

2020

## Motivators that Influence Canine Handlers to Volunteer in Animal Assisted Activities

Gina Marie Fisher  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Gina Fisher

has been found to be complete and satisfactory in all respects,  
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## Review Committee

Dr. Tracy Masiello, Committee Chairperson, Psychology Faculty  
Dr. Charles Diebold, Committee Member, Psychology Faculty  
Dr. Melody Moore, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost  
Sue Subocz, Ph.D.

Walden University  
2020

Abstract

Motivators that Influence Canine Handlers to Volunteer in Animal Assisted Activities

by

Gina Fisher

MS, Hunter College, 2005

BS, Slippery Rock University Georgia State University, 1997

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Teaching Psychology

Walden University

May 2020

## Abstract

Animal-assisted activity (AAA) programs support various mental health or health-related concerns. Little research has studied why individuals are motivated to volunteer in animal-assisted therapy programs; no studies have addressed what motivational factors influence individuals to become an AAA volunteer. This quantitative investigation used functional motivational theory and attachment theory to uncover the motivations of these volunteers. Certain motives were primed with cues to understand key influences among the 186 individuals selected by convenience sampling through a therapy animal organization. Data were collected through an online survey in which the participants answered a series of essay type questions, some of which contained priming words. The results indicated that there were no significant differences in the priming conditions. The findings may be used to design programs to recruit future volunteers to continue supporting these successful programs. The broad outcome for these programs will improve mental and physical health for patients participating in AAA.

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## Dedication

This project is dedicated to the most inspirational canine I have been fortunate to share my life. Thank you Mya for being present, always being by my side, and providing a sense of calm in every aspect of my life. You inspire me to relax more, take deep breaths when I am overwhelmed, and focus on making time together essential. I strive to be as strong, fearless, independent, and supportive as you. The day I started my PhD journey, you were by my side patiently waiting until we could take a break and get a snack. You stayed right next to me every moment as I struggled, cried and got frustrated to make sense of my thoughts while working towards my dream. There is no way I could have done it without you. Your endless support gave me the strength to know that one day I will contribute my knowledge from my dissertation to create a better world for individuals who would benefit from the love of a dog. No matter how many times you seemed annoyed by my hard typing skills, lights glaring in your face at all hours of the night or my awkward reading out loud, you were beside me. You are my one and only true best friend and the thought that I get to share your amazing being with others who need you, is an absolute honor. Thank you for opening my eyes to a greater meaning in this world. I will dedicate my life to ensuring others have this unique opportunity to feel as loved as I do.

## Acknowledgments

My parents are my biggest advocates on supporting my dreams and teaching me how important animals are in our life. I remember uttering the words to my mom that I want to get my PhD but was unsure how to fit school into my life. She helped me find the way. Since day one, she never gave up on me and supported me when at times I would be so worried I could not do it all. My mom brings the most amazing balance to my life with her calm assertive energy and the ability to make me feel I can do anything. To have someone in my life who believes in me no matter how scared I am and is always there to give me strength to keep trying, is a true blessing. My mom never stopped believing in me and was determined to remind me that I was truly capable of accomplishing all my dreams. My Dad has always made me feel that I am important and will change the world. He is by far the most interesting person I have ever met and kind beyond belief. I have learned from him that no matter how bad life can be, you should take time to heal, then make sure to laugh and help others to find humor in life. I wanted to make a positive change in this world and my parents were my true inspiration to be a good person every day. I love my parents and thank them for introducing me to the love of animals so I can share with others how important these beings are in our lives.

I would also like to thank my doctoral committee for providing endless support and important life lessons. To Dr. Tracy Masiello, my committee chair, who has been supportive of my academic journey through all my questions, and concerns while always giving me advice. I appreciate Dr. Tom Diebold and Dr. Melody Moore who guided me in making my dissertation a valuable piece of information to contribute to science. I

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## Chapter 1: Introduction to the Study

Examining motivators that influence canine handlers to volunteer in animal-assisted activities (AAA) provided meaningful information that was used to establish the best recruitment strategies while building the volunteer base. Alternate therapeutic interventions would not exist without these AAA volunteers' involvement (Chandler, 2012). Therefore, understanding what influences their motivation was essential in continuing the success of these highly effective programs for the mental health field (Chandler, 2012). This research was necessary to provide additional knowledge about the fundamental reasons why individuals become AAA volunteers, as these individuals have distinctive characteristics unique to this group of volunteers (Collins, 2014). The probable implications that the results of this study had on researchers, practitioners, and society at large provided clarity on the potential realization of factors that are considered when recruiting future canine handlers. AAA programs are considered to have a strong and positive impact on individuals in the mental health therapy environment (Chandler, 2012). The psychology field benefits from the success of these programs and it is essential to continue offering this alternative method of therapy to offer patients choices to best fit their needs for improvement. Volunteers play a crucial role in AAA. The motivational factors of those who maintain these programs must be better understood so that scholars and practitioners alike may better support the continued evolution of the animal assisted therapy field (Collins, 2014).

This chapter will include general information on the importance of AAA volunteers and the reason for the study. I outline the background, problem statement,

purpose of study, research questions and hypothesis, theoretical framework, nature of study, definitions of terms, assumptions, and introduce the reasoning for the methodology used to investigate this study. The research problem will be emphasized through specific aspects alongside the reasoning behind focusing on the subject matter including the delimitations and limitations. Finally, the significance is addressed and the potential contributions to address the research problem is supported by empirical understanding.

### **Background**

AAA programs were introduced to the mental and physical therapy field as an alternative approach to mental wellness (Chandler, 2012). They involve an animal handler and her or his personal pet in a therapeutic environment. The goal is to enhance a relationship among the socially dynamic group involving the patient, therapist, and dog (Walsh, 2009). Canines may create a connection between therapist and patient, with a non-confrontational animal present, and make it easier for the patient to trust and feel safe to disclose personal information (Chandler, 2012). The goal of AAA programs is to promote positive experiences for the patient and encourage the patient to form trusting relationships and develop better coping skills to assist in the healing process (Chandler, 2012).

Most of the canine handler literature deals with canines trained in police work, including bomb sniffing, search and rescue, or drug detection (Alvarez & Hunt, 2005). These handlers have extensive training in assessing the environment and in canine behavior. The handlers are primarily focused on identifying canine stressors and provide a specific need in the police field (Alvarez et al., 2005). AAA canine handlers, on the

other hand, have certain credentials such as advanced degrees or graduate of a formalized canine training program, but not all are given the same level of training needed to perform in highly distracting environments (Fine, 2015). Comprehending what motivates handlers to participate in AAA programs will help develop standards and guidelines for recruiting future handlers and prolong their participation in the programs while expanding animal training knowledge (Chandler, 2012; Fine, 2015).

Although canines participate in a variety of jobs in the human work force, research on handlers in AAA is underrepresented in the literature (Alvarez et al., 2005; Morrison, 2007; Johnson, 2011). According to Morrison (2007), the research thus far is weak in experimental design. Further investigation of the mechanism of action, settings, and characteristics of handlers is needed so that these impactful programs can continue to be offered (Morrison, 2007). The body of research is slowly growing, and limited empirical contributions have been currently made on the integral role handlers play in AAA program. Handlers are necessary in order to continue to provide these programs as an option in the mental health field. The empirical evidence on the benefits of AAA programs based on the importance of the handler role is limited (Nimer & Lundahl, 2007; Johnson, 2011).

The benefits of AAA have been supported in the limited current literature on the handler's role but quantitative data are needed to emphasize objective measurements and contribute numerical analysis of data for this intervention (Soloman, 2010). According to randomized studies, AAA programs play a fundamental part in patients healing experiences in mental health (Geist, 2011). The contribution of these studies demonstrate

that AAA programs have a positive impact on the therapeutic community including patients, therapist and handlers (Chandler, 2012; Solomon, 2010). If AAA programs were not available, then the therapeutic outcomes might not be as robust (Jalonga, Astorino, & Bombay, 2004). AAA programs are essential and need to be continued to enhance the therapeutic environment (Chandler, 2012; Fine 2015; Jalonga et al. 2004).

The essence of the study is understanding AAA handlers' motivation to participate in extensive canine-assisted training programs and to stay active as volunteers (Collins, 2014). As Collins (2014) said, "without the motivation of the handler, AAA programs would not exist" (p. 3). The motivation of an AAA handler sets the foundation of this important intervention, ultimately speaking to the importance of further investigation of this topic. By understanding what motivates people to participate in AAA, healthcare organizations will know more and thus be able to sustain their continued participation (Collins, 2014). To date, studies have sought to interpret how the patient benefits from the program. In contrast, little is known about how the handler benefits from the program (Collins, 2014; Chandler, 2012; Gammonley et al., 1997).

### **Problem Statement**

The field of AAI includes animal-assisted therapy (AAT) and AAA programs. AAT programs are goal-directed and seek a specific outcome to increase participants' physical, cognitive, or emotional stability (Gammonley et al., 1997; Takashima, 2014). AAA programs are relatively new in the alternative therapy field and treat a variety of mental health or health-related concerns, for example, anxiety, posttraumatic stress disorder, and depression, or blood pressure, heart rate, and stress levels (Chandler, 2012;



Gammonley et al., 1997). AAA programs also include informal recreational programs to help patients with special needs. Here, a pet animal is used in the therapeutic environment to stimulate the normalization of constructive social interactions and conversations (O'Hare, 2013). An animal that is present in a casual visitation program may stimulate an individual's sense of comfort so that she or he can engage in social situations, develop appropriate coping skills, and increase self-confidence, self-esteem, and self-awareness (Chandler, 2012; O'Hare, 2013).

According to randomized experiments, participating in AAA uses the presence of an animal to encourage companionship and compassion with the presence of an animal, which has led to improved self-esteem and the development of social skills while reducing anxiety and stress (Baker & Dawson, 1998; Bruneau & Johnson, 2011; Tsai, Friedmann, & Thomas, 2010). AAA programs encourage patients to re-engage with others by introducing a nonthreatening animal that offers unconditional support, acceptance, and stability (Takashima, 2014). The therapeutic environment is enriched with a human and animal team that stimulates emotional and mental healing (Chandler, 2012; Tsai et al., 2010).

The significance of the handler-animal relationship in AAA programs has been posited as essential to ensure safe and comfortable interactions while promoting trust and positive experiences for all involved including therapist, patient and handler (Chandler, 2012). AAA programs are available because the handler volunteers personal time with his or her animal to attend activities such as read with me programs to enhance therapeutic environments by encouraging children to feel comfortable reading out loud to

an animal. The handler is instrumental in the success of effective AAA alternative therapy programs (Chandler, 2012, Cregan, Bauer, Thomley, & Borg., 2015; Gammonley et al., 1997) and AAA programs would not exist without the handler and dog team (Chandler, 2012; Fine 2015). The AAA volunteer experience is unique from many other volunteer activities, because it often places the handler in emotionally uncomfortable or stressful situations, for example, community rescues after a catastrophe, disaster relief, and bereavement (Walsh, 2009).

Collins (2014) presented the first and only study on the motivation for volunteering in AAT programs. Although Collins (2014) conducted a mixed methods investigation on volunteer handler motivation, there is minimal research examining why these handlers volunteer their time and energy to train and participate in AAA (Collins, 2014; Geist, 2011). Since this study was published, I have been unable to find any further studies that investigate volunteer handler motivation, even though more research was suggested in the foundational study of this topic (Collins, 2014; Geist, 2011; Kruger & Serpell, 2010). Given that handlers willingly subject themselves to emotionally distressing situations while donating personal time and resources, and that little is known regarding their reasons for doing so, this study provided current information to the existing AAA literature by investigating motivates canine handlers to engage in AAA programs.

Collins (2004) examined motivational factors in AAT volunteers by employing a mixed method study. Quantitative data included a demographic questionnaire and the Volunteer Motivation Index (VMI; Esmond & Dunlop, 2004). Results revealed that the

value function was the main motivation reported in the VFI (Collins, 2014). For the qualitative data, Collins used a semistructured interview, from which five themes developed. The narrative themes included (a) being very proud to work with an extraordinary dog, (b) feeling good about being a part of a trusting team with their dog, (c) having a sense of responsibility and commitment to their dog, (d) ability to provide positive experiences to the community, and (e) experience the rewards connected with observing their dog interact with individuals in a positive manner (Collins, 2014).

Although the idea of volunteer motivation was investigated by Collins (2014), this mixed method study did not allow for causal conclusions between the value function and one of the five themes.

The present study is the first of its kind to determine causal relationships between variables. Specifically, the study adds empirical knowledge about the motivational influences of an individual to become an AAA volunteer by priming certain motives to understand key influences. The motives used to prime the participants was based on two motivators from Collin's (2014) mixed method study: strong values by giving back to the community and a feeling of pride working with one's dog. Alternate therapeutic interventions would not exist without the AAA volunteers' involvement. Therefore, understanding what influences their motivation is important to continue the accomplishments of these highly effective programs for the mental health field (Chandler, 2012; Collins, 2014).

According to Burns, Reid, Toncar, Anderson, and Wells (2008), volunteering is described as donating long periods of time and effort to helping others while being driven

by personal meaning or a tie to a cause. Volunteering has been related to different motivations of either giving back to the community, having a positive effect in others' lives, developing new abilities, developing experiences and knowledge, or providing a greater perspective and self-awareness (Clary et al., 1998). Many organizations depend on volunteers to be successful in their goal to benefit society by serving clients and increasing revenue while using free help (Burns et al., 2008). Thus, there is a need to develop knowledge on the reasons for individuals' motives to offer their unpaid services for the field to inform organizations about ways to attract and maintain volunteers to meet increasing organizational demands at minimal cost (Clary et al., 1998).

Examining the motivations of AAA volunteers, more specifically, expanded knowledge about the reasons for their participation. A study of this nature shed light on what motivates volunteers to stay active while assisting in the therapy environment, as little is known about this group of volunteers who engage in characteristically different volunteering activities than other volunteers. The motivating factors of AAA teams are vital to investigate so that professionals are better able to identify potential volunteers, consolidate the recruitment process, and promote sustainability while supporting healthcare organizations (Collins, 2014; Clary, Snyder & Ridge, 1992; Fine, 2015; Kruger et al., 2010). Research suggests the individual's motivation is a great method to forecast the amount of time that will be dedicated to the activity and the probability of sustaining volunteer opportunities over the long term (Collins, 2014; Geiser, Okun, & Grano, 2014). The field needs a deeper understanding in the form of empirical evidence to better recognize handlers' motivations to take part in AAA programs, as that

information can be used to help support the recruitment and sustainability of volunteers in AAA programs (Collins, 2014; Clary et al., 1992).

The research was necessary to fill the gap in knowledge about the fundamental reasons why individuals become AAA volunteers, as these individuals have distinctive characteristics unique to this group of individuals (Collins, 2014). These characteristics include the following: (a) their position should be accepted as a profession and (b) they belong to an elite group due to the extensive education necessary to become a volunteer and the level of commitment to be accepted as a trained AAA team (Collins, 2014). This study sought to provide empirical data on what motivates AAA volunteers (Collins, 2014; Nimer & Lundahl, 2007). To date, there is little empirical information on the importance of volunteers in AAA intervention programs to benefit mental health programs (Collins, 2014, Clary et al., 1998; Nimer et al., 2007).

### **Purpose of the Study**

Limited studies have contributed to the developing knowledge on what motivational factors influence an individual to volunteer in AAA programs and no studies have addressed what motivational factors influence an individual to become an AAA volunteer. Using a randomized experiment, the purpose of the current study was to better understand whether volunteers are motivated by the values associated with donating their time by (a) giving back to the community or (b) a feeling of pride working with one's dog. By priming motives, the conclusions of this study could shed light on these variables that increase a volunteer's perceived willingness to volunteer. Different priming conditions were the key factor in determining a volunteer's motivation (Haefliger & Hug,

2009; Maio, Pakizeh, Cheung, & Rees, 2009). Through the use of priming, these variables were considered alongside their relationship to a volunteer's perceived willingness to volunteer. Priming these variables of interest ultimately increases the understanding about the particular motive, leading to empirical information that influences a person's awareness of their volunteerism if the variable is a motive. This information allowed for an empirical understanding of which values are important in meeting a personal drive to participate and remain in the program (Collins, 2014).

### **Research Questions and Hypotheses**

Research Question 1: Does priming the importance of donating time by giving back to the community increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities?

*HA1*: Priming the importance of donating time by giving back to the community increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

*H01*: There is no effect of priming the importance of donating time by giving back to the community on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

Research Question 2: Does priming the importance of a feeling of pride working with one's dog increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities?

*HA2:* Priming the importance of a feeling of pride working with one's dog increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

*H02:* There is no effect of priming the importance of a feeling of pride working with one's dog on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

### **Theoretical Framework**

Theoretical information needed to support the present study was derived from volunteer, motivation, and human-animal bond research. The theoretical framework was functional motivational theory, which was used to categorize and explain why individuals participate as a volunteer. Functional motivational theory is an approach that determines the six most common reasons why individuals volunteer: protective motives, values, career aspirations, social standing, understanding, and personal enhancement (Clary et al., 2002). According to Collins' (2014) mixed method study on AAT motives and rewards, values was the highest ranked motivator for AAT volunteers, which is consistent with other volunteer studies on motivators. The VMI defines values as the deep desire and firm beliefs of a volunteer to find helping others to be highly important and then acting on those beliefs (Collins, 2014). Value was also defined for the participants in

Collins (2014) study as “the condition where a volunteer is motivated by the view of an opportunity to act on their strong beliefs that it is significant for them to assist” (p. 8). Value is a means to demonstrate altruistic and humanitarian values (Collins, 2014). AAT volunteers are categorized in the altruistic-egotistic duality interpretation of volunteerism. The value function has been identified in other studies that volunteer motivation is driven by altruism (Collins, 2014). Altruism represents one’s concern to enhance the welfare of others, strong desire to help people and follow personal values (Collins, 2014). Collins (2014) qualitative data was collected through a semistructured interview to provide insight into animal-assisted therapy (AAT), from which emerged five themes, encompassing strong values and sense of responsibility to help people. Collins (2014) found AAT volunteers to have increased self-importance and consider their volunteer position as a profession because their role had significant positive effects in therapy programs. These qualities have been associated with the values and attitude theories that emphasize a strong connection between volunteering and the individual’s principle of civic participation and responsibility felt to contribute charitable behavior (Andronic, 2014).

According to Collins (2014), the participants mentioned that team effort with their dog was another important factor for being an AAT volunteer. [Flow: Transition phrase or sentence needed to show the relationship between the previous and the following sentence.] Attachment theory examines relationships and is used to conceptualize child and parent relationships (Sable, 2013). The child is a needy and dependent individual and the parent is the stronger and wiser one who needs to become the primary caregiver



(Sable, 2013). Attachment theory as part of a framework can be used to describe a plethora of different human bonds, including the human-pet relationship (Sable, 2013). From the perspective of attachment theory, the human-animal bond is similar to other relationships due to the need for a sense of comfort and connection provided throughout all life stages (Sable, 2013). Authors have proposed that companion animals have significant positive impacts on psychological and physical well-being while creating a nurturing environment to regulate emotions and deal more appropriately with stressful conditions while relating better to other people (Sable, 2013). The human-animal relationship has significant benefits in providing comfort in an unpredictable environment. Empirical evidence supports that companion animals have positive outcomes on psychological and physical well-being which would ensure safety when a companion animal is present (Sable, 2013). This bond promotes trust and safety while encouraging a sense of being part of a team due to a nurturing relationship (Sable, 2013). Further discussion on the theoretical groundwork will be presented in Chapter 2.

### **Nature of the Study**

Collins (2014) discovered five emerging themes from the participants' interviews.

The narrative themes included

- being very proud to work with an extraordinary dog,
- feeling good about being a part of a trusting team with their dog,
- having a sense of responsibility and commitment to their dog,
- being able to give back to the community, and

- experiencing the incentives associated with observing their dog interact with others in a positive manner (Collins, 2014).

For the current study, two themes were chosen to use as priming variables based on the common language of AAT programs (Collins, 2014). Collins (2014) examined the content analysis to find AAT programs combine human generosity to bring enjoyment to others in need (giving back to community) and love of an animal (pride working with one's dog). In Collins (2014) experimental study, canine AAA volunteers were randomly assigned to one of two priming conditions. [Say what the priming conditions were?] The hypotheses were tested by comparing each priming condition with the control condition. The rationale for using a randomized experimental design was to draw valid inferences about cause and effect in order to answer the research questions with an objective statement and rationale rather than a blind assertion. The data were analyzed by using computational techniques that would provide quantifiable answers to the hypothesized questions and I conducted planned contrasts to address the hypotheses.

The methodological choices used in this study were made to support the integrity of the project. Priming is a procedure that may help to shed light on the variables that increase a volunteer's perceived willingness to volunteer by priming motives. Different priming conditions may be the key factor in determining a volunteer's motivation (Haefliger et al., 2009; Maio et al., 2009). Through the use of priming, these variables were considered alongside their relationship to a volunteer's perceived willingness to volunteer. Priming these variables of interest may ultimately increase the accessibility of

information about the motive, leading to accessible information influencing a person's perception of their volunteerism if the variable is a motive.

Each participant was randomly assigned to one of three conditions. There were five questions to answer for Conditions 1 and 2, and three questions for Condition 3 (control). The questions entailed one of the two independent variables in Condition 1 and 2. All conditions included two questions related to volunteering and the Pet Partners organization asking to answer these in 25 words. The first question for each condition was: "How has your volunteering experience been as a Pet Partners team?" The second question for each condition was: "What is your favorite animal assisted activity to attend as a Pet Partners team?" The third question for priming in Condition 1 was: "How do you feel about the importance of donating your time by giving back to the community while participating as an AAA volunteer?" The question for priming in Condition 2 was: "How do you feel about the importance of a feeling of pride when working with one's dog while participating as an AAA volunteer?" Condition 3 had no third priming question to answer.

In Conditions 1 and 2, the dependent variable was introduced after the first three questions were answered in 25 words. In Condition 3, the dependent variable was introduced after the first two questions were answered in 25 words. The dependent variable question to answer was: "What are the number of hours you expect to volunteer in the next month as an AAA canine handler volunteer?"

There was a two-part manipulation check question after the dependent variable question for Condition 1 and 2. The first question after the dependent variable in

Condition 1 was: “To what extent when answering the survey questions did you think about donating your time by giving back to the community as a canine AAA volunteer?” The participant was asked to answer this question using a scale from 1 (*not at all*) to 7 (*very much*). The second question after the dependent variable in Condition 2 was: “To what extent when answering the survey questions did you think about a feeling of pride while working with one’s dog as a canine AAA volunteer?” The participant was asked to answer this question using a scale from 1 (*not at all*) to 7 (*very much*). This design is a way to reduce a possible demand characteristic problem.

Each priming variable could be considered a separate independent variable. The dependent variable is the indicated number of hours of volunteering in AAA programs as a canine handler volunteer. This approach was expected to yield experimental evidence to address the need for better understanding of AAA handler motivation on the amount of volunteering.

### **Definitions of Terms**

*Animal-assisted activities.* These programs include informal recreational programs to assist individuals with special needs that use a pet animal in the therapeutic environment to enhance the normalization of constructive social interactions and conversations (O’Hare, 2013).

*Animal-assisted interventions:* This program assists specific populations to benefit in having positive experiences with an animal present to encourage therapeutic gains while positively impacting the health and well-being of humans (Chandler, 2012).

*Animal-assisted therapy:* These programs focus on being goal-directed and achieving a specific outcome to increase participants' physical, cognitive, or emotional stability (Gammonley, Howie, Kirwan, Zapf, Frye, Freeman et al., 1997; Takashima, 2014).

*Human–animal bond:* A meaningful bond that promotes trust and safety while encouraging a sense of being part of a team due to a nurturing relationship (Sable, 2013). The connection between a human and their companion animal has significant benefits in feeling comfortable in an unpredictable environment (Sable, 2013).

*Motivation:* the internal willingness that encourages a person to be stimulated to achieve a goal and participate in a volunteer activity (Clary, Snyder, & Stukas, 1998).

*Value:* The VMI defines values as the deep desire and firm beliefs of a volunteer to find helping others to be highly important and then acting on those beliefs (Collins, 2014). Value was defined for the participants in Collins (2014) study as “the condition where a volunteer is motivated by the view of an opportunity to act on their strong beliefs that it is significant for them to assist” (p. 8). Value is a means to express altruistic and humanitarian values (Collins, 2014).

*Volunteering:* an activity where a person voluntarily donates their time and efforts without compensation and is not required or obligated (Andronic, 2014).

### **Assumptions**

Using a randomized experiment, the purpose of this study was to comprehend whether volunteers are motivated by the values associated with donating time by giving back to the community, or motivated by a feeling of pride that working with one's dog.

The idea that there are certain common motivational influences that drive individuals to volunteer was originally evaluated by Collins (2014) who demonstrated these particular individuals are not well defined and needs to be further investigated. Overall, assumptions for volunteering in general has been recognized as individuals being interested in satisfying imperative personal goals, different people may do similar activities for distinctive reason, or some may be trying to satisfy more than one motive with a goal-directed activity (Clary et al., 1998). The ability to provide the appropriate experience to fulfill volunteer's important motives and assist in satisfying the need is important to understand to sustain a successful volunteer program (Clary et al., 1998). AAI programs commonly employ volunteers who possess altruistic-egoistic duality (Collins, 2014). AAA and AAT fall under the same umbrella in AAI programs. Therefore, it is assumed their volunteer motivation is similar. Collins (2014) found certain motivational factors occur in AAT volunteers and these motives were used to examine AAA volunteer motivations. It is assumed the two different volunteer groups would share similar drives due to these programs being related. Another assumption of the study is that participants are providing honest answers.

### **Scope and Delimitations**

This study addressed specific aspects on what motivates canine handlers to engage in AAA programs. The internal validity was challenged but the study will employ a randomized experiment including a control group to minimize risk in validity. The participants were given the option to fill out a survey at their leisure and when doing so they may be interrupted in their environment which can change the initial results.

This study is delimited to information from volunteers who belong to a single, professional therapy, animal-assisted intervention (AAI) program. The results can be applied only to this particular population. In addition, the individuals who participate in the survey could be different than the general population of this group. Only a subset of the population was sampled and the data gathered may not have been a true representation of all volunteers from this organization but instead only from those who chose to participate. Volunteer bias was a challenge for this study and represent an external validity issue.

### **Limitations**

This study was limited by using only one organization involved in AAA programs and generalized to this specific group. This may be an improper representation of the target population and may hinder the desired aims and objectives of this study. Additional environmental factors may include prior negative volunteer experiences or personal reasons such as stressful events may cause participants to answer a certain way. There may also be self-reported information obtained from the survey that is inaccurate or incomplete therefore information is lost.

Biases that may influence study outcomes and compromise the validity of AAA research are publication of positive results and the impact of investigator expectancies. All the published literature I reviewed for background information on this topic contributed only the positive effects AAA programs have on people. The questions designed for the study were created to not reflect the survey outcome as a survey can lead to survey response bias. Participants may not write about what they are instructed to write

about therefore I will avoid survey bias by creating questions that will be clear, accurate, and straight forward. Therefore, bias would be reduced by avoiding leading questions. How other potential issues will be addressed is through a quantitative study using priming, controls for research expectations, and report of all outcome measures.

### **Significance**

This study is expected to make several contributions while advancing knowledge in the discipline and filling a research gap in the literature. (a) This is the first study to identify causal relationships between variables and will add empirical knowledge about the motivational factors that may encourage an individual to become an AAA volunteer. Existing literature focused on patient experiences who participate in AAA programs and how these programs have benefitted their mental and physical health (Collins, 2014). These successful alternative therapeutic interventions exist due to specific volunteers who are willing to donate time with their canine to support such highly effective programs (Collins, 2014). Therefore, understanding their motivation to be involved is imperative to continue the success of these programs.

The prospective contributions of the study will improve practice and/or procedure by identifying the reasons for participation and be useful in future recruitment strategies. These reasons can be incorporated into the marketing strategy when recruiting potential future volunteers. These motivational reasons in the job description can be used while connecting them to the organization's mission. understanding what motivates them will assist in designing the appropriate guidelines and requirements to become an AAA volunteer. These volunteers will require specific training and will need to understand the



process thoroughly to continue the success of these programs. Finding suitable quality volunteers is essential in order to find the individuals who meet the specific criteria found from this study. This study provided the certain motivational factors associated with number of hours donating. Their commitment is key as well as the quality of people accepted to volunteer. Appropriate questionnaires for potential volunteers is needed to select those who demonstrate the interest needed to sustain longevity in the program. The information gathered from this study has potential reasons why they volunteer and linked to how many hours they donate to show a causal relationship. This study will place value and contribute empirical knowledge to increase credibility of the AAA practice and programs while providing suggestions on potential volunteer motivation. The implications for positive social change that are consistent with and bounded by the range of the study are considering the results for recruiting future canine handlers. Due to the positive impact AAA programs have on the mental health therapy environment, it is imperative to streamline the recruitment process and provide insight to better support their continued participation and volunteer effort (Collins, 2014).

### **Summary**

This chapter provided a general description of the importance of researching the motivators in AAA volunteers as they are instrumental in the success of effective AAA programs. Due to little research contributed to understanding why individuals are motivated to volunteer in animal-assisted therapy programs, it is imperative to better understand their motivation. The quantitative investigation was supported by the theoretical framework and the empirical support for the research questions. Certain

motives will be primed to understand key influences. The findings will help recruit future volunteers to continue supporting these successful programs. The broad outcome for these programs will improve mental and physical health for patients participating in AAA. The study will be the first of its kind to determine causal relationships between variables and provide a significant impact while contributing to the respective field.

Chapter 2 provides a foundational understanding of AAA programs while supporting the importance of examining volunteer motivation in the field. A thorough review of previous research is discussed along with results and interpretations. This chapter will summarize what is previously known, major findings, and relevant examples of research similar to the present study. Chapter 3 introduces the research design in sufficient detail to provide a clear understanding of how the study was conducted. Future researchers will be able to follow the procedures to be able to replicate the study. Chapter 4 presents the study results and the findings are generally organized based on the research questions. Tables are provided to support the findings and to summarize the information. Further detailed information is given in an appendix. Chapter 5, the final chapter, includes the implications of the study findings and discusses implications of practice and recommendations for further research. The final chapter summarizes the importance of the findings while integrating the theory employed in chapter 1 and body of knowledge previously discussed in chapter 2. The chapter ends with the implications of positive social change and summarizing the importance of the study findings.

## Chapter 2: Literature Review

AAI programs offer a positively enriched therapeutic environment involving a human and animal team with the goal to help individuals cope with health problems and stimulate emotional and mental healing (Chandler, 2017; Tsai et al., 2010). This alternative method has become a valuable approach to assisting individuals needing therapeutic guidance and facilitating human client recovery while differing from the traditional methods (Chandler, 2017). The psychosocial and medical arenas may have benefitted from introducing the importance of animals in the environment while encouraging healthy relationships through the human-animal bond (Chandler, 2017; Tsai et al., 2010). Walsh (2009) describes the connection between companion animals and physical well-being in humans as one of the greatest nurturing bonds between two beings. This bond is developed in strong relationships between human and animal after shared experiences of positive emotional connections. Therefore, the company of an animal in a therapeutic environment may influence the positive well-being in emotional, mental, physical, social, and spiritual health and allow an individual to become functionally whole (Chandler, Portrie-Bethke, Minton, Fernando, & O'Callaghan, 2010; Friedmann & Son, 2009; Walsh, 2009).

The primary focus of therapy is to assist individuals in achieving optimal functioning capabilities and viewing themselves as a competent individual who has the ability to thrive in full potential of oneself (Macdonald, 2007; Chandler et al., 2010; Pichot & Coulter, 2007). Research has shown people live to fullest human capacity when they feel good with themselves, others, and their environment (Fine, 2010; Chandler,

2017). Participating in AAI programs may bridge the gap to living a healthier lifestyle because the individual experiences a connection with another being offering unconditional support (Fine, 2010; Chandler et al., 2010; Chandler, 2017). The calming effect and sense of safety provided by the therapy animal may initiate the healing process (Fine, 2010; Chandler et al., 2010; Chandler, 2017).

Therapy animals may enrich lives by creating a comfortable setting with a sense of serenity, nonjudgmental, and by positively influencing humans to feel safe while engaging with non-confrontational companions (Nimer et al., 2007; Chandler, 2017; O'Hare, 2013). Introducing animals into therapeutic environments has shown an increase in patients feeling responsible, respected and feeling a connection to another being while reducing anxiety and loneliness indicated in a study with 230 participants in a pre- and posttreatment crossover study design using a mixed-models repeated-measure analysis (Baker & Dawson, 1998; Bruneau et al., 2011; LeRoux & Kemp, 2009; Bernabei et al., 2013). Le Roux (2009) conducted a study on the effect of a companion dog on the depression and anxiety levels of residents in a long-term care facility. Sixteen residents were randomly assigned to a control group and an AAA group to participate in the study to determine if the effects of engaging with a companion dog would increase the mental state in a positive way. Depression levels decreased resulting in a positive difference to the physiological health of humans. In another study, Bernabei et al., (2013) investigated how pet therapy on cognitive function, mood, and perceived quality of life would affect mental illness in elderly inpatients. The study consisted of 21 elderly inpatients were randomly assigned to either the control or pet group, along with a self-perceived quality

of life survey given pre and post pet therapy intervention. Participants in the pet group showed improvement in depressive and cognitive functions, although most participants from both the treatment and control group described an improvement to their perceived quality of life. Given the impact on the variables of interest in this investigation, this study contributed to the empirical understanding of some of the benefits of pet therapy.

Promoting human well-being through animal interactions needs to have more empirical support to continue advocating the importance of AAA (Chandler, 2017; Fine, 2010). These programs would not be possible without the endless support of canine handlers volunteering personal time to assist in providing an alternative therapeutic environment unlike the standard therapies offered having predictable outcomes (Fine, 2010). AAA allows the patient/client to interact at their individual pace as healing is quite complex so this method promotes positive well-being to occur more naturally. The importance of offering AAA programs to the general population has increased in popularity so an in-depth comprehensive look on how these programs should continue is imperative to the mental health field (Chandler, 2017; Fine, 2010).

The purpose of the current study was to comprehend whether volunteers are motivated by the values associated with giving back to the community, or motivated by a feeling of pride that working with one's dog brings. In this chapter, the literature search strategy is presented to explain how past literature was identified and reviewed. Next, the theoretical framework is presented, encompassing the functional motivational theory that introduces the basis of volunteer motivation. Attachment theory is described as a supplemental theory, providing a basis for exploration of the connection between the

human-animal bond and how it relates to AAI programs. A general overview of AAA in mental health programs is discussed, and the benefits of animal assisted programs are presented. The role of canine handlers, volunteer motivation, and the long-term impact of canine handler involvement are explained. Finally, this chapter highlights the need for the current research in understanding an alternative therapeutic intervention.

### **Literature Search Strategy**

PsycINFO, PsycARTICLES, Google Scholar, and SocINDEX were searched for relevant literature. The reference lists of textbooks focused on AAI programs were also used to identify authors in the field and their contributions. All articles included in the literature review were peer-reviewed. Key terms used in the search were *alternative medicine, animal assisted activities or therapy, canine handler, dog-human interaction, intervention, mental health, volunteer motivation, and registered dogs*. The first key terms used to search for articles were the primary words used in the research question. Any combination of these words were used to find additional resources. Reviewing the key words of existing literature aided in the realization of new terminology used to widen the search for more literature related to the research question. When reviewing articles on one of these topics, I noted other keywords that could be used to broaden my literature search. The search was not limited to the following 10 years: 2007-2017. Some studies prior to 2007 were used to support the theoretical framework. Studies that took place before this timeframe were also explored dating back to 1969 to ensure that I had a solid understanding of the empirical foundation on which the field of AAA is set.

## **Theoretical Framework**

The theoretical analysis described in the coming pages will outline two major influences in the current study: functional motivational theory and attachment theory. The application of functional motivational theory allows for a conceptual understanding of volunteer motivation in terms of personal and social motives. Along with this motivational theory, a secondary theory will be discussed and applied to understanding the human-animal bond. Attachment theory will support the emotional bond between humans and animals similar to the connection among handler and canine (Bowlby, 1969; Knapp, Sandberg, Novak, & Larson, 2015; Sable, 2013). Combining volunteer and attachment theories will support the theoretical framework for this project and introduce the central concepts necessary to explore this study.

### **Functional Motivation Theory**

Functional motivation theory was derived from action theory, analytic philosophy of history, and the psychoanalytic theory to further understand the purpose of a person's actions or primary motives for behavior (Clary, Snyder, & Ridge, 1992). Several authors have contributed to understanding volunteer motivation through functional theories (Clary et al., 1992; Omoto & Snyder, 1993; Omoto & Snyder 1995; Clary et al., 1998). Personal and social functions are in high regards according to the individual needing to fulfill psychological functions through volunteering (Clary et al., 1998). Every individual will volunteer for varying degrees of reasons depending on the personal psychological need to satisfy a function (Clary et al., 1992; Clary et al., 1998). That need may vary within each individual including ten unique categories including values, community,

career, protective, understanding, enhancement, reciprocity, recognition, reactivity and social (Clary et al., 1992). The two motives I selected for this study to further investigate will be values associated with giving back to the community, or motivated by a feeling of pride that working with one's dog. A feeling of pride while working with one's dog would be considered a reflection of the enhancement need (Collins, 2014). These two motivators were highly ranked and values was the number one motivator for AAT volunteers in Collins study (2014).

Each category has a distinctive definition but all containing a function to satisfy a need through volunteering personal time to a cause. Several studies have contributed to why an individual volunteers based upon a need to meet a particular psychological function derived from one of six functional motivational categories (Clary et al., 1998). This study will apply the functional motivational approach to answer the research question on the motivations that influence people to become volunteers and sustain longevity for an extended period. The functional approach to volunteerism is a motivational perspective concerning attitude and persuasion (Clary et al., 1998). This approach aims to clarify the rationale of decision making of a volunteer and the explanation on their respective motivational drives (Omoto et al, 1993). The functional motivation theory explains how there are similar acts of volunteerism but the reasons may vary with the different fundamental motives (Clary et al., 1998). These motives may include several different characteristics of the psychological functions. The theory infers that individuals will continue their volunteer role if the activity stimulates their initial reasons to volunteer and fulfills the individuals' motivational interests (Clary & Snyder,



1999). The organizations with volunteers have the opportunity to improve their recruitment and retainment strategies if they better understand the volunteer's psychological functions (Clary et al., 1999). The applied suggestions of volunteers have increased the knowledge on the functional motivation theory therefore providing researchers more context for future studies on volunteer motivation (Clary et al., 1999).

With the intentions to satisfy the needs of volunteers it is essential to find the origin of motivation in order to maintain the need to fulfill personal goals and retain the programs (Haug & Gaskins, 2012). When there is a better understanding of the individual preference in volunteering within a certain organization or being involved in a particular activity then the organization will be more successful in retaining the partnership (Tsai & Cheng, 2012). The relationship should be mutualistic among organization and individual where both seek to benefit from one another's involvement (Tsai et al., 2010).

The functional motivational theory focuses on the specific reasons of volunteering therefore understanding personal motives will help to better understand the person and their specific goals of volunteering (Finkelstein, 2008; Finkelstein, 2009). The need to understand the particular reason is imperative because then organizations can better understand volunteer motivation and, in turn, satisfy volunteer needs which will help in retaining volunteers (Millette & Gagné, 2008; Haug et al., 2012). When volunteer needs are not met, volunteers might resign, resulting in programs to fail without volunteer support (Millette et al., 2008). AAA programs exist due to volunteer commitment and participation. The personal drive of each volunteer is imperative to understand so there is a way to satisfy this need and sustain volunteer longevity in the program to continue the

rewarding experience. This theory will be applied to the current research to help identify reasons for volunteerism with the hopes of supporting current and future volunteer needs within the field of AAI.

### **Attachment Theory**

Attachment theory examines relationships and was used to conceptualize child and parent relationships which was grounded by John Bowlby's original work in psychological, evolutionary and ethological theory (Sable, 2013). The root of this theory is based on the interpersonal relationships between human beings. The child takes the role as a needy and dependent individual and the parent is the stronger and wiser one who needs to become the primary caregiver. Attachment theory as a framework can be related to an assortment of human bonds, involving the human-pet relationship (Sable, 2013). From the perspectives of attachment theory, the human-animal bond is similar to other relationships due to the need of a sense of comfort and connection provided throughout all life stages (Sable, 2013). Authors have proposed that companion animals have positive effects on psychological and physical well-being while creating a nurturing environment to regulate emotions and deal more appropriately to stressful conditions while relating better to other people (Sable, 2013). The relationship between a human and their companion animal has significant benefits in feeling comfortable in an unpredictable environment (Sable, 2013). This bond promotes trust and safety while encouraging a sense of being part of a team due to a nurturing relationship (Sable, 2013).

Attachment theory explains how the relationship with a dog highlights the social bond providing emotional security when sharing experiences in an intervention program.

This bond fulfills interpersonal needs for humans as well as an attachment figure when involved in social setting (Kruger et al., 2010; Beck & Madresh, 2008). This strong relationship may be a motivational factor for volunteers to share their unique relationship with their dog in an unpredictable environment (Kruger et al., 2010; Chandler, 2017). Collins (2014) explained how participants expressed a strong sense of pride when sharing their relationship with their dog in intervention programs. This feeling derived from building a strong connection with their dog during the visits creating a comfortable environment because of their foundation of a trusting relationship (Collins, 2017). According to the human-animal attachment theory, this relationship proposes animals can become a foundation of comfort and safety which is of interest to the handler to share their extraordinary relationship in a social setting (Collins, 2014).

### **Literature Review Related to Key Concepts**

AAI programs encompass many different topics which leads into the potential significance of this study. Integrating animals in the therapeutic environment is a growing field to explore (Jorgensen, 1997). There needs to be stronger evidence based research for introducing animals to assist in making a connection to facilitate social interactions, improve social functioning and improving overall physical and psychological welfare of humans due to animal involvement in a therapeutic setting (Cole & Gawlinski, 2000; Wu, Niedra, Pendergast, & McCrindle, 2002). The topics are of interest to understand to better support AAI as an alternative therapy method (Jorgensen, 1997). These interesting topics lead to the importance of this study because animals have the capacity to develop social support and comfort to facilitate social interactions (Cole et al., 2000; Wu et al., 2002).

Therefore, this study will provide evidence based research on providing the information necessary to support recruiting and retaining volunteers by understanding their motivation to continue in these programs.

With all these topics in mind, it is best to explore the different aspects of intervention programs to explore the foundational meaning and the importance of these programs. The different research efforts in this field have built the foundational base to explain why these programs should continue and offering this alternative therapy program is imperative in the mental health field. These successful programs are impactful and beneficial which leads into the supportive research efforts highlighted in literature review section. Several key terms are listed below for further explanation of the central areas of the main focus of this paper which include animal assisted programs, current research, role of canine handler and volunteer motivation.

Priming will be used as the methodology which has not been used before with this topic. Priming research has been popular as a methodology in cognitive psychology research to demonstrate that using subtle cues will influence the unconscious mind to think certain ways (Merikle, Smilek, & Eastwood, 2001). Past research has used this methodology to understand if cues primed specific actions suggesting that actions are reactions to random stimuli outside the consciousness (Merikle et al., 2001). I am using this unusual methodology (priming) for this topic because I am interested in priming a specific cue to influence perceived number of hours to volunteer.

### **Animal-Assisted Programs**

Personal and emotional challenges are as unique as the therapy required to promote the healing process (Chandler, 2017). Therapy sessions range from a client having one-on-one attention with the therapist to individuals feeling more comfortable engaging in a group setting with others having similar experiences (Chandler, 2017). It is imperative to provide clients a variety of considerate therapeutic environments to understand the best healing approach for an individual (Fine, 2010). Counseling in therapeutic settings should provide a variety of compassionate forums that best suits individuals to ensure a secure environment to create trust (Fine, 2010). One alternative type program that promotes a safe and comfortable environment is adding animals in the profession of counseling (Chandler, 2017). The addition of a therapy animal introduces an unusual way of building trust among humans as the client observes comfort, affection and positive interactions between handler and animal (Fine, 2010). The human-animal relationship encourages a trusting environment which allows secure feelings to build positive relationships between humans in a therapeutic setting or activity (Fine & Beck, 2015). According to Fine et al. (2015), animals and humans have an extraordinary relationship which is very different than the conventional bond humans have together. Animals are a keystone species that fulfills human needs to enjoy the presents of others without the feeling of insecurities so a person will be at ease and comfortable among others not well known (Fine et al., 2015). The possibility that an animal creates a nonjudgmental environment is reason enough to provide alternative programs to enhance mental well-being (Chandler, 2017).

Animal-assisted programs offer a partnership through a nonjudgmental and non-confrontational being that is paired with the therapeutic process (Chandler et al., 2010). To increase the human client recovery, an animal is introduced to alter the dynamics of the therapy process encouraging quicker recovery (Chandler et al., 2010). The addition of an animal in the therapeutic environment has resulted in statistically significant positive correlations to improve health (Morrison, 2007). Charnetski & Riggers (2004) randomly assigned 55 college students to either an experimental group or one of two control groups which included touching a live dog, touched a stuffed dog or had no interaction with either by sitting on a couch comfortably. The study demonstrated the valuable effects of pets on well-being in general particularly focusing on improving immunity. Stasi et al. (2004) presented a study with 28 subjects with chronic-related disabilities residing in nursing homes who were randomly assigned to a pet-therapy intervention group compared to a control group experiencing normal activity programs. The purpose was to examine the pet-therapy participation having an effect on these nursing home inpatients. The patients who interacted with pets had a significant change in improved depressive symptoms and decrease in blood pressure values. Allen, Shykoff & Izzo (2018) designed a study to examine the effect of a nonevaluative social support intervention (pet ownership) on blood pressure levels influenced by mental stress among people experiencing stress from their profession. Forty-eight hypertensive individuals were randomly assigned to two different ACE inhibitor trials including either the experimental group with assignment of pet ownership and lisinopril or to a control group with only lisinopril. ACE inhibitor therapy did lower resting blood pressure, however having an

increased social support with pet ownership availability also lowered blood pressure response to mental stress of hypertensive individuals in high-stress professions.

AAT has been mistaken with AAA, but are defined differently yet fall under the same umbrella of animal-assisted interventions including some level of professional involvement (Morrison, 2007). All programs related to animal-assisted programs have a common purpose to enhance quality of life by the addition of an animal in the therapeutic environment (Tucker, 2005). AAT offers a comprehensive therapy program and has a strategical purpose to formally incorporate the human-animal interactions (Chandler, 2017; Tucker, 2005). This goal directed intervention program has a licensed therapist present to supervise interactions between humans and animal. The session is monitored and documented to measure progress and further assist patients in personal goal setting to improve health (Chandler, 2017; Tucker, 2005). The interactions are recorded to develop specific purposes to be applied to the next visit and increase the patient's success in achieving optimal well-being (Tucker, 2005). AAT goals include refining fine motor skills, expanding verbal interactions, and building physical strength (Holcomb & Meacham, 1989; Richeson, 2003). In a 1998 study, researchers found 241 patients suffering from stress and anxiety had a significant reduction in levels after participating in AAT programs. Patients experiencing high levels of stress or loneliness are alleviated when participating in these programs (Walsh, 2009). In a pilot study that included fifteen nursing home residents with dementia, Richeson (2003) investigated therapeutic recreation intervention using AAT on disconcerted behaviors and social exchanges of older adults with dementia. The pilot study used a quasi-experimental time-series design

with three phases including baseline (prior to intervention or pretest), post-test (after three-week intervention), follow up (three weeks after the intervention ended). The participants assisted as their own control. The results indicated statistically significant decreases in disconcerted behaviors and a significant increase in social exchange both pre and posttest.

AAA is another branch of therapy programs but has no specific therapeutic goals (Tucker, 2015; Chandler, 2017). The program involves social visits with a therapy animal and is based on improving social skills and encouraging humans to feel more comfortable to engage in the environment (Morrison, 2007). Morrison (2007) conducted an extensive literature review on AAI programs, identifying, statistically significant health benefits associated with the intervention including decreased blood pressure, heart rate, depression, anxiety, and loneliness using randomized experiments. AAA are less formal than AAT and are known as the more casual “meet and greet” type of experience (Chandler, 2017). These programs offer compassion towards others while encouraging human engagement in social settings (Chandler et al., 2010). AAA programs are just as effective as AAT when providing positive mental healing results because animals continue to bridge the gap between human contacts (Tucker, 2005). Shy or depressed individuals, anxious people in social groups, or a human experiencing loneliness will gain positive interactions with animals present which will transfer in feeling comfortable around other people to engage in socializing (Walsh, 2009). These two AAI programs were created and implemented to provide an alternative therapy program to improve



“attitude, inspiration, self-esteem, and physical and psychological well-being” (Morrison, 2007, p. 58).

To enhance the positive well-being of an individual is to recognize all components of human welfare including physical, social, and psychological needs. Understanding how to impact one component of health will have direct effects in affecting other areas to promote mental healing (Friedmann et al., 2009). AAA programs as an alternative method in the therapy process offering a variety of implementation strategies to involve animals in healing different aspects of human well-being. It has been recommended that the interaction involving human and animal in a therapeutic setting has encouraged a more physiologically calming state of relaxation, decreased stress related behaviors, and provided social support which is further explained in the following studies (Arkow, 2004). For example, Hoffmann et al, (2009) conducted a study on AAT programs for participants with restless behavior. Twelve patients participated in the pre- and post-treatment cross over study were randomly assigned to a control group (without presence of dog) or an experimental group (dog present) to determine whether a dog can influence restlessness behaviors. The results indicated that AAT significantly decreased the anxiety condition and enhanced psychotherapeutic strategies and motivations of patients.

Previous research has postulated that AAA reduces isolation, boredom, anxiety and depression while offering outlets to increase socialization and overcome emotional disorders (Parshall, 2003). For example, according to Bernstein, Friedmann & Malaspina (2015), AAI programs encourage social stimulation and decrease social isolation in

nursing homes, while also maintaining mental abilities and increasing external environment awareness in the elderly population. The study conducted by Bernstein et al., 2015 consisted of thirty-three patients who participated in AAI programs while residing in the nursing home randomly assigned to two groups consisting of either both alert and semi-alert or non-alert during regular recreational therapy periods. These patients were observed initiating social engagement with humans and dogs. The rate of touch increased as the patients were observed interacting with the dogs, which was contemplated to be an essential part of social stimulation. Research has suggested a range of physical health problems including high blood pressure, cardiovascular health issues, and pain have been decreased through the participation in AAA programs (Parshall, 2003). For example, AAA allows patients to have an automatic relaxation response and often results in reducing the amount of prescribed medication initially used to assist in healing (Fine, 2010). This branch of therapy programs eases feelings of loneliness and the separation from loved ones while releasing pleasurable chemicals of oxytocin and endorphins in the brain (Walsh, 2009). AAA programs provide a calm environment by incorporating an animal in providing a more comfortable setting to relax and communicate more effectively (Chandler, 2017; Fine, 2010). Therapy patients dealing with trauma or social anxiety are more at ease when an animal is present and encourage verbal expression (Barker et al., 1998). Overall mental and physical stress is reduced when engaging with animals in therapeutic settings due to the positive interactions with a companion animal (Barker et al., 1998). The benefits of these programs are to positively impact human health and the treatment of a multiple of health-related concerns.

The unique bond between animal and human has sparked interest for numerous professionals to investigate the advantages of animal assisted activities. Current research describes the benefits of AAA as improving overall mental and physical health in clients due to responding better in therapeutic intervention involving an animal. Many clients prefer and seek therapy when an animal is present (Chandler, 2017). Previous literature strongly supports AAA programs being specifically necessary for therapeutic effect and success due to the relationship between animal and human contributing to the well-being of people. The previous studies conducted provides additional research in this field but resumes to be limited in provisions of scientific based evidence, and more anecdotal outcomes have been presented (Fine et al., 2015). Nicholas & Gullone (2001) evaluated research published since 1980 on the advantages of human-companion animal interaction. Studies that were reviewed included a variety of research methodologies, including descriptive studies, studies that used convenience sampling, and controlled studies. The summation of the literature review determined the research to be limited in research design complexity because this important topic is being neglected by researchers who are not contributing more sound empirical investigation with quantitative studies. There is a call for further research with rigorous designs that systemically builds on the line of inquiry and advances the empirical knowledge of AAI. In many of the existing studies that have taken place in this field, personal convictions, attraction to animals healing influences, and the usefulness of adding an alternative method to clinical application have guided empirical inquiry (Fine et al., 2015).

Holt, Johnson, Yaglom, and Brenner (2015) focused on AAA programs enhancing emotional well-being in retirement residencies. These occupants may be suffering from stress due to relocating and a lifestyle relying more dependently on others. The conceptual model for AAA programs consist of attributes of the human-animal bond including attachment, reciprocity, and unconditional acceptance from the animals when visiting the older adult retirement facility residents (Holt et al., 2015). Their study consisted of 13 residents who self-selected their participation in the program, filled out a demographic questionnaire about themselves and completed the Center for the Study of Animal Wellness-Pet Bonding Scale (CSAW-PBS) after interacting with a canine for an hour. The CSAW-PBS measures the participant's feeling on attachment, reciprocity and unconditional acceptance. A six-point Likert scale was used to rate their feelings, with scores ranging from 1 (*disagree very much*) to 6 (*agree very much*). The higher scores indicated stronger bonds. Descriptive statistics were used to analyze the results. Results indicated older residents formed a bond but younger residents formed a stronger bond. Those who formerly owned a pet stated stronger bonds compared to those who had not owned a pet. These visits enhanced their well-being by forming bonds with the animals and facilitated intergenerational interactions (Holt et al., 2015). Another study demonstrating the positive effects of AAA programs was conducted by O'Haire, McKenzie, McCune and Slaughter (2014) on the effects of classroom animal-assisted activities on social functioning in children with autism spectrum disorder. The study considered a sample of sixty-four children (5-12 years old) diagnosed with autism spectrum disorder. This was a multisite, control-to-intervention design study. The nested

study design (multiple assessments nested within participants nested within classrooms) had unequal group sizes therefore the data was analyzed using hierarchical linear modeling. There was a significant improvement with ASD children in social functioning including approach and skills after participating in AAA programs (O'Haire et al., 2014). Parents described their children had a stronger attention in going to school and interacting with peers. Social withdrawal behaviors and anxiety decreased among ASD children when exposed to AAA programs (O'Haire et al., 2014). Pain management has introduced a variety of methods to decrease levels of physical ailments. AAA programs were reviewed as a complementary treatment with individuals existing with chronic disease resulting in pain (Reed, Ferrer, & Villegas, 2012). Reed et al. (2012) reported decrease levels of pain occurred among children suffering from HIV and increase positive behaviors (sensitivity and focus) when interacting with an animal.

Mainstream health care has not fully accepted the integration of animals in a therapy program as the most advantageous plan for mental healing (Chandler et al., 2010). The studies previously conducted on the benefits of AAA have been mostly concentrated in correlational design demonstrating a relationship but does not draw causal conclusions (Chandler et al., 2010). Therefore, more causation research is necessary to support AAA programs and look for gaps in research to further understand how to improve and offer alternative therapeutic treatments (Nimer et al., 2007). This study will provide a causal experimental design providing predictable results and certainty using statistical tools to establish correlation between actions. Research suggest AAA programs are effective for different patient profiles, but further research needs to be

conducted to broaden the literature for an assortment of health conditions (Nimer et al., 2007). Due to previous authors stating these programs are important, furthering the empirical evidence is crucial to continue these programs in existence which are mainly driven and supported by volunteers (Nimer et al., 2007). To better comprehend the motivation of AAA volunteers will assist in recruiting future individuals while retaining and satisfying current people in the handler position (Finkelstein, 2008; Millette et al., 2008). Without these volunteers, AAA programs would not be an option for individuals needing this therapy program to increase optimal health and well-being.

Previous research has suggested the benefits are limitless when incorporating a pet animal into the therapeutic process by enhancing a healthy relationship among the socially dynamic group involved. Pet therapy programs involve several individuals but the interaction is guided between a well-trained animal and an individual or group, facilitated by the animal's handler (Chandler, 2017). It has been hypothesized that AAA programs have a positive influence on a vast majority of participants including the handler and animal (Chandler, 2017). It has been posited that the dynamic therapeutic experience involving animals provides opportunities to engage in positive interactions and promote comfort while participating in a social environment (Chandler, 2017). Studies indicate that the secure feelings animals bring to a casual and unstructured therapeutic setting such as AAA will allow patients to increase comfort and become more relaxed when building a trusting relationship with other people (Fine, 2010; Chandler et al., 2010; Chandler, 2017). A relaxed setting where an animal offers social support will help a patient achieve a comfortable state of mind has been posited in previous research

(Fine, 2010; Chandler et al., 2010; Chandler, 2017). For example, patients will be more likely to express feelings which improves patient's social, emotional, or cognitive functioning (Richeson, 2003). The presents of animals provide a less threatening environment to disclose personal information and share feelings (Chandler, 2017). It has been suggested that a key benefit of AAA programs encourages the state of feeling secure and safe which will trigger personal change and promote healing (Fine, 2010; Chandler et al., 2010; Chandler, 2017).

A purring cat, a dog rolling over to elicit tummy rubs and a horse producing low, soft "nickering" sounds invites the patient to show acknowledgement by petting the animal in a calm and relaxing manner (Chandler, 2017). The handler is present to demonstrate the most appropriate ways to show affection so the client and animal can build a trusting relationship (Chandler, 2017). This interaction will help the patient understand the importance of reading body language and how to be self-aware when interacting with another being. If a human comes on too strong then this may damage the relationship but with time and patience, then the bond is nurtured through mutual respect and understanding what provides comfort (Chandler, 2017). Animals have several ways of showing uncomfortable behaviors such as moving away from someone, hiding, shrinking back to the ground or stiffening in posture (Hoffman, 1992). When a person is being too forward or pushy in demands not requests, the animal might elicit these uncomfortable responses which is a cue to the handler the environment is overstimulating (Chandler, 2017). A participant witnessing how a handler protects the animal and listens to social cues will show the patient about a trusting relationship (Chandler, 2017). AAA

programs help participants understand the importance of observing behavior and how to proceed in engaging with others by asking for attention not demanding it (Gosling, Kwan, & John, 2003). The primary method in building a relationship is based on feelings of safety and trust (Fine, 2010). For example, interacting with animals helps a participant understand how important to be self-aware on other's feelings through subtle movements or physical language which prepares people on how to act and be confident in social activities (Gosling et al., 2003). AAA programs help patients develop social skills necessary to feel included, feel confident to read social cues and engage on different positive ways of communicating (Walsh, 2009).

Martin and Farnum (2002) investigated the effects of AAT programs for children with pervasive developmental disorders and how interaction with dogs might increase social awareness. This quantitative study examined how three different conditions (presence of nonsocial toy such as a ball, stuffed dog, or live dog) were randomly assigned influenced the expression of pervasive developmental disorders through behavioral and verbal aspects. The results indicated that children participating in AAT programs exhibited a more playful mood compared to those children who were not exposed to AAT programs. These children who participated in AAT programs were more socially aware when a therapy dog was present. These findings provide the statistical data needed to show interaction with dogs has specific advantages to this population and may be a suitable method of therapy.

In addition to this study, Cole et al. (2007) contributed an investigation examining therapy dog programs effect on hemodynamic measures, neuro levels, and state anxiety



in patients with advanced heart failure. There were seventy-six adults who were randomly assigned to 3-group repeated measure experimental design (volunteer with therapy dog, volunteer alone or control group as the usual visit). AAT programs significantly improved cardiopulmonary pressures, neurohormone levels, and anxiety in patients suffering from heart failure.

Every interaction with an animal is a learning opportunity therefore participants are directly involved in the training sessions during the visit. A participant will gain perspective on the importance of a relationship when observing how a handler and animal communicate in a positive manner (Chandler, 2017). A handler who is gentle, patient and an effective communicator will elicit the desired animal behavioral response by creating a comfortable environment (Chandler, 2017). When a participant observes how a handler and animal communicate through training in a calm and comfortable state then the participant will see the benefits of building a trusting relationship (Cooke & Farrington, 2016). Participants present during AAA programs are assisting the handler in maintaining well-mannered pet animal behaviors which gives the participant a sense of reason and obligation due to assisting in the animal's training (Cooke et al., 2016). Partaking in these sessions also heightens problem-solving and communication skills by giving the animal cues to respond (Cooke et al., 2016). An animal provides instant and honest feedback which helps people moderate behavior (Cooke et al., 2016). A client will get confidence in another skill development which will lead to positive attitude and motivate the sense of empowerment to engage in social activities without feeling incompetent (Walsh, 2009).

Each animal interaction is a unique experience and since animals are not robots they can be unpredictable allowing the participant to see how behavior is ever-changing. Participants will observe animals behaving naturally yet regain self-control when asked by their handler to pay attention and listen for a cue (Hoffman, 1992). This dynamic relationship between handler and animal demonstrates trust while being free spirited but within limitation as being in a social setting requires manners (Chandler, 2017). Self-concept or self-esteem will develop when a patient observes an animal being alert to the handler requests (Barker et al., 1998). When a pet animal responds positively to the requests of the handler then mutual respect occurs and demonstrates a healthy relationship (Chandler et al., 2010). This exchange has provided a deeper and more meaningful level to the environment creating a kinship between all involved (Chandler, 2017).

Some participants respond better to therapeutic environments involving an animal and actually prefer it over a session without an animal present (Chandler, 2017). Through AAT programs research has demonstrated the importance of emotionally healing therapy through the human-animal bond. AAA programs are mutually beneficial to both people and animals (Tucker, 2005). Interactions with animals in a therapeutic environment has positive influences on health and well-being (Parshall, 2003). AAA programs has an emerging body of research understanding the positive impacts on physical, social, and emotional health. Sedentary adults showed more progress to increase movement while participating in a walking program involving dogs (Johnson, 2010). Johnson (2010) examined walking one's own dog as a motivator to increase health conditions and

adherence. Twenty-six public housing residents participated in a pretest and posttest design with no control group. Participants demonstrated high motivation to be involved in the program due to their beliefs that their dog needed a walk, ultimately resulting in a commitment to the dog which effectively facilitated physical activity. The participants had an increase in motivation to exert physical energy because the dogs needed them to walk with them (Johnson, 2010). The limitation of the study with respect to experimental design was there was no control group which then made causal inferences. Autism spectrum disorder in children has shown significant positive social behaviors in engaging with others when an animal is in the environment (O’Haire et al., 2013). O’Haire et al., (2013) examined how the presence of an animal in a social setting would stimulate interaction among humans. Ninety-nine autism spectrum disorder (ASD) children participated in a nested study design using generalized linear modeling and randomly assigned. The results indicated the company of an animal significantly increased positive social behaviors among children with ASD. Pediatric cancer studies showed patients have an increase in motivation to receive treatments because they want to get better as they feel more optimistic after attending a therapy session where an animal was present (Sobo, Eng, & Kassity-Krich 2006).

A therapist, counselor, or group activity leader gains positive outcomes when involving a pet animal because a nonjudgmental and non-confrontational being is introduced into an environment that may be viewed as uncomfortable (Chandler, 2017). A client feels more comfortable to participate in the activity when an animal is present (Chandler, 2017). Often times a patient may feel uneasy or uncomfortable with a new

person and animals connect the therapist and patient (Chandler, 2017). The therapist has provided a relaxed setting to reduce stress and offer a sense of safety with unconditional acceptance to feel at ease. Noncommunicative patients may be drawn to animals because there is no pressure to talk with the animals giving these participants a reason to get the most out of their therapy (O'Haire et al., 2014; Richeson, 2003; Steed & Smith, 2003; Walsh, 2009). The goal is to enhance physical and emotional stability and health of patients so the therapist feels successful if they are able to achieve healing through animal assisted activities.

AAA provides stimulating activities for highly intelligent animals (Barker & Wolen, 2008; Chandler, 2017). The animal is engaging in more social time with handler and other people and not left home alone or given the option to be bored (Barker et al., 2008; Chandler, 2017). The AAA training process for an animal is intense with rigorous exercises both mentally and physically. The time it takes to train an AAA animal can take years while providing this animal with lots of attention from the handler to be able to pass all exercises required for the test (Barker et al., 2008; Chandler, 2017). This ongoing stimulation has shown the animal to stay healthier and live longer as they are given lots of enriching challenges (Fine, 2010). The animal spends more time with their handler allowing for a stronger relationship to build and create more trust to show interest in being involved in new activities (Barker et al., 2008; Chandler, 2017). This relationship is two sided as the dog is learning and better behaved as the handler gets to share the many talents of their dog and how affectionate the animal is (Barker et al., 2008; Chandler, 2017). The handler gets to share how incredible their dog is at creating a warm and

friendly atmosphere (Barker et al., 2008; Chandler, 2017). In addition, the handler's commitment to train an AAA dog will be demonstrated in activities showing people how well trained and mannered their dog is and that will make them feel good as a pet owner (Barker et al., 2008; Chandler, 2017). People notice this and compliment a well-behaved dog allowing the handler to feel their efforts have been noticed and feel good about their work (Barker et al., 2008; Chandler, 2017). The canine handler feels their work is important while sharing their dog with others.

### **Role of the Canine Handler**

The role of the canine handler plays an integral part in AAA programs because without the motivation to volunteer time and personal pet then this alternative therapy would not exist (Chandler, 2017). A majority of canine handlers being involved to assist in positive social change has focused on canines trained to use keen sense of smell and assist in police work (Chandler, 2017). These canine are specialized in examining the scene of a crime, detect bombs or drugs, or search and rescue (Alvarez & Hunt, 2005; Furon & Myers, 2001). These handlers are highly skilled in observing canine behavior and have highly impressive training backgrounds to assist in providing a well-trained dog in assessing the unstable environment (Furon et al., 2001). The handlers are responsible for identifying stressors and are able to provide a specific need in the police field as the dogs are trained for a specific job (Furon et al., 2001). Police work canines endure a rigorous set of training tests to pass all adequate skills to survey a scene for safety and missing people with the handler (Alvarez et al., 2005; Furon et al., 2001). AAT/A canine handler are certified in assessing their own dog welfare while participating in different

therapeutic environments that may be overwhelming, stressful and unpredictable. The handler is taught how to work with their dog through uncomfortable situations and keep the dog calm and well-mannered until they can remove themselves from the setting. AAT/AAA canines attend an extensive training program to be able to pass effectively different scenarios involving a plethora of situations that may arise in an unpredictable environment (Chandler, 2012). Understanding how handlers are motivated to participate in AAT programs will provide standards and guidelines to recruit future handlers and increase their longevity in the programs while increasing their training knowledge (Fine, 2010). Canines have a wide variety of jobs they perform in the human work force and unfortunately AAT handler literature is under represented to enhance this field (Barker et al., 2008).

The focus of the study is to examine canine handler motivators to volunteer their services and canine in AAT programs involving a wide range of mental health disorder patients. The emphasis from prior studies has been on canine handler's participation in police work. The handler-canine relationship in AAT is essential to promote positive interactions while encouraging the patients to feel comfortable in communicating their feelings (Barker et al., 2008). As stated by Chandler (2012), "involving a canine in a therapy session assists the therapist to build a relationship between therapist and patient" (p. 6). The handler is essential in the experience because they need to assess the therapy environment to be comfortable and controllable while providing a calm and safe setting (Chandler, 2017). Therapy sessions may include unpredictable behavior from a patient or

tension so the handler is responsible for gauging the setting to involve their canine and themselves (Chandler, 2017).

The majority of the empirical research in AAA has showed the many facets of canines in the work environment as being involved in cadaver search and bomb or drug sniffing (Alvarez et al., 2005; Furon et al., 2001). These canines undergo a different kind and amount of stress from their environment or handler. AAA programs involve a handler who is a volunteer and yet they may be exposed to unpredictable and unsafe environments as well. Their motivation to attend these environments is important to understand to continue the longevity and success of the AAA programs (Finkelstein, 2008; Millette et al., 2008). Canines involved in AAA programs need their handler to be present at all times. If the handler is uncomfortable then the canine may sense their uncertainty and cause the canine to lose focus which would be detrimental to the session (Chandler, 2017). AAA programs exist because there are canine handlers who volunteer their time to attend with their canine. Without the handler, there would be no AAA programs which have shown to be an effective means to alternative therapy program success (Chandler, 2012).

### **Volunteer Motivation**

Volunteering or volunteerism has a dynamic meaning dependent on the particular individual involved in the activity. Finkelstein, Penner, & Brannick (2005) describes volunteering as a timely commitment, planned pro-social behavior benefitting unfamiliar people and occurring in an organizational environment. Bubna (2012) conducted a qualitative study concentrating on motivations and experiences of volunteer counselors.

The study consisted of six volunteer counselors who were actively engaged in being an individual counselor for people who did not have insurance. The participants were requested to reflect on their motivation, experiences, and satisfaction as counselor. The possible explanation that they had high levels of personal satisfaction, demonstrating intrinsic and extrinsic motivation which lead the researchers to perceive these reasons increased longevity and higher retention rates in volunteer counselors. Using volunteer assistance is essential to some organizations with limited resources in order to provide outstanding services to their communities (Bubna, 2012). When nonprofit companies are dependent on volunteers to be successful then this free service becomes invaluable (Bubna, 2012). Volunteers have become an essential human resource providing additional support to an organization with very little financial cost to the company. Some businesses would not be able to exist or thrive without the continual support of free labor. The need for volunteers increases when companies comprehend the benefits of using free labor, which shows lower financial costs to the company, yet productivity continues to be high (Haug et al., 2012). Huag & Gaskins (2012) conducted a qualitative study reviewing the perceived motivation of EMT volunteers to determine how to retain these individuals while also providing the appropriate recommendations for increasing their longevity in the program. Two diverse locations (urban or rural) were used to survey EMT volunteers. Strategies were developed from the study using theoretical explanations to analyze the results as the findings contributed practical applications of recruiting and retaining volunteers. The possible explanation indicated the volunteers were initially motivated by selflessness, social objectives, and interest to increase professional experiences which



were themes generated from the responses. The questions asked were related to self-actualization, self-esteem and love and belonging which are the top three reasons individuals volunteer which aligns with Maslow's Hierarchy of Needs (Huag et al., 2012). However, over time the volunteers were more motivated by a feeling of personal needs being satisfied through helping others. This study dedicated the empirical findings to regulate how to maintain EMT volunteerism at desired levels while developing practical applications for increasing recruitment and retention. A cost benefit analysis of having a strong volunteer program has shown positive outcomes on the organization with little to no financial impact (Bubna, 2012). These factors raise the important question on how to sustain volunteer commitment and increase retention rates to continue driving a successful business without having too much financial expenditures (Finklestein et al., 2005).

Previous research indicates that there are wide varieties of assumptions and fundamental reasons on why people may get involved in volunteering opportunities. The possible explanation may be that volunteers devote personal time and energy to different causes within an organization for a multiple array of motives (Benson et al., 1980; Clary & Orenstein, 1991; Farmer & Fedor, 2001; Bussell & Forbes, 2002; Finkelstein et al., 2005). In some qualitative studies, the findings of these perceived motivational factors include improving skills, meeting people, giving back to the community, making a positive impact and feeling included or needed (Mowen & Sujana, 2005). Additional elements that were considered perceived motivational factors of people to get involved included being passionate about the cause, finding new direction, and gaining a whole

new perspective in an area where not much is personally known (Mowen et al., 2005). It has been posited that volunteering has shown these individuals live longer and healthier, builds stronger personal relationships, increases chances for better career moves, improves society and community based programs, and provides a sense of purpose (Mowen et al., 2005). Millette et al., (2008) conducted a field study with 124 volunteers who participated in a survey on Job Characteristics Model (JCM) in volunteer organizations and how this impacts their motivation. The JCM in the context of volunteer work assists in finding the reason why individuals volunteer. Wilson (2000) describes volunteer involvement in a particular activity will consist of unique job characteristics therefore volunteers are affected by the characteristics of their tasks. The results indicated that certain job characteristics such as increasing knowledge and gain experiences were related to the volunteer's motivation, satisfaction and performance (Wilson, 2000). However, these correlational findings do not allow one to make causal conclusions. Another great reason to getting involved is having free time to dedicate to an organization where the individual's passion lies and most importantly create positive change in the world (Millette et al., 2008). In addition, since volunteering is offering free labor then the individual needs to feel financially secure to dedicate time to a voluntary cause as they are not being paid for their services (McAllum, 2014). This means that the cause needs to be worth the time and energy to be involved as the benefit is not financial but driven by other personal motives. Therefore, the reason is often close to an individual's passionate cause while feeling personally connected to the volunteer experience to allow for meeting motivational needs for the organization to be productive and to satisfy the individual

(McCurley & Lynch, 1989). Volunteering is to also be fun and create memorable experiences through making time for other people or causes by getting involved in making the world a better place and being a part of a positive social change.

It has been suggested that a good number of people respond to three levels of motivation including basic, secondary, and highest drive (Dwyer, Bono, Snyder, Nov, & Berson, 2013; McKee & Feather, 2008). An individual driven by meeting their own needs is known as the basic level of self-serving (Dwyer et al., 2013). People get involved in organizations as a volunteer to meet certain personal needs and understand the personal benefits to them (Dwyer et al., 2013). Being an intern is an example of meeting self-serving needs because as the volunteer gives free time to assist the company yet the individual gains practical and knowledgeable experience for a future job while building their resume. If the volunteer does a good job, then in return they will receive a great recommendation letter. It is a win-win for both parties.

The second level is relational as these individuals are focusing on building friendships and are interested in being liked (Dwyer et al., 2013). Investing in personal relationships is a strong motivator and important for some individuals to volunteer within organizations which offer opportunities to make human connections (Dwyer et al., 2013). Being socially accepted while forming bonds is an important factor at this level which also leads into the enhancement of esteem (Dwyer et al., 2013). After making friends they are more likely to stay with the program to maintain relationships and support their friends (Dwyer et al., 2013).

Finally, the third level is belief being the greatest level of commitment (Dwyer et al., 2013). If an individual believes in a cause they are more probable to remain committed in a volunteer position to see through that the organization is successful by their support (Dwyer et al., 2013). This inner motivation is driven by believing in a cause being important and is the highest level of motivation (McKee et al., 2008). The self-motivation necessary for this level will be linked to the particular basic needs being met. An individual will be more likely to pursue goals that are concordant with their personal values (Dwyer et al., 2013).

Understanding personal drive to sustain longevity in volunteering is a very important factor to know when increasing success within an organization (Finkelstein, 2008). McClelland, Atkinson, Clark, & Lowell (1976) attributed personal motivations into three main types: achievement, affiliation and power-oriented. Each of these characteristics are involved in motivational factors but one dominates more in each person. Studies have suggested individual's choice to volunteer is related to the will to volunteer due to believing in the organization, desire to help others, achieve personal goals, satisfy needs, share expertise and skills with others, and want to gain new experiences (Bang & Ross, 2009). These factors may drive people to commit time and energy to an organization and understanding which one has more importance over the other will assist in sustaining longevity of volunteering and getting a long term commitment. Coordinators managing volunteer services would benefit in understanding which motivator is ranked highest in the reason for volunteering so a positive environment is offered including appropriate and ongoing recognition based on

motivational factors (Finkelstein, 2008 & Millette et al., 2008). If an individual is driven by the need to belong, then this person would be better suited to work in group environments and encouraged to be part of team project to meet motivational needs (Finkelstein, 2008 & Millette et al., 2008). If this volunteer is left alone on a project or asked to do an activity without others being involved, then this is not meeting the personal motives which may result in leaving the organization (Finkelstein, 2008 & Millette et al., 2008). However, volunteer needs may change over time so it is essential to check in regularly on the intrinsic and extrinsic motivational factors to determine the contributing factors in increasing longevity and higher retention rates (Finkelstein, 2009). Key concepts of retaining volunteers is to identify personal motivators, recruit volunteers based on strong motivators and reward volunteers based on their personal motives to retain their services (Collins, 2014; Clary et al., 1998; Cnaan & Goldberg-Glen, 1991).

### **Long-Term Impact of Canine-Handler Involvement**

It has been suggested that an individual suffering from anxiety, depression, self-harm or social skills have benefitted in participating in AAA programs. The traditional methods have not worked as well as AAA programs which provided an additional method to seek help (Chandler et al., 2010; Chandler, 2017). Previous research has demonstrated AAA programs are highly important by positively impacting human well-being and healing in a therapeutic environment (Barker et al., 2008). Without these incredible alternative programs some individuals may never feel secure or comforted to become functionally whole. Animals create a setting full of unconditional love and safety to bond with another being while not judging a person's differences in how to socially

engage (Chandler, 2017). The gap on what motivates volunteers to commit personal time to these programs while devoting energy to the continued success is important to understand better so these programs remain in existence. The success of offering alternative therapy options depends on continuing the volunteer recruitment, retention and satisfying these dedicated individuals who support the ongoing success of AAA programs (Haug et al., 2012; Chandler, 2017). Further research is suggested to further explore the motivators of volunteers specifically in the canine handler role because without them these programs would not exist (Chandler et al., 2010; Chandler, 2017).

### **Summary and Conclusions**

AAA programs have been providing additional therapeutic settings to promote healing and offer a unique method to increase positive well-being (Barker et al., 2008). The success of these programs identify the importance of continuing them for future individuals where traditional methods are not useful or beneficial (Barker et al., 2008; Chandler, 2017). Without such programs many individuals seeking treatment would not get the attention needed to heal and move forward in life. AAA programs are driven by volunteers dedicating time and energy while contributing their pet animal in a therapeutic environment. It is with understanding that these programs are beneficial. Unfortunately, not enough literature supports how to continue these programs successfully (Barker et al., 2008). Grounded in the current literature search the studies have not been based on experimental research designs indicating limitations with respect to the ability to make causal inferences. These designs are beneficial, yet they lack the empirical evidence provided by causality experimental designs that attempts to understand cause & effect

which can be beneficial when understanding the key motivating factors to volunteer. This study will be the first to contribute a casual research design using priming methods and fill this gap in literature. Since volunteers play an integral part in supporting these alternative successful therapeutic methods, understanding what factors motivate them to participate is essential for these programs to continue thriving (Finkelstein, 2008). By contributing to the academic understanding of volunteer motivation in AAA, programs will provide additional empirical resources required to the reliability and validity of this topic. The current study is expected to have positive social change in various community settings by understanding the key motivators to use when recruiting new volunteers as well as sustaining the current group. These motivators will contribute the information about these unique volunteers so organizations can better understand their drive. Therefore, they can make sure they are meeting these volunteer's motivational needs so they can continue visiting and making positive impacts on people's mental health.

In Chapter 3, design choice for this study is explained. The study's sampling strategy is defined, and the study population and data collection methodology are introduced. The purpose and focus of the study will be described, leading to the presentation of the research question and the optimal path of inquiry that has been identified for this project.

### Chapter 3: Methodology

This chapter will explain the research methods that were used in this study to understand the motivational factors of AAA volunteers. Priming conditions were used to examine the relationship between the variables of motivation and time volunteering. The quantitative research methods used in this study emphasized objective measurements; the statistical survey data were analyzed using computational techniques (Creswell, 2013). Quantitative research using randomized experiments can provide evidence of causation. This method was appropriate because it allows for generalizing the findings. The method also offered results using objective language that yielded experimental findings between the variables of interest (Creswell, 2013). Relationship-based research questions help answer the association or trend between two or more variables within one or more demographic groups (Creswell, 2013). Because the goal was to conduct a study to determine the relationship between the independent variables and the dependent variable within a specific population, a randomized experiment was appropriate for this study's research question (Creswell, 2013). This study is the first quantitative study to use priming conditions to determine volunteer motivation, adding to the empirical research of this underrepresented mental health topic.

This chapter will provide information and analysis on volunteer motivation. It includes an overview of the research design, research rationale, design choice, target population, sampling procedures, procedures for recruitment, participation, and data collection. A description of the relationship between the variables in the study will be defined along with the instruments used, data analysis plan, validation, and ethical



considerations. Finally, the quality of the data is discussed in order to provide sufficient depth so that other researchers can use similar methodology and replicate the study.

### **Research Design and Rationale**

The core research question that guides this study was: Which motivators influence canine handlers to volunteer in animal assisted activities? There are two independent variables represented in this study in the priming conditions. One priming condition involved the volunteer's feelings of the importance of giving back to the community. The second priming condition focused on the volunteer's feeling of pride. The participants in Collins (2014) study described a sense of pride as an elite volunteer position which they believed should be a paid profession. Their strong sense of pride derived from being proud of their highly trained dog who is critical in an AAA program and feeling proud of observing their dog interact with others by making people happy (Collins, 2014). Participants believed their training led to their dog's special achievements, which, in turn, they perceived as a direct reflection of them enhancing their self-esteem. In addition to the two priming conditions, there was a control condition. The dependent variable is the participants' indicated number of hours of volunteering in AAA programs as a canine handler volunteer. The research study used a randomized experimental design to draw valid inferences about cause and effect in order to answer the research questions (Creswell, 2013). A larger sample size of AAA handlers was required to gather all the necessary information to support the research question. In addition, time and resource constraints were considered through the selection of the research design. This research design selection is the choice preferred to remain consistent in the advancement of

knowledge in this discipline by allowing for causal inference (Creswell, 2013). This design provides context under highly controlled conditions where participants are assigned to each type of condition in an unbiased manner with random methods (Creswell, 2013). Causality can sometimes be inferred, and unfortunately results may not be applicable outside the experimental setting (Creswell, 2013).

### **Methodology**

The general approach has been introduced for this study, outlining the research design that has been identified to appropriately support this investigation. In this section, the study population is described, and the methods and procedures are presented. The descriptions are provided in enough depth so that the study could be reliably replicated or repeated.

### **Population**

The sample for this study was drawn from a population of individuals involved as active volunteer members in a professional therapy animal organization. Participants for this study were found with a purposive sample recruiting strategy using a professional therapy animal visitation organization. This organization is comprised of a variety of individuals who volunteer in animal-assisted activities. I contacted the national director of this organization and provided details on the purpose of this study and requested permission to ask participants to complete a survey where their identity would remain anonymous. Using primary research, a mass email was sent to a random group of active therapy animal volunteers on the organization's email list asking them to take an online survey through Psychdata. If they were willing to contribute to the research study and

met the requirements to participate, then they were asked some questions about their volunteer experiences. In the email, an informed consent document link was provided to help participants further understand the study and facilitate a conversation about any questions they might have about the study. After reading the consent form, the volunteers interested in participating in the study were given a respondent ID# and asked to continue to the survey. Participants were screened for three specific questions and needed to answer yes to all questions to continue with the survey:

- Are you a canine handler?
- Have you been a part of the same team for at least 1 year?
- Have you been an active volunteer in the therapy organization for at least 1 year?

If eligibility criteria were established by the responses to the questions, then participants were prompted to continue to the next page to answer some demographic questions. The demographic questionnaire was given to gather information on gender, age, education, employment status, household income, race/ethnicity, marital status, and current status of children under 18 living in household. This information can be used to address the generality of the findings with respect to populations. After the demographic questions, participants were thanked for sharing and instructed to proceed with the survey questions by clicking the 'Continue' button. However, if criterion was not met by answering no to any of the three questions, then a statement was provided to the individual that the researcher sincerely appreciated their time, dedication, and participation in the online survey, but that they did not meet the qualifications for the

survey. The researcher was looking for current canine handlers who have been active volunteers with the same animal-handler team for at least 1 year. The survey was completed online since a wide range of people have access and use the internet daily. Individuals who were interested in the study were selected through a convenience sampling method and randomly assigned to one of the three study conditions. The online survey closed 2 weeks from the sending date of the invite email.

### **Sampling and Sampling Procedures**

The sampling strategy used to collect data was obtained from the information provided from a distributed email where the volunteer willingly accepted to participate. The specific procedure on how the sample was drawn was by using convenience sampling while randomly selecting individuals of the Pet Partners group database so each volunteer had equal opportunity to be selected. These individuals volunteered to complete the anonymous survey, and no incentives were offered to the participants.

The study's sampling technique was appropriate to use since I was sampling from a well-established animal therapy group or organization (Pet Partners). Strengths of this sampling technique were the ability to reach people easily; attaining access to a list of participants; it was inexpensive; and participants were readily available. The weakness of this sampling technique was that it is only sampled a subset of the population and, as such, there is an inability to generalize the survey results to the population as a whole. These specific characteristics made inferences or extrapolations about the larger population of animal assisted volunteers. A power analysis was used to determine the sample size by running G\*Power 3.1.9.2 software analysis to determine the appropriate

sample size and statistical power for statistical significance. For the power analysis parameters, the statistical test used was ANOVA: fixed effects, omnibus, one-way with a priori power analysis to justify effect size  $f$  set as 0.25 (medium),  $\alpha$  err prob set as 0.05, power ( $1 - \beta$  err prob) set at the conventional level of 0.80. The requirement of the total sample size was 186 participants. There were three groups of 62 individuals in each group.

### **Procedures for Recruitment and Participation**

The recruitment strategy, as already discussed, was used to recruit canine handlers active in the Pet Partner's organization. I received permission to use the Pet Partner's database, calling for the organization to send out a mass email inviting applicable handlers to participate in the survey. The mass invite email included the purpose of the survey, introduction to the researcher, the reason they were invited to participate, a link to consent form, the amount of time the survey required, a description of how the anonymous survey results would be used in the dissertation study, and the deadline for participation (Appendix A). The participants accessed the survey through a direct link to the survey within the email inviting them to participate. The demographic information (Appendix B) obtained included information on gender (male, female or other), age (18-28 years, 29-39 years, 40-50 years, 51-61 years or 62 and older), education (high school graduate, associate degree, bachelor's degree, master's degree, doctorate degree, or other), employment (employed for wages, self-employed, out of work and looking for work, out of work but not currently looking for work, a homemaker, a student, military, retired, unable to work), household income (\$0-25, 999, \$26,000-51, 999, \$52,000-

74,999, more than \$75,000 or don't know/decline to say), race/ethnicity (Asian or Pacific Islander, Hispanic/Latino, White/Caucasian, Black/African American, Native American/American Indian or Other), marital status (single, never married, married or domestic partnership, widowed, divorced, separated) and if they currently have children under 18 living in the household (yes or no). At the end of the online survey, a final page thanked the participants for their time and let them know they can contact me if they have any questions.

### **Informed Consent**

The informed consent document was provided in the invite email and at the beginning of the online survey, and the participants' submission of the survey indicated their consent. The consent form provided full disclosure of the details regarding the study. The informed consent document indicated that the participant may withdraw from the study any time without consequence as it was a voluntary study. The consent form also included time constraints and my contact information. The surveys did not require identifying information and were anonymous. Therefore, the identity of the participant was not revealed and was referred to only as a number to protect the participant's privacy.

### **Data Collection Procedures and Instrumentation**

Data were collected for this study through an online survey tool, PsychData, with a block randomization feature, and typically took 15 minutes to complete. Block randomization was achieved by designing each survey page with a clear strategy for the survey structure. Once the blocks were built, I applied the randomization feature and

created a block to assign sample numbers equally to each new participant. All conditions consisted of two questions related to volunteering and the Pet Partners organization asking to answer these in a total of 25 words. The space to answer had a one-line answer response (100-character limit). The first question for each condition was “How has your volunteering experience been as a Pet Partners team?” The second question for each condition was “What is your favorite AAA to attend as a Pet Partners team?” There were five questions to answer for Condition 1 and 2. The third question in Condition 1 and 2 entailed one of the two independent variables. The third question was the priming question and was to be answered in 100 words which had a multiple answer response (1000-character limit). The third question for priming in condition 1 was “How do you feel about the importance of donating your time by giving back to the community while participating as an AAA volunteer?” The question for priming in Condition 2 was “How do you feel about the importance of a feeling of pride when working with one’s dog while participating as an AAA volunteer?” Condition 3 had no priming question to answer. After the first two questions in condition 3 and the first three questions in condition 1 and 2 were answered, the dependent variable was introduced to each condition. This question to measure the independent variable was “What are the number of hours you expect to volunteer in the next month as an AAA canine handler volunteer?” There was a two-part manipulation check question after the dependent variable question for the two IV conditions. The first manipulation check question after the dependent variable in condition 1 was “To what extent when answering the survey questions did you think about donating your time by giving back to the community as a canine AAA

volunteer?” The participant was asked to answer this question using a scale from 1 (*not at all*) to 7 (*very much*). The second manipulation check question after the dependent variable in condition 2 was “To what extent when answering the survey questions did you think about a feeling of pride while working with one’s dog as a canine AAA volunteer?” The participant was asked to answer this question using a scale from 1 (*not at all*) to 7 (*very much*). This design provided a way to reduce a possible demand characteristic problem. Each participant was randomly assigned to one of three conditions. Condition 3 (control) had three questions because there was not a priming or manipulation check question. The manipulation check questions were answered on a separate page from the page in which the independent variable questions were answered, and the manipulation check questions were answered after answering the questions for the independent variable. The demographic survey was completed after the email invitation and consent form.

### **Data Analysis Plan**

The software used for analyses was IBM SPSS Statistics v25. I conducted planned contrasts within the one-way ANOVA program to address the hypotheses while reflecting each comparison. Each planned contrast involved comparing a priming condition with the control condition. I set alpha to .05 for all statistical tests. Data cleaning and screening procedures were conducted to ensure that all data were complete prior to analyzing the data in SPSS. The descriptive statistics included means, standard deviations, and effect sizes.



**Research Question**

RQ1: Does priming the importance of giving back to the community increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities?

*HA1: Priming the importance of giving back to the community increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.*

*H01: There is no effect of priming the importance of giving back to the community on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.*

RQ2: Does priming the importance of a feeling of pride working with one's dog increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities?

*HA2: Priming the importance of a feeling of pride working with one's dog increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities.*

*H02: There is no effect of priming the importance of a feeling of pride working with one's dog on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities.*

**Threats to Validity**

There are several threats to external and internal validity in this study. Threats to external validity include interaction of selection, setting, and history of the treatment

(Creswell, 2013). These two threats impose an issue by drawing incorrect inferences from the sample. Characteristics of participants and uniqueness of setting has external threats to this study (Creswell, 2013). These threats can be addressed by conducting additional experiments with groups of different characteristics, in new settings and replicate study at later times to understand if past or future situations influenced results (Creswell, 2013). Threats to internal validity were selection, mortality, and compensatory rivalry of participants (Creswell, 2013). First, participants were randomly assigned to conditions which would make it likely that the three groups were equal with respect to individual difference variables (Creswell, 2013). However, there could be differences between people who decide to volunteer and people who decline to volunteer. This would seem to be a problem with external validity. Moreover, a primary issue with the internal validity of randomized experiments is whether there may be confounding variables (with the manipulation). I included manipulation check questions to address whether the manipulations were successful. Also, the issue of confounding variables was addressed by examining the conditions and determining if there are other possible explanations for the findings. A second threat concerns mortality, where participants drop out during the experiment due to several different reasons unknown to the researchers, and thus one condition may not be completed, resulting in a problem with interpreting the findings. A third threat is demand characteristics, where the survey questions may provide subtle cues or hints on how the experimenter would prefer the questions to be answered to achieve a particular outcome. The participant becoming aware of this may alter their behavior to conform to the expectations which can have a profound influence on the

results of the study (Creswell, 2013). This issue of trying to be the perfect participant and not behaving in a normal manner could skew results due to participants wanting to answer in ways they believe will live up to the researcher's expectations. There may also be a demand characteristic problem if participants discern the purpose of the study and believe that it is best to respond in a manner consistent with the purpose. These few threats were addressed to the extent possible so that the risk was minimized.

Threats to construct or statistical conclusion validity include drawing inaccurate inferences from the data. The statistical assumptions are addressed by considering all possibilities of whether or not the variables have a relationship (Creswell, 2013). The measures may have low reliability and provide "noise" in the environment, or the relationship is weak so statistical power was essential to be greater than .80 in value (Creswell, 2013). Collecting more information or obtaining a larger sample size will assist in reducing the threats to statistical conclusion (Creswell, 2013). Reducing errors in decisions can be accomplished by using larger sample size (Creswell, 2013).

### **Ethical Procedures**

The ethical considerations were addressed to the participants to minimize any potential risks will be important for their protection. Describing full disclosure of the study, getting a sign consent form, and ensuring the protection of amenity were essentials in having the participant and researcher feel safe. Participants were provided enough documentation describing the purpose of the study and their role in the study. At any point they were able to withdraw from study with no negative consequences. The protocol for this study was approved by the Institutional Review Board of Walden

University (Approval No. 10-18-19-0554515). Participants read and signed an informed consent form given before the survey to ensure their rights were protected and understood their role in the study. My primary responsibility was to protect their rights and dignity while maintaining confidentiality. Respecting participant's rights is important for many reasons, including consideration of their time and energy to sacrifice for the study without money, gifts, or any other incentives. There was no compensation awarded to participate. The stored data were password-protected and participants were assigned numbers; no names were used. The participants were not a considered to be members of a vulnerable population. The results of survey were posted to all volunteers on the Pet Partners website.

### **Summary**

This chapter discussed the reasoning to use quantitative measures to support the research questions on understanding the motivational factors of AAA volunteers. The purpose of this study was clearly defined using the appropriate research strategy and design to provide empirical evidence reflecting quantitative data collection. Priming conditions were used to examine the relationship between the variables of motivation and time volunteering. The method of recruiting participants was through a mass email to a professional therapy animal organization inviting applicable active canine handlers to participate in the survey. Participants continued with the survey if they met the requirements to participate, then they were asked some questions about their volunteer experiences. Participants were randomly assigned to one of three groups through an online survey. Demographics information was obtained on this population. The goal was

to conduct a study to determine the relationship between the independent variables and the dependent variable within a specific population, a randomized experiment was appropriate for this study's research question to provide evidence of causation. Data collection and analysis procedures were reviewed to present the important relationship of mathematical methods through statistical analysis. Planned contrasts were conducted within the one-way ANOVA program to address the hypotheses while reflecting each comparison.

As the primary researcher, I identified important threats to external and internal validity including ethical procedures which would demonstrate the importance of how I will protect the integrity of this work and minimize risks. The ethical considerations were addressed to the participants to minimize any potential risks will be important for their protection. Describing full disclosure of the study, getting a sign consent form, and ensuring the protection of amenity were essentials in having the participant and researcher feel safe. This study is the first quantitative study to use priming conditions to determine volunteer motivation, adding to the empirical research of this underrepresented mental health topic. In Chapter 4, I will further detail the study's findings including data collection, demographics and summary of results. Another goal of chapter 4 is to determine that the methodology described in chapter 3 was followed.

## Chapter 4: Results

The purpose of this experimental study was to understand the individual motivational influences to become an AAA volunteer by priming certain motives and revealing key influences. A causal relationship between volunteer motivation and the number of hours predicted to volunteer was examined. The study involved two priming questions. Two quantitative research questions (RQs) and corresponding null and alternative hypotheses were derived from the theory and provided for this study.

RQ1: Does priming the importance of donating time by giving back to the community increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities?

The independent variable (i.e., giving back to community) and the relationship to the dependent variable (i.e., number of hours) were examined using the following hypotheses:

*HA1*: Priming the importance of donating time by giving back to the community increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

*H01*: There is no effect of priming the importance of donating time by giving back to the community on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for animal assisted activities.

RQ2: Does priming the importance of a feeling of pride working with one's dog increase the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities?

The independent variable (i.e., feeling of pride) and the relationship to the dependent variable (i.e., number of hours) were examined using the following hypotheses:

*HA2*: Priming the importance of a feeling of pride working with one's dog increases the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities.

*H02*: There is no effect of priming the importance of a feeling of pride working with one's dog on the number of hours that canine AAA volunteers indicate that they would be willing to volunteer for Animal Assisted Activities.

### **Data Collection**

Data collection began about a month after IRB approval. The IRB approval date was October 17, 2019 (Approval No. 10-18-19-0554515); The data were collected from October 22, 2019 until November 5, 2019. The data collection process was consistent with procedures set up in Chapter 3. Participants were recruited from a therapy animal organization and were given 2 weeks to complete the online survey. Quantitative data were collected through computer-administered surveys using Psychdata.com. Participants were given a unique ID number, and could respond in private in order to assure their anonymity. There were no issues with collecting data from this source and methodology.

The desired sample size was surpassed, and the number of participants exceeded what was proposed in the GPower3 power analysis; therefore, the sample size was large enough to identify statistically significant relationships in ANOVA and regression analysis. Approximately 186 volunteers responded and completed the survey. Of all the

surveys that were completed, there were no discrepancies noted in the data collection process. However, of the 222 participants who started the survey and completed the demographic survey, 36 participants did not finish the survey so their information was excluded from the final study dataset.

The assumptions for conducting ANOVA analysis include homogeneity of variance (Field, 2013). The representation of the sample of the population of interest or how proportional it is to the larger population was comparable to the one previous study found on this topic which was Collins' (2014) research. Collins (2014) examined therapy dog handlers using a mixed methods design. As there is limited data available from similar studies, given that there is little research within this field, it seems that this study's sample is a good representation of the AAA handler population.

### **Demographics**

There were a total 186 participants in the dataset. Ninety-one percent (91%;  $n = 170$ ) of the population was female. Forty-seven percent (47.3%;  $n = 88$ ) of the population was 62 or older. Thirty-three percent (32.8%;  $n = 61$ ) of participants held a bachelor's degree and thirty-six percent (35.5%;  $n = 66$ ) participants held a master's degree. Thirty-six percent (35.5%;  $n = 66$ ) of the population were employed for wages and forty-four percent (44.1%;  $n = 82$ ) were retired. Fifty-six percent (55.9%;  $n = 104$ ) of the population household income was more than 75,000. Ninety-five percent (95.2%;  $n = 177$ ) of the population race/ethnicity was white/Caucasian. Seventy percent (69.9%;  $n = 130$ ) marital status are married or in a domestic partnership. Ninety-one percent (91.4%;  $n = 170$ ) of population currently have no children under 18 living in the household. Demographic



data for gender, age, education, employment status, household income, race/ethnicity, marital status, number of children under 18 in household can be found in Table 1.

Table 1

<i>General Demographics of the Sample</i>		
	<i>N</i>	Percentage
<b>Gender</b>		
Male	16	8.6
Female	170	91.4
<b>Age</b>		
18-28	6	3.2
29-39	10	5.4
40-50	30	16.1
51-61	52	28.0
62+	88	47.3
<b>Education</b>		
High school graduate	13	7.0
Bachelor's degree	61	32.8
Doctorate degree	20	10.8
Other	9	4.8
Associate degree	17	9.1
Master's degree	66	35.5
<b>Employment Status</b>		
Employed for wages	66	35.5
Self-employed	27	14.5
Out of work-looking for work	1	0.5
Out of work-not currently looking	3	1.6
A homemaker	5	2.7
A student	1	0.5
Retired	82	44.1
Unable to work	1	0.5
<b>Household Income</b>		
0-25,999	3	1.6

26,000-51,999	18	9.7
52,000-74,999	26	14.0
More than 75,000	104	55.9
Don't know/decline to say	35	18.8
<b>Race/Ethnicity</b>		
Asian or Pacific Islander	3	1.6
Hispanic/Latino	1	0.5
White/Caucasian	177	95.2
Black/African American	1	0.5
Other	4	2.2
<b>Marital Status</b>		
Single/never married	26	14.0
Married or domestic partnership	130	69.9
Widowed	9	4.8
Divorced	20	10.8
Separated	1	0.5
<b>Currently have children under 18 in household</b>		
Yes	16	8.6
No	170	91.4

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### **Summary of the Results**

The foundational question of this study was whether using a priming question about motives would influence the number of hours' canine therapy handlers reported they would volunteer in the next month. I conducted an ANOVA to examine possible significant main effects and interactions between priming questions and number of hours predicted to volunteer. Data analysis was conducted using the computer software program SPSS. The first assumption was the dependent variable was measured at the interval or ratio level (continuous such as time). The second assumption was that there

were two or more categorical groups in the priming conditions that are independent of one another. The third assumption was that there is no relationship between observations in each group or between the groups (different participants in each group). This is an important assumption to use a one-way ANOVA. The fourth assumption was that the dependent variable should not contain any outliers, and the fifth assumption is that the dependent variable should be approximately normally distributed. The sixth assumption was the need for homogeneity of variances tested (Garson, 2012, & Field, 2013). The data was tested against each of these assumptions, and appropriate adjustments were made if the assumptions were violated. These assumptions were tested in SPSS software using Levene's test for homogeneity of variances.

The Levene's test was used to assess the normality of variance of all variables. The results of the Levene's test indicated that no distributions violated the assumption of homogeneity of variance ( $p > .05$ ). Because there was an equal distribution of error variances across levels of independent variables, the assumption of homogeneity of variance was not violated. This was not significant, which indicated the assumption for priming conditions had no difference between the variance of the first group and variance of the second group. The Levene's test suggested that the priming conditions did not show violations for homogeneity,  $F(2,183) = 1.48$ , with a significant value of  $P = .231$  using a .05 level of significance. In addition, the homogeneity of variance was not violated and the error of variance on the dependent variable is equal across groups.

Garson (2012) reported the ANOVA test is powerful test and fairly robust to violating assumption of homogeneity. The result of the ANOVA for group mean and

standard deviation differences on hours is not significant for priming community ( $M = 2.27, SD = 1.01$ ), priming pride ( $M = 2.39, SD = 1.23$ ), and control ( $M = 2.37, SD = 1.28$ ) conditions. The result of the ANOVA for group mean and standard deviation does not show a significant difference for priming community ( $M = 5.40, SD = .67$ ) and priming pride ( $M = 5.15, SD = 1.99$ ) conditions. Levene's Test of Equality of Error Variances and Tests of Between-Subjects Effects was tested on whether group 1 and group 2 differed on the manipulation check (i.e., the priming effect). There was not a significant difference. The Levene's test suggested that the priming effect did not show violations for homogeneity,  $F(1,122) = 3.02$ , with a significant value of  $P = .085$  using a .05 level of significance. There was not a significant difference with the tests of between-subjects effect of priming conditions at the  $p < .05$  level for all priming conditions. The predicted main effect of priming group was not significant,  $F(1,22) = .607, p = .44, \eta^2 = .003$ .

A Pearson product-moment correlation coefficient was computed to assess the relationship between the number of hours of volunteering and demographics (age, education, working, household income). Age was correlated with hours but it was also highly correlated with working or retired, so it fell out of importance giving way to the number of hours being less for those who worked versus those who were retired. The higher one's level of education the fewer expected hours, but the higher one's household income the more expected hours. There was a strong positive linear relationship between hours and age ( $r = 1, n = 165, p = .003$ ), education ( $r = 1, n = 165, p = .025$ ), working ( $r = 1, n = 165, p = .000$ ), and household income ( $r = 1, n = 165, p = .097$ ).

Counts and tests of Independence of Group by Sex and by Employment is presented in Table 2.

Table 1

*Counts and Tests of Independence of Group by Sex and by Employment*

	Group				$\chi^2$	$p$	Cramer's $V$
	Total	Community	Pride	Control			
Male	16	5	3	8	2.60	.313	.118
Female	170	57	59	54			
Retired	82	23	29	30	2.67	.262	.124
Working	93	37	27	29			

Tests of means and standard deviations (SD) difference of age, education level, and household income group is presented in Table 3.

Table 2

*Tests of Means and Standard Deviations Differences of Age, Education, and Household Income by Group*

Variable	Group			$F(2, 183)$	$p$	$\eta^2$
	Community	Pride	Control			
	$M (SD)$	$M (SD)$	$M (SD)$			
Age	4.03 (1.06)	4.19 (1.02)	4.10 (1.13)	0.36	.700	.004
Education	3.32 (0.97)	3.19 (1.17)	3.57 (0.98)	2.04	.133	.023
Income	3.94 (0.87)	3.61 (0.91)	3.87 (0.93)	1.81	.112	.024

Means and standard deviation of hours broken out for each of the three groups is presented in Table 4.

Table 3

*One-way Descriptive*

		N	Mean	Std. Deviation	Std. Error	95% C.I. for Mean		Min	Max
						Lower Bound	Upper Bound		
Age	1.00 community	62	4.03	1.06	0.13	3.76	4.30	1	5
	2.00 pride	62	4.19	1.02	0.13	3.93	4.45	1	5
	3.00 control	62	4.10	1.13	0.14	3.81	4.38	1	5
	Total	186	4.11	1.07	0.08	3.95	4.26	1	5
	1.00 community	62	3.32	0.97	0.12	3.07	3.57	1	5
Education	2.00 pride	62	3.19	1.17	0.15	2.88	3.49	1	5
	3.00 control	62	3.57	0.98	0.13	3.31	3.83	1	5
	Total	177	3.36	1.05	0.08	3.20	3.51	1	5
	1.00 community	62	3.94	0.87	0.11	3.72	4.16	1	5
	2.00 pride	62	3.61	0.93	0.12	3.38	3.84	1	5
Income	3.00 control	62	3.87	0.93	0.19	3.63	4.11	1	5
	Total	186	3.81	0.91	0.07	3.67	3.94	1	5

Correlation values and  $p$  values of regression of age, education, working, and household income presented in Table 5.

Table 4

*Correlation values*

		Hours	Age	Education	Working	Income
Pearson Correlation	Hours	1.000	0.213	-0.152	-0.292	0.102
	Age	0.213	1.000	-0.137	-0.597	-0.024
	Education	-0.152	-0.137	1.000	0.056	0.100
	Working	-0.292	-0.597	0.056	1.000	-0.033
	Income	0.102	-0.024	0.100	-0.033	1.000
Sig. (1-tailed)	Hours	.	0.003	0.025	0	0.097
	Age	0.003	.	0.04	0.000	0.382

	Education	0.025	0.04	.	0.236	0.100
	Working	0.000	0.000	0.236	.	0.337
	Income	0.097	0.382	0.100	0.337	.
N	Hours	165	165	165	165	165
	Age	165	165	165	165	165
	Education	165	165	165	165	165
	Working	165	165	165	165	165
	Income	165	165	165	165	165

ANOVA is used to test whether Between-Subjects effects the DV and to find if there is significance value without a covariate. When using ANOVA without testing for a covariant suggests clear finding of the significance value  $F(4,164) = 5.268, p = .001^b$ , using a .05 level of significance. Coefficients results including B, 95% CI of B,  $t$ ,  $p$ , part-r squared is presented in Table 5.

Coefficients' results of variance in hours uniquely accounted by each predictor presented in Table 6.

Table 5

*Coefficients Results*

	Unstandardized Coefficients		Standardized Coefficients	$t$	$p$	95% C.I. for B	
	$B$	$SE_B$	$B$			Lower est.	Upper est.
Constant	2.44	0.76		3.22	0.00	0.94	3.94
Age	0.05	0.11	0.45	0.48	0.63	-0.17	0.27
Education	-0.16	0.09	-0.14	-1.90	0.06	-0.34	0.01
Working	-0.60	0.22	-0.25	-2.73	0.01	-1.03	-0.16
Income	0.15	0.10	0.11	1.45	0.15	-0.05	0.36

There were no differences between the two groups, therefore the two proposed priming conditions seem to have no significant effects on presumed hours of

volunteering. Therefore, I fail to reject the null hypotheses as there is no significant difference in the two priming conditions on number of predicted hours to volunteer. Statistical analysis of the research data indicated no significant interaction between priming questions and number of hours predicted to volunteer. Both priming conditions were non-significant.

In Chapter 5, I will provide the interpretation of the findings, limitations of the study, recommendations, implications for positive social change, and conclusion of this study's findings in relation to current literature with volunteer motivation in animal therapy work.



## Chapter 5: Discussion, Conclusion, and Recommendations

### **Introduction**

The purpose of this experimental study was to understand whether two primed motives for volunteering in AAA were significantly related to the number of hours reported for volunteering. Volunteer motivation is important to understand because AAA programs have been shown to be helpful in mental health healing, such as reducing treatment anxiety, decreasing feelings of detachment, and providing a nonverbal avenue for expression and processing (Chandler, 2012). Demographic data were collected to examine the representative nature of the sample population and to enable comparison with samples in future studies of AAA programs. Given the few studies on volunteer motivation in AAA programs, the demographic information is also helpful for understanding more about the background of individuals who volunteer in AAA programs.

### **Interpretation of the Findings**

There are few studies to help understand volunteer motivation in AAA. Only Collins' investigation (2014) was similar, and it did not examine causal relationships between volunteer motivation and number of hours predicted to volunteer. In the present study, ANOVA, planned contrasts, post hoc tests, and moderated ANOVA (i.e., PROCESS tool) were used to evaluate the two study research questions. The results indicated that there were no significant differences between the number of hours' volunteers expect to volunteer over the course of the next month and donating time by giving back to the community or feeling of pride working with one's dog. This research

was focused on priming participants to understand whether priming them for donating time by giving back to the community or feeling of pride working with one's dog would influence the number of hours they volunteered. There has never been a randomized study on the effects of different volunteer motivations in AAA. The study differed in its approach from previous research, so there cannot be a direct comparison with other's findings. However, I was able to explore this topic in a unique way that allowed the examination of cause and effect with the goal of contributing new findings to this field.

Previous studies that focused on volunteer motivation, or why volunteers participate in certain activities, were reviewed to provide relevant context for the findings of the present study. Most of the previous research focused on volunteer motivation in general, but no other study has targeted AAA volunteer motivation. For example, Bubna (2012) conducted a qualitative study that examined motivations and experiences of volunteer counselors who described having high levels of personal satisfaction, demonstrating that there is intrinsic and extrinsic motivation to volunteering, and that personal satisfaction increased longevity and higher retention rates in volunteer counselors. In the present study on motivation of AAA volunteers, values were examined when priming the conditions of donating time by giving back to the community or the feeling of pride from working with one's dog. These two priming conditions can be included as personal satisfaction goals relevant to AAA (Collins, 2014).

Huag and Gaskins (2012) conducted a qualitative study reviewing the perceived motivation of EMT volunteers to determine how to retain these individuals, while also providing the appropriate recommendations for increasing their longevity in the program.

Themes generated in this study indicated that the volunteers were initially motivated by selflessness, social objectives, and interest to increase professional experiences. Strategies were developed from the study using these theoretical explanations to analyze the results as the findings contributed practical applications of recruiting and retaining volunteers. These factors raise the important question on how to sustain volunteer commitment and increase retention rates to continue driving a successful business without having too much financial expenditures (Finklestein et al., 2005). Results from the current study indicate that donating time by giving back to the community or the feeling of pride working with one's dog were non-significant and to further understand volunteer motivation other factors should be investigated. Reviewing the results from the Huag and Gaskins (2012) study, volunteers were motivated by selflessness, social objectives and interest to increase professional experiences, which identifies interesting priming conditions that may be incorporated into a future study of AAA volunteer motivators. Using the findings from Huag and Gaskins (2012) would be beneficial in implementing a new priming study by using the motivators found to be possible explanations of volunteer motivation in a different context, testing to see if these themes would be significant in having a direct relationship with the number of hours' individuals perceive they will volunteer in AAA.

Previous research indicates that there are wide varieties of assumptions and fundamental reasons for why people may get involved in volunteering opportunities. The findings of perceived motivational factors include improving skills, meeting people, giving back to the community, making a positive impact and feeling included or needed

(Mowen & Sujan, 2005). Additional elements that have been suggested to be motivational factors for people to get involved in volunteering included being passionate about the cause, finding new direction, and gaining a new perspective in an area which not much is personally known (Mowen et al., 2005). In addition, the reason to volunteer is often closely tied to an individual's passionate cause and feeling personally connected to the volunteer experience allowing for motivational needs to be met both for the individual and the organization (McCurley & Lynch, 1989).

The current study focused on two unique motivators: donating time by giving back to the community or the feeling of pride working with one's dog. There are several motivators that could have been used in the priming conditions. The two common motivators used in the present study were based on Collins (2014) study which was the only similar study found while investigating volunteer motivation in the AAI field. However, in reviewing the literature of volunteer motivation across other fields, it is possible other meanings of volunteer motivation might have been more appropriate to use in a priming condition, this potentially yielding different findings.

Previous research primarily examined handler motivation in therapy work or patient benefits from participating in AAA programs. This study sought to address the need for research to examine volunteer motivation associated with AAA programs. This study examined whether donating time by giving back to the community or feeling of pride working with one's dog, when primed in AAA volunteers was associated with the amount of time they predicted they would dedicate to volunteering. No significant difference was found for either conditions, indicating that donating time by giving back

to the community or a feeling of pride working with one's dog were not significant motivators on why these volunteers participate in AAA programs.

### **Limitations of the Study**

The results of this study are limited to participants recruited from only one therapy animal organization, so it is possible that this organization has members who share certain demographics. In addition, there were 186 participants in this dataset, which may have been a limiting factor, as the email was sent to over 10,000 volunteers and only a small subset of this population participated. A small percent of the total possible population could indicate that the responding volunteers might differ in certain characteristics from other AAA volunteers who chose not to participate. There may be some different characteristics in the volunteers who decided not to participate. Perhaps incentives could have assisted in getting more volunteers to participate. In addition, generalization of results to the greater population may be limited because of the purposive sampling methodology that was used.

There were only two priming questions used to understand volunteer motivation in this study: donating time by giving back to the community and feeling of pride working with one's dog. Collins (2014) was the only study that related to this effort to further understand volunteer motivation, and five narrative themes were introduced in Collins' study. Those themes included being very proud to work with an extraordinary dog, feeling good about being a part of a trusting team with their dog, having a sense of responsibility and commitment to their dog, ability to provide positive experiences to the community, and experiencing the rewards connected with observing their dog interact

with individuals in a positive manner (Collins, 2014). For this study, two of those motives were chosen; however, the other three may be more influential on volunteer motivation and could be examined in a future study.

### **Recommendations**

Further research is necessary to understand the reasons that motivate AAA volunteers to participate in therapy programs. It would be beneficial to investigate different motivation other than the two priming conditions used in this study to find a significant motivational factor. This study focused on two narrative themes based on Collins 2014 study which included ability to give back to the community and being very proud to work with an extraordinary dog. However, the other three narrative themes could be used in another priming study such as feeling good about being a part of a trusting team with their dog, having a sense of responsibility and commitment to their dog, and experience the incentives associated with observing their dog interact with others in a positive manner (Collins, 2014). In addition, researchers might consider conducting a longitudinal study to explore how the initial motivations of volunteers develop through volunteering experience. Similar studies could focus on different demographic group to determine if any relationship exists with the priming condition.

There has been limited research on this topic, and it was therefore not possible to align results from this current study to previous studies with this topic in the AAA field. This topic is underrepresented in the research literature, and a replication of this study would be recommended with another animal therapy group to understand if similar results would be generated. There are several therapy animal organizations and the subset

of the population was only taken from one organization. This study could be replicated in various capacities to test for the recurrence of this study's findings.

### **Implications for Positive Social Change**

Determining relationships between volunteer motivation and hours they donate their time may help enhance the lives of people who want to participate in these programs and make a positive social change in their healing. The number of people who are interested in using therapy dog programs in their health programs outweigh the number of teams registered. The demand is there, but there are not enough volunteers to fill the needs of supporting these programs. Additional teams hold the potential to create more positive social change if they are found to provide significant benefit over other forms of supplemental therapies. Supporting additional research and work that can ultimately assist in adding more teams to AAA programs has the potential to make a positive social change on several communities, from researchers to patients. The results of this study provide clarity on the factors that should be considered when recruiting AAA volunteers, thus yielding meaningful implications for researchers, practitioners, and society at large.

### **Conclusion**

Overall, this study sought to develop an understanding of AAA volunteers' motivation in relation to two unique priming conditions. Motivational differences were not found between the subgroups and therefore an inference on a relationship between the variables cannot be drawn from these priming conditions which would be useful in the planning, recruiting and managing process of the volunteers. Even though the results of this study did not yield a significant difference, the information gained from this study

did contribute valuable information by indicating that donating time by giving back to the community and feeling of pride working with one's dog conditions do not have a direct relationship with the number of hours' individuals perceive they will volunteer. Based on these findings, further research that facilitates a better understanding of volunteer motivation and their relationship to number of hours to volunteer is warranted. Previous research on the benefits of AAT programs have demonstrated these are highly effective programs (Chandler, 2012). Researchers and therapy organizations should act to understand volunteer motivation because without AAA volunteers, these productive programs would not exist. Patients deserve alternative methods to help in their healing process. AAA is an intervention program with a valuable approach that enhances the therapeutic environment but is unfortunately underrepresented in literature (Chandler, 2012). Therefore, it is imperative to continue contributing empirical research to further understand how this approach might be bolstered. Ultimately, the results from this study showed that volunteers are donating valuable time, but more work is called for to better understand their motivation so that they can be supported in their continued participation and volunteer efforts.



## References

- Allen, K., Shykoff, B. E., & Izzo Jr, J. L. (2001). Pet ownership, but not ACE inhibitor therapy, blunts home blood pressure responses to mental stress. *Hypertension*, 38(4), 815-820.
- Alvarez, J., & Hunt, M. (2005). Risk and resilience in canine search and rescue handlers after 9/11. *Journal of Traumatic Stress*, 18(5), 497-505. doi: 10.1002/jts.20058
- Andronic, R. L. (2014). Volunteering: Theoretical approaches and personal characteristics. *Scientific Research & Education in the Air Force-AFASES*, 2, 475-478
- Arkow, P. (2004). *Animal-assisted therapy and activities: A study, resource guide and bibliography for the use of companion animals in selected therapies*. P. Arkow.
- Bang, H., & Ross, S. D. (2009). Volunteer motivation and satisfaction. *Journal of Venue and Event Management*, 1(1), 61-77.
- Barker, S. B., & Dawson, K. S. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services*, 49(6), 797-801. doi: 10.1176/ps.49.6.797
- Barker, S. B., & Wolen, A. R. (2008). The benefits of human–companion animal interaction: A review. *Journal of Veterinary Medical Education*, 35(4), 487-495.
- Beck, L., & Madresh, E. A. (2008). Romantic partners and four-legged friends: An extension of attachment theory to relationships with pets. *Anthrozoös*, 21(1), 43-56.
- Bernabei, V., De Ronchi, D., La Ferla, T., Moretti, F., Tonelli, L., Ferrari, B., ... & Atti,

- A. R. (2013). Animal-assisted interventions for elderly patients affected by dementia or psychiatric disorders: a review. *Journal of Psychiatric Research*, 47(6), 762-773.
- Bernstein, P. L., Friedmann, E., & Malaspina, A. (2000). Animal-assisted therapy enhances resident social interaction and initiation in long-term care facilities. *Anthrozoös*, 13(4), 213-224.
- Bowlby, J. (1969). Attachment and loss v. 3 (Vol. 1). *Random House*. Furman, W., & Buhrmester, D. (2009). *Methods and measures: The network of relationships inventory: Behavioral systems version*. *International Journal of Behavioral Development*, 33, 470-478.
- Bruneau, L., & Johnson, A. (2011). Fido and Freud meet: integrating animal assisted therapy into traditional counseling theories. In L. Bruneau & A. Johnson, *Handout presented at the American Counseling Association Conference and Exhibition, New Orleans, LA* (pp. 01–18).
- Bubna, D. (2012). Motivations to volunteer: Factors that promote longevity.
- Burns, D. J., Reid, J., Toncar, M., Anderson, C., & Wells, C. (2008). The effect of gender on the motivation of members of generation Y college students to volunteer. *Journal of Nonprofit & Public Sector Marketing*, 19(1), 99-118.  
doi:10.1300/J054v19n01\_05
- Bussell, H., & Forbes, D. (2002). Understanding the volunteer market: The what, where, who and why of volunteering. *International Journal of Nonprofit and Voluntary sector marketing*, 7(3), 244-257.

- Chandler, C., Portrie-Bethke, T., Minton, C., Fernando, D., & O'Callaghan, D. (2010). Matching animal-assisted therapy techniques and intentions with counseling guiding theories. *Journal of Mental Health Counseling*, 32(4), 354-374.
- Chandler, C. K. (2012). *Animal assisted therapy in counseling* (2<sup>nd</sup> ed., Vol. 01). Routledge.
- Chandler, C. K. (2017). *Animal assisted therapy in counseling* (3<sup>rd</sup> ed., Vol. 01). Routledge.
- Charnetski, C. J., Riggers, S., & Brennan, F. X. (2004). Effect of petting a dog on immune system function. *Psychological Reports*, 95(3\_suppl), 1087-1091.
- Clary, E. G., Snyder, M., & Ridge, R. (1992). Volunteers' motivations: A functional strategy for the recruitment, placement, and retention of volunteers. *Nonprofit Management and Leadership*, 2(4), 333-350. doi: 10.1002/nml.4130020403
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516.
- Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current directions in psychological science*, 8(5), 156-159. doi; 10.1111/1467-8721.00037
- Clary, E. G., & Snyder, M. (2002). Community involvement: Opportunities and challenges in socializing adults to participate in society. *Journal of Social Issues*, 58(3), 581-591.
- Cnaan, R. A., & Goldberg-Glen, R. S. (1991). Measuring motivation to volunteer in

- human services. *The Journal of Applied Behavioral Science*, 27(3), 269-284. doi: 10.1177/0021886391273003
- Cole, K. M., & Gawlinski, A. (2000). Animal-assisted therapy: the human-animal bond. *AACN Advanced Critical Care*, 11(1), 139-149.
- Cole, K. M., Gawlinski, A., Steers, N., & Kotlerman, J. (2007). Animal-assisted therapy in patients hospitalized with heart failure. *American Journal of Critical Care*, 16(6), 575-585.
- Collins, K. V. (2014). Animal-Assisted Therapy: Motives and Rewards. *Honors Theses and Capstones*. 175.
- Cooke, B. J., & Farrington, D. P. (2016). The effectiveness of dog-training programs in prison: A systematic review and meta-analysis of the literature. *The Prison Journal*, 96(6), 854-876.
- Creagan, E. T., Bauer, B. A., Thomley, B. S., & Borg, J. M. (2015). Animal-assisted therapy at Mayo Clinic: The time is now. *Complementary Therapies in Clinical Practice*, 21(2), 101-104. doi; 10.1016/j.ctcp.2015.03.002
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Dwyer, P. C., Bono, J. E., Snyder, M., Nov, O., & Berson, Y. (2013). Sources of volunteer motivation: Transformational leadership and personal motives influence volunteer outcomes. *Nonprofit Management and Leadership*, 24(2), 181-205.
- Esmond, J., & Dunlop, P. (2004). Developing the volunteer motivation inventory to assess the underlying motivational drives of volunteers in Western Australia.

- Farmer, S. M., & Fedor, D. B. (2001). Changing the focus on volunteering: An investigation of volunteers' multiple contributions to a charitable organization. *Journal of Management*, 27(2), 191-211.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics: and Sex and Drugs and Rock "N" Roll*. 4th ed. Los Angeles: Sage.
- Fine, A. H. (Ed.). (2015). *Handbook on animal-assisted therapy: Foundations and guidelines for animal-assisted interventions*. 4<sup>th</sup> ed. Academic Press.
- Fine, A. H., & Beck, A. M. (2015). Understanding our kinship with animals: Input for health care professionals interested in the human–animal bond. In A. H. Fine & A. M. Beck, *Handbook on Animal-Assisted Therapy* (Fourth Ed.), pp. 3-10.
- Finkelstein, M. A., Penner, L. A., & Brannick, M. T. (2005). Motive, role identity, and prosocial personality as predictors of volunteer activity. *Social Behavior and Personality: An International Journal*, 33(4), 403-418.
- Finkelstein, M. A. (2008). Predictors of volunteer time: The changing contributions of motive fulfillment and role identity. *Social Behavior and Personality: An International Journal*, 36(10), 1353-1363.
- Finkelstein, M. A. (2009). Intrinsic vs. extrinsic motivational orientations and the volunteer process. *Personality and Individual Differences*, 46(5-6), 653-658.
- Friedmann, E., & Son, H. (2009). The human–companion animal bond: how humans benefit. *Veterinary Clinics of North America: Small Animal Practice*, 39(2), 293-326.
- Furton, K. G., & Myers, L. J. (2001). The scientific foundation and efficacy of the use of

- canines as chemical detectors for explosives1. *Talanta*, 54(3), 487-500.
- Gammonley, J., Howie, A. R., Kirwin, S., Zapf, S.A., Frye, J., Freeman, G., et al. (1997). *Animal-assisted therapy: Therapeutic interventions*. Renton, WA: Delta Society.
- Garson, G. D. (2012). Testing statistical assumptions. Asheboro, NC: Statistical Associates Publishing. doi:10.5121/ijdkp.2018.8601
- Geiser, C., Okun, M. A., & Grano, C. (2014). Who is motivated to volunteer? A latent profile analysis linking volunteer motivation to frequency of volunteering. *Psychological Test and Assessment Modeling*, 56(1), 3-24.
- Geist, T. S., Conceptual Framework for Animal Assisted Therapy. (2011). *Journal of Child Adolescent Social Work*, 28:243-256
- Gosling, S. D., Kwan, V. S., & John, O. P. (2003). A dog's got personality: a cross-species comparative approach to personality judgments in dogs and humans. *Journal of personality and social psychology*, 85(6), 1161.
- Haefliger, U., & Hug, S. (2009). Mean well to do good? Volunteer motivation re-examined. In *annual meeting of the National Communication Association, Chicago, IL*.
- Haug, J. C., & Gaskins, J. N. (2012). Recruiting and retaining volunteer EMTs: from motivation to practical solutions. *International journal of sociology and social policy*, 32(3/4), 197-213.
- Hoffman, R. G. (1992). Companion animals: A therapeutic measure for elderly patients. *Journal of gerontological social work*, 18(1-2), 195-205.
- Hoffmann, A. O., Lee, A. H., Wertenaue, F., Ricken, R., Jansen, J. J., Gallinat, J., &

- Lang, U. E. (2009). Dog-assisted intervention significantly reduces anxiety in hospitalized patients with major depression. *European Journal of Integrative Medicine*, 1(3), 145-148.
- Holt, S., Johnson, R. A., Yaglom, H. D., & Brenner, C. (2015). Animal assisted activity with older adult retirement facility residents: the PAWSitive visits program. *Activities, Adaptation & Aging*, 39(4), 267-279.
- Hsieh, F.Y., Block, D.A., and Larsen, M.D. (1998). A Simple Method of Sample Size Calculation for Linear and Logistic Regression. *Statistics in Medicine*, Volume 17, pages 1623-1634.
- Jalongo, Mary Renck; Astorino, Terri; Bombay, Nancy; "Canine Visitors: The Influence of Therapy Dogs on Young Children's Learning and Well-Being in Classrooms and Hospitals." *Early Childhood Education Journal*, Vol 32, (1), August, 2004.
- Johnson, R. A. & Meadows, R. L., (2010). Dog-walking: motivation for adherence to a walking program. *Clinical Nursing Research*, 19, 387-402.
- Johnson, R. A. (2011). Animal-assisted intervention in health care contexts. In P. McCradle, S. McCune, J. A. Griffin, V. Mahomes, P. McCardle, S. McCune, ... V. Maholmes (Eds.), *How animals affect us: Examining the influences of human-animal interaction on child development and human health* (pp. 183-192).
- Jorgenson, J. (1997). Therapeutic use of companion animals in health care. *Image: The Journal of Nursing Scholarship*, 29(3), 249-254.
- Knapp, D. J., Sandberg, J. G., Novak, J., & Larson, J. H. (2015). The mediating role of attachment behaviors on the relationship between family-of-origin and couple

communication: Implications for couples therapy. *Journal of Couple & Relationship Therapy*, 14(1), 17-38.

Kruger, K. A., & Serpell, J. A. (2010). Animal-assisted interventions in mental health: Definitions and theoretical foundations. In *Handbook on Animal-Assisted Therapy* (3<sup>rd</sup> ed., Vol. 01) (pp. 33-48).

Le Roux, M. C., & Kemp, R. (2009). Effect of a companion dog on depression and anxiety levels of elderly residents in a long-term care facility. *Psychogeriatrics*, 9(1), 23-26.

Macdonald, W., Mead, N., Bower, P., Richards, D., & Lovell, K. (2007). A qualitative study of patients' perceptions of a 'minimal' psychological therapy. *International Journal of Social Psychiatry*, 53(1), 23-35.

Maio, Gregory R., Ali Pakizeh, Wing-Yee Cheung, and Kerry J. Rees. "Changing, priming, and acting on values: effects via motivational relations in a circular model." *Journal of Personality and Social Psychology* 97, no. 4 (2009): 699.

Martin, F., & Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western journal of nursing research*, 24(6), 657-670.

McAllum, K. (2014). Meanings of organizational volunteering: Diverse volunteer pathways. *Management Communication Quarterly*, 28(1), 84-110.

McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1976). The achievement motive.

McCurley, S., & Lynch, R. (1989). *Essential Volunteer Management, The Volunteer Management Series of VMSystems.*



- McKee, I. R., & Feather, N. T. (2008). Revenge, retribution, and values: Social attitudes and punitive sentencing. *Social Justice Research, 21*(2), 138.
- Merikle, P. M., Smilek, D., & Eastwood, J. D. (2001). Perception without awareness: Perspectives from cognitive psychology. *Cognition, 79*(1-2), 115-134.
- Millette, V., & Gagné, M. (2008). Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on volunteer engagement. *Motivation and Emotion, 32*(1), 11-22.
- Morrison, M. L. (2007). Health benefits of animal-assisted interventions. *Complementary health practice review, 12*(1), 51-62.
- Mowen, J. C., & Sujan, H. (2005). Volunteer behavior: A hierarchical model approach for investigating its trait and functional motive antecedents. *Journal of Consumer Psychology, 15*(2), 170-182.
- Nicholas, R. F., & Gullone, E. (2001). Cute and cuddly and a whole lot more? A call for empirical investigation into the therapeutic benefits of human–animal interaction for children. *Behaviour Change, 18*(2), 124-133.
- Nimer, J., Lundahl, B., 2007. Animal-Assisted Therapy: A Meta-Analysis. *Anthozoos* Vol 20 (3) 225-238
- O'Haire, M. E., McKenzie, S. J., McCune, S., & Slaughter, V. (2014). Effects of classroom animal-assisted activities on social functioning in children with autism spectrum disorder. *The journal of alternative and complementary medicine, 20*(3), 162-168.
- Omoto, A. M., & Snyder, M. (1993). AIDS volunteers and their motivations: Theoretical

- issues and practical concerns. *Nonprofit management and leadership*, 4(2), 157-176.
- Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of personality and social psychology*, 68(4), 671.
- Parshall, D. P. (2003). Research and reflection: Animal-assisted therapy in mental health settings. *Counseling and Values*, 48(1), 47-56.
- Reed, R., Ferrer, L., & Villegas, N. (2012). Natural healers: a review of animal assisted therapy and activities as complementary treatment for chronic conditions. *Revista latino-americana de enfermagem*, 20(3), 612-618.
- Richeson, N. E. (2003). Effects of animal-assisted therapy on agitated behaviors and social interactions of older adults with dementia. *American Journal of Alzheimer's Disease & Other Dementias®*, 18(6), 353-358.
- Sable, P. (2013). The pet connection: An attachment perspective. *Clinical Social Work Journal*, 41(1), 93-99.
- Sobo, E. J., Eng, B., & Kassity-Krich, N. (2006). Canine visitation (pet) therapy: pilot data on decreases in child pain perception. *Journal of Holistic Nursing*, 24(1), 51-57.
- Soloman, O., "What a dog can do: children with autism and therapy dogs in social interaction." *Journal of the Society for Psychological Anthropology*, Vol 38, (1), 2010. pp.143-166
- Stasi, M. F., Amati, D., Costa, C., Resta, D., Senepa, G., Scarafioiti, C., ... & Molaschi,

- M. (2004). Pet-therapy: a trial for institutionalized frail elderly patients. *Archives of Gerontology and Geriatrics. Supplement*, (9), 407-412.
- Steed, H. N., & Smith, B. S. (2003). Animal assisted activities for geriatric patients. *Activities, Adaptation & Aging*, 27(1), 49-61.
- Takashima GK, Day, MJ, (2014). Setting the one health agenda and the human-companion animal bond. *International Journal of Environmental Research and Public Health* 2014, 11, 11110-11120; doi:10.3390/ijerph111111110
- Tucker, M. T. (2005). The Pet Partners team training course manual. add source
- Tsai, C. C., Friedmann, E., Thomas, S. A. (2010). *The effect of animal-assisted therapy on stress responses in hospitalized children*. *Anthrozoös*. Sep; 23(3): 245-258
- Walsh, F. (2009). "Human-animal bonds II: The role of pets in family systems and family systems and therapy." *Family Process* 48(4), 481-499. Doi:10.1111/j.1545-5300.2009.01297.x
- Washington, DC: American Psychological Association. doi:10.1037/12301-010
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26(1), 215-240.
- Wu, A. S., Niedra, R., Pendergast, L., & McCrindle, B. W. (2002). Acceptability and impact of pet visitation on a pediatric cardiology inpatient unit. *Journal of Pediatric Nursing*, 17(5), 354-362.

## Appendix A: Email Invite

Hello, Pet Partners therapy dog handlers!

As you might know, we at Pet Partners are highly committed to supporting the field of evolving research on animal-assisted interventions (AAI). We are excited about a new study opportunity that is being conducted by a fellow Pet Partners handler who aims to better understand volunteer motivation in AAI, realizing that you as a handler are crucial to the mission at the heart of this work.

Although this study is being conducted by a fellow handler, please note that this is not a program evaluation for Pet Partners. It will contribute to the general empirical understanding of our interventions. The researcher hopes you will participate in this project to receive feedback on your experiences.

The researcher for this short online survey is a doctoral student at Walden University. This is a confidential survey; the doctoral student will not know the participants' identities and will not have access to participants' names.

If you are willing to contribute and meet the requirements to participate, you will be asked some questions about your volunteer experiences. There is an informed consent document available to further explain the study and to facilitate a conversation about any questions that you may have about this project.

Please note:

- The survey will take around 15 minutes to complete.
- These anonymous survey results will be used in a dissertation study.

To take this survey, click the following link: [Pet Partners Volunteer Survey](#) This survey will close two weeks from the sending date of this email.

Thank you, as always, for all that you do as an advocate in this field!

Gratitude,

National Director of AAI Advancement

## Appendix B: Demographic Survey

### **Demographic Questions:**

Thank you so much for taking the time to participate in this survey. You have met the requirements to participate in answering some questions about your volunteer experience.

If you are ready to start the survey, please proceed in answering some demographic questions. Please inform me on your gender (male, female or other), age (18-28 years, 29-39 years, 40-50 years, 51-61 years or 62 and older), education (high school graduate, associate degree, bachelor's degree, master's degree, doctorate degree, or other), employment (employed for wages, self-employed, out of work and looking for work, out of work but not currently looking for work, a homemaker, a student, military, retired, unable to work), household income (\$0-25,999, \$26,000-51,999, \$52,000-74,999, more than \$75,000 or don't know/decline to say), race/ethnicity (Asian or Pacific Islander, Hispanic/Latino, White/Caucasian, Black/African American, Native American/American Indian or Other), marital status (single/never married, married or domestic partnership, widowed, divorced, separated) and currently have children under 18 living in your household (yes or no).

Thank you for sharing. Now we are ready to get started with the survey.