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# ANIMAL-ASSISTED THERAPY: BENEFITS AND IMPLICATIONS FOR PROFESSIONALS IN THE FIELD OF REHABILITATION

By

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B.A., Eastern Illinois University, 2012

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the

Master of Science Degree

Rehabilitation Counselor Training Program

In the Graduate School

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## RESEARCH PAPER APPROVAL

# ANIMAL-ASSISTED THERAPY: BENEFITS AND IMPLICATIONS FOR PROFESSIONALS IN THE FIELD OF REHABILITATION

By

Amanda M. Mangalavite

A Research Paper Submitted in Partial

Fulfillment of the Requirements

For the Degree of

Master of Science

in the field of Rehabilitation Counseling

Approved by:

Thomas D. Upton, Chair

In the Rehabilitation Institute of Southern Illinois University Carbondale June 26, 2014

#### AN ABSTRACT OF THE RESEARCH PAPER OF

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# TITLE: ANIMAL-ASSISTED THERAPY: IMPLICATIONS FOR PROFESSIONALS IN THE FIELD OF REHABILITATION

#### MAJOR PROFESSOR: Dr. Thomas D. Upton

The use of animals for therapeutic purposes has been done for centuries. It wasn't until the 20<sup>th</sup> century when people began to realize the potential the humananimal interaction had on our overall health. Professionals and organizations began to implement animal-assisted therapy (AAT) and activities, and research began to see the benefits that it could produce. Animal-assisted therapy has shown to provide various populations of individuals with physiological and psychological benefits, including a decrease in anxiety and depression, better cardiovascular functioning, and an increase in socialization skills and functioning. AAT has the potential to provide the field of rehabilitation with an alterative, complementary therapy to improve recovery, motivation, and treatment goals for consumers. Future research needs to be done to determine long-term effectiveness of animal-assisted therapy and how it can benefit more specific populations within the rehabilitation field.

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#### **CHAPTER 1**

#### INTRODUCTION

Owning a pet and being around animals of varying species, in general, can be comforting, calming, or therapeutic to many people. According to the Humane Society of the United States, pet ownership has more than tripled in the U.S. since the 1970s. Statistics show that there are 83.3 million owned dogs and 95.6 million owned cats as household pets, and in the 2012, approximately 62 percent of American households included at least one pet (Humane Society of the United States, 2014). With these numbers in mind, there is little surprise that the concept of Animal-Assisted Therapy (AAT) and Animal-Assisted Activities (AAA) is not a new one.

For years, organizations, animal-behavioral groups, and individuals have been claiming the use of animal-assisted therapy and interventions is effective and provides numerous physical, emotional, and mental benefits to its participants. Research on this topic varies greatly from type of client population served, to setting or location in which the animal-assisted therapy or activity occurs, to the species of therapy animal used. While the research on this topic is wide-ranging, there is a lack of research discussing this topic in-depth. The research available also lacks in ability to determine conclusively whether animal-assisted programs should be incorporated into more programs and settings that it is now.

#### Backrgound

Animal-assisted therapy and animal-assisted activities are not new subjects of research, but they are not commonly used or practiced in many rehabilitation facilities. The use of properly trained, certified animals has been found, through previous and

recent research, to positively benefit individuals' moods and physical well-being. Unresolved issues for this type of approach include precisely how effective this type of approach is and whether that effect is substantial enough to warrant more prominent use of the approach in general. Society has embraced the use of service animals for individuals with disabilities, especially Veterans, but concern over the use of therapy animals as a staple in rehabilitation treatment has yet to be addressed thoroughly. This paper is relevant to the rehabilitation field because animal-assisted therapy and animalassisted activities could possibly be a way to enhance an individual's recovery and rehabilitation, both physically and mentally.

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#### Significance of the Study

Current research by a number of different organizations and individual researchers discuss the benefits of such a therapy in a wide-array of rehabilitation centers, but do not describe long-term effectiveness or usage. This paper will lay a foundation for the benefits of animal-assisted activities and therapies, and discuss why further research needs to be conducted in order to determine whether this type of therapy has lasting effects for individuals. Further research may be necessary to address whether animal-assisted approaches have any effect on an individual's wellness and recovery longevity compared to other therapy approaches or techniques.

#### Purpose

Animal-assisted therapy may have the potential to reach individuals on a different level and in a different way than traditional therapy approaches. AAT is often times combined with another therapeutic approach, such as person-centered counseling or cognitive-behavioral therapy, that is used by the therapist/counselor on a regular basis.

The purpose behind this particular research is to discuss the benefits and effectiveness of animal-assisted therapy as identified in previous and recent literature. This paper also addresses and brings to focus the possible need and relevance for future research on this topic. It is commonly known throughout research that animals can have an effect on human thoughts, feelings, and overall recovery. That connection could be used more often to enhance the therapy or rehabilitation process for individuals with physical, medical, or psychiatric disabilities. This study will examine the positive aspects discovered through previous research that participating in AAT can provide to individuals with disabilities, particularly individuals with psychiatric symptomology and medical conditions. These findings may also be able to provide insight to professionals and consumers as to whether AAT is an appropriate complementary or alternative therapy for them to consider as an option for treatment.

#### **Definition of Terms**

There are two defined forms of animal-related therapies and activities: Animal-Assisted Therapy (AAT) and Animal Assisted-Activities (AAA). These are two different entities, and in order to distinguish each form and it's associated features, it is necessary to define each one, as well as other key terminology or vocabulary that is relevant to this research.

Animal-assisted therapy (AAT): A goal directed intervention in which an animal meeting specific criterion is an integral part of the treatment process. It is designed to promote improvement in human physical, social, emotional, or cognitive function. It is delivered and/or directed by health or human service providers working within the scope of their profession in a variety of settings, and may be group or individual in nature. The

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process of Animal-Assisted Therapy is also documented and evaluated. (American Veterinary Medical Association, 2014)

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*Animal-assisted activities (AAA):* Provide opportunities for motivation, education, and recreation to enhance quality of life. Specially trained professionals, paraprofessionals, or volunteers in association with animals that meet specific criteria deliver these activities in a variety of environments. (American Veterinary Medical Association, 2014)

Resident animals (RA): Live in a facility full time, are owned by the facility, and are cared for by the staff, volunteers, and residents of the organization. Some resident animals may be formally included in facility activity and therapy schedules after proper screening and training, while others may participate in spontaneous or planned interactions with residents and staff. (American Veterinary Medical Association, 2014)

*Therapy animal:* While not defined by federal law, some states have laws defining what a therapy animal is and does. Federal laws have no provisions for people to be accompanied by therapy animals in places of public accommodation that have "no pets" policies. These animals provide people with contact with animals, but are not limited to working with individuals with disabilities. They are usually personal pets of their handlers and work with their handlers to provide services to others. While these animals can be trained to be services animals, they generally are not. Therapy animals still must be trained and meet criteria qualifications to be certified. (Pet Partners, 2014)

*Service animal:* As defined by the Americans with Disabilities Act 1990, service animals are "dogs that are individually trained to do work or perform tasks for people with disabilities." Federal law protects the rights of individuals with disabilities to be

accompanied by their service animals in public vicinities. Service animals are not considered "pets," and have many different definitions under different legislative documents.

*Emotional support animal (ESA):* Animals that provide comfort and security to individuals, especially to those with psychological limitations. While these animals may perform some type of "work" or purpose for their owner, it is mostly the pet's presence alone that is beneficial. The individuals who own ESA's are protected under the Fair Housing Act to keep the animals in a public housing situation, but property managers have a right to ask for proper documentation from a health-care provider that the animal is necessary for the resident's health and well being. (Pet Partners, 2014)

*Companion animal:* Accepted as another term for a pet; is not legally defined. (Pet Partners, 2014)

#### **CHAPTER 2**

#### **REVIEW OF THE LITERATURE**

#### INTRODUCTION TO THE CHAPTER

In this chapter, research findings by a number of organizations and individuals will be shared in order to show the benefits that can result from participation in animalassisted therapy. In order for readers to grasp the concept behind AAT, a brief history of the approach will be discussed. The types of animals that are used will also be discussed, as well as a brief look at different types of approaches based on the animal used (i.e. dolphin-assisted therapy and equine therapy). After that, research findings for generalized benefits of participation in AAT, benefits for individuals with psychiatric symptoms/disorders, and benefits for individuals with medical conditions will all be discussed.

#### **OVERVIEW OF THE RESEARCH**

#### History of Animal-Assisted Therapy

The first documented example of the use of animals for therapeutic reasons occurred in the 9<sup>th</sup> century in Gheel, Belgium (Shubert, 2012). During this time, animals were a part of what was known as a "therapie naturelle," which was provided for the handicapped by members of the community (Shubert, 2012). The first known use of animals for the treatment of individuals with mental illness occurred in the late 18<sup>th</sup> century in York, England at the York Asylum. Patients living at the asylum were allowed to wear their own clothing, had the opportunity to work on crafts, read books, write, and wander the grounds, which contained a wide variety of small animals. The first documented use of animals for a therapeutic purpose in the United States took occurred

during World War II in 1942 at an Army Air Corps Convalescent Hospital in Pawling, New York (Behling, Haefner, & Stowe, 2011). While many informal efforts were given to include animals in treatment and/or rehabilitation of individuals throughout the 18<sup>th</sup> and 19<sup>th</sup> centuries, it wasn't until the 20<sup>th</sup> century, however, that official programs were developed to train animals, more specifically, dogs, to provide a variety of services to humans. The therapist that is considered to be the true father of animal-assisted therapy, Boris Levinson, actively tried to show other mental health professionals the benefits of including animals in their therapeutic interventions and/or activities. Levinson published two books, Pet-oriented Child Psychotherapy in 1969 and Pets and Human *Development* in 1973, as well as many journal articles in his pursuit (Shubert, 2012). During the same time as Levinson's pursuit for animals' use in therapeutic practices, Samuel and Elizabeth Corson were attempting to promote the use of dogs in a psychiatric facility and a nursing home. A study conducted by Corson et al showed that if dogs were introduced into treatment of patients that were previously unresponsive to a variety of other treatments increased those individuals' social interactions amongst one another and also improved patient/staff relationships (Shubert, 2012). Other studies during this same time period only verified Corsons' results and also provided conclusions of other health benefits as well (i.e. improved cardiovascular health, stress relief, etc) (Shubert, 2012).

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Through the findings of the research discussed above, two important organizations were established. The first organization created was Therapy Dogs International in 1976 by Elaine Smith, an American Nurse. Then, in 1977, the Delta Foundation was established in Portland, Oregon with Michael J. McCulloch, MD as the

President and several other veterinary professionals who were interested in humananimal relationships and the effects that come from them (Pet Partners, 2014). In 1981, the organization changed its name to the Delta Society and began to focus on completing more research on human-animal interactions, as well as on training, certifying, and registering therapy and service dogs (Shubert, 2012). Also in 1981, Bill McCulloch helped to initiate the American Veterinary Medical Association's (AVMA) Human-Animal Bond Task Force. This task force was, and continues to this day, to review the professional's role in "recognizing and promoting the human-animal bond." (Pet Partners, 2014). In 2012, Delta Society once again changed their name, this time to Pet Partners. The organization believes that this name conveys more clearly its mission to the research and advancement of the human-animal bond/interaction and the human health benefits that the positive interactions provide.

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#### Types of Animal-Assisted Therapy

A variety of animal species may be used for animal-assisted therapy, including dogs, cats, horses, dolphins, fish, birds, rabbits, and turtles. This is not an exclusive list of animals that are used for AAT, but provides an example of how diverse this type of intervention can be. The use of different animals has the ability to provide different types of services. For example, equine-assisted therapy, also known as Hippotherapy, is the use of horses and therapeutic horseback riding as a form of treatment for individuals with chronic illness and disabilities. Through Hippotherapy, individuals often obtain recreational and social benefits, but the primary goal of this type of therapy is to improve an individual's balance, posture, mobility, and function (All, Loving, & Crane, 1999). Another example of an animal that can be used for therapeutic purposes is the dolphin.

Dolphin-assisted therapy (DAT) is still a relatively new sub-field of animal-assisted therapy but has shown promising results with children with special needs (Dilts, Trompisch & Bergquist, 2011). While there is still limited data, the current research has supported that the use of dolphin-assisted therapy increased attention spans, improved interactive and play behaviors, and increased verbal expression among the children who participated (Dilts et al., 2011).

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Probably the most common and well-known animal to be used in animal-assisted therapy is a dog. A dog is often the preferred choice for AAT because they are very social, dependent, and trainable creatures (Beck et al., 2012). There is two recognized categories of dogs that provide assistance to people with disabilities: service dogs and therapy dogs. The definitions of a service dog and a therapy dog can be found in the previous chapter of this paper. The terms service dog and therapy dog are not interchangeable ones, as they are two separate things. Service dogs are defined by law under the Americans with Disabilities Act, and assist their owners with a variety of tasks related to their disability. These animals also provide a sense of companionship to owners, which can be particularly important to individuals who may have been experiencing isolation due to their disabilities. Therapy dogs are not defined or represented under the law, but can be trained to assist in medical crises, treatment, emotional reactivity, and security (Shubert, 2012).

Pet Partners, formally known as the Delta Society, suggests that the ideal animal candidate should be healthy, well behaved, skilled in basic obedience, well groomed, clean, and at least 1 year old (Horowitz, 2010). The American Veterinary Medical Association also provides guidelines for animals and their handlers to adhere to in order

to participate in AAT, AAA, and RA programs. Animals that do participate in these areas are monitored for their well-being and for the safety of the facilities in which they practice (Horowitz, 2010).

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#### **Generalized Benefits of AAT**

Research on animal-assisted therapy is wide-ranging and has studied many different populations. While each population yields it's own individualized results, studies have show to have some generalized benefits amongst all the populations of people studied.

One of the first things that human-animal interactions seem to nurture in adults and children is a sense of empathy (Pet Partners, 2014). According to Pet Partners, it is "easier to teach children how to be empathetic with an animal than with a human." The reasoning behind this is that animals are straightforward and live in the moment, so determining their feelings and reading their body language is simpler than understanding human intentions/feelings. As children age, their ability to then empathize with animals translates to their experiences with people. As children, and even adults, learn to empathize through human-animal interaction, they are also learning to think outside of themselves. This is known as being able to "outward focus (Pet Partners, 2014)." With increasing one's ability to do this, the individual is able to watch, talk to, and talk about their animals, which then can help increase their capability to focus on their surrounding environment (Pet Partners, 2014). Awareness of one's outside environment is just as important as awareness of what is going on internally, as the two mesh together to create each individual's personal reality.

The use of AAT also can increase an individual's ability to learn nurturing skills. Nurturing skills are a learned behavior, and many children are not taught these skills through traditional ways, such as from their parents. Through the act of being around and taking care of an animal, children (and even adults who may have never developed these skills) can develop these skills and fulfill a psychological need that ever human being possesses. Animal-assisted therapy, by virtue, then also has the ability to increase an individual's level of acceptance. Animals accept people into their lives without stipulations or hesitation. They do not care what a person says, looks like, or has done in their past. Animals are also extremely forgiving and do not play mindgames, as many people often can/will do. Due to this overwhelming since of acceptance that people feel by animals, the mere presence of one has the ability to build rapport between professionals and clients. Studies have shown that in therapy settings, having an animal present can present a feeling of emotional safety (Pet Partners, 2014). This may open a window through a person's initial resistance and hesitancy towards the situation.

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Socialization and entertainment are two more potential benefits to result from AAT. A lack of socialization and integration is common amongst individuals with disabilities, and multiple studies have concluded that when animals, particularly dogs and cats, visit care facilities there is more laughter and interaction among residents than during any other therapy or entertainment time (Pet Partners, 2014). Interaction and socialization cannot only be fostered between clients, but also between clients and staff, and between clients, staff, and visitors to the facilities. Through this finding, it can be predicted that AAT has the ability to increase the satisfaction of residents and their

attitudes toward treatment and recovery. Even for those individuals who do not like animals, merely watching their antics and reactions to others can be enjoyable, increase the consumer's mood, and promote socialization.

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The two most researched and documented benefits of animal-assisted therapy, especially with individuals with disabilities, are mental stimulation and physiological benefits. According to Pet Partners, the mental stimulation that is provided by humananimal interaction is because of "increased communication with other people, recalled memories, and the entertainment provided by the animals (Pet Partners, 2014)." Animals have an ability to distract people from their personal problems or issues by increasing the fun, laughter, and light-heartedness in life. Positive distractions or interactions with creatures that provide undivided and unconditional love and attention can decrease people's feelings of alienation or isolation (Pet Partners, 2014). Physiological benefits of AAT also accompany the mental stimulation. Research has shown that many people are better able to relax when animals are present, thus decreasing one's heart rate and blood pressure (Pet Partners, 2014). This can lead to stress reduction and create a more calming atmosphere for patients/clients.

Research on animal-assisted therapy up to present day has been very diverse in regards to the population of people that have been studied. As discussed in the paragraphs above, animal-assisted therapy has been shown to have benefits that can relate to any human being, regardless of disability or life situation. While this is useful and interesting information for many, professionals often want to know the effect specific therapies have on specific populations. For example, in regards to the field of rehabilitation, how would an individual diagnosed with autism benefit from AAT

compared to a Veteran diagnosed with PTSD? Could AAT provide beneficial aspects to the individual's daily life or course of recovery? These may be the kind of questions asked by professionals. Current research has shown animal-assisted therapy to have beneficial outcomes with a wide range of populations, including individuals with mental disorders and physical disabilities. While each of these populations can be broken down more specifically, for the purpose of this paper an overall general outlook will be used.

#### Benefits of AAT for Individuals with Psychiatric Disabilities/Symptoms

Individuals with psychiatric disabilities have been the subject of research studies for numerous types of therapies and interventions, and AAT is one of them. Individuals who have been diagnosed with a mental illness have a number of different types of options for therapeutic intervention when it comes to their mental health treatment. This includes both inpatient and outpatient services. In regards to animal-assisted therapy, it has been reported through a number of studies that AAT has shown benefits in inpatient psychiatric settings (Knisely, Barker, & Barker, 2012).

In a review article written by Knisely, Barker, & Barker, a number of studies were examined to acknowledge the benefits of AAT. In one study mentioned, 35 individuals were receiving electric-convulsive therapy (ECT) treatments and a single 15-minute session of AAT involving a therapy dog or a 15-minute session on reading/looking through magazines on anxiety, fear and depression. In the AAT condition, there was a significant 37% reduction in fear and an 18% reduction in anxiety (Knisely et al., 2012). In another study, researchers found that after 4 weeks of AAT with 69 hospitalized psychiatric patients there were increased social behaviors and responsiveness to their environment (such as in therapy group). A similar 4-week AAT-group study with 37

elderly psychiatric patients resulted in increased interactions in therapy and social encounters (Knisely et al., 2012). According to a study conducted by Perry, Rubinstien, and Austin (2012), findings show that animal-assisted therapy in inpatient psychiatric settings draws individuals who normally would exhibit isolating behaviors and tendencies. Increased social interaction and functioning can be a huge hurdle to overcome for individuals who have been diagnosed with a chronic mental illness. Through AAT, individuals with psychiatric symptoms and disabilities have the ability to increase these skills and open up in a more relaxed, comfortable environment that may have otherwise been too threatening or anxiety provoking.

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Correctional facilities are another type of institution that is noticing the benefits of animal-assisted therapy for the mentally ill. Correctional facilities have been using animals as rehabilitative and therapeutic tools for many years (Jasperson, 2010). These programs are called prison-based animal programs (PAPs). In a national survey conducted across 36 U.S. states, the most frequently cited benefit of the prison-based animal programs was the sense of responsibility that developed amongst the inmates from caring for the animals (Jasperson, 2010). In a study conducted by R.A. Jasperson, female inmates were involved in an AAT pilot program in which they participated in once or twice weekly group AAT sessions that focused on a combination of psycho-education and therapeutic intervention. The program was well received by both the inmates and mental health professionals involved. The group members reported feeling a large decrease in anxiety and depressive symptoms. The mental health professionals that worked directly with the female inmates that participated in the AAT sessions reported that, through their direct observation, the individuals appeared to have a decrease in

social isolation and an increase in pro-social behaviors (Jasperson, 2010). These results further show that the use of AAT may have the ability to foster socialization skills in individuals that may lack in them and also decrease depression and anxiety at the same time.

#### Benefits of AAT for Individuals with Medical Disorders/Disabilities

Along with the psychological benefits, animal-assisted therapy has proven to have physiological benefits as well. Patient populations such as those with cardiovascular disease, cancer, a stroke, and dementia have all yielded beneficial results after participation in AAT (Knisely et al., 2012). These results have come from a variety of studies conducted over the course of many years. According to Marcus et al. (2012), a number of published studies have indicated that between just 10-15 minutes of therapy dog visits can produce optimal benefits to individuals who were visited by or interacted with the dog. These benefits were show across a broad range of medical conditions (Marcus et al., 2012).

One source of evidence for AAT with individuals with medical concerns involved a study done with 76 patients who had been hospitalized with heart failure (Knisely et al., 2012). Compared to the control group in the study, there was a significant decrease in pulmonary capillary wedge pressure and systolic pulmonary artery pressure both during and after the AAT visit. Also reported were significant decreases in epinephrine and norepinephrine levels during and after the AAT visit. The AAT group also resulted in a significantly greater decrease in anxiety levels reported by the patients. In a similar study by Abate et al. (2011) conducted with 69 individuals with a primary diagnosis of heart failure, ambulation with a restorative aide was offered with a therapy dog as a

walking partner (as cited in Marcus et al., 2012, p.46). The individuals who participated in the AAT group indicated a higher voluntary ambulation treatment participation rate and walked almost twice as much as the patients who had not participated in the AAT group (Knisely et al., 2012). As found by Abate et al. 2011, in the historical control group, only 120 steps were walked, compared to the therapy dog group where an average of 235 steps were walked (as cited in Marcus et al., 2012, p.46). Not only does this information provide insight into the physiological benefits of AAT, but also the potential possibility for motivation to participate in treatment, thus increasing likelihood of medical improvement and recovery (Knisely et al., 2012). In addition to helping individuals while undergoing treatment in the hospital, researchers have found that by owning a pet, particularly canines, individuals with cardiovascular disease have enhanced survival rates and a reduced need for doctor visits (Shubert, 2012).

In another study reported on by Knisely et al. (2012), oncology patients were given the opportunity to participate in a one-hour animal-assisted activity (AAA) session while receiving chemotherapy treatment at the hospital. These sessions were broken down into 3 20-minute segments: patients watching the dog exercise with the handler, the patient playing with the dog, and then feeding or holding the dog. After these onehour sessions, the AAA group, compared to the control group who did not have interaction with the therapy dog, showed a significant decrease in depression symptoms and an increase in arterial oxygen saturation. Significant decrease in blood pressure in the patients was also reported (Knisely et al., 2012).

As another example for benefits of AAT for individuals with various medical conditions, Marcus et al. (2012) completed a study in an outpatient pain management

clinic to evaluate the benefit of AAT as a complementary therapy for patients attending the clinic. A single therapy dog was used for this study, and patients visiting the clinic were able to visit with the animal in a designated room with the dog's handler. Multiple patients could visit with the dog at once, and conversations between the study's participants and the dog's handler focused on the dog and dog-related topics. Participants could spend as much time as they wanted with the animal, or until a nurse notified the patient that their appointment with the doctor was ready to begin. A total of 382 people took part in the study, with 286 individuals who met with the therapy dog and 96 individuals who just completed a survey without meeting the dog. Results showed that "clinically meaningful pain relief was achieved by 22.6% of patients visiting with the therapy dog vs 3.6% completing the waiting room survey (Marcus et al., 2012)." Among the individuals who met with the therapy dog, 70 individuals spent less than 5 minutes with the animal, 96 spent 5-10 minutes, and 129 spent 10 minutes or greater. The presence of the therapy dog was overwhelmingly positive, and negative comments that were made focused generally on a preference for cats or a general dislike of dogs. Comments made from the individuals who felt the experience was a positive one stated that they felt a reduced sense of discomfort, relaxation, positive impression of the dog and his handler, and that the dog provided a positive distraction from the symptoms they were currently experiencing (Marcus et al., 2012).

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Overall, through research, animal-assisted therapy has shown to have beneficial physiological outcomes for individuals with medical conditions. By spending time with a therapy animal, the human body is able to react in a physical way to the human-animal interaction that AAT provides. This physiological reaction is in part to the psychological

reaction, as discussed in the previous section. All tied together, AAT has provided insight into an alternative or complimentary type of therapy for individuals with medical disorders or conditions.

#### SYNTHESIS OF THE RESEARCH FINDINGS

Animal-assisted therapy has a deep and interesting historical background. Dating back all the way to the 9<sup>th</sup> century, the use of animals for therapeutic reasons has been used to improve the lives of individuals with a variety of disorders and conditions. From working for individuals with mental illness to Veterans rehabilitating from war, animals have shown to have an impact on human thought, emotion, and behavior. Boris Levinson and a few others recognized this potential and actively promoted it to professionals who would listen. Through their pursuits, two important organizations were founded, Therapy Dogs International and Pet Partners (formerly known as Delta Society). In present day, these organizations continue to research and promote human-animal interaction. Animals ranging from common household pets, such as dogs and cats, to domesticated animals such as horses and dolphins have shown to have beneficial effects on people in various ways. While there is no specific animal criterion for animal-assisted therapy, Pet Partners has suggested that to be considered an ideal AAT candidate, the animal should be healthy, well-maintained and groomed, well behaved, and skilled in basic obedience (Horowitz, 2010). It is also suggested that the animal should be at least 1 year old (Horowitz, 2010).

Over the course of literature, AAT has shown to have benefits for specific populations and benefits that generalize over populations. Generalized benefits across human populations studied include a sense of increased empathy, nurturing,

socialization and entertainment, as well as the ability to promote and increase mental stimulation and physiological improvements (Pet Partners, 2014). For individuals with psychiatric disorders and symptoms, studies have shown that by participating in AAT, in combination with other therapeutic interventions, can result in decreased anxiety, fear, and symptoms of depression, as well as an increase in social interaction and participation in one's environment (Knisely et al., 2012). For individuals with medicals disorders/disabilities, physiological benefits have been shown to exist after participation in AAT. Individuals with cardiovascular conditions have shown significant physiological improvements after spending time with therapy animals, as well as patients receiving treatment for cancer. Individuals visiting an outpatient pain management clinic also reported feeling less physical pain after visiting with a therapy dog before their appointments (Marcus et al., 2012).

Overall, research on animal-assisted therapy has shown to yield numerous types of benefits, both psychological and physiological, for a variety of populations. These outcomes could be used as a starting point for professionals who are looking to research and expand their therapeutic practices.

#### **CHAPTER 3**

#### DISCUSSION

#### **Implications for Professionals**

Throughout time, animals have always had some type of influence on humans, whether it was just living in the same environment, to companionship, hunting partners, or assistance with daily tasks. Over the course of that time, we began to realize the impact that animals have on people, and recognized the potential for good that could come from that interaction. We, as a species, have always found ways to improve our lives and benefit from new ideas. Animal-assisted therapy, while not such a new idea now, has been shown through time and research to provide beneficial effects for individuals with various medical and psychological concerns.

In the field of rehabilitation, professionals assert that each individual has a unique situation or recovery process. While various therapies, interventions, and techniques have consistently provided evidence for success, searching for new avenues for those people who may not have had as much success is vital and ongoing. Animal-assisted therapy is continuing to show through research that it is a viable option. It has consistently shown positive influences on different populations of consumers in various settings. For individuals with disabilities, introducing a form of therapy that has an animal included may be more inviting and bring a sense of comfort and familiarity. Many people have pets that they can relate to in some way or another, so being able to transfer that familiarity and sense of comfort into a setting that might be intimidating and/or foreign could improve the process and maybe outcomes of therapy. The benefits of decreased anxiety and depressed, increased social interaction and functioning, and

improved physiological functioning are all things commonly sought after and to be considered In the field of rehabilitation. In order to accomplish these things, more professionals in the rehabilitation field would have to be willing to pursue the use of animals as "co-workers."

In order to implement AAT more into rehabilitation for individuals with disabilities, professionals in the field would have to be willing to consider the use of animals in their practice and facilities. This would require further training for the working professionals or for organizations to be willing to allow therapy animals and their handlers to come to their facilities and interact with the consumers on a regular, consistent basis. Another factor that would have to be considered before choosing to offer animal-assisted therapy is allergies. If an individual is allergic to an animal, specifically dogs, then other options should be available to that particular consumer. The possibility of having different types of animals is also an option, such as dogs, cats, birds, reptiles, fish, and so on. Professionals who choose to implement animal-assisted therapy take on the responsibility of not only being attune to their client's needs, feelings and emotions, but also their therapy animal's. Just like people, animals do not always have positive reactions to every single person they meet. These are all things that need to be considered before an individual is chosen to partake in animal-assisted therapy.

Based on the findings in the literature discussed, it is the conclusion of this writer that animal-assisted therapy has the potential to bring many of the benefits discussed to the field of rehabilitation and its consumers, but with some aspects to consider. As discussed, AAT has been and, in this writer's opinion, should continue to be used as a complementary therapy. Animal-assisted therapy was designed to be used in

conjunction with another form of an evidence-based therapy, unless it's just a basic animal-assisted activity. AAT could specifically be useful in the field of rehabilitation to assist with individuals who have difficulties with learning, or never learned, effective socialization and communication skills. With animals, especially dogs, communicating effectively is important in order for the animal to understand what you want them to do. That skill can then conceivably be transferred from communication with animals to communicating with other people. Animals are also very good socialization tools. They are good conversation starters and can help those who may be shy or socially isolated to interact with others. If AAT has the ability to help increase these skills in individuals, then using it as an optional tool for recovery could be an important, potentially lifechanging component for some people.

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AAT is becoming more popular as time progresses as a supportive therapeutic tool and it has the ability to be a crucial component in some individual's rehabilitation and recovery. In the field of rehabilitation, future research in this area should focus on how animal-assisted therapy can be used to its maximum potential with individuals with disabilities and how those people are affected by the therapy. The more specific research can be with how AAT effects and benefits individuals with various disabilities will only strengthen the argument that it is a valuable tool that should be considered as an option during treatment. Also, more research needs to be done on how effective AAT is in the long-term. Would an individual experience continual benefit, or would the benefits of the therapy level off at a given point? This question and more may be answered with further research in the area.

Human-animal interaction for therapeutic purposes has a long history and has continued to gain popularity to present day in many different professions. Professionals are starting to recognize the positive impact this interaction can have on individuals with various conditions, both physiological and psychological. Recognizing the benefits animal-assisted therapy can produce is the first step. Using that knowledge to further impact the field of rehabilitation and promote the well being of individuals through alternative avenues could be important to the future of the field.

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