The Benefits of Animal-Assisted Interventions: Perceptions of Social Workers Working with Veterans

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THE BENEFITS OF ANIMAL-ASSISTED INTERVENTIONS: PERCEPTIONS OF SOCIAL WORKERS WORKING WITH VETERANS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Anne Victoria Thompson
June 2019
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Approved by:
Dr. James Simon, Faculty Supervisor, Social Work
Dr. Janet Chang, MSW Research Coordinator
ABSTRACT

Evidence-based practices utilized by social workers working with veterans experiencing physical (e.g., spinal cord injuries and loss of limbs) and/or mental health (e.g., posttraumatic stress disorder, depression, substance use) issues are widely used with this vulnerable population. The number of social workers integrating animal-assisted interventions (AAI) or animal-assisted therapy (AAT) as a complementary intervention to these practices is extremely limited. A significant amount of research has been published on AAI and AAT, yet there is a gap in research regarding AAI and AAT as effective complementary approaches when working with veterans.

The qualitative method utilized in this study was interviews in which MSWs and LCSWs were asked to share personal experiences while employed at veteran-supported agencies and/or non-profit organizations. The qualitative method of interviews and content analysis were used to help identify the themes and sub-themes of this study. The themes and sub-themes supported the phrases and statements drawn from the seven interviews conducted for this study. Findings supported in this study addressed the value of the human-animal bond, how integrating AAI and AAT with evidence-based practices can assist the veteran in improving quality of life (e.g., a decrease in social isolation, increase in social activity, decrease in substance use), and how important it is to recognize the need to provide the education in this field to social workers. Findings from
this study can help to provide the foundation for future research, can underscore the value of offering and integrating AAI and AAT education into more MSW programs, and can contribute to establishing policy where those who can benefit by AAI and AAT are given access to it.
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This path that I chose to take would not have been possible without the love, encouragement, and support of my family and friends. My Mom has always been my number one supporter no matter what I have chosen to do and has always believed in me. My dear friend and bestie, Robin, has been there for me through thick and thin and believed in me even when I was in doubt. There are others who have shown their support for and belief in me, and I am grateful to each and every one of them.

My final acknowledgment is to my canine companion, Gracie, who was my inspiration for my research topic. Without her unconditional love and acceptance of me I never would have made it.
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CHAPTER ONE
ASSESSMENT

Problem Focus and Literature Review

Introduction

This research project introduced the problem focus of animal-assisted interventions (AAI) and animal-assisted therapy (AAT) as effective interventions for social workers servicing veteran populations with physical and/or mental health disabilities. An important element of the literature review and this study included the key themes of disability, whether physical or mental and how it was defined in relation to AAI, how AAI was defined and described, and how understanding and explaining the role of the human-animal bond affected the role of the social worker and the growing population served. The literature review laid the groundwork for Bandura’s self-efficacy and social cognitive theories to be the foundation of this researcher’s theoretical orientation. Defining the chosen approach for this study, the rationale for choosing a Post-Positivist approach, and a brief explanation of its assumptions were presented. The final area discussed in Chapter One included the potential contributions this research study could contribute to both micro and macro social work practice including additional education and training in the fields of disability and AAI, the ability to broaden the populations served through the integration of AAI, and to assist our clients in the
reduction of symptoms of physical and/or mental health disabilities to provide a better quality of life.

**Research Focus**

The research focus for this study was to consider whether animal-assisted interventions (AAI) or animal-assisted therapies (AAT) are effective interventions in social work practice for those assisting in the rehabilitation and treatment interventions for veterans with physical and/or mental health issues. Animal-assisted intervention is the general term that encompasses animal-assisted therapy (AAT) also known as canine-assisted therapy (CAT) and animal-assisted activities (AAA). AAT is a goal-directed type of therapeutic intervention practiced by human services (e.g., social worker) or health professional (e.g., therapist or psychologist) that is practicing within his/her scope of practice in which an animal plays a pivotal role. Improving human functioning, whether cognitive, physical, social, and/or emotional is what this goal-specific intervention works to promote (Beck, et al., 2012). Animal-assisted activities (AAA) are less structured than AAT, still include an animal, but are more focused on activities that offer recreational, educational, or motivational therapeutic benefits (i.e., pet visits and dog walks) with the goal of helping to improve a client’s quality of life (Palley, O’Rourke, & Niemi, 2010).

An alternative therapeutic intervention being explored by the Department of Veterans Affairs and Department of Defense is animal-assisted therapy also known as canine-assisted therapy (CAT). The integration of CAT into veterans’
health care settings offers veterans and wounded warriors, who continue to experience symptoms of traumatic brain injury (TBI) and/or posttraumatic stress disorder (PTSD) an alternative or complementary therapy to the standard evidence-based treatments. Although canines have historically played a significant role in military operations, the integration of canines into veterans’ health care settings is considered an important element to complementary and alternative medicine (CAM). According to Owen, Finton, Gibbons, and DeLeon (2016), both the Department of Defense (DOD) and Veterans’ Affairs (VA) have stepped up efforts to evaluate CAT’s effectiveness of therapy canines in the recovery process of veterans experiencing TBI and/or PTSD (Owen, et al., 2016).

The human-animal bond is a necessary and significant component to any animal-assisted intervention. Prior to discussing how the human-animal bond can contribute to the effectiveness of rehabilitation and treatment plans for veterans, there needs to be an understanding of what a human-animal bond is. This bond is based on the attachment that is formed in a relationship between a human and his/her animal companion. Throughout history, this established bond between humans and their animal counterparts had and continues to contribute a significant role in the well-being and quality of life of both the human and the animal. Risley-Curtiss, Rogge, and Kawam (2013) suggest how the human-animal bond can be characterized as reciprocal, with both humans and their
animal companions being givers and recipients of emotional support through their bond (Risley-Curtiss et al., 2013).

For veterans who have or who are experiencing physical and/or mental health issues, the human-animal bond can take on a whole new meaning. AAT is based on the reciprocal relationship between the human and the animal and according to Mills and Yeager (2012), for veterans who have or are experiencing physical (i.e., spinal cord injuries or loss of limbs) and/or mental health conditions (i.e., PTSD, depression, and suicidal ideation), canines have been found to be non-judgmental and all-accepting of veterans in settings where decreased function, anxiety, and pain are common place. AAT has provided tangible and intangible health benefits (Mills & Yeager, 2012) including the reduction of symptoms of PTSD and TBI.

Another unique characteristic to the human-animal bond among the veterans who have experienced or are experiencing physical and/or mental health conditions is referred to as the “stress buffering effect” (p. 66). Due to the fact that combat traumatic injuries were caused by humans, humans may then be considered triggers for PTSD symptoms. Experiments with humans and animals were conducted under stressful conditions, resulting in an attachment and bond between the humans and canines that produced an effect that acted as a stress buffer (Yount, Olmert, & Lee, 2012). The positive effects of AAT and the human-animal bond with veterans was discussed further in this research study.
The integration of complementary or alternative interventions such as AAT into rehabilitation and treatment plans for veterans who have experienced or are experiencing physical and/or mental health conditions provided social workers with interventions that have been proven effective in decreasing symptoms of PTSD and TBIs and improving a veterans’ quality of life. Prior to social workers integrating AAT into their best practice interventions with veterans, the necessary knowledge, education, understanding, and training must be acquired. As receptive as social workers working with veterans may be to the integration of AAT as an effective intervention, without understanding the human-animal bond, the pivotal role it plays in AAT, and the education and training needed to serve clients in the best way possible, AAT may not be an effective intervention (Risley-Curtiss, 2010).

Paradigm and Rationale for Chosen Paradigm

Defining Post Positivism

The post-positivist approach was the chosen paradigm for this research. According to Morris (2006), the post-positivist paradigm holds the beliefs that scientific knowledge, when seen through the lens of empirical objective data, lacks the ability to encompass the many aspects of human behavior. The post-positivist paradigm rejects the narrow view of the positivist paradigm which posits that what could be observed was only what could be studied (Morris, 2006). The Post-Positivist approach bases their understandings on what can be observed in
naturalistic settings rather than what is observed in a manipulated quantitative fashion.

**Assumptions of Post-Positivism**

The assumptions of Post-Positivist paradigms are a set of beliefs based on knowledge, reality, and value in the research that was conducted. Epistemology or the philosophical study of knowledge and knowing is an inquiry into how knowledge was gained, the sources of that knowledge, the reliability of the sources, and knowing whether knowledge gained was true. Ontology is the philosophical study of reality and looks at what the nature of reality is by recognizing reality’s existence, knowing that it cannot be perfect due to human limitations (Bisel & Adame, 2017). When the nature of reality was recognized in this way, it was called critical realism, which means that reality was discovered within the probability of human limitations, not in certainty. An ontological assumption of reality from the post-positivist paradigm is that reality is measurable and knowable, despite the difficult in accessing it. Axiology is the third type of philosophical assumption of this paradigm and is based on the researcher’s values being independent of the beliefs of those involved in the study. It is important to recognize how background knowledge, including the theories and hypothesis of the researcher can influence the type of observations included, as well as how they were observed. The post-positivist assumption of value is to recognize that a bias exists and although it is not desired, it is also important to note that it is more than likely going to occur.
Rationale for Choosing Post Positivism

The post-positivist paradigm provided an opportunity to review the previously published literature on the efficacy of AAI, the human-animal bond, studies that addressed the utilization of AAI and veterans, and the role a social worker played when this intervention was utilized. Recognizing the epistemological, ontological, and axiological assumptions of the Post-Positivist approach as it pertained to the previously published literature provided a basis for the interpretation of the information that was gathered from the interviews with the MSWs and LCSWs. This approach not only challenged the information already known but allowed for the discovery of new knowledge based on the meanings that humans attributed to their behavior, attitude, and worldview (della Porta & Keating, 2008). The Post-Positivist approach also provided the means by which AAI and the human-animal bond can be better understood. It is also important to understand how past knowledge and knowledge gained by using this approach contributed to a clearer and better understanding of human nature and its diversity within societies and cultures.

Literature Review

The literature review for this study was based on published literature on animal-assisted interventions, the human-animal bond, studies addressing animal-assisted interventions and veterans, and the role a social worker played in this type of intervention. Most articles discussed were studies or research that were conducted by the U.S. Army Medical Department and published in the U.S.
Army Medical Department Journal. The initial research addressed the human-animal bond, how animal-assisted interventions and disability are defined, as well as how veterans with physical and/or mental health conditions have benefited from the integration of AAT interventions into treatment plans.

A clearer picture on how animal-assisted interventions are defined was presented and assisted this study with its Post-Positivist approach. Previously published literature presented in this research project recognized the significant contribution the human-animal bond provided within and outside of the context of social work. The previously published literature discussed the social worker's role in AAI and what it would look like. This literature review also demonstrated a gap found in research on AAI and social workers, social workers' lack of training in AAI, and social workers' applied interventions when working with veterans. The following literature review addressed the different areas of focus for this research proposal.

**Defining and Describing Disability and Animal-Assisted Interventions**

Understanding how disability is defined is important when understanding the parameters by which AAI can assist an individual. According to Mills and Yeager (2012), the definition applied to disability and utilized by the military comes directly from the Americans with Disabilities Act (ADA), which defined disability as a form of physical or mental impairment that significantly limited an individual’s major life activities. This definition is universal to defining disability, no matter which population was addressed. The concern was that policies
addressed the increased needs of the military and AAI be clarified to ensure the best practices for Veterans (Mills & Yeager, 2012). Schubert (2012) was quick to point out how an amendment to the ADA was implemented in 2011 which addressed the use of service dogs for those with physical and/or mental impairments. Dogs that worked or performed specific tasks for an individual with an impairment, whether physical, psychiatric, sensory, intellectual, or other mental impairment, are trained to perform these tasks specifically for the individual’s impairment (Schubert, 2012).

**Animal-Assisted Interventions**

For animal-assisted interventions or therapies to be considered an effective type of therapy or complementary therapy, there must be an understanding of what animal-assisted interventions and therapies (AAT) are. AAI have been considered an integral part of a goal-directed and individualized treatment plan in which a canine has been trained to assist an individual with tasks specific to the needs of the individual with the impairment. AAT is similar to AAI and is delivered by a health or human services professional who has expertise in a specialized area. Beck et al. (2012) further described the goal-directed intervention of AAT as an intervention “directed or delivered by a health/human service professional with specialized expertise, and within the scope of practice of his/her profession” (Beck et al., 2012, p. 39).
The Role of the Canine

The role of the canine in AAT was defined by Schubert (2012). To be considered for this role and considered an integral part of the treatment plan, it is paramount that specific criteria be met which addresses the animal’s ability to assist their human counterpart with needs specific to him/her. Specified goals and objectives that can be measured were considered key components (Schubert, 2012) as well as the physical and/or psychological benefits through the interactive connection between the human and the animal. Literature on animal-assisted interventions is extensive, but according to Knisely, Barker, and Barker (2012) published empirical studies on the utilization of AAI or animal-assisted therapy (AAT) within populations of military or veterans suffering from mental health issues (i.e., combat stress, PTSD, and physiological changes) is extremely limited or non-existent. Knisely et al. (2012) strongly suggested that findings from civilian studies supported the need for research concerning AAT with military personnel who have or are experiencing psychiatric symptoms. AAT provided veterans as well as civilian populations with a complementary intervention with “powerful potential” (p. 33) and no side effects (Knisely, Barker & Barker, 2012).

The Human-Animal Bond

Historically, the human-animal bond has been in existence for thousands of years and was considered an important element to an individual’s well-being and quality of life. This bond demonstrated the powerful connection we as
humans had to animals and animals had with their human counterpart. The context in which the human-animal bond was discussed in this literature review was supported during AAI and AAT interventions utilized with veterans and canines. Owen et al. (2016) reported how human-canine interactions supported a broad range of adjunctive therapeutic modalities with numerous benefits reported by veterans and military personnel. Some of these benefits included but were not limited to increased assertiveness, improved stress management, and improved communication and parenting interactions (Owen et al., 2016). It was also reported that active and passive social interactions had increased when AAT was utilized. Results from Camp’s (2012) qualitative studies on veterans with physical impairments presented findings that demonstrated veterans desire to become more engaged in activities, increased self-confidence through the engagement in more social activities and being more open to the development of relationships (Camp, 2012). Other findings from this study conveyed an increased independence and decreased perception of disability by the veterans.

Social Workers, the Human-Animal Bond, and Animal-Assisted Interventions

There has been an extensive amount of research on the power of the human-animal bond with 62% of households in the United States reporting having animal companions. Encountering and/or providing services to individuals or families who have a companion animal is almost inevitable in the field of social work. Risley-Curtiss (2010) strongly suggested that animals be included in both research and practice and be considered a ‘natural’ extension of the humans that
social workers serve. This natural extension plays a vital role in humans as they face challenges, develop coping mechanisms, and resiliency (Risley-Curtiss, 2010). Because of the evidence presented in previously published literature, there is a sense of urgency within the field of social work to become more informed about the human-animal bond and the inclusion of animals in social work practice.

Risley-Curtiss (2010) also reported that the human-animal bond was normally not included in assessments, engagement, or treatment of clients. It was taught in only seven out of 230 schools of social work and many times the information and/or training in this area was non-existent. The integration of the human-animal bond into social work interventions, research, and practice is paramount to understanding the interconnectedness with humans (Risley-Curtiss, 2010). The positive effects of AAI and AAT has demonstrated some of the positive benefits clients have received, as well as how these types of interventions have built and strengthened rapport between therapist and client. Questions arose concerning the training and integration of AAI and AAT into social work practice. Because we as social workers are always looking for ways to expand our knowledgebase, the question that needs to be asked is, “Are MSWs and LCSWs willing to be properly trained in this area so that we increase our understanding of and usefulness in services we provide our clients?”
Themes of the Literature Review

The literature review conducted for this research proposal addressed several themes which are directly linked to the focus of my research. Defining disability according to the ADA (1990) provided a clearer understanding of what was meant when the word disability or impairment was used within the context of this research focus. Animal-assisted interventions and animal-assisted therapies are two types of interventions discussed in the literature review and being considered for social workers practicing with veterans with physical and/or mental health issues. This literature review provided definitions and descriptions of AAI and AAT as complementary interventions to evidence-based practices that can contribute and broaden the knowledge base of social workers, with the potential to increase the integration of AAI and AAT with this vulnerable population. Reviewing and discussing previously published literature on the human-animal bond contributed to the second area of focus which is the significant contribution the human-animal bond made to the treatment or interventions of veterans with physical and/or mental health issues. The final theme discussed in the literature review is directly linked to the research focus which examined the extent to which social workers integrated AAI and AAT in their interventions with veterans.

Theoretical Orientation

Two theories presented throughout this study were self-efficacy theory and social cognitive theory. When an individual believes in his/her ability to
perform behaviors that will create an expected and desired outcome, he/she has practiced self-efficacy. One of the most efficient ways to practice and achieve self-efficacy is by successfully performing a behavior that once may have brought about fear. Self-efficacy theory posits that performance and motivation are in part determined by how effective an individual believes they can be (Bandura, 1977). Social cognitive theory posits individuals learn through both interaction with the environment and internal processes rather than just through the principles of operant or classical conditioning. An individual's motivation and behavior (human functioning) are determined by how an individual's cognitive, behavioral, personal, and environmental factors interact (Bandura, 1986). Bandura was author to both self-efficacy theory and social cognitive theory and both were applied to this study.

The theories of self-efficacy and social cognitive theory were ideal for providing the framework for this study. Self-efficacy theory was applied to the focus of the study that addressed the veterans’ rehabilitation and treatment plan to include AAI or AAT. The perspective of the veteran was addressed, and the theory was applied when the veteran believed that his/her ability to work with the canine assisted in his/her rehabilitation and treatment plan. In this way, the desired outcome of decreased physical or mental health symptoms was achieved. Social cognitive theory also contributed to the framework of this study through the veterans’ ability to learn through both his/her interactions with the
canine and his therapist (environmental) as well as the internal processes (i.e.,
cognitive, behavioral) that effected his motivation and behavior.

The theories of self-efficacy (Bandura, 1977) and social cognitive theory
(Bandura, 1986) also contributed to the framework for this study from the social
worker’s perspective. If the social worker believed in his/her ability to apply what
he/she knew through participation in trainings and education in AAI and worked
with veterans with physical and/or mental health issues, he/she was able to
achieve the desired outcome of providing service to the veteran while
contributing to a better quality of life for the veteran. The social worker learned
through both interactions with the canine and veteran, as well as their practiced
self-efficacy, that the motivation to assist the veteran and the application of being
there with the veteran are interacting.

Potential Contribution of Study to Micro and Macro Social Work Practice

In a population as vulnerable as Veterans with physical and/or mental
health issues, the need for research on complementary or integrative
interventions is paramount. Social workers working with this vulnerable
population need to be provided with tools that have been utilized and
demonstrated to be effective. Animal-assisted interventions and animal-assisted
therapies are not new interventions, but the research in the military and veteran
settings utilizing them is limited at best. These interventions contributed to both
micro and macro social work practice and can be utilized with both civilian and
military populations. On a micro level, individual therapy or intervention with an
individual experiencing physical and/or mental health issues significantly impacted not only the individual receiving the therapy but greatly improved the quality of life of family members, friends, colleagues, and/or peers. On a macro social work level, an improved quality of life of one can have a rippling effect. Previously published literature and research demonstrated the need for more interventions such as AAI and AAT in the field of social work. Integrating and augmenting social work interventions already in practice can and will contribute to our ability to better serve those in need in both the veteran and civilian populations.

Summary

Chapter One of this research project introduced the problem focus of animal-assisted interventions as an effective intervention for social workers servicing veteran populations with physical and/or mental health disabilities. The chosen paradigm for this research project was then defined, its assumptions explained, and the researcher's rationale for choosing the post-positivistic approach given. The literature review for this research project was then described and reviewed through the areas of focus for this research project. The areas of focus that were discussed in this chapter included how disability, whether physical or mental, were defined and described in relation to AAI, how AAI was defined and described, and how understanding and explaining the role of the human-animal bond affected the role of the social worker and the growing population served. Next, the areas of focus discussed in the literature review laid
the groundwork for Bandura’s self-efficacy and social cognitive theory to be the foundation of this researcher’s theoretical orientation. The final area of Chapter One that was discussed included the potential contributions this research study could contribute to both micro and macro social work practice including additional education and training in the fields of disability and AAI, the ability to broaden the populations served through the integration of AAI, and to assist our clients in the reduction of symptoms of physical and/or mental health disabilities to provide a better quality of life.
Initial Engagement of Study Site Gatekeepers and Preparation for Study

Introduction

Chapter two outlined the initial engagement of the study site, engagement strategies for gatekeepers at the research site, and the researcher’s preparation for engagement of the study site. Along with this information, Chapter two introduced diversity, ethical, and political issues that could affect the outcome of this study. Following a discussion of these issues a description of the role that technology played in the engagement of the study site was discussed. This discussion included the initial contact with potential participants through the message center on the web-based job-related site LinkedIn and the subsequent messages and emails exchanged through LinkedIn and the researcher’s university email.

Study Site

The study sites were located within agencies or non-profit organizations providing veteran-based services. Social workers employed within these agencies were recent MSW graduates, worked in the field as MSWs, or were practicing as licensed clinical social workers (LCSWs). The participants of this study also worked in a very specialized field of social work and were certified to practice animal-assisted interventions. The study sites for the participants were
divided between canine-assisted and equine-assisted programs that spanned across the United States and although not all provided the same type of animal-assisted interventions, all did provide services for veterans. All study sites were private or non-profit agencies and relied solely on private donations. Some of the study sites were affiliated with a university-sponsored program that assisted with the education and training of both the social worker and the animal. The participants of this study utilized evidence-based and trauma-informed approaches and augmented those with animal-assisted interventions as a complementary treatment approach. The IRB approved this research project under #SW1873.

The services provided to the veterans at the study site were not limited to treating a single diagnosis and many times treated veterans with a dual diagnosis. Symptoms of posttraumatic stress, anxiety, depression and suicidal thoughts, for example, were treated along with substance abuse. Veterans, who suffered a physical injury such as loss of limb, traumatic brain injury (TBI), or spinal cord injury (SCI), were found to be addicted to prescribed pain medications. The social workers at these study sites treat and provide services for veterans with dual diagnoses and found AAI to be effective for both.

**Engagement Strategies for Gatekeepers at Research Site**

There was an extensive amount of research on how effective animal-assisted interventions were integrated with other more ‘traditional’ evidence-based therapies for veterans experiencing physical and/or mental health
conditions in previously published studies. For the initial development of the research focus, it was necessary to understand how private and non-profit agencies functioned when providing services to veterans. Although non-profits and private agencies do have a chain of command and those that are employed by them do have someone they have to answer to, the participants from the study sites were free to make their own personal decision when asked by the researcher whether they wanted to participate in this study.

There was no need to contact those in supervisory roles to explain, review, or discuss the purpose of the research focus because all participants practiced direct practice with veterans. Feedback, comments, and/or support was received directly from participants prior to conducted interviews. The interview questions were sent to participants via email or LinkedIn message center and participants were given the opportunity to respond to the questions provided for the purpose of gaining more clarity and understanding of the researcher's goals for this study. The initial engagement also introduced previously published research findings as evidence to the benefits (e.g., decrease of PTSD symptoms and better quality of life) to alternative or complementary treatment/interventions (AAI) for veterans experiencing physical and/or mental health conditions (e.g., PTSD and TBI).

The potential benefits to this research focus could be significant on many levels and it was important to discuss this as it related to current and future social workers employed by veteran-based service providers. Veteran-based service
providers could have opportunities to further their education, broaden their knowledge base, and offer interventions to veterans that could hasten the healing process. Private and/or non-profit agencies for the research sites offered a more personal perspective to AAI s and presented opportunities to explore a less bureaucratic approach to veterans’ services.

Integrating AAI s into patient-centered and evidence-based practices can provide an environment by which collaboration between professional, veteran, and animal could become engaged in an integrated environment in such a way that discovery, learning, and continuous improvement were supported and practiced. The integration of AAI s into the ‘exemplary services’ already being provided by social workers working with veterans, aligned with the core values of the NASW and adhered to the highest professional standard. Utilizing and integrating AAI s in the work done with veterans allows social workers to act with a high moral principle defining the core value of integrity.

For those participants who were offered the opportunity to ‘spread the word’ about the benefits of AAI s through their participation in this study, there was a strong commitment to work diligently to serve veterans. These social workers held a strong belief in fulfilling responsibilities to themselves and it was this responsibility as social workers that drove them. Staying veteran-focused helped these social workers to identify, consider, and advance veterans’ interests and helped to define the role of a veteran-focused advocate.
When peers and veterans are treated with dignity and respect, the social workers have then earned the respect of those they have served and those they have worked with. Social workers that strived for excellence have strived for continuous improvement and the highest quality of service for those they serve. They hold themselves accountable for their own actions, admit to mistakes, and work towards rectifying those mistakes through thoughtful and decisive leadership. With the integration of animal-assisted interventions with evidence-based person-centered approaches, the core value of excellence is underscored because the social workers strive for the highest quality of service for the veterans they serve by integrating AAI with other traditional approaches.

Self-Preparation

In preparation for engaging social workers from several different study sites as well as those conducting research that focused on effective alternative and/or complementary social work interventions for veterans experiencing physical and/or mental health issues, engagement strategies were prepared. A necessary step in the process of engagement was to contact potential or agreed upon participants who had conducted their own research or were aware of previously published studies and agree on the most effective form of communication. Some suggested forms of communication to establish initial contact were written (i.e., email and LinkedIn messaging) and/or web-based (i.e., Skype, Fuze, or Zoom). After initial contact had been established, communications continued in agreed upon format with potential social work
participants until participants felt comfortable. Once desired format for interviews was discussed and confirmed, the researcher and social workers scheduled the most convenient time for participants to be interviewed.

During initial contact and subsequent communications via emails, LinkedIn messages or phone calls, the researcher engaged the social workers interested in participating and offered opportunities to discuss current study or ask any questions they may have had. Although web-based communications had been discussed during initial contact, all interested participants had declined to utilize this form of communication. Once those interested in the study had agreed to participate, the researcher sent copies of the informed consent and debriefing statement to all participants, and if requested, a copy of the interview questions. Prior to conducting the interviews, confidentiality, informed consents, and demographic information were collected from study participants. In preparation for gathering data from the study participants, it was necessary to demonstrate self-awareness and acknowledge any biases the researcher may have. It was also important to review notes previously recorded in the journals before, during and after the interviews.

Diversity Issues

Our reactions to others are very individualized and dependent upon our own background, our life experiences, worldview, and how aware we are of diversity. Being aware of our differences was important before, during and after engagement with those who participated in the research. Before gathering data a
necessary component to any research study is the awareness of personal diversity issues as well as those within the study population. Diversity issues the researcher needed to be aware of before gathering data were that each participant had their own worldview and within that worldview, their behaviors, perspectives, and beliefs were shaped. The researcher also needed to explore personal cultural identity and awareness issues for the purpose of acquiring the knowledge and skills that were needed to meet the diversity issues of the social workers that were interviewed. It was not only important that the researcher was aware of the diversity issues of the social workers who worked with the veterans, but an awareness of diversity issues within the veteran and/or military culture was also a necessary component to explore before gathering data.

This research study focused on the information gathered from the interviews conducted with the social workers who worked with veterans experiencing physical and/or mental health conditions. The researcher’s awareness of diversity issues within the military culture was extremely limited and in a post-positivist approach, “manifestations of differences” (p. 268) in those living within and working with military and/or veteran populations was a necessary component (Morris, 2006). The layers of awareness in military culture were significant, and the first was being aware of the negative connotations that mental illness carries within this culture. Those who experience mental illness fear being ostracized and losing status and are hesitant to seek treatment. Another layer of awareness within the military culture was through the concept of
strength, both physical and mental. When mental health conditions exist, there is often a stigma attached to it. The veteran experiencing mental health conditions is often seen as weak and can many times act as a catalyst to discourage the veteran from seeking help. Being aware of the diversity issues in and among the military culture is paramount to providing the best services possible to the veteran who has reached out for help. There was also information noted in the journals and gathered from the interviews conducted with the social workers that contributed to this awareness as well. This research focus was based on the perspective of the social worker, not the veteran population served and so the understanding and perspective of diversity issues within the military culture were founded from the social workers’ perspective.

Ethical Issues

One of the most important ethical issues considered when research is conducted from a post-positivist approach is confidentiality. Throughout the initial and subsequent engagement between researcher and potential participants for the study, confidentiality was at the forefront. The research focus was discussed with each participant, with each being given the opportunity to discuss any ethical concerns or questions they may have had. A thorough layout of the study was drawn up and presented to each of the participants to avoid any issues with lack of transparency. This layout included informed consent procedures, debriefing statements, how interviews were recorded, and demographic characteristics included within interviews, content of interview questions, and possible length of
interviews. With interviews being the main source for gathering data for this study, there was the potential for ethical issues to arise concerning confidentiality of the study participants. During the study, the researcher informed participants that all information that was retrieved through a recorded interview, would be transcribed and coded, with all identifiable information (i.e., name, location, gender) being removed. Transcriptions of recorded interviews along with the narrative and reflective journals were secured in a locked filing cabinet until study was completed. Once all transcriptions from the interviews were completed and integrated into the data analysis section of this research project, they were submitted, reviewed, and approved by Graduate Studies, and all identifiable information was destroyed.

Political Issues

A political issue that could be introduced in this study is where the responsibility lies for the care and treatment of veterans. The intent of this study is not to discount the services provided by the Veterans’ Administration and/or Veterans’ Healthcare Administration (VHC), but to introduce the idea that evidence-based approaches could be utilized alongside AAIs as a complementary treatment to veterans experiencing physical and/or mental health conditions. The political issue that could arise from this study could be one involving both policy and fiscal responsibility for a veteran’s treatment options. It is the opinion of this researcher that this issue belongs to both the public and private sectors and is an issue that could be addressed through policy change and fiscal support.
The integration of AAIs in both public and non-profit organizations providing services to veterans would align with the core values of the VA which supports learning, discovery, and continuous improvement to the services they provide. If policy and fiscal support aligned with these values, collaborative efforts from all political sides could erase the lines of inequity in the care provided to our veterans.

Along these same lines of discussion of possible political issues that could arise from this study would be a loss of services to the veteran based on changes in policies that may already be in place, whether in the VA or in the non-profit and private sector. Maybe what could alleviate this potential loss of services would be for those doubting the efficacy of AAI to fund research supporting AAI’s potential as a complementary treatment for veterans.

The Role of Technology in Engagement

Technology did play a role in the initial phase of engagement and throughout this study. The initial phase of engagement discussed for this study involved searching a web-based job-related site called LinkedIn and contacting members through a keyword search. Potential contacts were found through keywords of ‘MSW, LCSW, Social work, Animal-assisted interventions, and veterans and were sent messages through LinkedIn’s message center. The researcher received responses in a similar manner. After initial contact had been established, emails were exchanged and participants were given the option of continuing communication via LinkedIn or emails. Although given the option to
participate in web-based face-to-face interviews (i.e., Skype, Fuze, and Zoom),
all participants chose the option of researcher conducting and recording
interviews through phone calls.

Summary

Chapter two outlined the initial engagement of the study site, engagement
strategies for gatekeepers at the research site, and the researcher's preparation
for engagement of the study site. Along with this information, Chapter two also
introduced diversity, ethical, and political issues that could affect the outcome of
this study. Following a discussion of these issues the researcher considered
could potentially affect the study site and the outcome of this research, a
description of the role that technology played in the engagement of the study site
was discussed. This discussion included the initial contact with potential
participants through the message center on the web-based job-related site
LinkedIn and the subsequent messages and emails exchanged through LinkedIn
and the researcher's university email.
CHAPTER THREE
IMPLEMENTATION

Methodology

Introduction

Chapter three was the Implementation of the study. This chapter described the participants that were interviewed for this study and included MSWs and LCSWs who provided services for veterans within mental health or veteran-supported agencies or non-profit organizations. A description was then given as to how the participants were selected using a purposive sampling procedure. The qualitative data was gathered through interviews conducted with participants and notes from interviews were recorded and then transcribed. The data gathering instrument was an eighteen-question interview developed by the researcher and included demographic and open-ended questions. The interview questions addressed the type of services the participants provided for the veterans, the type of agency these services were provided through, interventions that had been currently utilized by social workers providing services to veterans with physical and/or mental health conditions, and the participants' perspective on the role of the human-animal bond when utilizing AAI. Data recording involved note-taking by the researcher during the interview process and recording interviews on an audio recorder. The researcher was given verbal permission by participants to audio record the interviews and then interviews were transcribed. Qualitative data analysis was carried out through open, axial, and selective
coding of interviews. Findings of this research project were communicated through scheduled phone conversations with study participants. Termination and follow-up of the study were discussed as well as any ongoing relationship with the study participants. The final section of Chapter three discussed and described how findings of the study were disseminated to social work practice.

Study Participants

MSWs or LCSWs employed by veteran-supported agencies and/or non-profit organizations whose past or current work history was based on their work with veterans with physical and/or mental conditions, was the targeted population from where the sample for this study was drawn. The social workers who participated in this study were employed by veteran-supported agencies or non-profit organizations and were contacted through LinkedIn’s message center, a social media site connecting people with similar careers and/or interests. Keyword searches on LinkedIn used to locate potential participants included ‘social workers, MSWs, LCSWs, veterans, and animal-assisted therapy.’ At the time of the interviews, education and career status of participants were considered and ranged from graduates who had obtained a Master’s in Social Work degree (MSW) to Licensed Clinical Social Workers (LCSW) who had worked in the capacity of providing services such as intakes, assessments, case management, or mental health services for veterans. For the sake of this study, the study sample was drawn from the MSWs and LCSWs who provided these services in several veteran-supported or non-profit agencies throughout the country.
Selection of Participants

A post-positivist approach identified units of analysis for this study. The units of analysis identified in this study were MSWs and LCSWs (individuals) and the veteran-supported or non-profit agencies (organizations). The researcher utilized the applied research design for this study because it had been determined to be the best fit for this study. The applied research design also allowed for the expansion on the utilization of animal-assisted interventions to assist social workers’ interventions with veterans. The participants chosen for the study were selected based on his/her social worker status (i.e., MSWs and LCSWs), work experiences, the specialized knowledge and training in AAI/AAT, and work experiences in this specialized practice. The method of sampling chosen for the selection of study participants was purposive sampling. The researcher chose the purposive sampling method because, according to Morris (2013), study participants selected by the researcher using this method of sampling provided the most complete data about the study focus. Typical case sampling was the type of purposive sampling method chosen because it was used to provide a profile of what is regular or routine (Morris, 2013). Typical case sampling usually cannot give a generalizable statement about the social workers’ experiences with social work interventions, particularly animal-assisted interventions.
The applied research design had two units of analysis (individuals and organizations). The individuals considered were MSW interns, MSWs, and LCSWs and the organizations were the veteran-supported agencies and/or non-profit organizations where the individuals were employed. A sampling was gathered through typical case sampling since those considered for this study were all social workers working with veterans and are associated with the veteran-supported agencies. This study focused on the role and perspective of the MSWs and LCSWs employed with veteran-supported agencies or non-profit organizations, the interviews with those MSWs and LCSWs who volunteered to participate through shared personal experiences, and the valuable contribution this study made to the field of AAI.

The strategy used in this study was typical case sampling because it described a specific type of intervention (animal-assisted interventions) to MSWs and LCSWs who may not have been familiar with this type of intervention. The applied research questions addressed the social workers and the organizations in which they worked on the topic of animal-assisted interventions. This study focused on the MSWs and LCSWs employed with various veteran-supported agencies and non-profit organizations who provided mental health or rehabilitative services to veterans experiencing physical and/or mental health issues through the complementary intervention of AAI. The MSWs and LCSWs interested in participating in the study were advised of the purpose of the study and had given their permission to participate through informed consent. The
participants were informed through informed consent of the strictly voluntary nature of the study and that at any time, they could choose to not answer any questions or withdraw from the study.

Data Gathering

The three different means by which data can be gathered when utilizing a post-positivist approach are all accomplished in a naturalistic setting. Of the three means available, the researcher chose to gather data through interviews. Because participants had been selected from LinkedIn, traveling to the various locations to do on-site interviews with all participants was not possible and phone interviews was found to be more convenient and agreeable to all participants. The inevitable impact of the researcher’s own biases and values was acknowledged. The structured set of interview questions allowed for similar responses by the different study participants to be recorded, while also allowing for ongoing analysis of data to guide questions down a path which had yet to be considered. The questions that were asked of the study participants assisted the researcher in the exploration, reexamination, and redefining of categories that eventually connected the different responses by the different participants. The topics that were addressed and interspersed throughout the interview questions included questions in which the interviewee was asked to share with the researcher the types of services that were provided by social workers in veteran-supported settings or non-profit organizations. Participants were also asked to share their knowledge of AAIs as well as what was understood about the human-
animal bond. Other topics addressed in the interview included what interventions were considered effective for veterans with physical and/or mental health conditions (Please refer to APPENDIX C).

There were three categories of questions that were asked during the interviews: descriptive questions which addressed what the participant had seen as characteristic of a typical day when working with veterans; structured questions which addressed the expansion of a particular topic (i.e., what do you know about animal-assisted interventions); and contrast questions which addressed whether the participant had felt he/she was providing effective interventions and what type of intervention he/she felt would provide effective interventions.

A post-positivist approach for this study allowed for access to previously published literature while integrating data that was gathered through key gatekeepers and interviews of social workers working for various veteran-supported agencies and non-profit organizations. One of the main focuses of this approach was not only in the process of gathering the data, which was gathered from previously published literature, but also what was recorded from the data gathered from the interviews that the researcher conducted with MSWs and LCSWs working with veterans. Recording the interviews in a naturalistic setting allowed for personal experiences of the MSWs and LCSWs to be recorded through a narrative format. The rules of the methodology were maintained and allowed for data to be revisited throughout the study. The gathering of qualitative
data through an inductive exploratory approach provided a better understanding of how the social worker felt about the type of interventions and services that had been provided to the veteran. With the research focus centering around AAI, data gathered through interviews also addressed whether the MSW or LCSW was open to integrating animal-assisted interventions into their practice.

**Phases of Data Collection**

Implementing an interview was done in a similar fashion as any conversation with another person. Breaking an interview down into four different phases helped the interviewee feel more comfortable and assisted him/her to gain a sense of familiarity with the interviewer (the researcher). These four phases were engagement, development of focus, maintaining focus, and termination but what was most important was that the researcher remained cognizant of the participant’s reactions to each of these stages. Even though the same set of questions was asked of each of the participants, the processing of these stages varied from participant to participant. All participants went through all four stages during the interviews and all four types of questions were asked of all participants so that the most complete data was gathered from all participants.

Essential questions addressed the research topic and were asked in subsequent order or interwoven with the other types of questions. Examples of some essential questions that were asked are:

1. What interventions do you currently use with your clients?
2. If looking outside the box for potentially effective interventions for the population you serve, what type of intervention would come to mind?

3. What do you know about animal-assisted interventions and their utilization as an effective intervention when working with veterans with physical and/or mental health conditions?

Another type of question asked in an interview was extra questions, which are like essential questions but worded slightly different. Examples of essential questions about cognitive behavioral therapy (CBT) were not included in the original 18 question interview. Other examples of extra questions that the researcher asked participants included:

How do your clients respond to cognitive behavioral therapy?

If you were presented with three interventions to employ with your clients, but you were not familiar with one of them, how would you determine which intervention you would employ?

If you observed a strong positive connection between your client and his canine companion, what steps would you take to learn more about providing animal-assisted interventions to your client–served population?

A change in focus or as a means to calm things down after asking questions about a sensitive subject can be accomplished by asking throw away questions. Although the researcher did not find the need to change the focus, the researcher did ask some demographic questions as well as some general questions that helped to establish rapport with the participants. The fourth type of
question that was included in the interviews for this study was probing questions. When probing questions were asked, the researcher felt the interviewee was given an opportunity to share more of what he/she knew about a particular area of focus and was allowed to elaborate on personal experiences. Responses by the researcher were simple responses, like, “Tell me more about your experiences.” The researcher felt that all four types of questions were important to include in all interviews but decided that each interview should be conducted as its own unique experience, therefore questions were not asked in the same order with each participant. Scattering these questions throughout rather than lumping them together reduced feelings of being overwhelmed and increased each participants’ level of comfort throughout the interview (Morris, Practiced informed research methods for social workers, 2013). After each interview had been conducted, the researcher asked each participant for feedback, comments, or concerns they had with any of the questions that were asked. The researcher also provided contact information to all participants should any questions or concerns arise about the interview or the study.

**Data Recording**

The options for how data recording of interviews would be achieved for this study were discussed with each participant prior to each interview. The options discussed with each participant were Skype or phone interviews alongside an audio recording of the interview and note-taking. This researcher conducted phone interviews with social workers (MSWs and LCSWs) employed with veteran-
supported agencies or non-profit organizations. Each participant in the study had given their consent for the researcher to audio record the researcher’s questions and participants’ responses as well as permission for note-taking throughout the interviews. These methods of data recording helped establish accurate records of the data collected during the interviews. Audio recording and note-taking of interviews allowed the researcher to identify factors, record reactions and feelings no matter how insignificant or irrelevant they seemed at the time. Reviewing audio recordings and notes taken during the interviews provided the researcher with the tools by which insight rather than evaluation was gained.

The note-taking helped the researcher to keep track of the qualitative data that was being gathered. The first journal was kept as a means for recording the rationale for the research plan, notes on sampling, data collection, and decisions made on the analysis. This journal outlined the post-positivist approach to collecting data and the rationales for theories that showed themselves during the study. The second journal kept track of the data that was collected from the interviews. In this study, interviews were the main source of data collection. The researcher made notes on data collection, and then revisited notes throughout the study. With the data collected from the interviews and noted in the journals, the researcher immersed herself in the information gleaned from the interviews, the notes and the continual self-evaluation.
Data Analysis

The “bottom up” approach is utilized more often in a post-positivist analysis and was the approach for this study. This approach examined the data in a more inductive and open-ended way where the researcher built up from the data when patterns and groupings started to form. The narrative text recorded was the basis for transforming the interviews from a series of words into theoretical statements. The four stages of synthesis which helped in the process of developing a theory were open coding, axial coding, selective coding, and the conditional matrix. These four stages are considered sequential but were revisited by the researcher throughout the interview process. By revisiting them throughout the interview process, the researcher initiated data analysis and enabled the development of the theory for the study.

In open coding, the narrative was reviewed and transcribed, different phrases and responses were reviewed, and figuring out what the interviewee was saying was noted. In other words, through content analysis, the narrative of the research was transcribed and broken down into themes or categories. Narratives that were broken down into themes or categories helped guide the fine tuning for future questioning or observation. Axial coding followed open coding and helped the researcher to start connecting the themes or categories. The purpose of the stage of axial coding was to propose or establish relationships between these themes or categories. When more data was gathered, these proposed relationships were tested.
The third stage was selective coding which was where theory was built. The researcher started to see the big picture, was able to identify the how’s and whys of the relationships between themes and categories, included them in a comprehensive statement, and developed a theoretical statement. The fourth stage of synthesis was the conditional matrix, the stage in which the researcher discovered how the data gathered fit into the big picture. The theoretical statement developed in the selective coding stage was then applied to the context of the human interaction being addressed in the study. Some examples of codes that emerged and illustrated this process were interventions utilized, social work experience, effective interventions, and human-animal connection.

Termination and Follow Up

Termination of a post-positivist study with participants and the research site can be difficult due to the level of intensity of involvement between the research site and the researcher. With this particular study and with participants spread out over seven different locations across the country, the option to meet to initiate termination was impossible. Prior to conducting the interviews, the researcher and participants discussed ideas for termination or disengagement. All participants agreed that the researcher email copies of the completed research project to them after it had been submitted, approved, and accepted by Graduate Studies. Acknowledgement of closure was important to the termination of this post-positivist study from both a formal and informal level.
Because of the varied geographic locations of the participants and study sites, the researcher contacted each participant after completion of the study and sent a personal note of thanks for their participation. The researcher expressed gratitude for their willingness to give of their time and share their perspectives on social work and animal-assisted interventions. The researcher provided participants with a debriefing statement and school email address should they have any questions or concerns that may arise at a later date. The researcher suggested to participants that they follow up in six months to discuss any questions, comments, or concerns they might have about the study.

Communication of Findings and Dissemination Plan

A copy of this research study and its findings was offered to all participants at their selected study sites. The hope was to disseminate copies of the findings to participating social work locations within the study site. Key stakeholders were invited to attend a formal presentation of the findings at which time the researcher will address any questions they may have regarding a follow-up to this study. The researcher also will request information from stakeholders on how new interventions or ideas can be shared with other interested parties from the study site (i.e., meetings and monthly newsletters). Additionally, the findings will be presented at the CSUSB SSW Poster Day in June 2019.

Summary

Chapter three was the Implementation of the study. The areas covered in this chapter included who the participants would be, how the participants were
selected, and the reasons for using this approach to select this study’s participants. This chapter also discussed the means by which the data was gathered and what the phases of data collection were. For this study, the data was gathered from interviews. Chapter three also addressed how the data was recorded and the type of data recording chosen for this study. Another area that was discussed in Chapter three was how the participants would be notified of the study’s findings, how the findings were communicated to the participants, and how the study was terminated. Finally, the plan for the dissemination of the study’s findings was discussed and an ongoing relationship with study participants was reviewed.
CHAPTER FOUR
EVALUATION

Introduction

The focus of Chapter Four was on the data analysis, the data interpretation, and a summary of all of the abovementioned topics for this research project. An explanation was presented of how data was analyzed through content analysis, using open, axial, and selective coding as well as data interpretation which was utilized to explain what was discovered from the data. This study utilized the post-positivist paradigm which required that an explanation on the development of data codes be presented as well as the rationale for decisions of codes that were organized and joined for axial and selective coding. Finally, a review of the data analysis, data interpretation, and a summary were presented.

Data Analysis

Before approaching the first step in the data analysis, demographic information was provided based on information from the seven participants of this study. The demographic information was limited to age, sex, and educational background. There were four males and three females and the average age was 40.8 (SD 15.8). The educational background of the study sample ranged from undergraduate degrees, graduate degrees, PhDs, certifications, and licensures in
social work and other related fields. This information is presented in Table 1 to give the reader a better idea of who the participants were.

Table 1

<table>
<thead>
<tr>
<th>Demographic characteristics of sample (N=7)</th>
<th>N(%)</th>
<th>M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>40.8</td>
<td>15.8</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4 (57%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3 (43%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSW</td>
<td>2 (27%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Sociology</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Psychology</td>
<td>3 (43%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Ed. Psych.</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Undergraduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS Equine Bus.Mgmt.</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA Agriculture</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSW/MSSA</td>
<td>7 (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS Counseling</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD Social Work</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCSW/LMSW</td>
<td>3 (30%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal-assisted</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>1 (15%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The researcher was able to perform a content analysis which helped to identify the following themes (Morris, 2006). Concepts were analyzed, relationships between concepts were established, and subsequent themes and sub-themes were created. Once the main concepts were identified, the researcher then reviewed these concepts and was able to find similar concepts
that were then coded. Based on similar statements that reoccurred throughout the seven interviews, the researcher identified the following eight themes.

1. Benefits of animal-assisted interventions,
2. Types of benefits from animal-assisted interventions
3. Physical, emotional, psychological, and social benefits to AAI
4. Understanding the value of the human-animal connection from a personal perspective
5. Understanding the value of the human-animal connection from professional perspective
6. Shared values of participants
7. Shared experiences of participants
8. Animal-assisted interventions as mutually beneficial interventions

The abovementioned concepts were organized into more abstract concepts and the researcher was then able to identify two major themes through the stage of axial coding by forming statements about the relationship between these themes (Morris, 2006). Once the two themes were identified, the researcher took the remaining concepts, and was able to link the 'benefits of animal-assisted interventions' to the ways in which clients benefitted from AAI. The same was the case for the second theme of 'values of the human-animal connection.' The researcher had also been successful in linking personal and
professional values, as well as the value of reciprocity to the human-animal connection.

Results

As described above, two themes emerged, one of which had five subthemes and the other had three subthemes. These are summarized in Table 2 and are followed with participants' quotes that supported the theme or subtheme.

Table 2: Identification and description of themes

<table>
<thead>
<tr>
<th>Themes &amp; Subthemes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Benefits to Animal-assisted interventions</td>
<td>This theme encompasses the ways in which AAI can help to improve a client's overall well-being from increased levels of oxytocin, increased positive social interactions, decrease in stress and anxiety, and reduced symptoms of depression, PTSD. Benefits to both client and clinician are also recognized.</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td></td>
</tr>
<tr>
<td>Mutual</td>
<td></td>
</tr>
<tr>
<td>2. Values of human-animal connection</td>
<td>This theme emphasizes how the human-animal connection exists because of the value placed on that connection. The values of feeling</td>
</tr>
</tbody>
</table>
The first theme identified from the interviews was the ‘benefits to animal assisted interventions’ and was supported by statements made by all seven participants in this study.

Similar statements were made by participants 1 and 2 regarding physical benefits as indicated by the following,

“Close contact with animals can increase a veteran’s level of physical activity … release oxytocin … slow down the heart … lower blood pressure and respiration” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“Human-animal interaction releases oxytocin in both the animal and the human … decreases in cortisol which fuels stress and anxiety in human subjects” (T. Jones, personal communication, 9/15/2018).
Similar statements were made by all seven participants regarding social benefits as indicated by the following,

“Socially, veteran enjoys the companionship of the animal … can be a segway into a connection with people” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“…increases social interaction, trust and eye contact among other things” (T. Jones, personal communication, 9/15/2018).

“People emotionally numb … no friends … tended to isolate socially … now out in the community laughing, training dogs and forming friendships” (T. Jones, Personal Communication, 9/15/2018).

“The opportunity to touch Bonnie allows them to practice social skills and safe touch with a consenting creature” (M. Mock, personal communication, 6/13/2018).

“With the equine, it’s all about creating a relationship that can literally change people” (A. DeGruccio, personal communication, 6/21/2018).

“Animal-assisted interventions can provide motivation or a reason to go out into the community, interact with others more often” (M. Decker, personal communication, 6/1/2018).

“Seeing individuals who were very socially withdrawn slowly start to brighten and socially engage with animals” (M. Decker, personal communication, 6/1/2018).
“Provides support to the veteran … they become actively engaged … increased positive social interactions” (M. Deck, personal communication, 6/1/2018).

“Animal-assisted therapy provides physical, social and relational opportunities with the horses” (R. Pliskin, personal communication, 6/11/2018).

Statements regarding emotional benefits were made by all participants with the exception of participant 6 as indicated by the following,

“Animals provide an unconditional and nonjudgmental source of affection” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“Emotionally, the veteran develops affection for and receives comfort from the animal” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“Elevated mood from interacting with animals … an environment perceived as non-judgmental, can serve as a buffer against depression” (T. Jones, personal communication, 9/15/2018).

“Client interactions with Bonnie … assess their capacity for empathy, attachment, emotional expression … that may contribute to their treatment plan” (M. Mock, personal communication, 6/13/2018).

“Helping the veteran believe that they are still a strong and an important person can empower them to act as such” (A. DeGruccio, personal communication, 6/21/2018).
“It gives us unconditional love in an environment that is non-judgmental and mutually beneficial” (J. Janatzke, personal communication, 6/5/2018).

“I grew up with horses … so I always knew how it made me feel … always thought how amazing it was how connected they seemed to be to me” (R. Pliskin, personal communication, 6/11/2018).

Similar statements regarding psychological benefits were made by participants 1, 4, 6, and 7 as indicated by the following,

“Psychologically, this type of connection with an animal can create meaning, purpose, and a better quality of life for people” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“Specifically, with horses, veterans can relate to their hypervigilance and the survival skills that are instinctual to horses” (A. DeGruccio, personal communication, 6/21/2018). (Yarborough et al., 2018)

“Canines are utilized as a diagnostic tool … keeps the veteran grounded” (M. Decker, personal communication, 6/1/2018).

“I strongly believe that one of the biggest benefits to AAI or AAT is that the canine has the potential to bring the veteran ‘back to the fight’ which is what every veteran wants” (M. Decker, personal communication, 6/1/2018).
“We haven’t even touched on the actual potential of service dogs to impact veterans’ mental health” (M. Decker, personal communication, 6/1/2018).

“Animal-assisted therapy for veterans … is client-centered … meets client where they are” (R. Pliskin, personal communication, 6/11/2018).

Similar statements regarding mutual benefits were made by participants 1, 4, and 5 as indicated by the following,

“Animal-assisted interventions explicitly leverage specific benefits of human-animal interaction to provide benefits to people” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“The veteran and the equine have contributed to a better quality of life for both” (A. DeGruccio, personal communication, 6/21/2018). (O’Haire & Rodriguez, 2018)

“When there is a connection there is a sense of trust, mutual understanding, and responsibility to each other” (A. DeGruccio, personal communication, 6/21/2018).

“It gives us unconditional love in an environment that is non-judgmental and mutually beneficial” (J. Janatzke, personal communication, 6/5/2018).
The second theme identified from the interviews was the ‘value of the human-animal connection.’ Several statements were made by participants regarding personal value as indicated by the following,

“People find animals easy to connect with” (J. Hoy-Gerlach, personal communication, 8/30/2018).

“Animals listen and do not judge … able to hold sacred space and not share secrets that are told to them” (A. DeGruccio, personal communication, 6/21/2018).

“Animals can provide a sense of safety and positive social interaction that is less threatening or challenging than human-to-human interaction” (J. Janatzke, personal communication, 6/5/2018).

“I’ve always had a connection to animals and found comfort in the presence of and interacting with animals” (J. Janatzke, personal communication, 6/5/2018).

Similar statements were made by participants 2, 5, 6, and 7 regarding professional value as indicated by the following,

“The human-animal bond acts as a catalyst for healing for so many” (T. Jones, personal communication, 9/15/2018).

“Understanding the power of human-animal connection and the many ways we can incorporate it into social work practice” (J. Janatzke, personal communication, 6/5/2018).
The human-animal connection is important to effective social work interventions … ability of the canine to actively engage the human in a social manner” (M. Decker, personal communication, 6/1/2018).

“It can provide a veteran with the missing pieces … moving towards a better quality of life” (R. Pliskin, personal communication, 6/11/2018).

Similar statements were made by participants 4 and 7 regarding the value of reciprocity as indicated by the following,

“Personally, horses saved my life … they depended on me to take care of them … my one reason for living” (A. DeGruccio, personal communication, 6/21/2018).

“Working with animals made their lives meaningful again” (R. Pliskin, personal communication, 6/11/2018).

**Summary**

Chapter Four outlined the process of data analysis and displayed the results. The data analysis section described the steps that were taken to establish open coding, axial coding, and selective coding using examples of statements from the transcripts of the interviews to support the chosen themes. By providing these examples and highlighting the similarities and common phrases used by the interviewees, the researcher organized the most prominent content and used those in the selective coding to identify themes and sub-
themes. The researcher also gave an explanation as to how data was analyzed and how participants were selected.
Plan for Termination and Follow-Up

This qualitative research project explored the effectiveness of animal-assisted interventions from the perspective of social workers who worked with veterans with physical and/or mental health conditions. During semi-structured interviews the researcher asked the participants to openly relate how they felt about working with veterans, utilizing AAI, and their perspective on the human-animal connection. This research project allowed the participants to share their experiences from a purely subjective perspective. By sharing their perspective of AAI and its effectiveness, participants can contribute to the research that supports the utilization of this intervention when working with veterans.

Existing research was supported by data which supports the many physical, social, emotional, and psychological benefits of AAIs (Camp, 2012) although empirical evidence of the benefits is limited (O'Haire & Rodriguez, 2018). Common themes identified by the researcher are in alignment with existing research on AAIs and the human-animal connection. Current studies suggest the need for more research in the area of animal-assisted interventions including research supporting AAIs as a complementary intervention to the traditional evidence-based treatments (O'Haire & Rodriguez, 2018). Existing research has addressed the value of the human-animal connection but when
coupled with its significance to a veteran’s quality of life, research is limited (Owen et al., 2016).

Continued research and discussion of AAlS and their use as an effective intervention for social workers working with veterans with physical and/or mental health impairments is needed based on the minimal number of previously published studies (Hoisington et al., 2018). These results, when included with the growing body of literature, highlighted some of the benefits of integrating AAlS into practice when working with veterans. The findings of this study supported the need for the integration of AAlS in practice with social workers working with veterans.

The interviews conducted for this study did support previous and current research regarding benefits of AAlS as well as the value of the human-animal connection. Recent studies supporting the human-animal connection were considered to physiologically and psychologically impact the function and sense of well-being of the veteran (Handlin et al., 2011). Some of the benefits reported were decreases in pain and sensitivity to pain, improvement in depression symptoms, and lower levels of anxiety (Owen, et al., 2016). The data gathered from this study supported the previously published findings as evidenced by the reporting by participant six in which a decrease in opioid use for pain was observed when AAlS were integrated into a veteran’s treatment plan.
Limitations of Study

There were three major limitations of this study that were addressed for future research. First, the study focused on a small sample size (N=7). Although a small sample size helped the researcher in being able to investigate research problems in an in-depth and comprehensive way, it also limits the opportunities to draw generalizations or make recommendations based on the findings (Anderson, 2010).

The second limitation in this study was found in the sampling method that was chosen. Purposive sampling is highly prone to researcher bias due to the reliance on the researcher’s judgment for creating the sample and the personal interpretation of the data. Participants were selected from one source at the researcher’s discretion where subjectivity played a large role in who was chosen. The question arose as to whether the selected sample was the most appropriate for this study.

The third limitation noted from this study was the use of qualitative data. Although qualitative data with small samples is great because it allows for meaningful, personal interviews, some of these data may be anecdotal. Qualitative data also means that everything that the participants shared with the researcher for this study was taken at face value, which limits the generalizability of the findings. The researcher believes that if more participants had been interviewed, it could have improved the generalizability of the findings.
Implications of Findings for Micro and Macro Practice

The implications of findings of this study could be seen as being beneficial to both micro and macro practice. The social workers that were interviewed for this study provided individual and group therapy and practiced in the fields of canine-assisted interventions (CAI), animal-assisted interventions (AAI), or equine-assisted therapy (EAT) or equine-assisted interventions (EAI). Implications of the findings on a micro level could offer the veteran a safe environment in which to heal while helping the veteran to decrease social isolation and suicidal ideation (Yarborough et al., 2018). This safe environment has the potential to expedite the healing process through the reduction of symptoms and improving mental health outcomes (Hoisington et al., 2018).

Medications are many times prescribed for veterans experiencing physical and/or mental health impairments. Training canines for service provision through animal-assisted interventions could alleviate the cost of medications as well as the abuse of prescribed medications by veterans. Rick Yount, who created the first service dog training program for wounded warriors through the Veterans Administration (VA), had the treatment philosophy of providing “a safe, effective, non-pharmaceutical intervention” for service members who had been experiencing symptoms of PTSD and TBI (Yount et al., 2012). The use of animal-assisted interventions can not only reduce the use of prescribed medications, but can cut the cost to support the veteran. The utilization of canines not only addresses the issue of the cost of medications, but underscores all the benefits...
that were previously discussed. If an animal can assist a veteran to reduce stress and anxiety, can increase oxytocin, can assist in decreasing social isolation, can increase social activity, and help them to feel safe in the world in which they live, there would be less cost being put out for medications that would address those very issues. Owen et al. (2016) suggested that identifying cost-effective and efficient treatments for PTSD and TBI would ‘drive the need’ (p.99) for more research on AAI or canine-assisted therapy (Owen et al., 2016). Another implication of findings of this study could be in identifying the gap in the research on AAIs as a cost-effective intervention for the treatment of PTSD and TBI. With more research in this area of AAI, more veterans may be able to improve their quality of life, reduce their symptoms and lower the number of suicides among our veteran populations. Having a registry that would identify these types of programs would allow for a place where outcomes could be compared and future research could be structured.

**Summary**

Chapter five explained the researcher's plan, justification, and decision for terminating the relationship with the study site and study participants. An explanation of how findings of this study were communicated to study participants was also discussed as well as how these findings could impact further research. A discussion of how the results of this study can add to the growing body of literature on the benefits of integrating AAIs into practice when working with veterans was also be presented. A discussion on the limitations to
this study was provided as well as the implications of the findings of this study to micro and macro practice. A dissemination plan of the findings of this study was also discussed.
APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER
CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
SCHOOL OF SOCIAL WORK
Institutional Review Board Sub-Committee

Researcher(s): Anne Thompson

Proposal Title: Animal-Assisted Interventions: An Effective Social Work Intervention for Veterans

# _SW1873________________

Your proposal has been reviewed by the School of Social Work Sub-Committee of the Institutional Review Board. The decisions and advice of those faculty are given below.

Proposal is:

_X_ approved

_____ to be resubmitted with revisions listed below

_____ to be forwarded to the campus IRB for review

Revisions that must be made before proposal can be approved:

_____ Investigators’ signature missing

_____ missing informed consent _____ debriefing statement

_____ revisions needed in informed consent _____ debriefing

_____ data collection instruments missing

_____ agency approval letter missing

_____ CITI missing

_____ revisions in design needed (specified below)


5/15/2018

Committee Chair Signature Date

Distribution: White-Coordinator; Yellow-Supervisor; Pink-Student
APPENDIX B

INFORMED CONSENT
INFORMED CONSENT

The study in which you are being asked to participate is designed to explore the use of animal-assisted interventions among social workers working with veterans. The study is being conducted by Anne Thompson, an MSW student under the supervision of Dr. James Simon, Assistant Professor, in the School of Social Work, California State University, San Bernardino. The study has been approved by the Institutional Review Board Social Work Sub-Committee, California State University, San Bernardino.

PURPOSE: The purpose of the study is to explore the utilization of animal-assisted interventions among social workers as an effective intervention when working with veterans who have or are experiencing physical and/or mental health conditions.

DESCRIPTION: Study participants will be asked questions from a semi-structured interview with information gathered from demographic and open-ended questions.

PARTICIPATION: Your participation in this study is totally voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences.

CONFIDENTIALITY OR ANONYMITY: Your responses will remain anonymous and data will be reported in group form only.

DURATION: The interview will take approximately 30 minutes to complete.
**RISKS:** There are no foreseeable risks to the participants.

**BENEFITS:** There will not be any direct benefits to the participants.

**CONTACT:** If you have any questions about this study, please feel free to contact Dr. James Simoon at 909-537-7224 (email:James.Simon@csusb.edu).

**RESULTS:** Results of the study can be obtained from the Pfau Library ScholarWorks (http://scholarworks.lib.csusb.edu) at California State University, San Bernardino after December 2019.
This is to certify that I read the above and I am 18 years or older_______________________

Place an X mark here ________________Date___________________

I agree to be tape recorded:______________Yes______________No
APPENDIX C

DATA COLLECTION INSTRUMENT
Interview Questions

1. What gender do you identify with?

2. What is your age?

3. What is your educational background?

4. What services and/or interventions are offered or provided by your organization/agency for Veterans?

5. How would you describe the type of organization/agency you are associated with?

6. What services and/or interventions do you as an MSW/LCSW offer or provide for Veterans?

7. What do you feel are the benefits to animal-assisted interventions?

8. Why is human-animal connection important to effective social work interventions?

9. What role do you feel the human-animal connection plays in animal-assisted interventions?

10. Why do you think there is such a high value placed on the human-animal connection?

11. If you could share an experience, whether from childhood or adulthood that might have influenced your decision to practice social work utilizing AAI, what would that be?

12. What do you feel are the most effective social work interventions in use today for Veterans with physical disabilities?

13. What do you feel are the most effective social work interventions in use today for Veterans with mental health issues?
14. What is one reason why you feel animal-assisted interventions are effective interventions for Veterans?

15. How long have you been employed in the field of social work?

16. How long have you worked with Veterans?

17. How long have you been practicing with animal-assisted interventions?

18. Are there any additional comments you would like to add to this interview that you feel would underscore the practice of AAI with Veterans?
APPENDIX D

DEBRIEFING STATEMENT
DEBRIEFING STATEMENT

This study you have just completed was designed to explore animal-assisted interventions as an effective intervention for social workers to utilize when working with veterans experiencing physical and/or mental health conditions. I am interested in exploring the effectiveness of animal-assisted interventions as perceived by social workers working in either private or non-profit agencies. This is to inform you that no deception is involved in this study.

Thank you for your participation. If you have any questions about the study, please feel free to contact Dr. James Simon at 909-537-7224. If you would like to obtain a copy of the group results of this study, please contact the ScholarWorks database (http://scholarworks.lib.csusb.edu/) after December 2019.
REFERENCES


Schubert, J. (2012 April-June). Dogs and human health/mental health: From the pleasure of their company to the benefits of their assistance. The U.S.
Army Medical Department Journal (Canine-Assisted Therapy in Military Medicine), 21-29.
