with this kitten, and I breathed a sigh of relief that my introduction was on an animal that would not have been viable anyway. The thought that a foster could nurse the kitten to health and provide frequent bottle feedings which would save its life entered my mind, but I quickly pushed it out. What would be the point of thinking of such a thing, as that only made me feel heartbroken. One of the workers gingerly removed the kitten from its crate as another prepared the syringe. According to the Humane Society of the United States (HSUS) (2013) in their *Euthanasia Reference Manual,* it should take approximately 2 minutes for loss of consciousness, 3-4 minutes to deep anesthesia, about 6 minutes to respiration cessation, and an estimated 8 minutes until death. *The kitten was injected in the abdomen and then carefully returned to its crate, which was then re-latched. After a few seconds, the kitten started to stumble repeatedly in its crate, until after perhaps a minute, it finally collapsed. I told myself that this kitten had barely come into this world and would not miss much of it – a justification I believed would help me cope with the sadness I felt at its inevitable loss of life. I tried to remain*

"scientific" in my thinking, to be devoid of emotion. Emotionlessness was a futile undertaking. I was filled with multiple, simultaneous emotions that were difficult to separate. It was sick, and would need a foster to care for it, hand feed it repeatedly until it was weaned, and provided with medications. A foster could not be found, and medications are costly. I was told if the kitten stayed at the shelter, it could infect the other cats, thus risking the lives of all of the felines at the shelter. I reminded myself that it was a sacrifice of one for the many, which helped.

Later, the workers said, they would examine the kitten to be sure it was dead before placing it in a black, plastic bag and lay it in the chest freezer. They told me they had heard horror stories of animals assumed deceased which later regained consciousness, some of which had already been placed in a freezer for disposal. To avoid that, the workers do not immediately deposit the remains in the freezer and allow for adequate time and checks to be sure the animals are dead. The remains of the canines, they said, are eventually cremated and some of the felines – if not cremated – are donated to science.

One employee repeatedly told me that "this is not normal," meaning the process of having to put animals down on a daily basis in the conditions in which they do is not a normal human experience. Each of the employees voiced their concern for my well-being and asked me several times how I was doing. They recounted how difficult it was to witness euthanasia for the first time for them and other staff members, and I assured them I was okay. At this point, someone entered the room with an adult German shepherd that the owner's family had recently surrendered and requested them to euthanize. The sound that had been hushed was now unmuted. A large, beautiful dog was led into the room. His tail was wagging and he was alert. Immediately, the noise of dog panting, leash clamoring, and raised voices filled the room. At this point, my mind started to shut off as the shock of seeing what appeared to me a healthy animal

led into the euthanasia room. Once again, the door was closed. I heard someone say that the owner was gravely ill and the family "didn't want to deal with him anymore." The fact that no rescues were willing or able to take him saddened me and I felt my heart beat rise, my chest tighten, and my body and mind go numb as I looked upon this friendly, gorgeous creature. I thought for a moment of taking him home myself, but I already have a full house of animals. One of my own pets is a German shepherd mix, and when I thought of him, my heart felt heavier as I could not imagine relinquishing him to a shelter to be put down. My mind then flashed to animal hoarders, and at that moment I understood how someone could take in far too many animals than they can adequately care for. Again, I was told how the experience is not a normal one for people, and tried to refocus on what was happening in the room. If a rescue is willing, the staff of this shelter told me they had in the past driven 3 days each way to deliver the animals. But none would, and there was no space in the shelter to house this dog indefinitely. And, the family had specifically requested he be put down. I could not bear to ask why the family requested euthanasia or if there was a medical or behavioral issue with the dog – anything that could justify its death. I was concerned that there would be no satisfactory answer for me, and I did not want to give the shelter workers the perception that I was criticizing them for performing the euthanasia.

While two of the staff members held the dog, a handheld scanner was run several times over the neck and body of the dog to check for a microchip, but the scanner remained silent and none was found. This step helps check for or confirm ownership. During this procedure, the dog's tail was joyfully wagging. Unlike other animals who have been taken into the euthanasia room, this one did not seem to have an inkling of what was to come. He appeared friendly and obedient – a wonderful family dog. A torrent of emotions and thoughts overcame me. I felt anger

at the owner's family who relinquished the dog to be euthanized. Who, I thought, could dispose of a family member – as I see this dog – so easily as if they are taking out the trash. I wondered how the owner felt about his or her companion animal, and what this person thought about their family's request. Was the owner even aware of what was happening? I was incensed that the family would put the shelter workers in the position that they did. Their selfish decision was contributing to the trauma the employees experience. Sadness then overcame me, and I felt sorry for the workers who had to perform the euthanasia and those who had to process the intake. I dreaded what I was about to witness, and nervous about what my reactions would be. Reminding myself I was only going to be in that room a short time and I needed to be present to conduct the job I was there to do, I steeled myself.

Multiple passes of the microchip scanner yielded nothing more than silence. Once more, a syringe was prepared, but this time with a pre-euthanasia sedative drug to cause unconsciousness. Two of the staff held onto the dog as another injected him intravenously in the front right leg. I had wanted to stop them, to yell out that surely there was some alternative, but the shock silenced me and rendered me helpless. There were no viable alternatives, I knew, or the staff would have pursued them. An exact four seconds later, the dog softly crossed his paws and laid down onto his right side as if he was going to sleep. I thought he was already dead, as his tongue came out of his mouth and his eyes were partly opened. After a few moments, one of the staff members gently pressed on the dog's left eyelid to check for consciousness. If the dog blinked, that would be a sign he is still conscious. Since there was a reflexive reaction to this, they needed to wait for the drug to take effect. After a few minutes, another check was made for a blink reflex. I was told they needed to complete the euthanasia with an injection into the heart, or an intracardiac injection, and this could only be done once the animal has been confirmed to

lose consciousness as the procedure was otherwise painful. The purpose of the intracardiac injection, they said, was to allow for the quickest death of an animal. The HSUS (2013) states that intracardiac injections take 5 to 10 seconds until the cessation of the heartbeat, or death, and another 2 to 5 minutes until there is complete lack of fibrillation of the heart. *This second blink test indicated that the dog was not conscious, so the workers could continue with the euthanasia.*

A syringe was given to one of the employees, and I saw him feel along the ribcage. Once he found what he was looking for, he inserted the needle and injected the drug. He then left the needle in place and stood up. The syringe shook to the animal's heartbeats until it slowed down and finally ceased. Consistent with the HSUS's *Euthanasia Reference Manual* (p. 29), it took minutes for the syringe, moving in unison with the beat of his heart, to stop. *Still numb, I focused curiously on the pulsating syringe. After the pulsing slowed to a near halt, I scanned the room and saw the pained faces of the others. The one who administered the euthanasia drug appeared tense, his expression aggrieved, his own heartbeat fast. He saw me looking at him and told me he can feel his chest tightened and his pulse and breathing fast and hard. After all the years he had been doing it, euthanizing animals such as this one always triggers this physiological reaction. This led me to think that his reaction to euthanizing the animal was the same as those who witness or experience a traumatic event, and to do this work day after day for sometimes years does not allow time for the body to return to a normal, non-stress-induced state.* This is similar to the experience of first responders and combat military personnel who often operate for extended periods of time with increased adrenaline in the body due to the arousal of the sympathetic nervous system that occurs during stress. It is widely understood that the chronic activation of the body's stress reaction system impairs cognitive, emotional, and physical health (ex., Mariotti, 2015; Schneiderman, Ironson, & Siegel, 2005). *It became easy for me to see how*

many animal shelter workers who participate in euthanasia experience acute and chronic stress reactions. All this while, however, the staff repeatedly asked me how I was doing and checking if I was okay. It was an unusual position I found myself in – I had arrived at the shelter to, in part, explore how the mental health profession can better serve the needs of animal shelter workers. Yet, the people I meant to serve – some of whom had just an hour before told me how they have cried after some of the euthanasias performed - were empathetically trying to care for my needs. These shelter workers, it was confirmed for me, are deeply compassionate human beings and desperately care for animals. They had just shared with me their pain resulting from the euthanasia of animals, and yet they were more concerned about my well-being than their own.

And they were right. Conducting the euthanasia of companion animals on a daily basis is not a normal experience. It became clearer to me after witnessing the procedures that no person should have to experience what euthanasia technicians experience every day they are at work. At the same time, it was also clearer to me how the mind works to protect itself. My rational justifications of the procedure, my mind becoming numb, and my thoughts freezing are just a few of the coping mechanisms I unconsciously engaged in. For days after, I had difficulty recalling the emotions I felt, and I could not write more than a dry, clinical recounting of the euthanasias. My mind refused to allow me to relive the emotional aspect of the experience, and once it finally did, the memories came back in patches over the course of three weeks. I was only a witness for approximately an hour. I could choose to never watch another animal be euthanized again. For the medical staff and the other personnel who work at the shelter, the option to not witness – much less participate in - euthanasia is simply not an option as this was their job, their way of making a livelihood. Their love for the animals is also what motivates their work. Caring, compassionate individuals are required to euthanize animals as part of their jobs. If the staff

members who I met find employment elsewhere, I wondered if the next person who accepted the job would be as warmhearted as they are and would be able to provide the animals with the love they give in the short time the animals are at the shelter. As challenging as being a witness to the euthanasias was, I could only imagine how arduous it was for the workers and impressed by their fortitude and compassion. While a difficult experience, I was and am truly grateful the staff generously allowed me to be *with* them for a short time, helping me more deeply understand the phenomenon of their lived experiences.

Textural and Structural Description of the Phenomenon

Participants of this study painted a vivid picture of their work experiences. The animal shelter workers surveyed in the qualitative portion of the study reported that they chose their employment because they find the work personally rewarding. Many stated that they want to help animals (n = 13) and they love animals (n = 10), which greatly influenced their job choice. The participants felt that they could make a difference in their work (n = 7) with animals, as one person *stated "I absolutely love it and wouldn't change it for a thing! Every day I get to help needy pets, help people keep their pets, and finding pets new homes!"* Helping animals was what most people reported as why they chose to work at an animal shelter, and one participant summed that up thusly:

> *Working in an animal shelter is not a job for everyone. It is very stressful dealing with abused, unwanted animals on a daily basis. You have to love animals to want to be here. I chose to work in this field for the love of animals and helping those without a voice find a way to survive being housed in a kill shelter. It's a rewarding experience emotionally seeing a homeless and unwanted animal find a brand new life.*

As with any job, there exists job attributes that are unpleasant. One such attribute is the task of euthanasia. Animal shelter workers generally view euthanasia as an unfortunate necessity, and acceptable in certain circumstances. The most common circumstances reported were medical issues (n = 17). These involve the need to end the animal's suffering due to either an incurable disease or a traumatic injury. An aggressive temperament was cited both as an agreeable reason for euthanasia (n = 10) and an invalid one (n = 1). As one person stated:

> *I think euthanasia, when performed humanely and responsibly, is an important part of rescue. There are some dogs who cannot be rehabilitated, whether it is because of abuse, neglect, or genetics. If the animal has no quality of life because he or she is deemed "unadoptable," then the most humane thing is to let him/her be humanely euthanized. I do not believe in letting aggressive dogs spend years and years in a kennel because they cannot be safely placed into a home. I think it is cruel to deprive dogs of human contact in an effort to remain "no-kill." I also do not believe that sticking a shock collar on a dog for training to overcome a bite history is humane in any way. As rescue workers we have to be realistic – a dog with a level 4 bite history should not be in a shelter and no shock collar is going to fix that. The lengths to which some recues will go to in order to remain no-kill are downright in-humane.*

Euthanasia was also reported to be viewed as an acceptable, albeit less than ideal alternative to pet overpopulation (n = 4). As another participant reported, "*It (euthanasia) is an important part of my job to protect herd health and public health."* Herd health is the principle that animals (in this case, companion animals) within a herd should be provided quality veterinary care to maintain health as a sick animal compromises the health of the rest of the herd (Miller & Hurley, 2011, p. 5). Overpopulation in a shelter, along with other factors such as stress and sanitation

issues, will increase the risk that animals in the shelter will succumb to disease if one animal is ill (Miller, & Hurley, 2011).

Most of the shelter workers (n = 13) reported that people outside of their employment are not understanding of their job requirement to euthanize animals. The responses ranged from disapproval (*"People don't understand it. They always think there is something that could be done for the animal."*) to inability to understand (*"People say I don't know how you do your job I could never do it."*) to hostility (*"I've been called a killer that I have no soul. Most people simply ask how can you do that." "People think you are a terrible person and say they could never work at a shelter."*) As one participant reported, the disapproval caused strain within the family support system:

> *have been ridiculed in public by persons who know where I work, have had arguments with family members of the policies of my department because they do not understand we have no choice in the policies set forth by our superiors, multiple others too numerous to count.*

While some animal shelter workers (n = 5) try not to let the strains of euthanasia affect them, others were affected personally by the euthanasia. One summed up the experience of euthanizing thusly:

> *Euthanasia does cause PTSD and it is not recognized in the industry as a PTSD causing career. This I compassion fatigue classes that are offered by animal sheltering companies but I feel that compassion fatigue classes should be a requirement given yearly for those working in the industry and coping with the stresses of performing euthanasia classes also be a requirement. Euthanasia affects my life in PTSD form and causes nightmares at times where in the dream I am performing euthanasia and the room fills up with dead*

animals and I cannot catch up with the euthanasia as the animals keep coming. I also have developed a phobia of seeing animals like on a calendar or picture sleeping quietly. While some may see the picture as cute, I see the animals as having been euthanized and not sleeping but dead. Euthanasia is a morbid task that skews reality.

Another reported that euthanasia has made them question their religious views:

I will say that has changed my religious views. I grew up in a Lutheran church and school, since euthanizing animals I feel that I will be judged for taking the life of animal but I also feel that if there were a god or higher power that these animals that are needing euthanasia would not exist.

Many others (n = 10) reported sadness and crying spells, and a few (n = 3) reported nightmares or flashbacks: *"It breaks my heart! I can't get certain images out of my head."* Two shelter workers reported that the negative public perceptions of euthanasia and animal shelter workers can have an adverse impact:

It is a difficult decision to make even knowing that euthanasia may be the most humane, appropriate outcome for a pet. The most difficult part of this piece of the job is the reaction the public/community has to the euthanasia of pets at our shelter and the negativity that is often cast on shelter workers. It creates unnecessary stress and feelings of defeat at times.

Despite the struggles reported on the job, animal shelter workers overwhelmingly reported utilizing one or more healthy coping mechanisms to address the strains of work. Four animal shelter workers reported unhealthy coping mechanisms of drinking (n = 4) and smoking (n = 1), and one reported not utilizing any coping mechanisms. Several (n = 9) cope by spending time with their own dogs. As one stated, "I go home and try to spend time with my own dogs and

focus on being thankful for them and how they have been saved and have a good life now." Interestingly, one participant reported that not having a companion animal is a coping mechanism:

> *I don't own any animals. I love them, but I am surrounded by them five days a week and I have to decompress from work by doing things completely unrelated to work or animals on my days off. I liken it to child psychologists who don't have their own children or cooks who never make their own food at home. You have to have a balance.*

Other coping mechanisms reported to be employed included exercising, spending time with friends and family, talking with coworkers, and focusing on hobbies.

Composite Description of the Phenomenon

Participants in the qualitative portion described a phenomenon similar to those who have experienced traumatic events. According to the Center for Substance Abuse Treatment (2014), those who have experienced trauma react in a myriad of ways dependent upon their past coping skills, family history, available support system, and past experiences. As well, the Center for Substance Abuse Treatment (2014) asserts that reactions are not necessarily pathological but are often a natural response to trauma. These reactions may include sadness, anxiety, exhaustion or fatigue, irritability, feeling numbness or avoidance of emotions, and experiencing nightmares. Participants in the study described being haunted by images of animals being sick, injured, and euthanized. Some reported recurring nightmares related to those images. Many reported emotionally distressing reactions such as sadness, feelings of guilt, and heightened anxiety. Crying spells were also reported among the animal shelter workers. Like many victims of traumatic events, participants verbalized their perception that others who have not experienced

their line of work do not understand what it is that they are going through, thus limiting who the animal shelter workers felt they can rely on for support.

Despite the immense stress associated with the euthanasia of animals, the animal shelter workers appeared to display a high level of resiliency as demonstrated by their reported ability to focus on the positive aspects of the job and the number of healthy coping mechanisms reported employed as opposed to maladaptive coping mechanisms.

Convergence of Results

The employees who participated in the qualitative portion indicated that working with traumatized companion animals and the job requirement of euthanizing the animals led to them experiencing symptoms of secondary traumatic stress. This seemed to be aligned with the quantitative results that participation in euthanasia had a significant effect on mental health (as comprised of scores on the substance abuse, anxiety, depression, secondary traumatic stress, and burnout scales). In addition, the results of the qualitative portion aligned with the quantitative in that there was a mean difference in both work-related trauma (TraumaWork_Scale) and the Secondary Traumatic Stress subscale of the ProQOL between groups that participate in euthanasia and those who do not. However, the overall scores for Secondary Traumatic Stress and Burnout subscales of the ProQOL were predominately low or average. Low scores generally indicate more positive feelings about one's abilities on the job and less risk for secondary traumatic stress (Stamm, 2010). The higher the scores on the ProQOL subscales, the greater the cause for concern that the individual is at risk for either secondary traumatic stress or burnout. The scores on those quantitative scales may be a reflection of the effectiveness of the coping mechanisms reported in the qualitative portion of the study.

Substance use was not highly reported in the qualitative portion of the study, which appeared to correspond to the quantitative portion in which most of the participants did not meet criteria for substance abuse and dependence, as indicated by scores on the CAGE-AID. However, 15.2% of respondents in the quantitative portion did meet criteria, which is higher than the prevalence rate of the general population for substance use disorder. The quantitative portion also demonstrated only low correlations of substance abuse with anxiety (GAD-7) and depression (PHQ-9). Anxiety and depression were most highly correlated in the quantitative survey and symptoms were frequently reported among respondents of the qualitative portion. That was reflected in the frequency of scores in the quantitative portion that indicated concern for any level of severity of anxiety and depression, which was higher than the prevalence rates in the general population for those disorders. However, few of the quantitative respondents had scores consistent with severe depression or anxiety, as indicated by the PHQ-9 and GAD-7.

The relatively low scores on the mental health scales may be in part due to the quality of the coping mechanisms employed by the animal shelter workers. Participants of the qualitative study listed mostly positive and active coping techniques they employ, which may help their resiliency when faced with the distress of their work. Coping skills may then be a mediating factor on the effects of euthanasia on mental health.

Respondents who participated in the member checking panel all work in a high kill shelter. They reported that they perceive differences in culture for high kill shelters and low/no-kill shelters based for many upon either their personal experiences in both types of shelters or interactions with others from low/no-kill shelters. Members had stated that they had to become mentally and emotionally stronger to cope with the strain of having to perform a high number of euthanasias on a regular basis, something those in low/no-kill shelters do not have to do. Those

who work in the other types of shelters are used to saving lives, members asserted, and will thus experience more difficulty when they euthanize a companion animal. However, the differences that members perceived was not reflected in the quantitative results. The results indicated that those who work in a kill shelter tended to be involved in euthanasia only slightly more frequently than those who reported working in no-kill shelters. This may have at least in part been due to the number of management staff who completed the survey, who may conduct euthanasias but possibly not as often as non-supervisory staff members. The results also did not show any mean differences between groups who work in a kill shelter and those who work in a no-kill shelter on any of the mental health variables.

CHAPTER V

DISCUSSION

Summary of Findings

While there does not appear to be an interaction effect between working at a kill shelter, participating in euthanasia, and number of years at current job on mental health, a main effect was found on participation in euthanasia based upon results from a three-way factorial (2 x 2 x 2) MANOVA. Participation in euthanasia was found in univariate tests to have an effect on both burnout and secondary traumatic stress. This was reflective in the univariate tests conducted on the four scale loadings that the factor analysis yielded. In these, participation in euthanasia was found to have an effect on both burnout (Burnout_Scale) and work-related trauma symptoms (TraumaWork_Scale). Participation in euthanasia and the type of shelter employed at (no-kill, kill) was also found to have an interaction effect on burnout (Burnout_Scale). Univariate tests also indicated an interaction effect between the number of years on the job (less than five years, five or more years) and burnout (Burnout_Scale).

Mental health factors of animal shelter workers (as indicated by the scores for the five dependent variables of substance abuse, depression, anxiety, secondary traumatic stress, and burnout) appeared to generally indicate moderate to low levels of pathology symptoms. However, the prevalence of depression, anxiety, and substance use disorders in the general population of adults in the United States were lower than the rate of participants whose scores

met the criteria for those disorders. This indicated that participants were at a higher risk for depression, anxiety, and substance use disorders than adults in the general population.

Independent samples t-tests conducted indicated mean differences between groups who participate in euthanasia and those who do not on both secondary traumatic stress and burnout (as indicated by scores on the respective ProQOL subscales). Relationships were also shown for the five dependent variables through Pearson's product-moment correlation coefficients. Substance abuse (CAGE-AID) and anxiety (GAD-7) were correlated, as were substance abuse (CAGE-AID) and depression (PHQ-9). A relationship existed between anxiety (GAD-7) and depression (PHQ-9). Anxiety (GAD-7) was also shown through a Pearson correlation to have a relationship with both of the ProQOL subscales for secondary traumatic stress and burnout. Secondary traumatic stress (ProQOL STS subscale) was also correlated with the burnout subscale of the ProQOL. Univariate analyses demonstrated interaction effects between participation in euthanasia and both Secondary Traumatic Stress (STS subscale of ProQOL) and Burnout (BO subscale of ProQOL). Independent samples t-tests were conducted for the different groups and the five dependent measures. A mean difference was found for secondary traumatic stress (ProQOL STS subscale) between groups that participate in euthanasia and those who do not. A mean difference was also found for burnout (ProQOL BO subscale) between groups that participate in euthanasia and those who do not. No other mean differences were found between groups on the other dependent variables.

Independent samples t-tests were also conducted for the different groups and the loaded factors. A mean difference was found for TraumaWork_Scale between groups that participate in euthanasia and those who do not. There was a mean difference between those who have worked less than five years and those who worked five or more years on the Burnout_Scale. The mean

scores were higher for those who worked for five or more years than those who worked less than five years. Pearson's correlations found associations between Anxiety_Scale and each of the other scales: Drugs_Scale, Burnout_Scale, and TraumaWork_Scale. A relationship was found between Drugs_Scale and Burnout_Scale. A Pearson correlation also demonstrated a relationship between Burnout_Scale and TraumaWork_Scale. These results were similar to the correlations that were conducted on the five dependent variables, except that the CAGE-AID (alcohol and drug abuse scale) was not found to be associated with the ProQOL Burnout or Secondary Traumatic Stress subscales.

In the qualitative portion, the stress of having to conduct euthanasia on a near daily basis was reported by participants as being emotionally difficult. However, they also cited lack of social/familial support and negative attitudes/behaviors from the general public as contributors to work strain. Some participants also reported that lack of understanding about trauma associated with euthanizing companion animals by coworkers who do not conduct euthanasia also contributes to occupational stress.

Participants frequently cited engaging in healthy coping mechanisms such as spending time with friends and family, enjoying the company of their own companion animals, exercising, and disconnecting from work while at home. Few reported in the qualitative portion that they engage in maladaptive coping mechanisms such as imbibing in alcohol or smoking. Only one reported not knowingly engaging in any coping mechanisms. That one response could be explained by the participant not knowing what coping mechanisms are or not conceptualizing that how s/he manages stressors is considered coping mechanisms. This conclusion is based on the focus group response during member checking. When asked for their response to the question of coping mechanisms employed by animal shelter works to help heal with the stressors

of the job, silence initially ensued. The first response from a focus group member was that she did not have any coping mechanisms. However, after some discussion among the focus group members, all were able to identify ways they cope with the stressors of their work.

Overall, animal shelter workers reported choosing the job because they truly love animals and feel it is their calling to help animals. Many of the respondents stated that they are passionate about their jobs and gain much satisfaction knowing that they were able to save at least some of the thousands of animals in need. As one of the focus group members stated: *"I've killed millions, but I've saved thousands."* Perhaps this satisfaction and devotion to their jobs – in addition to coping mechanisms employed - also helps mitigate the effects of the strain associated with euthanasia.

Comparison with Other Research

A little more than 43% of respondents of the quantitative portion of the present study scored on the average range for secondary traumatic stress, meaning their secondary traumatic stress level is "average" and similar to approximately 50% of the population (Stamm, 2010). Approximately 25% of the population indicate low levels of secondary traumatic stress and 25% indicate high levels. Average levels are still cause for concern as secondary traumatic stress symptoms may have a rapid onset depending upon exposure to secondary trauma, and the more elevated the levels, the higher the risk to secondary traumatic stress reactions. Yassen (1995) listed a multitude of consequences of secondary traumatic stress. These consequences include questioning the meaning of life, anger at God, feeling isolated and lonely, withdrawal from others, breathing difficulties, aches and pains, sleep difficulties, nightmares, substance use as a negative coping mechanism, memory difficulties, sadness, guilt, anxiety, feeling of powerlessness, concentration difficulties, apathy, self-doubt, and repeated trauma imagery. Many

of these personal impacts were also reported by the participants of the current study's qualitative study. Secondary traumatic stress can also have occupational effects such as withdrawal from colleagues, absenteeism, faulty judgments, demoralization, low motivation, and avoidance of job tasks (Yassen, 1995). These effects can then lead to employee turnover if workers do not employ healthy coping strategies to counter the effects of occupational stress.

In their study on coping strategies among 242 euthanasia technicians at animal shelters, Baran et al. (2009) reported on recommendations participants gave to others who were just starting out in the field to help them cope with the euthanasia-related stress of the job. Responses included "vent your feelings," "alter your emotional attachment level" (engage in some level of detachment from the animals at the shelter), and "know that euthanasia is sometimes the best option" (p. 86). Likewise, participants in the present study frequently stated that while they do not like euthanasia, they view it as "a necessary evil" and sometimes preferable to the alternatives to the animals' fates. Baran et al. (2009) also reported that their participants suggested employees "keep work separate from personal life," "meditate, pray, or reflect," and "seek a diversion" (p. 86). The present study's respondents also reported seeking diversion in hobbies, engaging in meditation and religious/spiritual pursuits, and disengaging from work once at home. These activities may positively impact animal shelter workers' abilities to cope with the distress of euthanasia.

Interestingly, few of the respondents of the qualitative portion of the study reported substance use as a coping mechanism ($n = 4$). Previous literature indicates a strong link between history of trauma and substance use (Ullman, Relyea, Peter-Hagene, & Vasquez, 2013; Jacobsen, Southwick, & Kosten, 2001). In the study by Ullman, Relyea, Peter-Hagene, and Vasquez (2013), the experience of interpersonal trauma (sexual, emotional, and/or physical abuse

experienced by either a child or adult) predicted substance use as a coping mechanism while non-interpersonal trauma did not. The authors posited that the difference in coping by those who experienced interpersonal trauma versus non-interpersonal trauma may be due to interpersonal trauma negatively impacting an individual's ability to trust others, thus limiting their social support network. If social support is limited, the authors further asserted, individuals may rely more on maladaptive coping mechanisms such as substance use. Several of the participants of the current study stated that they do not talk about work with others outside of their job sites, reporting that they do not believe that those who do not have to euthanize animals will be able to understand what those who must euthanize go through. The low number of substance use reported by participants of the qualitative study could also be due to subject reactivity of the measure. Subject reactivity occurs when participants react to the measure and respond in a way that they wish to be perceived, rather than answering honestly. Participants may engage in such deception completely unintentionally. Some participants of the present study may have subconsciously or consciously avoided answering truthfully regarding their alcohol or drug use.

Rogelberg et al. (2007) performed a qualitative study on recommendations of animal shelter workers for their peers to help them cope with euthanasia-related distress. Participants overwhelmingly responded with advice for management. Results of their study indicated that participants most frequently suggested that management and coworkers who do not perform euthanasia should display more understanding and less criticism towards their colleagues who do (13.17% of responses). Providing professional counseling services for employees (12.35%), conducting support/debriefing groups (7.82%), and holding compassion-fatigue/stress management seminars (4.12%) were also suggested by participants of the study. Not having to euthanize as frequently by hiring more euthanasia technicians to ease the strain (10.29%) and

providing days off from euthanasia (9.05%) were also suggested. While the participants of the present study did not focus critically on management staff and coworkers who do not perform euthanasia in the qualitative study, those in the current study's focus group had. Focus group members discussed how criticisms by coworkers who do not euthanize of euthanasia technicians' work compound the emotional strain of the work and caused undue frustration and guilt. Members also discussed how a perceived lack of support and understanding by members of the Board of Directors and city officials have contributed to burnout and overwhelming stress.

The qualitative portion of the present study found results similar to Arluke's (1991) ethnographic case study of one shelter. Similar to Arluke's findings, current participants commonly reported that others made statements to them such as "…I could never do (your job)" and "…(they) say they could never work at a shelter." These statements could have an isolating effect on shelter employees, thereby limiting who they feel they can reach out to for support when distressed. The results of the present study also mirrored findings by White and Shawhan (1996). Those authors found that emotional distress of animal shelter workers was compounded by the anger they face from the public who condemn the work that they perform and their own anger towards the general population for their contributions or indifference to pet overpopulation and animal cruelty.

Support from others, especially from those close to the animal shelter workers, was found in the qualitative portion of the present study to be frequently cited as important for coping with the stress of the job by many of the participants. Likewise, Rohlf and Bennett's (2015) study of veterinarians and veterinary nurses in private practice and research staff found that satisfaction with social support was negatively correlated with the impact of traumatic stress. Impact of traumatic stress in Rohlf and Bennett's (2015) study included avoidance behaviors, exaggerated

startle responses, and nightmares. However, that study found that length of employment was negatively correlated with symptoms of trauma, which the present study did not find. The present study did appear to reflect the finding by Rohlf and Bennett (2015) that being concerned about the circumstances surrounding the animal deaths (e.g., relief from injury or illness, result of experimental research) was positively associated with trauma symptoms, which had indicated that the higher the level of compassion for animals, the more likely the participants would experience negative stress reactions. The present study's contradicted that finding. The present study found that animal shelter workers reported feeling less distress and increased comfort surrounding the euthanasia of animals if they felt that the animals would be saved from a prolonged, incurable pain or illness, a traumatic life on the streets, or an indefinite life in a kennel due to severe behavioral issues.

Animal shelter workers were also found by White and Shawhan (1996) to cope better with the participation in euthanasia if the animals are old or ill, rather than if the animals must be put down due to shelter overpopulation. This finding seems to be aligned with many of the responses of the present qualitative portion of the study in which respondents frequently discussed the purpose for euthanasia and how the option, while sad, may be better than alternatives. Euthanasia technicians may therefore cope better if they identify benefits to the animals for euthanasia.

Implications

Implications for Future Research

Participants in the qualitative portion of the study largely reported that they regularly employ healthy coping mechanisms when dealing with work stress. However, the qualitative data was collected and analyzed separately from the quantitative scale which contained the

mental health scales. Collecting both of the information simultaneously could be beneficial to allow for inferences to be better made as to how the two variables may relate to each other.

Future research may improve the process by sampling only those who perform euthanasia, rather than include all those who work for animal shelters. This would focus the research on just those who are directly involved in the decision and act of euthanizing the shelter animals. While the survey asked participants if their job duties involved euthanasia in any way, and the study compared results for those who are involved in euthanasia and those who are not, being involved in euthanasia is a broad category. This can include those who only make the decision as to which animals are euthanized as well as those who perform the euthanasia. There may be differences in the intensity of stress reactions depending on whether or not one is actually performing euthanasia. The greater the homogeneity of participants, the lower the sampling variability would be and the greater the statistical power. Likewise, future research may compare those who perform euthanasia of companion animals with those who are only peripherally involved in euthanasia. The statistical power of the study may therefore increase by increasing the differences between and among groups and reducing the within group variance. Future research may also increase sample size, which could increase the significance of findings.

In addition, the combined mental health scales included two out of the three subscales of the ProQOL. This study did not include the compassion satisfaction subscale. Subsequent research may elect to include the compassion satisfaction scale to gain a fuller picture of employees' professional quality of life. Future research may also conduct a factor analysis with the five scales used in this present study to develop a new scale measuring Mental Health Issues. The current study conducted an exploratory factor analysis on the items that resulted in four factors labeled Anxiety_Scale, Drugs_Scale, Burnout_Scale, and TraumaWork_Scale. These

factors were not combined in the present study due to the items being from different instruments that had dissimilar scales. Drugs_Scale was comprised of four items that utilized categorical dichotomous variables, while the GAD-7 and PHQ-9 utilizes a four-point Likert scale, and the Burnout and Secondary Traumatic Stress subscales of the ProQOL, Version 5 uses a five-point Likert scale. To create the new Mental Health Issues scale, the standardized values of the items would first be computed, then factor weights would be used to compute the unstandardized scores, and finally the factor scores would be standardized.

Due to some of the participants indicating that they perceive high kill shelters are culturally different from low and no-kill shelters, future research could further investigate any cultural differences and how any distinctions influence employee mental health and professional quality of life. Because the results of the current study did not detect relationships between the type of shelter employed (kill versus no-kill shelters) with any of the mental health variables, and the number of respondents who may be involved with euthanasia but does not directly perform them were likely included in the study, future research may focus solely on euthanasia technicians in kill and no kill shelters. Further increasing the differences between and among groups by separating shelter type into high kill, low kill, and no kill shelters may also increase the statistical power of future research.

Future research could also explore any cultural differences based on race and ethnicity. Most of the participants of the current study were Caucasian followed by Hispanics. A larger sample size may present a more racially/ethnically diverse workforce, which may then help highlight any cultural differences related to mental health outcomes and professional quality of life for animal shelter workers who perform euthanasia. Likewise, any differences based on spirituality and religion on mental health outcomes and professional quality of life may also be

explored in future research. The current study collected data on religious affiliation and importance of religion to the participants. However, this data was not analyzed at this time, as it was not the focus of the current study. Religious traditions hold differing views on how members are to treat animals. Some believe humans have dominion over the earth, animals included. Others prescribe or encourage vegetarianism and believe the killing of all living creatures is immoral. Exploring group differences on mental health and professional quality of life between religious traditions may be beneficial for future research.

Identification of victims as a factor in observer empathy had been studied in past research on interpersonal trauma (Deitz & Byrnes, 1981; Kahn, 1977; Krulewitz & Nash, 1979). Due to the similarity of the current study's participants' reported reactions to euthanasia with those who experience secondary traumatic stress reactions as a result of their work with victims of interpersonal trauma, a study that includes the exploration of identification with animals who are euthanized would be beneficial.

In addition, future research could also ask respondents about their opinions on management staff. The current study asked participants to provide information on what factors contribute to their work distress and report which coping techniques they employ. However, participants included management staff, and the respondents were not specifically asked how management contributes to or alleviates their stress levels. Results of that question posed only to euthanasia technicians could be compared to previous studies' results, such as that by Rogelberg, et al. (2007) who examined how management could help animal shelter workers mitigate the effects of euthanasia-related stress.

The current research also examined self-care strategies of animal shelter workers who are involved in euthanasia but did not explore interventions by mental health professionals. Rohlf

(2018), in her recent review of the literature of occupational stress and compassion fatigue among animal care professionals, found only 4 articles that addressed mental health treatment interventions, while a multitude of articles explored workers' occupational stress. Rohlf's (2018) recommendations for therapeutic interventions therefore considered evidence-based approaches for professionals in the human care field, such as those in the medical field and police officers. Additional research that assessed the efficacy of treatment modalities for animal shelter employees would be beneficial. Such research could lead to the development of a Counselor's Toolbox for Assisting Animal Shelter Workers. This toolbox would include an overview of shelter culture and best practices for treatment of mental health issues related to employment as an animal shelter worker.

Implications for Shelter Management

A few of the participants of the qualitative study stated the importance of disconnecting from work when they are not at the shelter for their overall mental health level. One participant reported that this disconnection includes the choice to not have any pets of their own. Shelters should honor employees' mental health by respecting their choice to disconnect when at home. If employees choose to not rescue or foster companion animals themselves, any negative judgment by management and other employees should be suspended to respect the employees' decision to disconnect from work to take care of their mental health in this manner. Fournier and Mustful (2019) suggested animal care workers practice physical and mental detachment for their own mental health. The suggestions included not treating the animals at the shelter as pets, avoid thinking about the shelter animals when not at work, refraining from bringing work home, and not talking about work when not at work.

While space at an animal shelter is often limited, a comfortable, homey quiet room would be a welcome addition to allow for disconnection while at work. Quiet rooms are meant to provide a spiritual and emotional retreat for employees and can be used for yoga, meditation, naps, reading, reflection, or just a place to spend some time away from the hectic and oftentimes loud confines of the shelter floor. These activities are in line with Figley and Roop's (2006) suggestion that employees of animal shelters regularly practice stress management strategies to help calm themselves during the work day. Used judiciously, the respite provided by quiet rooms may not only allow employees to recharge during their work day but help give the message that management cares about their workers' well-being, thus lifting morale and employee engagement.

Shelter management may also consider not allowing euthanasias to be performed every day or allowing employees to take a day off after a particularly heavy period of euthanasia. Employees who perform euthanasia may rotate the duty so the burden does not fall more heavily on one person. This would allow an employee to catch her/his breath and collect themselves. The member checking participants also noted that the euthanasia technicians ensured that those who would have a particularly difficult time with putting specific animals down were not required to do so. For example, focus group members stated that staff members who were especially fond of cats did not euthanize cats and those who had a particular affinity towards puppies did not euthanize puppies. Management could ensure this arrangement is respected, as it can help prevent compassion fatigue by removing employees' most difficult triggers. This is also in line with one of the euthanasia behavioral strategy suggestions for self-care from Baram et al. (2009, p. 86), which recommended staff "have someone else euthanize special pets."

In addition to allowing staff members to refuse to euthanize animals they are particularly fond of, management may ensure that staff can truly allow the animals the "good death" that is implied in the word *euthanasia*. Baran et al. (2009, p. 86) suggested that employees "practice proper euthanasia techniques" as a coping mechanism while at work. This may mean always utilizing the same euthanasia techniques that veterinarian offices perform, which could make the process of euthanasia less emotionally arduous. As some of the participants of the member checking had reported, euthanasias that are performed at a veterinarian's office involve sedating the animal and providing a painkiller prior to administering the injection of the euthanasia drug intravenously. By contrast, animal shelters do not always sedate the animal nor provide painkillers prior to intravenous injection of the euthanasia drug. The lack of prior sedation or painkiller means that animals may resist the process, experience spontaneous seizures, and/or release bodily fluids, making for a more traumatic death. The assumption is that the more suffering the animal experiences prior to death, the more likely a witness to that death will experience a traumatic reaction. This assumption is reflective of prior research that increased exposure to traumatic personal violence, including witnessing the death and/or torture of nuclear family members, increases the risk of developing posttraumatic stress disorder (Goldstein, Wampler, & Wise, 1997; Kilpatrick et al., 2003; Vrana & Lauterbach, 1994).

This study's finding that there was a main effect of participation in euthanasia and combined mental health issues (as defined by the five dependent variables of anxiety, depression, substance use, burnout, and secondary traumatic stress) also highlights the importance of mental health services for those who perform euthanasia at animal shelters. In addition, the present study found mean differences between those who participated in euthanasia and those who did not participate in euthanasia on both secondary traumatic stress and burnout. Rogelberg et al. (2007)

found that the higher the euthanasia rate for animal shelters, the higher employee turnover. Turnover increases operational costs to employers through the cost incurred by hiring and training new employees. Rogelberg et al.'s (2007) study also found that turnover rate was positively correlated to the decision to euthanize animals that were not ill or had behavioral problems. In a study of occupational therapists working in mental health, Scanlan and Still (2013) found that burnout was associated with a higher rate of turnover. Schaufeli, Bakker, and Van Rhenen (2009) found through structural equation modeling analyses that burnout was predicted by a rise in job demands such as emotional strain and work-home interference, and a drop in employee resources including social support and autonomy. Further, job resources predicted work engagement, which then reduced absenteeism. Good mental health of employees and support by management should then be viewed as important as a factor to reduce turnover and thus the costs to the employers. To assist employees, shelters may offer insurance plans or an employee assistance program for euthanasia technicians that cover professional mental health counseling services, so finances are not a barrier to receiving help. Considering the main effects found in the present study between performing euthanasia and not performing euthanasia on both secondary traumatic stress and burnout, as well as correlations between depression and anxiety, burnout, and substance abuse, it would be beneficial for shelter management to periodically sponsor confidential mental health screenings for staff members who are involved in euthanasia. These screenings may be administered in person or online, and could provide early detection and intervention for those more at risk for developing a serious mental health problem.

To address the issue that arose in the present study of those who perform euthanasia's perception that their coworkers who do not perform euthanasia are sometimes critical and unsupportive of them, it could be beneficial to provide sensitivity training to the larger shelter

staff. In their report on the pain experienced by laboratory animals, the National Research Council Committee on Pain and Distress in Laboratory Animals (1992, p. 2) recommended that coworkers of research laboratory personnel who must euthanize animals should work to display empathy and sensitivity towards those who perform and observe the euthanasia due to the emotional impact it has on the individuals involved. Sensitivity training for all animal shelter employees would help towards this end.

Implications for Mental Health Professionals

Employers should also consider providing compassion fatigue workshops conducted by a mental health professional on at least a quarterly basis and allow for time off after particularly difficult periods in which workers are faced with a high number of euthanasias. As animal shelters are also often understaffed (Garcia, 2009; Rogelberg, 2007), it may be beneficial for mental health professionals to go directly to the shelters to provide support and psychoeducation groups to the employees rather than solely provide individual services at the counseling practice. This would allow more animal shelter workers to receive assistance, as it reduces the need of taking time away from work which could pose a barrier to help-seeking.

Additionally, mental health professionals should strive to increase their knowledge of euthanasia-related stress. An increased knowledge of the emotional, physiological, and behavioral reactions to euthanasia-related stress can help mental health professional better conceptualize cases, thereby improving decision-making on effective interventions. While focused on medical doctors who perform euthanasia and physician-assisted suicide on humans rather than companion animals, Dees et al. (2012) described how physicians in the Netherlands frequently reported feeling emotionally drained when discussing euthanasia and physician-assisted suicide, and were strongly reluctant to perform those job tasks. Physicians further

stressed how important personal support was to them during the process of euthanasia and physician-assisted suicide. Those findings highlight how important supportive counseling can be to those whose jobs involve euthanasia – both on human patients and animal companions.

Similar to providing cross-cultural counseling, mental health professionals should also strive to become more familiar with the culture of animal sheltering and what employment at a shelter entail. Raising knowledge about what clients experience each day at work may help raise an understanding of their occupational stress. This recommendation for counselors was also provided by Fournier and Mustful (2019). They cautioned practitioners about implicit bias against animal shelters and the practice of euthanizing companion animals. As with multicultural counseling, psychotherapists must have insight into their own biases and guard against allowing those biases to negatively impact their work with clients.

A modality that may be particularly helpful when providing psychotherapy to animal shelter workers is cognitive behavioral therapy (CBT). The American Psychological Association (n.d.) describes CBT as a treatment that has been demonstrated to be effective for a wide range of client issues in numerous studies. The APA (n.d.) also state that CBT involves helping clients understand that their difficulties are at least in part due to their faulty cognitions and learned patterns of behavior, and then assisting clients to change their faulty, negative thinking and engage in new, more helpful behaviors. Fournier and Mustful (2019) discussed the benefits of helping animal shelter workers reframe negative experiences on the job. They stated that negative experiences may be taken personally when workers believe their unique gifts of helping animals are stifled, and suggested they not ascribe personal meaning to occupation-related difficulties. Instead, the authors suggested workers restructure their cognitions to view the problems as learning opportunities.

Oftentimes, it can be difficult to verbalize stress reactions. As several of the participants of the qualitative portion indicated, there is a concern that those who do not perform euthanasia will not only have difficulty understanding what animal shelter workers experience due to their jobs, but also have hostility against the workers. This may make it difficult for animal shelter workers to feel comfortable enough to share their thoughts and feelings with a mental health professional. The expressive arts can be a way to allow individuals a safe method to express their voice. The expressive arts that are often used in mental health counseling include the visual arts, imagery, dance/movement, writing, drama, and music (Degges-White, 2018). The integration of the expressive arts into counseling can be utilized to provide individuals, couples, families, and groups with an intermodal experience that can help bring about positive change.

Mindfulness is increasingly used as a therapeutic modality and may be viewed as a creative or expressive art. Mindfulness is a Buddhist practice that has been adopted for use in several psychotherapies, such as dialectical behavior therapy. Thich Nhat Hanh, in his book *The Miracle of Mindfulness*, wrote "Mindfulness is the miracle by which we master and restore ourselves" (1976, p. 14). He further described mindfulness as a tool that individuals can immediately use to re-center themselves and feel more whole when their lives seem overwhelming. The practice of mindfulness involves allowing oneself to become fully aware of and focus on every sensation and thought one experiences at that moment in time without judgment of those sensations and thoughts. This is different from focusing on negative distressing ruminations that an individual may have about the practice of companion animal euthanasia. Being mindful of thoughts entails adopting a neutral, objective view of thoughts as individuals allow thoughts to enter and leave their minds without judgment. Mindfulness may also allow animal shelter workers a form of disconnection that was recommended previously.

Deep breathing, half-smiling, mindful eating, and walking meditation, detached action, and practicing compassion for those one despises are examples of specific mindfulness techniques that may be taught by counselors for animal shelter workers to use regularly.

Mental health professionals should also practice self-care themselves. Working with those who are traumatized, including those experiencing secondary traumatic stress, are themselves at risk for secondary traumatic stress reactions (Fournier & Mustful, 2019). The same strategies recommended for animal shelter workers may be utilized by the counselors themselves.

Limitations

As stated previously, animal shelter workers self-reported their symptoms of mental disabilities. Self-reports alone are not the most accurate method of assessing mental disabilities because individuals are not always comfortable sharing such sensitive information, and thus may not have reported honestly. Deception, either purposeful or subconscious, may also factor into any self-reporting errors as individuals may under- or over-estimate the severity of mental illness symptoms experienced. The reporting errors may then negatively affect the internal validity of the study.

Many of the animal shelter workers, according to some of the directors and managers who provided feedback to the researcher, do not have email addresses to forward the surveys. This contributed to the low response rate. In addition, employee turnover may exclude some potential respondents, as novice employees – those most affected by the caring-killing paradox (Arluke & Sanders, 1996) – may choose to not continue working at the animal shelter and were thus excluded from the study. There were also a large number of supervisory staff who may not conduct euthanasia but participate through decision-making who completed the survey, which

may have influenced the low incidence of symptoms of mental disabilities and compassion fatigue.

In addition, because mental illness is a complex phenomenon, the causes of which are either unknown or comprised of a combination of genetic, biological, social, psychological, and environmental factors, this study cannot state definitively that euthanasia causes any of the mental health difficulties examined. Moreover, this survey focused solely on compassion fatigue (comprised of burnout and secondary traumatic stress), rather than the full Professional Quality of Life instrument, and thus did not include the compassion satisfaction component of the ProQOL. As compassion satisfaction has been shown to be a moderator, and possibly mediate the effects of compassion fatigue, including all components of the ProQOL would have allowed a report on the overall professional quality of life (ex., Sodeke-Gregson, Holttum, & Billings, 2013; Wagaman, Geiger, Shockley, & Segal, 2015).

Conclusion

Animal sheltering can be an emotionally taxing field to enter due to continuously caring for suffering animals and the requirement to euthanize many of them. Unlike other animal-care professions such as veterinary care, animal shelter workers do not develop working relationships with the animals' owners, as either none exist because the animal entering is a stray or the animal was surrendered by the owner. Thus, animal shelter workers are the sole caregivers until the animals are adopted, fostered, rescued, or humanely euthanized. They alone carry the burden of caring for the animals. Additionally, how the animals enter the shelter facility can influence the stress responses of the animals themselves (Dybdall, Strasser, & Katz, 2007), many of which are already entering the shelters traumatized. Dybdall, Strasser, and Katz (2007) studied the differences in feline behavior for those entering animal shelters as strays and those who were

owner surrendered. They found that during the first three days of being at the facility, a main effect on entry type was indicated in analysis, showing the owner surrendered cats had consistently displayed greater stress reactions on average than the strays ($F(1, 85) = 9.28$, $p = .003$). As this study had discussed, ongoing exposure to traumatic stress experienced by individuals and animals results in an emotional and psychological toll on those who help them (Cerney, 1995), and the helpers' compassion for the others increase risk of secondary trauma reactions (Arluke, 1991, AVMA, 2000).

The workers who participate in euthanasia are also more likely to be subjected to harsh criticisms from the public at large as well as coworkers who do not conduct euthanasia, which compound the workers' negative stress reactions. The public, however, are largely responsible for the animals housed and euthanized at the shelters, due to activities such as owner surrenders, refusal to spay and neuter pets, and dumping animals. Until increasing numbers of pet owners are willing to spay and neuter their companion animals to help control the pet population and municipalities pass and enforce mandatory spay and neuter laws, euthanasia will remain a burden for animal shelter workers to perform.

As this study had demonstrated, animal shelter workers who perform euthanasia may have higher levels of burnout and secondary traumatic stress symptoms and be more at risk for compassion fatigue than those employees who do not perform euthanasia, which is consistent with past studies on animal shelter workers. They may also be more at risk for depression, anxiety, and substance use disorders than the general population of adults in the United States. These results highlight the importance of quality, evidence-based mental health care for those in the animal sheltering profession. The utilization of healthy self-care and coping strategies by animal shelter workers, and proactive, sensitive employee assistance by shelter management are

also critical not only for worker longevity and mental health, but ultimately to better serve the animals they are there to care for. As Figley and Roop (2006, p. 6) stated, compassion fatigue can have debilitating effects on the professional competencies of those who work in the animal-care community, such as slowing reaction times and hindering judgment. Affected individuals also lose motivation and enthusiasm, resulting in lower quality of work, a sense of alienation, and greater temper and aggressiveness (Figley & Roop, 2006, p. 20-21). The animals meant to be sheltered until they are adopted or rescued consequently suffer directly from the unattended emotional strain experienced by the animal shelter workers. Caring for the workers, then, ensures greater quality of care for the companion animals under their guardianship.

As the literature previously discussed had demonstrated, prolonged exposure to trauma both primary and secondary increases the risk for mental health difficulties (Ahmadi, Azampoor-Afshar, Karami, & Mokhtari, 2011; Cerney, 1995; Figley & Roop, 2006; Yassen, 1995). However, the results of the present study did not yield many high scores on the mental health scales, even though many met criteria for those scales on the low or moderate range. One possibility for the low numbers of mental health consequences found among the present sample of participants could be the animal shelter workers' high level of resiliency, or their ability to "bounce back" from difficulties. Another reason could be the effectiveness of the coping techniques, both healthy and maladaptive, currently employed by the workers. This could include workers emotionally numbing themselves from the trauma associated with euthanasia. Perhaps the answers are to be found in the words of the participants themselves:

"Having been in this line of work for over 10 years, combined in animal sheltering and animal rescue work, I feel euthanasia is an unfortunate circumstance that unfortunately needs to be performed due to pet overpopulation. Through no fault of the animal, there is simply not

enough people spaying/neutering their companion animals and over breeding, that an animal pays for it with their life. There is not enough people adopting and rescue organizations only have enough room for those they choose to rescue from kill shelter facilities. Animal shelters run out of space daily with the amount of unwanted, abused animals coming into any animal shelter facility."

"Nobody likes this part of the job, but we realize it has to be done for the animals who are suffering."

"Euthanasia changes you."

REFERENCES

Ahmado, K., Azampoor-Afshar, S., Karami, G., & Mokhtari, A. (2011). The association of veterans' PTSD with secondary trauma stress among veterans' spouses. *Journal of Aggression, Maltreatment & Trauma, 20*(6), 636-644. doi: 10.1080/10926771.2011.595761

American Humane Society of the United States (HSUS). (2013). *Euthanasia reference manual.* Retrieved from https://www.animalsheltering.org/sites/default/files/content/euthanasia-reference-manual.pdf

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders, 5th ed.* (DSM-5). Arlington, VA: American Psychiatric Association.

American Psychological Association. (n.d.). *PTSD clinical practice guideline: What is cognitive behavioral therapy?* Retrieved from https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral.pdf

American Society for the Prevention of Cruelty to Animals. (2016a). *Shelter intake and surrender: Pet statistics.* Retrieved from http://www.aspca.org/animal-homelessness/shelter-intake-and-surrender/pet-statistics

American Society for the Prevention of Cruelty to Animals. (2016b). *Shelter intake and surrender: Animal homelessness.* Retrieved from http://www.aspca.org/animal-homelessness/shelter-intake-and-surrender

American Veterinary Medical Association (AVMA). (2000). Report on the AVMA Panel on Euthanasia. *Journal of Veterinary Medical Association, 218*(5). 669-696.

American Veterinary Medical Association (AVMA). (2013). *The AVMA guidelines for the euthanasia of animals: 2013 edition.* Schaumburg, IL: American Veterinary Medical Association. Retrieved from https://www.avma.org/KB/Policies/Documents/euthanasia.pdf

American Veterinary Medicine Association (AVMA). (April 1, 2015). Study: 1 in 6 veterinarians have considered suicide. *Journal of Veterinary Medical Association.* Retrieved from https://www.avma.org/News/JAVMANews/Pages/150401d.aspx?PF=1

American Veterinary Medical Association (AVMA). (2017). *Euthanasia laws*. Retrieved from https://www.avma.org/Advocacy/StateAndLocal/Documents/Euthanasia_Laws.pdf

Anderson, D. (2000). Coping strategies and burnout among veteran child protection workers. *Child Abuse and Neglect, 24*(6), 839-848.

Anderson, K. A., Brandt, J. C., Lord, L. K., & Miles, E. A. (2013). Euthanasia in animal shelters: Management's perspective on staff reactions and support programs. *Anthrozoös, 26*(4), 569-578. doi: 10.2752/175303713X13795775536057

Arluke, A. (1991). Coping with euthanasia: A case study of shelter culture. *Journal of Veterinary Medical Association, 198*(7). 1176-1180.

Arluke, A., & Sanders, C. R. (1996). *Regarding animals.* Philadelphia, PA: Temple University Press.

The Asilomar Accords. (2004). Retrieved from https://www.shelteranimalscount.org/docs/default-source/DataResources/2004aaccords5.pdf?sfvrsn=0

Association of Shelter Veterinarians. (2017). *Shelter Terminology.* Retrieved from https://www.sheltervet.org/assets/PDFs/shelter%20terminology.pdf

Avanzino, R. (2003). Defining no kill editorial. *Maddie's Fund.* Retrieved from http://www.maddiesfund.org/defining-no-kill-editorial.htm

Baran, B. E., Allen, J. A., Rogelberg, S. G., Spitzmüller, C., DiGiacomo, N. A., Webb, J. B., …Walker, A. G. (2009). Euthanasia-related strain and coping strategies in animal shelter employees. *Journal of the American Veterinary Medical Association, 235*(1), 83-88. doi: 10.2460/javma.235.1.83

Beck, C. T. (2011). Secondary traumatic stress in nurses: A systemic review. *Archives in Psychiatric Nursing, 25*(1), 1-10. doi: 10.1016/j.apnu.2010.05.005

Boland, R. (1985). Phenomenology: A preferred approach to research on information systems." In E. Mumford (Ed.), *Research methods in information systems.* North Holland. (as cited in Bygstad, B., & Munkvold, B. E. (2007, January). The significance of member validation in qualitative analysis: Experiences from a longitudinal case study. In R. H. Sprague (Chair), *The Fortieth Hawaii International Conference on System Sciences.* Symposium conducted at the meeting of the Institute of Electrical and Electronics Engineers, Inc. doi: 10.1109/HICSS.2007.553)

Boyatzis, R. E., Smith, M. L., & Blaize, N. (2006). Developing sustainable leaders through coaching and compassion. *Academy of Management Learning & Education, 5*(1), 8-24. doi 10.5465/AMLE.2006.20388381

Breen, L. J., O'Connor, M., Hewitt, L. Y., & Lobb, E. A. (2013). The "specter" of cancer:

Exploring secondary trauma for health professionals providing cancer support and counseling. *Psychological Services, 11*(1), 60-67. doi: 10.1037/a0034451

Brown, R. L., & Rounds, L. A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice. *Wisconsin Medical Journal, 94*(3), 135-140.

Center for Disease Control. (2015). Suicide: Facts at a glance. Retrieved from https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf

Center for Substance Abuse Treatment. (2014). Trauma-Informed Care in Behavioral Health Services. (Treatment Improvement Protocol (TIP) Series, No. 57.): Chapter 3, Understanding the Impact of Trauma. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK207191/

Cerney, M. S. (1995). Treating the heroic treaters. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 131-149). New York: Brunner-Routledge.

Cieslak, R., Shoji, K., Douglas, A., Melville, E., Luszczynska, A., & Benight, C. C. (2014). A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychological Services, 11*(1), 75-86. doi: 10.1037/a0033798

Compassion. (2018). In *Oxford Dictionaries online*. Retrieved online from http://www.oxforddictionaries.com/us/definition/american_english/compassion

Compassion fatigue. (2018). In *Oxford Dictionaries online*. Retrieved online from http://www.oxforddictionaries.com/us/definition/american_english/compassion_fatigue

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., DeRosa, R., Hubbard, R., Kaga, R., Liautaud, J., Mallah, K., Olafson, E., & van der Kolk, B. (2005). Complex trauma in children and adolescents. *Psychiatric Annals, 35*(5), 390-398.

Couwenbergh, C., Van Der Gaag, R. J., Koeter, M., De Ruiter, C., & Van Den Brink, W. (2009). Screening for substance abuse among adolescents: Validity of the CAGE-AID in youth mental health care. *Substance Use & Misuse, 44*(6), 823-834. doi: 10.1080/10826080802484264

Crespo, K. E., Torres, J. E., & Recio, M. E. (2004). Reasoning process characteristics in the diagnostic skills of beginner, competent, and expert dentists. *Journal of Dental Education, 68*(12), 1235-1244.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches (3rd ed.)*. Thousand Oaks, CA: Sage Publications, Inc.

Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research (2nd ed.)*. Thousand Oaks, CA: Sage Publications, Inc.

Dees, M. K., Vernooij-Dassen, M. J., Dekkers, W. J., Elwyn, G., Vissers, K. C., & van Weel, C. (2012). Perspectives of decision-making in requests for euthanasia: A qualitative research among patients, relatives and treating physicians in the Netherlands. *Palliative Medicine, 27*(1), 27-37. doi: 10.1177/0269216312463259

Degges-White, S. (2018). Introduction to use of expressive arts in counseling. In S. Degges-White & N. L. Davis (Eds.), *Integrating the expressive arts into counseling practice* (pp. 1-4). New York, NY: Springer Publishing Company, LLC.

Deitz, S. R., & Byrnes, L. E. (1981). Attribution of responsibility for sexual assault: The influence of observer empathy and defendant occupation and attractiveness. *The Journal of Psychology, 108*(1), 17-29. doi: 10.1080/00223980.1981.9915241

Di Fabio, A., & Saklofsky, D. H. (2018). The contributions of personality and emotional intelligence to resiliency. *Personality and Individual Differences, 123*(1), 140-144. doi: 10.1016/j.paid.2017.11.012

Donald, R. L., & Powell, C. (1989). A piece of us dies every time. *Shelter Sense, 12*(10), 1-4.

Dowling, M. (2007). From Husserl to van Manen: A review of different phenomenological approaches. *International Journal of Nursing Studies, 44*(1), 131-142. doi: 10.1016/j.ijnurstu.2005.11.026

Dybdall, K., Strasser, R. and Katz, T. (2007). Behavioral differences between owner surrender and stray domestic cats after entering an animal shelter. *Applied Animal Behaviour Science, 104*(1-2), 85-94. doi: 10.1016/j.applanim.2006.05.002

Dyson, V., Appleby, L., Altman, E., Doot, M., Luchins, D. J., & Delehant, M. (1998). Efficiency and validity of commonly used substance-abuse screening instruments in public psychiatric patients. *Journal of Addictive Diseases, 17*(2), 57–76.

Ellis, C., & Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity: Researcher as subject. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 733-766). Thousand Oaks, CA: Sage Publications, Inc.

Evans, J. D. (1996). *Straightforward statistics for the behavioral sciences.* Pacific Grove, CA: Brooks/Cole Publishing.

Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1-20). New York: Brunner-Routledge.

Figley, C. R. (2002). Compassion fatigue: Psychotherapist's chronic lack of self-care. *Journal of Clinical Psychology, 58*(11), 1433-1441. doi: 10.1002/jclp.10090

Figley, C. R., & Roop, R. G. (2006). *Compassion fatigue in the animal-care community.* Washington, D. C.: Humane Society Press.

Fournier, A. K., & Mustful, B. (2019). Compassion fatigue: Presenting issues and practical applications for animal-caring professionals. In L. Kogan & C. Blazina (Eds.), *Clinician's guide to treating companion animal issues: Addressing human-animal interaction* (pp. 511-534). San Diego, CA: Elsevier, Inc.

Garcia, C. (2009). Animal custody cases. *GPSolo, 26*(5), 23-24.

Glaser, B. G., & Strauss, A. L. (2006). *The discovery of grounded theory: Strategies for qualitative research.* New Brunswick, NJ: Transaction Publishers. Retrieved from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Glaser_1967.pdf

Goldberg, K. (2019). Considerations in counseling veterinarians: Addressing suffering in those who care for animals. In L. Kogan & C. Blazina (Eds.), *Clinician's guide to treating companion animal issues: Addressing human-animal interaction* (pp. 511-534). San Diego, CA: Elsevier, Inc.

Goldblatt, H. (2009). Caring for abused women: Impact on nurses' professional and personal life experiences. *Journal of Advanced Nursing, 65*(8), 1645-1654. doi: 10.1111/j.1365-2648.2009.05019.x

Goldstein, R. D., Wampler, N. S., & Wise, P. H. (1997). War experiences and distress symptoms of Bosnian children. *Pediatrics, 100*(5), 873-878. doi: 10.1542/peds.100.5.873

Hanh, T. N. (1976). *The miracle of mindfulness: An introduction to the practice of meditation*. Boston, MA: Beacon Press.

Hegney, D. G., Craigie, M., Hemsworth, D., Osseiran-Moisson, R., Aoun, S., Francis, K., & Drury, V. (2014a). Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Study 1 results. *Journal of Nursing Management, 22*(4)*,* 506-518.

Hegney, D. G., Craigie, M., Hemsworth, D., Osseiran-Moisson, R., Aoun, S., Francis, K., & Drury, V. (2014b). Compassion satisfaction, compassion fatigue, anxiety, depression and stress in registered nurses in Australia: Phase 2 results. *Journal of Nursing Management, 22*(4)*,* 519-531.

Husserl, E. (1981a). Philosophy as a rigorous science (Q. Lauer, Trans.). In P. McCormick & F.

A. Ellison (Eds.), *Husserl: Shorter works* (pp. 166-197). Notre Dame, IN: University of Notre Dame Press. (Reprinted from *Phenomenology and the crisis of philosophy*, pp. 71-147, by Q. Lauer, Trans., 1965, New York, NY: Harper & Row Publishers, Inc.)

Husserl, E. (1981b). Syllabus of a course of four lectures on "phenomenological method and phenomenological philosophy (G. Dawes Hicks, Trans.). In P. McCormick & F. A. Ellison (Eds.), *Husserl: Shorter works* (pp. 166-197). Notre Dame, IN: University of Notre Dame Press. (Reprinted from *Journal of the British Society for Phenomenology, 1*, 1970, 18-23)

Husserl, E. (1994). The self-contained field of the purely psychical. – Phenomenological reduction and true inner experiences. In J. J. Kockelmans (Ed.), *Edmund Husserl's phenomenology* (pp. 111-115). West Lafayette, Indiana: Purdue University Press.

Jacobsen, L. K., Southwick, S. M., & Kosten, T. R. (2001). Substance use disorders in patients with posttraumatic stress disorder: A review of the literature. *The American Journal of Psychiatry, 158*(8), 1184-1190. doi: 10.1176/appi.ajp.158.8.1184.

Kahn, A. (1977). Attribution of fault to a rape victim as a function of respectability of the victim: A failure to replicate or extend. *Representative Research in Social Psychology, 8*(2), 98-107.

Keidel, G. C. (2002). Burnout and compassion fatigue among hospice caregivers. *American Journal of Hospice & Palliative Care, 19*(3), 200-205. doi: 10.1177/104990910201900312

Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692-700. doi: 10.1037/0022-006X.71.4.692

Kockelmans, J. J. (1994). *Edmund Husserl's phenomenology.* West Lafayette, IN: Purdue University Press.

Koelsch, L. E. (2013). Reconceptualizing the member check interview. *International Journal of Qualitative Methods, 12*(1), 168-179. doi: 10.1177/160940691301200105

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals, 32*(9), 1-7.

Kroenke, K., Spitzer, R. L., Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.

Krulewitz, J. E., & Nash, J. E. (1979). Effects of rape victim resistance, assault outcome, and sex of observer on attributions about rape. *Journal of Personality, 47*(4), 557-574. doi: 10.1111/j.1467-6494.1979.tb00209.x

Lang, A. J., & Stein, M. B. (2005). An abbreviated PTSD checklist for use as a screening instrument in primary care. *Behavior Research and Therapy, 43*, 585-594.

Lang, A. J., Wilkins, K., Roy-Byrne, P. P., Golinelli, D., Chavira, D., Sherbourne, C., Rose, R. D., Bystritsky, A., Sullivan, G., Craske, M. G., Stein, M. B. (2012). Abbreviated PTSD Checklist (PCL) as a guide to clinical response. *General Hospital Psychiatry, 34*(4), 332-338. doi: 10.1016/j.genhosppsych.2012.02.003

Lynch, S. H., & Lobo, M. L. (2012). Compassion fatigue in family caregivers: A Wilsonian concept analysis. *Journal of Advanced Nursing, 68*(9), 2125-2134. doi: 10.1111/j.1365-2648.2012.05985.x

Mariotti, A. (2015). The effects of chronic stress on health: new insights into the molecular mechanisms of brain-body communication. *Future Science OA, 1*(3), FSO23. Retrieved from http://doi.org/10.4155/fso.15.21

Martin, A., Rief, W., Klaiberg, A., & Braehler, E. (2006). Validity of the brief patient health questionnaire mood scale (PHQ-9) in the general population. *General Hospital Psychiatry, 28*(1), 71-77. doi: 10.1016/j.genhosppsych.2005.07.003

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397-422. doi: 10.1146/annurev.psych.52.1.397

Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology, 19*(3), 921–930. doi: 10.1017/S0954579407000442

McGreary, C. A., Garcia, H. A., McGreary, D. D., & Finley, E. P. (2014). Burnout and coping: Veterans Health Administration posttraumatic stress disorder mental health providers. *Psychological Trauma: Theory, Research, Practice, and Policy, 6* (4), 390-397. doi: 10.1037/a0036144

Miller, L., & Hurley, K. (2011). *Infectious disease management in animal shelters.* New York, NY: John Wiley & Sons.

Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry, 20*(8), 1045-1053. doi: 10.1177/1077800413513733

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: SAGE Publications, Ltd. doi: 10.4135/9781412995658

Munger, T., Savage, T., & Panosky, D. M. (2015). When caring for perpetrators becomes a sentence: Recognizing vicarious trauma. *Journal of Correctional Health Care, 21*(4), 365-274. doi: 10.1177/1078345815599976

National Center for Health Statistics. (2018). *Prevalence of depression among adults aged 20 and over: United States, 2013-2016: NCHS Data Brief No. 303.* Retrieved from https://www.cdc.gov/nchs/products/databriefs/db303.htm

National Institute of Mental Health. (2017). *Any anxiety disorder.* Retrieved from https://www.nimh.nih.gov/health/statistics/prevalence/any-anxiety-disorder-among-adults.shtml/index.shtml

National Research Council Committee on Pain and Distress in Laboratory Animals. (1992). *Recognition and alleviation of pain and distress in laboratory animals.* Washington, DC: National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK235440/

Nett, R. J., Witte, T. K., Holzbauer, S. M., Elchos, B. L., Campagnolo, E. R., Musgrave, K. L., …Funk, R. H. (2015, February 13). Notes from the Field: Prevalence of Risk Factors for Suicide Among Veterinarians — United States, 2014. *Centers for Disease Control and Prevention (CDC): Morbidity and Mortality Weekly Report (MMWR), 64*(05), 131-132. Retrieved from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6405a6.htm

Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kooper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviors Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment, 8*(4), 443-454.

Palaganas, E. C., Sanchez, M. C., Molintas, V. P., & Caricativo, R. D. (2017). Reflexivity in qualitative research: A journey of learning. *The Qualitative Report, 22*(2), 426-438. Retrieved from https://nsuworks.nova.edu/tqr/vol22/iss2/5

ProQOL.org (2016). *A Comprehensive Bibliography of Documents Specifically Using the ProQOL Measure*. Retrieved from http://proqol.org.

Rank, M. G., Zaparanick, T. L., & Gentry, J. E. (2009). Nonhuman-animal shelter compassion fatigue: Training as treatment. *Best Practices in Mental Health, 5*(2), 40-61.

Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255-267. doi: 10.1177/1534765612471144

Reeve, C. L., Rogelberg, S. G., Spitzmüller, C., & DiGiacomo, N. (2005). The caring-killing paradox: euthanasia-related strain among animal shelter workers. *Journal of Applied Social Psychology, 35*(1), 119-143. doi: 10.1111/j.1559-1816.2005.tb02096.x

Reich, W. T. (1989). Speaking of Suffering: A moral account of compassion. *Soundings: An Interdisciplinary Journal, 72*(1), 83-108.

Rogelberg, S. G., DiGiacomo, N., Reeve, C. L., Spitzmüller, C., Clark, O. L., Teeter, L.,

…Starling, P. G. (2007). What shelters can do about euthanasia-related stress: An examination of recommendations from those on the front line. *Journal of Applied Animal Welfare Science, 10*(4), 331-347. doi: 10.1080/10888700701353865

Rogelberg, S. G., Reeve, C. L., Spitzmuller, C., DiGiacomo, N., Clark, O., Teeter, L., …Carter, N. T. (2007). Impact of euthanasia rates, euthanasia practices, and human resource practices on employee turnover in animal shelters. *Journal of the American Veterinary Medical Association, 230*(5), 713-719. doi: 10.2460/javma.230.5.713

Rohlf, V. I. (2018). Interventions for occupational stress and compassion fatigue in animal care Professionals-A systematic review. *Traumatology, 24*(3), 186-192. doi: 10.1037/trm0000144

Rohlf, V., & Bennett, P. (2005). Perpetration-induced traumatic stress in persons who euthanize nonhuman animals in surgeries, animal shelters, and laboratories. *Society & Animals, 13*(3), 201-219.

Rollin, B. (2011). Euthanasia, moral stress, and chronic illness in veterinary medicine. *Veterinary Clinics of North America: Small Animal Practice, 41*(3), 651-659. doi: 10.1016/j.cvsm.2011.03.005

Scanlan, J. N., & Still, M. (2013). Job satisfaction, burnout and turnover intention in occupational therapists working in mental health. *Australian Occupational Therapy Journal, 60*, 310-318. doi: 10.1111/1440-1630.12067

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*(7), 893-917. doi: 10.1002/job.595

Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress and health: Psychological, behavioral, and biological determinants. *Annual Review of Clinical Psychology*, *1*, 607-628. doi: 10.1146/annurev.clinpsy.1.102803.144141

Scotney, R. L., McLaughlin, D., & Keates, H. L. (2015). A systematic review of the effects of euthanasia and occupational stress in personnel working with animals in animal shelters, veterinary clinics, and biomedical research facilities. *Journal of the American Veterinary Medical Association, 247*(10), 1121-1130. doi: 10.2460/javma.247.10.1121

Simpson, L. R., & Starkey, D. S. (2006). Secondary traumatic stress, compassion fatigue, and counselor spirituality: Implications for counselors working with trauma. Retrieved from http://www.counselingoutfitters.com/Simpson.htm

Slocum-Gori, S., Hemsworth, D., Chan, W. W. Y., Carson, A., & Kazanjian, A. (2011). Understanding compassion satisfaction, compassion fatigue and burnout: A survey of the hospice palliative care workforce. *Palliative Medicine, 27*(2), 172-178. doi: 10.1177/0269216311431311

Smith, B. J. (2009). Compassion fatigue, burnout, objectivism, and religious activities/beliefs in practitioners (Doctoral dissertation). Old Dominion University, Norfolk, VA.

Smith, C. S. (2007). Coping strategies of female victims of child abuse in treatment for substance abuse relapse: Their advice to other women and healthcare professionals. *Journal of Addictions Nursing, 18*(2), 75-80. doi: 10.1080/10884600701334929

Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and secondary traumatic stress in UK therapists who work with adult trauma clients. *European Journal of Psychotraumatology, 4*(1), doi: 0.3402/ejpt.v4i0.21869. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3877781/

Spitzer, R. L., Williams, J. B. W., & Kroenke, K. (n.d.). *Instruction manual: Instructions for Patient Health Questionnaire (PHQ) and GAD-7 measures.* New York, NY: Pfizer, Inc. Retrieved from https://phqscreeners.pfizer.edrupalgardens.com/sites/g/files/g10016261/f/201412/instructions.pdf

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine, 166*(10), 1092-2007.

Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion fatigue, compassion satisfaction, and burnout: Factors impacting a professional's quality of life. *Journal of Loss and Trauma, 12*(3), 259-280. doi: 10.1080/15325020701238093

Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed.). Pocatello, ID: ProQOL.org.

Stebnicki, M. A. (2007). Empathy fatigue: Healing the mind, body, and spirit of professional counselors. *American Journal of Psychiatric Rehabilitation, 10*(4), 317-338. doi: 10.1080/15487760701680570

Substance Abuse and Mental Health Services Administration. (2017). *The CBHSQ Report: Trends in substance use disorders among adults aged 18 or older.* Retrieved from https://www.samhsa.gov/data/sites/default/files/report_2790/ShortReport-2790.html

Thompson, I. A., Amatea, E. S., & Thompson, E.S. (2014). Personal and contextual predictors of mental health counselors' compassion fatigue and burnout. *Journal of Mental Health Counseling, 36*(1), 58-77.

Tiesman, H. M., Konda, S., Hartley, D., Menéndez, C. C., Ridenour, M., & Hendricks, S. (2015). Suicide in U.S. workplaces, 2003-2010: A comparison with non-workplace suicides. *American Journal of Preventive Medicine, 48*(6), 674-682. doi: 10.1016/j.amepre.2014/12.011

Tukey, J. W. (1977). *Exploratory data analysis.* Reading, PA: Addison-Wesley.

Tyler, T. A. (2012). The limbic model of systemic trauma. *Journal of Social Work Practice, 26*(1), 125-138. doi: 10.1080/02650533.2011.602474

Ullman, S. E., Relyea, M., Peter-Hagene, L. & Vasquez, A. L. (2014). Trauma histories, substance use coping, PTSD, & problem substance use among sexual assault victims. *Addictive Behaviors, 38*(6), 2219-2223. doi: 10.1016/j.addbeh.2013.01.027

Vagle, M. D. (2016). *Crafting phenomenological research* (1st ed.). New York, NY: Routledge.

van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice, 1*(1), 11-30.

Vollmer, S., Spada, H., Caspar, F., & Burri, S. (2013). Expertise in clinical psychology: The effects of university training and practical experience on expertise in clinical psychology. *Frontiers in Psychology, 4,* 141. doi: 10.3389/fpsyg.2013.00141

Vrana, S., & Lauterbach, D. (1994). Prevalence of traumatic events and post-traumatic psychological symptoms in a nonclinical sample of college students. *Journal of Stress, 7*(2), 289-302.

Wagaman, M. A., Geiger, J. M., Shockley, C., & Segal, E. A. (2015). The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work, 60*(3), 201-209. doi: 10.1093/sw/swv014

Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993, October). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the Annual Convention of the International Society for Traumatic Stress Studies, San Antonio, Texas.

White, D. J., & Shawhan, R. (1996). Exploring the bond: Emotional responses of animal shelter workers to euthanasia. *Journal of Veterinary Medical Association, 208*(6). 846-849.

Whitebird, R. R., Asche, S. E., Thompson, G. L., Rossom, R., & Heinrich, R. (2013). Stress, burnout, compassion fatigue, and mental health in hospice workers in Minnesota. *Journal of Palliative Medicine, 16*(12), 1534-1539. doi: 10.1089/jpm.2013.0202

Winerman, L. (2005). The mind's mirror: A new type of neuron--called a mirror neuron--could help explain how we learn through mimicry and why we empathize with others. *Monitor on Psychology, 36*(9), 48-51.

Yassen, J. (1995). Preventing secondary traumatic stress disorder. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1-20). New York: Brunner-Routledge.

APPENDIX

The University of Texas Rio Grande Valley

The Institutional Review Board for Human Subjects Protection (IRB)
Division of Research, Innovation, and Economic Development
Office of Research Compliance

January 12, 2018

To: Kim Nguyen-Finn, MA

Cc: Noreen Graf, Faculty Advisor

From: Institutional Review Board

Subject: Approval of a New Human Research Protocol

IRBNet ID: 1102209-1

IRB# 2017-181-07

Project Title: Cost of Caring: The Effects of Euthanasia on Animal Shelter Workers

Dear Researcher,

The IRB protocol referenced above has been reviewed and **APPROVED ON December 6, 2017**.

Basis for approval: Exempt, Category # 2

Approval expiration date: December 5, 2020

Recruitment and Informed Consent: You must follow the recruitment and consent procedures that were approved. If your study uses an informed consent form or study information handout, you will receive an IRB-approval stamped PDF of the document(s) for distribution to subjects.

Modifications to the approved protocol: Modifications to the approved protocol (including recruitment methods, study procedures, survey/interview questions, personnel, consent form, or subject population), must be submitted to the IRB for approval. Changes should not be implemented until approved by the IRB.

Approval expiration and renewal: Your study approval expires on the date noted above. Before that date you will need to submit a continuing review request for approval. Failure to submit this request will result in your study file being closed on the approval expiration date.

Data retention: All research data and signed informed consent documents should be retained for a *minimum* of 3 years after *completion* of the study.

Closure of the Study: Please be sure to inform the IRB when you have completed your study, have graduated, and/or have left the university as an employee. A final report should be submitted for completed studies or studies that will be completed by their respective expiration date.

Approved by: Laura D. Seligman

Laura D. Seligman
Interim Chair, Institutional Review Board

The University of Texas Rio Grande Valley
Informed Consent Form

Cost of Caring: The Effects of Euthanasia on Animal Shelter Workers

Investigators:

Primary investigator: Kim Nguyen-Finn, MA, LPC-S, Doctoral Student
School of Rehabilitation Studies and Counseling
University of Texas-Rio Grande Valley
Phone: (956) 665-7036, Email: kim.finn01@utrgv.edu

Faculty Advisor: Dr. Noreen Graf, Professor
School of Rehabilitation Studies and Counseling
University of Texas-Rio Grande Valley
Phone: (956) 665-7036, Email: noreen.graf@utrgv.edu

Background: We would like to request your participation in this panel interview. This panel interview is part of a research study that is being conducted by Kim Nguyen-Finn from the University of Texas Rio Grande Valley (UTRGV), under the supervision of Dr. Noreen Graf, as part of Ms. Nguyen-Finn's doctoral dissertation. We are conducting a research study about the lived experiences of those who work at animal shelters. As part of this study, we are interested in the views of animal shelter workers.

Procedure: The panel interview asks some of those who participated in the online survey portion to read through the preliminary data analysis and verbally give their impressions on the veracity of those conclusions. This interview will be conducted in a group format and will take no longer than one hour (60 minutes) of your time.

Risks or Possible Discomforts Associated with the Study: The researchers do not foresee the probability of harm to respondents as a result of participation in this interview. However, if you feel that you had been hurt or upset as a result of your participation, you are encouraged to contact the researcher for debriefing of the interview. The researcher may, at your request, provide a referral for community counseling in your area.

Benefits of Participation: The researchers do not anticipate any direct benefits for participants. However, indirect benefits could be the increased awareness of any risks to mental health from working at an animal shelter.

Payment for Participation: By participating in this study you will be eligible to receive compensation as a token for your time in the form of a $5 gift card during the interview. You will be provided with the gift card at the conclusion of the panel interview. In addition, a drawing will be conducted at the conclusion of the panel interview for one $25 gift card. All compensation is provided by the researcher, not UTRGV. Please note that any payment(s) you receive for participation in this study is considered income for tax purposes.

The University of Texas Rio Grande Valley
Informed Consent Form

Voluntary Participation: Your participation in this study is voluntary; you may discontinue your participation at any time without penalty. If for any reason you decide that you would like to discontinue your participation, simply tell the researcher that you wish to stop. You may also refuse to answer any question that you do not want to answer, for whatever reason you may have.

Anonymity and/or Confidentiality: Data will be anonymous. Your personal information, including your name, will not be stored with your responses during the panel interview. Date will be securely stored for three (3) years in a locked storage of files, accessible only to the researchers. After this time, data will be destroyed.

Who to Contact Regarding Your Rights as a Participant: This research has been reviewed and approved by the Institutional Review Board for Human Subjects Protection (IRB# 2017-181-07). If you have any questions about your rights as a participant, or if you feel that your rights as a participant were not adequately met by the researcher, please contact the IRB at 956-665-2093 or irb@utrgv.edu.

Please keep a copy of this form for your records

Quantitative Survey Instrument

DEMOGRAPHICS

1. Gender? (male/female/other_____)
2. Race\Ethnicity? (Hispanic, white/Caucasian, black/African-American, Asian/Pacific Islander, Native American/American Indian, Other, Decline to answer)
3. Highest Educational Level completed? (Less than high school, High school diploma/GED, some college, Bachelors, Masters, Doctorate, MD/JD)
4. What is your religious affiliation/denomination (ex., Protestant, Catholic, Buddhist, Muslim, Decline to answer)? (open)
5. How important is religion/spirituality in your life? (Not at all important/Somewhat unimportant/Neither important or unimportant/Somewhat important/Very important)
6. What is your job title at the shelter? (open)
7. Do you work for a "no kill shelter"? (yes/no)
8. Do your job duties include participation in euthanasia in any way? (yes/no)
9. Number of years at current job? (open numerical)
10. Are you a pet owner? (yes/no)
11. Are you CURRENTLY receiving professional counseling for any work-related issues? (yes/no)

GENERALIZED ANXIETY DISORDER 7-ITEM (GAD-7) SCALE

Spizer, R. L., Kroenke, K., Williams, J. B. W., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Archives of Internal Medicine, 166*, 1092-1097.

Instructions: Over the last 2 weeks, how often have you been bothered by the following problems?

0=Not at all sure, 1=Several days, 2=Over half the days, 3=Nearly every day

1. Feeling nervous, anxious, or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing

5. Being so restless that it's hard to sit still

6. Becoming easily annoyed or irritable

7. Feeling afraid as if something awful might happen

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

Somewhat difficult

Very difficult

Extremely difficult

CAGE-AID QUESTIONNAIRE

Brown, R. L., & Rounds, L. A. (1995). Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice. *Wisconsin Medical Journal, 94*(3), 135-140.

1. Have you ever felt that you ought to cut down on your drinking or drug use?

2. Have people annoyed you by criticizing your drinking or drug use?

3. Have you ever felt bad or guilty about your drinking or drug use?

4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?

PATIENT HEALTH QUESTIONNAIRE (PHQ-9) (Brief depression screening)

Phizer, Inc.(1999)

For these questions, answer 0=Not at all, 1=Several days, 2=More than half the days, 3=Nearly every day

1. Little interest or pleasure in doing things

2. Feeling down, depressed, or hopeless

3. Trouble falling or staying asleep, or sleeping too much

4. Feeling tired or having little energy

5. Poor appetite or overeating

6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down

7. Trouble concentrating on things, such as reading the newspaper or watching television

8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual

9. Thoughts that you would be better off dead, or of hurting yourself

PROFESSIONAL QUALITY OF LIFE SCALE (ProQOL)

COMPASSION SATISFACTION AND COMPASSION FATIGUE (ProQOL) VERSION 5 (2009)

Hudnall Stamm, B. (2009-2012). Professional Quality of Life: Compassion Satisfaction and Fatigue, Version 5 (ProQOL). *www.proqol.org.* (Altered with permission to address helping animals). Altered to remove questions for Compassion Satisfaction (original Qs: 3, 6, 12, 16, 18, 20, 22, 24, 27, 30)

Instructions: When you [help] animals you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Very Often

1. I am happy.
2. I am preoccupied with more than one animal I [help].
3. I feel connected to others.
4. I jump or am startled by unexpected sounds.
5. I find it difficult to separate my personal life from my life as a [helper].
6. I am not as productive at work because I am losing sleep over traumatic experiences of animals I [help].
7. I think that I might have been affected by the traumatic stress of those I [help].
8. I feel trapped by my job as a [helper].
9. Because of my [helping], I have felt “on edge” about various things.
10. I feel depressed because of the traumatic experiences of the animals I [help].
11. I feel as though I am experiencing the trauma of an animal I have [helped].
12. I have beliefs that sustain me.
13. I am the person I always wanted to be.
14. I feel worn out because of my work as a [helper].
15. I feel overwhelmed because my case [work] load seems endless.
16. I avoid certain activities or situations because they remind me of frightening experiences of the animals I [help].

17. As a result of my [helping], I have intrusive, frightening thoughts.
18. I feel “bogged down” by the system.
19. I can’t recall important parts of my work with trauma animal victims.
20. I am a very caring person.

Qualitative Survey Instrument

DEMOGRAPHICS

12. Gender? (male/female/other_____)
13. Race\Ethnicity? (Hispanic, white/Caucasian, black/African-American, Asian/Pacific Islander, Native American/American Indian, Other, Decline to answer)
14. Highest Educational Level completed? (Less than high school, High school diploma/GED, some college, Bachelors, Masters, Doctorate, MD/JD)
15. What is your religious affiliation/denomination (ex., Protestant, Catholic, Buddhist, Muslim, Decline to answer)? (open)
16. How important is religion/spirituality in your life? (Not at all important/Somewhat unimportant/Neither important or unimportant/Somewhat important/Very important)
17. What is your job title at the shelter? (open)
18. Do you work for a "no kill shelter"? (yes/no)
19. Do your job duties include participation in euthanasia in any way? (yes/no)
20. Number of years at current job? (open numerical)
21. Are you a pet owner? (yes/no)
22. Are you CURRENTLY receiving professional counseling for any work-related issues? (yes/no)

QUALITATIVE

6. Please share why you chose to work with shelter animals.
7. What is your view of euthanizing animals?
8. If you assist in the euthanasia of animals, what are other people's (not your coworkers') reactions to that part of your job? (write N/A if this does not apply to you)
9. If you assist in euthanasia of animals, how is your life affected by euthanasia?
10. How do you cope with the stressors of your job?

BIOGRAPHICAL SKETCH

Kim L. Nguyen-Finn earned her PhD in Rehabilitation Counseling in 2018 from the University of Texas Rio Grande Valley (UTRGV). She has been a counselor since 1998, having graduated from the University of Texas at San Antonio in May, 1998, with a Master of Arts in Education with a concentration in Educational Psychology/Guidance & Counseling. Prior to that, she earned a Bachelor of Arts in Psychology in May, 1995. Kim is licensed by the state of Texas as a Licensed Professional Counselor – Supervisor, and provides individual, group, couple, and family counseling for a wide range of issues, including borderline personality disorder, trauma resolution, and gender identity. She is also a lecturer at UTRGV in the School of Rehabilitation Services and Counseling and serves as consultant counselor for the university's Office for Victim Advocacy and Violence Prevention. Additionally, Kim serves as an expert witness for domestic violence and sexual assault cases.

Email: kimfinn@gmail.com