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# The Effectiveness of Animal Assisted Activity and Animal Assisted Therapy in Reducing Symptoms of Depression

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The Effectiveness of Animal Assisted Activity and  
Animal Assisted Therapy in Reducing Symptoms of Depression

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A Capstone Project submitted in partial fulfillment of the

Requirements for the Master of Science Degree in

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College of Education  
Counselor Education Department

CERTIFICATE OF APPROVAL

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CAPSTONE PROJECT

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The Effectiveness of Animal Assisted Activity and Animal Assisted Therapy in Reducing  
Symptoms of Depression

This is to certify that the Capstone Project of

Alexis J. Hauser

Has been approved by the faculty advisor and the CE 695 – Capstone Project

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### Abstract

This paper reviews the use of Animal Assisted Activity (AAA) and Animal Assisted Therapy (AAT) to effectively treat individuals experiencing symptoms of depression. This paper discusses the symptoms of depression, the process and techniques of AAA and AAT, and the effectiveness of AAA and AAT in reducing depressive symptoms. It also describes the differences between AAA and AAT and how these techniques can be used individually or in combination with more traditional forms of treatment for depression. An extensive review of literature is provided in this paper with the final section discussing limitations of research and suggestions for future research in this field of study. This paper concludes that there are several reasons for mental health professionals to consider incorporating the use of AAA and AAT in to their practice to enhance the therapeutic experience and implement skills that are beneficial to individuals and society as whole.

*Keywords: AAA, AAT, depression*

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## Introduction

Depression is among the leading causes of disability in individuals aged 15 years or older and can affect an individual's life on all dimensions (Siu et al., 2016). Depression makes it difficult for individuals to manage co-existing health issues; and therefore, indirectly affects families and society as a whole through diminished quality of life and increased financial burden (Siu et al., 2016). Depression is also associated with higher mortality rates due to suicide and increased severity of suicidal ideation (Siu et al., 2016). An abundance of therapeutic treatments have been offered for treating depression, including animal assisted activity (AAA) and animal assisted therapy (AAT). Animals seem to have a natural tendency to form a bond with humans which suggests that AAA and AAT may be beneficial to individuals experiencing symptoms of depression (Nimer & Lundahl, 2007). AAA and AAT have been practiced by mental health professionals for many years and recently there has been an increased interest in demonstrating its effectiveness through research (Nimer & Lundahl, 2007).

Researchers have attempted to examine the effects of AAA and AAT on a variety of symptoms related to stress, anxiety, and depression. To date, research studies have produced varied results on the effectiveness of AAA and AAT in reducing the symptoms or levels of depression (Souter & Miller, 2007). As a result, mental health professionals are less inclined to incorporate AAA and/or AAT in their own practice with clients when clear inferences about its effectiveness have not been established. Depression affects over 19 million adults in the United States alone; therefore, establishing the ability of AAA and AAT to treat symptoms of depression will support their use by mental health professionals (Souter & Miller, 2007). Identifying additional forms of treatment will also provide professionals with an additional

approach to treatment when more traditional forms of treatment are not producing desired results.

Depression is a serious condition that can increase the severity of co-existing illness or disease such as cancer, diabetes, and heart disease (Souter & Miller, 2007). It has also been suggested that depressed individuals are at an increased risk for having a heart attack in the future (Souter & Miller, 2007). Of the research studies that support the use of AAA and AAT in therapeutic settings, many have suggested both behavioral and psychological benefits that may improve the overall quality of life and well-being of an individual (Souter & Miller, 2007). Of these benefits, the most notable in regards to treating depression include: increased activity, improved recovery rate, better coping, relaxation, improved self-esteem, increased positive affect, and decreased loneliness (Souter & Miller, 2007). This paper will discuss the symptoms of depression, the process and techniques of AAA and AAT, and the effectiveness of AAA and AAT in reducing depressive symptoms.

### **Review of Literature**

Major depressive disorder is one of the most common disorders within the realm of mental health and it has been reported that 1 in 5 individuals will experience a major depressive episode during their lifetime (Hoffmann et al., 2009). Prevalent symptoms of major depressive disorder include feelings of worthlessness, sleep disturbance, depressed mood, fatigue, difficulty concentrating, and suicidal ideation (Fried & Nesse, 2015). According to the American Psychiatric Association (2013), the symptoms to meet the criteria for a major depressive disorder diagnosis must be present nearly every day. Further, depressed mood is a necessary criterion that must be present most of the day (American Psychiatric Association, 2013). Additionally, sadness is a symptom that tends to often get overlooked because it may not be readily observable until the individual is interviewed further (American Psychiatric Association, 2013). Of the depressive symptoms, fatigue and sleep disturbance are reported to have the highest prevalence among cases of a major depressive disorder (American Psychiatric Association, 2013). The effects of depressive symptoms can range in severity and can significantly affect an individual's life in multiple areas.

When individuals struggle with symptoms of depression it can result in negative impacts in all areas of their life including cognitively, socially, behaviorally, and physically. It is necessary for depressive symptoms to be consistently present for at least two weeks which can result in loss of interest and no longer finding pleasure in activities (American Psychiatric Association, 2013). These types of feelings may significantly impact an individual's social life and lead to isolation and loneliness. Some individual's symptoms may take the form of physical symptoms such as body aches and pains or emotional symptoms including irritability, frustration, and anger (American Psychiatric Association, 2013). Often these types of emotions will lead to

angry outbursts or exaggerated responses of frustration and blaming others for their behaviors (American Psychiatric Association, 2013). Depressive symptoms may be confusing or hard for others to understand which can also lead to interpersonal disconnect and increased isolation.

The mood of an individual experiencing depression is often described as sad, hopeless, or “down in the dumps” (American Psychiatric Association, 2013). Since loss of interest is nearly almost present, it is common for family members or friends to notice a depressed individual begin to withdraw socially and report increased feelings of loneliness (American Psychiatric Association, 2013). Sleep disturbances may also affect the individual by taking the form of excessive sleeping or difficulty getting to sleep at all which can result in decreased energy, fatigue, and tiredness (American Psychiatric Association, 2013). These types of feelings can make simple everyday tasks extremely difficult or seem impossible and further adding to their impairment. A depressive episode may also influence an individual’s appetite which may involve a significant increase or decrease in weight and food consumption (American Psychiatric Association, 2013). Often changes in appetite lead to feelings of guilt or worthlessness which greatly affects an individual’s self-perception and increases negative self-talk (American Psychiatric Association, 2013).

To further add to the burden of depression, an individual may experience cognitive difficulties which can negatively impact an individual’s work performance and day to day experiences. Many individuals with depression will report an impaired ability to think or concentrate (American Psychiatric Association, 2013). The severity of these symptoms can be so significant that individuals may find it difficult to make even minor decisions or experience difficulty with memory recall (American Psychiatric Association, 2013). Even more concerning in regards to cognitive difficulties is the prevalence of suicidal ideation and suicide attempts

among depressed individuals. Thoughts of death and the belief that others would be better off if the individual were dead are commonly reported by those experiencing depression (American Psychiatric Association, 2013). The high mortality rate associated with major depressive disorder is cause enough for mental health professionals to provide the most beneficial form of treatment to individuals experiencing depression (American Psychiatric Association, 2013).

Social cognitive theory is based on the belief that there is a continuous shared relationship between an individual's thoughts, actions, and environment (Kruger & Serpell, 2006). When using this theoretical framework, the goal of therapy is to promote positive changes in the way that an individual perceives themselves, thus altering their behaviors (Kruger & Serpell, 2006). The thoughts, feelings, and behaviors are all areas to be addressed when working with clients experiencing depression. This can be done by making improvements in an individual's self-esteem and self-efficacy. Common ways for an individual to learn appropriate behaviors and build self-efficacy is through observation and imitation, often using techniques such as modeling (Kruger & Serpell, 2006). A benefit associated with AAA and AAT is the ability of animals to provide honest and immediate feedback when interacting with people (Kruger & Serpell, 2006). This can help individuals learn the cause and effect of their behaviors and, as a result, develop more appropriate social interactions and enhance their quality of life (Kruger & Serpell, 2006).

AAA and AAT incorporate the use of animals by trained professionals in a therapeutic setting to assist in the treatment of individuals seeking mental health services. Although AAA and AAT are often terms used interchangeably, it is important to note distinguishable differences between the two (Souter & Miller, 2007). AAT is a goal-directed intervention that requires the trained animal to be an integral part of the therapeutic process with specific objectives and

measured progress (Kruger & Serpell, 2006). AAA provides opportunities for therapeutic benefits that may enhance the quality of life but does not require specific treatment goals (Kruger & Serpell, 2006). Both AAA and AAT can be used in several settings including psychiatric facilities, hospitals, nursing homes, and rehabilitation facilities (Souter & Miller, 2007). These interventions can also be implemented by a wide variety of animals such as dogs, cats, horses, and rabbits. Since AAA and AAT are easily adaptable to many environments and settings, it can make them more useful to a variety of clientele experiencing mental health issues (Souter & Miller, 2007).

One specific area of counseling that AAA and AAT can provide assistance with is the process of rapport building. The quality and strength of the counseling relationship is greatly affected by the counselor's ability to build and maintain rapport with the client (Chandler, 2012). Animals can assist in rapport building in many ways such as creating familiarity with the environment, providing the feeling of nostalgia by bringing up fond memories, and eliciting feelings of calmness and relaxation (Chandler, 2012). In a real-life example described by Chandler (2012), clients reported that the presence of a cat during therapy sessions helped them to be better able to get in touch with their feelings and made them feel safe. Chandler (2012) also described the experience of a counselor treating children with severe depression and the integral part that her rabbit played in the progress made in therapy by each client. The counselor reported that clients were more willing to talk when the rabbit was present during sessions which allowed for the therapeutic relationship to begin and grow (Chandler, 2012). Since rapport is a key factor of the therapeutic relationship, it is important for professionals to consider the benefits of AAA and AAT in assisting in this process and how it may be useful in their practice.

The use of AAT in the therapeutic process requires that specific goals, objectives, and techniques are used appropriately to address the needs of the clients. Some common goals of AAT in counseling include improving social skills, affect and mood, self-esteem, and ability to express feelings (Chandler, 2012). This can be done through a variety of techniques such as petting or holding the animal, engaging in play with the animal, talking to the animal, and introducing the animal to others (Chandler, 2012). All of the goals and techniques mentioned may be useful to individuals experiencing symptoms of depression. Improving an individual's self-esteem and mood are critical components to the treatment of depression. The use of AAA and AAT techniques could provide great benefits to the client in learning effective coping skills and appropriate social interactions. The use of AAA and AAT can promote positive interactions between client and counselor which will strengthen the therapeutic alliance and support progress towards treatment goals (Chandler, 2012).

Techniques of AAA and AAT can be incorporated into counseling and used during sessions to implement a variety of treatment goals related to psychosocial development (Chandler, 2012). Often clients experiencing depression may have goals related to developing and improving their social skills. The practice of having the client interact with a therapy animal by playing together and teaching pet commands or tricks can help facilitate important social skills such as communicating in a way that is clear and understood, giving and providing effective feedback, and enhancing cooperation (Chandler, 2012). Further practice of improving social skills could include having the client describe or demonstrate to another individual the process of completing these techniques and teaching them these same skills (Chandler, 2012). Self-esteem is another common goal of treatment for depression and can be enhanced by

successfully completing a difficult AAA or AAT task such as cleaning a horse's hooves (Chandler, 2012).

The use of horses as therapy animals can be particularly useful for clients wanting to build self-efficacy and psychosocial development (Chandler, 2012). The skills of gentleness and compassion can be taught and further reinforced by asking a client to interact with a horse in the animal's environment such as a barn or pasture (Chandler, 2012). When a client must enter these types of environments it is important to do so with a posture and attitude that instills a sense of trust and security in the horse (Chandler, 2012). Once a client is able to accomplish this successfully, a true bond can develop between them and the horse and the desire for each to interact with the other can enhance a client's self-worth (Chandler, 2012). Further, AAA and AAT techniques can include team activities that require clients to work together to successfully complete animal-facilitated tasks. When working as group members, it requires clients to demonstrate patience, cooperation, and good communication in order to accomplish the task at hand (Chandler, 2012). Practicing these skills and feeling a sense of accomplishment when completing tasks helps to promote self-esteem and reinforces positive social interactions that can be applied to others areas of their life (Chandler, 2012).

Chandler (2012) described an approach that was frequently used with juveniles at a detention center that helped to emphasize the importance of proper communication in order to be understood. The approach invited clients to ask the therapy dog to do a trick which often resulted in entertainment and further engagement of the client while also refining the client's skill at communication and affirming their abilities (Chandler, 2012). Therapy dogs tend to become familiar with certain vocal tones and rates of speech which can present as a challenge to clients when trying to initiate a command (Chandler, 2012). When the therapy dog did not

respond accordingly, the juvenile client became frustrated or easily gave up which is not uncommon when working with this type of population (Chandler, 2012). However, when encouraged and given helpful suggestions by the counselor, the clients were motivated to keep trying and demonstrated eagerness to be successful at completing the command with the therapy dog which allowed them to experience a sense of self-efficacy (Chandler, 2012). Further, Chandler (2012) found that AAT contributed to decreasing a variety of antisocial behaviors such as offensive or defiant behavior, abusive language, intimidation, and threatening behaviors. It was made evident by the juveniles that the desire to interact with the therapy animal and continue in the AAT program was the motivating factor to demonstrate behaviors that aligned with the program rules (Chandler, 2012).

Nimer and Lundahl (2007) completed a detailed literature review of qualitative research studies examining AAA and AAT and found that the overwhelming majority showed positive outcomes. Further, their qualitative review found that AAA and AAT was associated with positive improvements in happiness, social interactions, and physiological health (Nimer & Lundahl, 2007). One specific study examining the effect of a companion dog on levels of depression in elderly residents of a long-term care facility found significant results supporting the influence of AAA (Le Roux & Kemp, 2009). The results of this study found that AAA visits made a difference in reducing the levels of depression of the residents and most residents reported feeling happy when receiving visits from dogs (Le Roux & Kemp, 2009). Further, residents reported an increase in social interactions and that AAA visits created or brought back pleasant memories (Le Roux & Kemp, 2009). The usefulness and effectiveness of AAA and AAT is becoming increasingly more apparent; however, the need for continued research of quantitative value is necessary to further support this idea.

Another study examining the usefulness of AAT used patients diagnosed with dementia that were admitted to a nursing home and used two AAT trained dogs. The two therapy dogs were used in three different types of activities for one hour over four consecutive days (Motomura, Yagi & Ohyama, 2004). The first activity incorporated communication with dogs which consisted of introducing the patient to the dog and having the patient instruct the dog to sit down (Motomura et al., 2004). Once the dog sat down, the patient could then touch the dog or call its name (Motomura et al., 2004). The second activity required the patient to observe the dog's exercise routines which consisted of jumping into a ring and running through courses (Motomura et al., 2004). The final activity was broadly described as allowing the dogs to interact with the patients as desired by the patient (Motomura et al., 2004).

After the four day program was complete, an interview was conducted with each patient individually. It was reported that the majority of patients preferred to take the AAT program and participate in the designed AAT activities (Motomura et al., 2004). Further, patients who participated in the AAT program had improved irritable behavior scores when compared to patients that did not participate (Motomura et al., 2004). Patients also reported an increase in social behaviors such as attending activities, greeting, and speaking with others (Motomura et al., 2004). The results of this research study show promising results in the ability of AAA and AAT programs to assist in the treatment of depressive symptoms. This study further supports the idea that AAA and AAT can be an effective form of treatment for specific symptoms related to depression.

Chandler (2012) suggests that the use of a therapy animal during sessions will often elicit information about a client's current or former pet(s) and the experiences they have had relating to animals. This objective study found that about 90% of individuals will engage in unprompted

conversation with the therapist when accompanied by a therapy animal (Chandler, 2012). This statistic emphasizes the power of therapy animals in their ability to assist in facilitating communication between client and therapist and creates a foundation for exploration and sharing of deep emotions (Chandler, 2012). This type of discussion can also allow for the opportunity to discuss issues related to grief and loss if the client is describing a former pet that is no longer with them (Chandler, 2012). These types of issues are often precursors to a depressive episode and a therapy animal can provide a safe and soothing space for them to process difficult emotions and give them the opportunity to heal from bereavement and promote greater well-being for the client (Chandler, 2012). Further, a discussion about a client's relationship to their pet or feelings they have about a deceased pet provides a seamless transition into deeper exploration of the client's interpersonal relationships with people (Chandler, 2012).

### **Discussion**

AAA and AAT was reviewed as individual and supplemental forms of treatment to enhance the counseling experience for both the professional and client, specifically as it relates to symptoms of depression. As described, AAA and AAT can be used as individual forms of therapy as well as in conjunction with others forms of therapy to enhance and strengthen the counseling experience. After an extensive review of the literature regarding AAA and AAT, I believe that these are effective approaches to facilitate the therapeutic relationship and enhance the quality of treatment provided. The techniques and activities included within this type of therapy allows for a unique experience that may not occur with more traditional forms of treatment. I believe that AAA and AAT can meet a variety of client needs and is appropriate for use with all developmental levels, ranging from young children to aging adults. The ability for animal facilitated interactions to provide a safe space for clients to practice and develop positive and effective social skills is one of the most important aspects of this type of therapy. Social skills and interpersonal growth are critical to every individual and promotes a greater self-perception and willingness to positively contribute to society.

In regards to research, I believe there are some limitations to consider regarding the use of AAA and AAT in effectively treating or reducing the symptoms of depression or similarly related issues. It is important to recognize that the majority of research studies conducted using AAA and/or AAT are primarily qualitative based and therefore do not provide a strong basis for obtaining measurable and replicable results. For this reason, it is often difficult to achieve statistical significance that would support their effectiveness, specifically in any quantitative measures. Typically, statistical analyses are most useful when applied to a large sample size which is often difficult to accomplish due to the nature and process of these therapies. The small

body of research studies that use quantitative measures to test for AAA and AAT effectiveness show promising results; however, further research is needed to expand upon these findings and provide additional support to this argument.

For future research, I would suggest replicating quantitative research studies already developed to further analyze the effectiveness of AAA and AAT. Several assessments exist to monitor levels of depression, such as the Beck Depression Inventory (BDI), that may be useful in examining differences throughout the counseling process. Inferences could be made by comparing pre-, mid-, and post-test BDI scores over a specified time period when AAA or AAT was consistently used throughout sessions. A research study that included an AAA group, AAT group, and control group could provide powerful data to allow for further analysis of variance between groups. Studies such as the one discussed are necessary to broaden the body of quantitative research in this field with the potential to provide statistically significant support to the argument that AAA and AAT can be beneficial forms of treatment for individuals experiencing depression.

There is great potential for future research regarding AAA and AAT in treating individuals experiencing symptoms of depression. Both of these approaches have the ability to be quantitatively tested and future research needs to build upon these types of experiments so that clear inferences can be made related to their effectiveness. It would be important for future research to also include AAA and AAT applications in combination with more traditional forms of treatment to identify which therapies work most effectively together.

### **Conclusion**

A number of animal related activities and techniques exist that can be useful for both professionals and clients to address a variety of mental health issues. The ability for AAA and AAT techniques to be broadly applied in therapeutic settings makes these approaches invaluable to the counseling and mental health profession. It is important to stress the usefulness of animal facilitated interactions in providing an opportunity for clients to gain knowledge and skills that not only benefit them, but the animal population as well. Some of the greatest accomplishments of AAA and AAT are evident through the growth of clients by their learning of caring and nurturance, practicing loyalty and responsibility, incorporating an attitude of compassion and kindness to others, learning humane animal care, and experiencing the human-animal bond (Chandler, 2012). These types of experiences and interactions further support the effectiveness of AAA and AAT in their ability to promote knowledge and skills necessary to effectively participate in society and achieve overall health and wellness.

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