

EFFECTS OF THERAPY CANINES ON THERAPEUTIC ALLIANCE: A PILOT STUDY ON
CLIENT PERCEPTIONS

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ABSTRACT

While Animal Assisted Therapy is a more recent phenomena (Chandler, 2005, p. 5), AAT is quickly becoming an empirically supported treatment for a variety of mental health disorders (Perry, Rubinstein, & Austin, 2012). This study explored how client perceptions of their counselors change when a therapy canine is present in session. There is little research regarding client viewpoints on counselors who partner with therapy canines. Nine participants responded to a quantitative survey that was analyzed through non-parametric means. As was predicted, participants indicated more positive views of their counselors when a therapy canine was included in session. Findings suggest client perceptions of AAT reflected previously made claims by clinicians in the literature.

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CHAPTER 1. INTRODUCTION

While animal-human connection has been studied through philosophy, literature, and science for a large portion of history (Kesner & Pritzker, 2008), the effect of this bond on mental health is a more recent phenomena. Animal-Assisted Therapy (AAT), utilizing a trained animal to achieve therapeutic goals, has seen an increase in attention and research as it has gained recognition by the media in the last two decades (Chandler, 2005, p. 5). AAT is quickly becoming an empirically supported treatment for a variety of mental health disorders (Perry, Rubinstein, & Austin, 2012) and can be used in addition to many existing therapeutic techniques (Chandler, 2005, p. 5; Dietz, Davis, & Pennings, 2012). This versatile low cost (Dietz, Davis, & Pennings, 2012) adjunct to therapy can be utilized in a variety of settings including schools, hospitals, agencies, private practice, and many others (Chandler, 2005, p. 2-3).

Involving animals in therapy can provide multiple mental health and medical benefits (Perry, Rubinstein, & Austin, 2012; Fine, 2010, p. 4). An AAT animal may provide multiple types of relationships to those they interact with. These roles include a companion, social facilitator, and can function in the place of an alternative interpersonal relationship (Sockalingam et al., 2008). During the counseling process, a therapy animal may provide an effective boost to the solid base created by the counseling professional. The therapy animal can provide many benefits to the therapeutic alliance and as a result the counseling process and outcome itself. Benefits can be often seen in three major areas of holistic health: physical, psychological, and emotional/social. Some of the physical benefits often seen in AAT are often stress reduction in nature. Clients exposed to animals are more likely to have lower pulses and blood pressure (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Heimlich, 2001; Fine, 2010, p. 27). It has

also been demonstrated that interacting with animals can actually change the way the brain functions including the alteration in the production of hormones related to physical stress such as cortisol and oxytocin (Parish-Plass, 2008). Pet-owners are also less likely to visit the doctor than those who do not own animals due to increased health (Sockalingam et al., 2008). Many psychological benefits seen often include the reduction of symptoms such as improved mood, self-esteem, and a reduction of psychosis related to specific mental health disorders including anxiety, depression (Chandler, 2005, p. 17; Fine, 2010, p. 85), schizophrenia (Sockalingam et al., 2008), and PTSD (Hamama et al., 2011). When animals are present in therapy settings, social interactions often increase in frequency (Parish-Plass, 2008). In fact, many mental health professionals use the term "social lubricant" to describe the increased interaction that occurs around an animal (Jalongo, Astorino, Bomboy, 2004). Many individuals who are exposed to AAT also report an increased self-esteem and self-confidence (Parish-Plass, 2008; Hamama et al., 2011). Pets can also create a safe avenue for which clients can practice their social skills. Animals are often much more forgiving of social errors than others in their social circle may be (Parish-Plass, 2008).

Having an animal present can alter the counseling environment in ways that the counselor, client, and animals all benefit from the experience. Research has demonstrated that one such benefit is clients are more likely to attend counseling and participate with AAT (Chandler, 2005, p. 3). Sessions may become more effective as clients are distracted from any pain they may experience in the presence of a therapy canine allowing extended processing during counseling (Chandler, 2005, p. 3). Other benefits include a client getting needed physical contact from a companion animal, soothing from holding or petting an animal, unconditional acceptance from the animal, enjoyment and entertainment, deeper trust between client and counselor, and the

achievement of goals and activities not applicable without AAT (Chandler, 2005, p. 4). These benefits may provide depth and further value to the counselor-client relationship.

It has long been discovered that having a strong therapeutic relationship creates an environment that often leads to better outcomes (Shaw, & Murray, 2014; Manthei, 2007). It is this relationship that is often claimed to be the basis of the entire counseling experience. Many would argue that without this relationship it is nearly impossible for counseling to be successful. AAT provides another avenue in which a counselor can facilitate the conditions required for a successful therapeutic relationship. Rapport and empathy are often naturally developed between an animal and the client as is evidenced by positive client reactions to therapy animals (Chandler, 2005, p. 5). This in return can help a therapeutic alliance develop more naturally between counselor and client through the therapy animal. Clients will also often quickly develop trust with an animal that they may not normally extend to humans (Chandler, 2005, p. 6). Animals can often form a bridge between client and counselor and create an atmosphere of acceptance and trust (Dietz, Davis, Pennings, 2012).

It is important to understand the relationship between counseling outcomes and client perceptions. In situations where the client's and counselor's view of the counseling process and relationship differed significantly, clients regressed over the course of counseling (Shaw & Murray, 2014). By regularly engaging with clients and discussing client perceptions and goals, counseling can become more effective (Shaw & Murray, 2014). Animals can encourage risk taking by clients including discussing differing viewpoints on therapeutic goals and processes (Zilco-Mano, Mikulincer, & Shaver, 2011). While AAT has been proven to provide various benefits to the therapeutic relationship, there is little evidence to support this from a purely client perspective. By looking at how animals effect the therapeutic alliance, counselors can better

understand how AAT impacts the effectiveness of the counseling process. Counselors who partner with therapy canines appear more emphatic (Shaw & Murray, 2014), warmer (Parish-Plass, 2008), and safer (Zilco-Mano, Mikulincer, & Shaver, 2011) all of which are strongly correlated with counseling success (Manthei, 2007; Shaw & Murray, 2014). It is this awareness of the client's understanding and reflection of utilizing AAT that assist counselors to use therapy canines to the benefit of their clients.

Statement of Purpose

The purpose of this pilot study is to introduce examination of the effects AAT, specifically canine-assisted therapy, has on a client's perception of counseling and their counselor in particular. The object of study, the client's perception, will allow further inspection in the implications AAT has on the counseling therapeutic alliance.

Statement of the Problem and Research Questions

After reviewing the literature, it can be concluded that AAT can provide a variety of physical, psychological, and emotional benefits and can have a positive influence on the therapeutic environment and alliance. Despite this, there is little evidence to support these claims from a client perspective. Assumptions have been made based upon clinicians view points of the process. This stimulates the creation of two main questions. First, do client perceptions of AAT in counseling differ from those stated in the literature and claimed by mental health professionals? And second, are clients' perceptions of the therapeutic alliance with their counselor affected by being exposed to a therapy canine?

Significance of Study

AAT is quickly gaining popularity in the counseling field yet large portions of the research is qualitative based. This also leads to the natural bias of the primary voices provided

being that of the researcher rather than that of the client. It has been established in the literature that the client's perception of counseling is the strongest indicator of the success of counseling (Henkelman & Paulson, 2006). The lack of client voice in the literature raises the question of the effectiveness of AAT. By determining the client's perspective of counselors utilizing AAT, a more balanced representation of the validity of AAT as a counseling method will be explored. This study will specifically draw attention to how using AAT affects the client's view of the counseling relationship.

Definition of Terms

To further promote the comprehension and understanding of this study, the following definitions are provided. These terms are often used by many mental health professionals who utilize AAT in their practice or research the effects of AAT. Many of these terms are defined by the researcher based on common abbreviations and language found throughout the literature.

Animal Assisted Therapy (AAT): While there are many different variations of the definition across the literature, the most often referenced one is provided by Pet Partners. Pet Partners define AAT as a process in which a therapy animal that has met a standardized criteria and is an essential part of the therapy process. This process is an intervention that is goal directed, clinical in nature, and is directed by a trained clinical mental health professional (Horowitz, 2010; Dietz, Davis, & Pennings, 2012). Chandler (2007, pg. 2) specifies counseling in the process by calling it Animal Assisted Therapy in Counseling or AAT-C.

Animal Assisted Group Therapy (AAGT): Animal assisted group therapy is similar to AAT. The only other major difference is the use of AAT with an entire group rather than an individual. While many of the mechanics are the same, different techniques and therapeutic interventions may be used in a group setting.

Animal Assisted Activities (AAA): AAA is often confused by audiences with AAT. Unlike AAT, AAA does not require the use of a therapy animal by a licensed mental health professional. AAA involves the use of therapy animals for educational, recreational, and/or therapeutic goals by non-licensing handlers (Parish-Plass, 2008). Many individuals who provide these services are volunteers who wish to provide socialization benefits via animals to others.

Therapeutic Alliance: The therapeutic alliance is an essential component of counseling. It is often the core of the therapeutic relationship and as a result is predictor of success to counseling itself. Bordin (1979) defines therapeutic alliance as the unity of goals, treatment process, and relationship between the client and counselor (Shaw & Murray, 2014).

Social Lubricant: The term social lubricant is used to describe the effect animals have on social interactions. Animals often increase the frequency of social interactions and speed up the natural progression of relationship development (Parish-Plass, 2008; Jalongo, Astorino, Bomboy, 2004).

Summary

Despite the long history of animal-human interaction, the use of animals in therapy is a fairly recent event. There are many different benefits to including animals in the counseling process such as physical, mental, emotional, and social benefits. There is a small portion of data dedicated to the client viewpoints of therapy dogs in counseling. This pilot study explores the relationship between client and counselor perceptions on the partnership of a canine in the therapy process through a non-parametric quantitative study. An analysis was conducted on client rankings of counselors who partner with a therapy canine to determine if client-counselor perceptions align and therapeutic alliance was affected.

CHAPTER 2. LITERATURE REVIEW

This literature review was created to understand the importance of the construct under study and presented research questions. By examining the history of animal assisted therapy (AAT), readers are provided with a better understanding of how this intervention originated and how it has developed. It is important to also consider the various benefits that AAT can provide to individuals seeking treatment, including physical, psychological, and emotion/social benefits. While there are many benefits to clients, it is also crucial for the point of this study to examine how AAT can affect the client-counselor relationship and as a result the counseling environment and process. While much of the literature focuses on the benefits AAT can provide, there is also discussion on the possible challenges and concerns of its practice. It is important for readers to examine the importance of a therapeutic relationship and client feedback to counseling effectiveness. As a result this literature review will include the following sections: "history of AAT," "physical benefits of AAT," "psychological benefits of AAT," "emotional/social benefits of AAT," "effects of AAT on the counseling process," "challenges of AAT," "importance of therapeutic relationship," and "importance of client feedback."

History of AAT

While animals have appeared in human history long before animal assisted therapy (AAT) was defined, it was not until the eighteenth century that AAT was recognized as a practice. This may also reflect the progress of mental health care becoming a recognized field among the academic community. The most cited and documented origin of AAT lies with child psychologist Boris Levinson who brought his canine, Jingles, to a therapy session with a difficult child in the 1960s (Chandler, 2005, p. 10; Heimlich, 2001; Hamama et al., 2011; Parish-Plass, 2008; Friesen, 2010). Levinson found that incorporating a canine into therapy altered the

environment and acted as a 'social lubricant' that encouraged more interaction between therapist and client (Friesen, 2010). Levinson was also one of the first individuals to publish on the matter of AAT (Chandler, 2005, p. 10). While there are other recorded accounts of partnering with animals for therapeutic purposes, Levinson often receives credit as the founder of AAT due to his publications and specific intended use of an animal for therapy.

Before Chandler was crowned the first professional to utilize AAT, there were other individuals who also incorporated the partnership of animals in a therapeutic setting dating as far back as 1792. In 1792 animals were brought into a therapeutic context at a Quaker Society of Friends York Retreat in England (Velde, Cipriani, & Fisher, 2005; Reichert, 1998). In 1919 dogs were introduced to St. Elizabeth's Hospital in Washington, DC to interact with psychiatric patients by Franklin K. Lane, who was at the time the Secretary of Interior (Chandler, 2005, p. 10; Velde, Cipriani, & Fisher, 2005). The United States military partnered with animals with veterans in a therapeutic context at Pawling Army Air Force Convalescent Hospital in Pawling, New York in 1942 (Chandler, 2005, p. 10). The first individuals to collect data on the interaction of animals in the hospital setting were psychiatrists Sam and Elizabeth Corson who studied AAT at Ohio State University Psychiatric Hospital in the 1970s (Chandler, 2005, p. 10).

It was not until after 1950 that organizations were founded regarding AAT and publications were recognized. In 1976 Therapy Dogs International, the oldest recorded therapy animal organization, was founded by Elaine Smith in New Jersey (Chandler, 2005, p. 11). Therapy Dogs International is also currently the largest such organization in the United States (Chandler, 2005, p. 11). Another popular organization promoting the use of therapy animals is Pet Partners created by the Delta Society, an organization dedicated to bringing therapy animals to individuals, in 1990 (Chandler, 2005, p. 11). Articles looking at the effects animals have on

the therapy process gained in popularity in the 1990s and early 2000s, leading AAT to be recognized as an evidence based process (Chandler, 2005, p. 11). Recent events such as 9/11 and school shootings have also provided media coverage that has boosted AAT's popularity in the past two decades (Chandler, 2005, p. 12).

Physical Benefits of AAT

There are many different forms of physical benefits related to animal assisted therapy (AAT) in mental health settings but a majority of these benefits are associated with stress reduction in clients. Decreased pulse and blood pressure is one of the most referenced benefits of using animals in therapy (Perry, Rubinstein, & Austin, 2012; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Heimlich, 2001; Parish-Plass, 2008). Other cardiovascular related benefits include an increase in peripheral skin temperature (Velde, Cipriani, & Fisher, 2005), increased survival of coronary artery illness in pet owners (Heimlich, 2001), and changes in stress hormones (Parish-Plass, 2008) suggesting an activation of the parasympathetic nervous system. Hormones such as the neurochemicals endorphin, oxytocin, prolactin, phenylectic acid, and dopamine all see positive level changes in response to interacting with a therapy animal (Chandler, 2005, p. 16). These hormones are often associated with stress and relaxation. There is also evidence that the levels of the stress hormone cortisol leveled as clients are exposed to AAT (Chandler, 2005, p. 16; Fine, 2010, p. 283). These types of changes can also be seen in an activated stress-response system (Perry, Rubinstein, & Austin, 2012). Individuals exposed to AAT also reported increased relaxation, reduction of pain, a more positive attitude, and increased sleepiness (Horowitz, 2010).

Certain populations seem to experience unique benefits that may not be present without therapy animals. One of these populations is children. In a study by Jalongo, Astoino, and

Bomboy (2004), children had lower stress responses in the presence of a relaxed canine than they did in the presence of an adult or friend. In a study by Yorke et al. (2013), children showed significant changes in their neurobiology during and after AAT. Also given an animals ability to simulate the reduction of pain, animals in children's hospitals may ease children's discomfort in such facilities. Another population that has seen improvements in the quality of life in response to AAT is the elderly, particularly individuals living in nursing homes. After being exposed to animals, many nursing home residents gain weight as a result of eating more (Horowitz, 2010). Many adults in this type of care lose weight, which can often become a health concern. This was especially true amongst those with Alzheimer's disease, this group also needed fewer nutritional supplements when exposed to animals (Velde, Cipriani, & Fisher, 2005). The third most frequently cited population with significant health benefits is companion animal owners themselves. In a study by Sockaligham et al. (2008) it was found that companion animal owners had lower blood pressure and lower triglyceride levels (Sockalingham et al., 2008; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). While it is assumed that there are many more reported physical health benefits in response to animals, the literature has very specific measurable benefits recorded.

Psychological Benefits

While many physical, psychological, and emotional/social benefits intertwine and overlap, it is important to take a closer look at how animal assisted therapy (AAT) can affect individuals with mental illness. Many individuals report reduced symptoms of mental illness following the use of AAT (Chandler, 2005, p. 17-18; Horowitz, 2010; Hamama, 2011; Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2011; Sockaligham et al., 2008; Dietz, Davis, & Pennings, 2012; Aoki et al., 2012). Many studies support that a long-term relationship with an

animal can greatly enhance the mental health of an individual (Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2011). There are several specific disorders that have been shown to be positively affected by AAT. One of these in particular is anxiety (Chandler, 2005, p. 17). With what has already been established in the previous section about the reduction of stress responses, it is not surprising that AAT can reduce anxiety symptoms (Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2011; Dietz, Davis, & Pennings, 2012). Another well documented mental illness that can be reduced with AAT is depression (Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2011; Fine, 2010, p. 85). Many individuals with depression reported a lower Beck Depression Inventory score after seeing a therapy dog (Chandler, 2005, p. 17). Two other disorders frequently documented include Post Traumatic Stress Disorder and Schizophrenia. After being exposed to animals individuals with PTSD reported fewer symptoms (Hamama et al., 2011). Those with schizophrenia saw an increase in therapy involvement and health activities (Sockalingam et al., 2008). In study by Horowitz (2010), patients with schizophrenia had fewer psychiatric symptoms, higher self-esteem, and increased social support following AAT (Horowitz, 2010).

While many improvements are seen in individual disorders, there are many benefits that can be seen within general well-being or across several disorders at once. Clients involved with AAT had an increased ability to experience pleasure (Parish-Plass, 2008). Self-efficacy and self-confidence increases were also common in clients who were exposed to animals within a therapeutic context (Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2001). Clients also reported lower levels of general aggression and stress (Sockalingam et al., 2008). Many individuals with chronic and long-term mental illness also saw increases in alertness and cognitive abilities (Velde, Cipriani, & Fisher, 2005). In a study by Deitz et al. (2012), children

were involved in therapy environments for six weeks that had either canines, stories, or both. Children in environments with canines saw the greatest improvements in anxiety, anger, PTSD, depression, disassociation, and sexual challenges (Deitz et al., 2012). Children exposed to both canines and stories saw the largest improvements (Dietz et al., 2012). A study by Aoki et al. (2012), supports the suggestion that AAT activates the portion of the brain responsible for working memory. This part of the brain is responsible for depression and has a correlating effect on schizophrenia, affective disorders, and personality disorders (Aoki et al., 2012). It has also been suggested that time spent with animals can positively correlate to changes in general mental health scores (Pedersen, Nordaunet, Martinsen, Berget, & Braastad, 2011).

Emotional/Social Benefits of AAT

While benefits of animal assisted therapy (AAT) are often cited in the areas of physical and psychological well-being, emotional/social benefits also frequently show up in the literature. This may reflect the more qualitative nature that most of these studies follow or a reflection of the focus of outside reinforcers that are easily seen by clinicians. Many of the general emotional/social benefits include skill development, personal and social development, increased self concept and self esteem, and enhanced attention (Chandler, 2005, p. 8). Many clinicians experience therapy animals as a catalyst for social interaction with clients. This effect can also be seen outside of a therapy session when humans interact with animals in groups (Parish-Plass, 2008). It's also been argued that conversations and interactions occurring around animals are more natural and less planned (Parish-Plass, 2008). Clients often report an increased ability to feel and handle emotions in the presence of a companion animal (Parish-Plass, 2008). This increased awareness and comfort is often also seen in self-esteem and self-image (Hamama et al., 2011). This may be due to a therapy animals' nonjudgmental nature. An accepting presence

allows clients to practice social skills longer as animals are often more forgiving than their human counterparts (Parish-Plass, 2008). Many clinicians also report a positive increase in attitude following ATT in both the animals and humans (Parish-Plass, 2008).

Human-animal bonds can meet the attachment bond requirements that humans have to grow into successful functioning (Zilcha-Mano, Mikulincer, & Shaver, 2011). In instances where reliable human contact is not available, animals may serve as a primary attachment for individuals during the healing and growing process. The four components of an attachment bond as defined by Zilcha-Mano, Mikulincer, and Shaver (2011) includes: proximity seeking, a secure base, a safe haven, and separation distress. This effect can often be evidenced by companion animal owners who claim that their companion animals provide support, comfort, and relief when they need it (Zilcha-Mano, Mikulincer, & Shaver, 2011). Specifically canine ownership has been associated with higher levels of attachment and the capacity to more effectively handle stress (Sockalingam et al., 2008). Other benefits animal companionship provide for individuals include higher levels of exercise, a greater sense of comfort, and decreased depression and loneliness (Kesner & Pritzker, 2008; Chandler, 2005, p. 8). Animals can provide both emotional and social support to increase an individual's overall health in these areas.

Many documented emotional and social benefits in recent studies can be found with children. In a study by Jalongo, Astorino, and Bomboy (2004), children with disabilities were approached by children without disabilities ten times more frequently when they were accompanied by a canine. This is one specific example in which an animal can serve as a 'social lubricant' (Jalongo, Astorino, & Bomboy, 2004). Children who have been diagnosed with emotional disorders often display more emotional regulation and positive attitudes during school while in the presence of a canine. This effect can also be seen in children with developmental

disorders who often display more positive behavioral and social attitudes after working with a therapy canine (Sockalingam et al., 2008; Chandler, 2005, p. 20). Some of these changed behaviors include less retreat to fantasy worlds, increased focus, fewer behavioral outbursts, and better interactions with peers including increased eye contact (Chandler, 2005, p. 20-21).

Animals have the power to promote a calm state in children and can help a child feel heard and valued (Horowitz, 2010). This in turn can lead to a more responsive and cooperative attitude, allowing for an individual to be more alert and have a larger attention span (Friesen, 2010). Children who are in the presence of a therapy canine are more likely to interact with peers and adults and may display an increased desire for social contacts (Friesen, 2010). This is a result of the reduction of anxiety that a therapy canine can provide (Friesen, 2010). By introducing companion animals into a hospital setting, children not only experience less pain but also an improved mood (Sockalingam et al., 2008). Changes in empathy can also be seen in children who are often exposed to AAT. Children who are able to display empathy towards animals have a higher chance of doing the same for their human counterparts (Kesner & Pritzker, 2008). This along with a better ability to form successful relationships, independence in tasks, and ability to follow instructions are skills that may help children adapt to everyday life (Kesner & Pritzker, 2008).

While the emotional and social benefits of using AAT with children is well documented, there are other populations that experience benefits when exposed to animals. Alzheimer's patients are more likely to interact with others when exposed to animals (Chandler, 2005, p. 17). This includes behaviors such as more smiles, physical warmth, and tactile contact (Chandler, 2005, p. 17; Horowitz, 2010). There were also fewer instances of agitation and aggression (Horowitz, 2010). Individuals with disabilities report higher levels of self-efficacy and self-

confidence with the use of AAT (Chandler, 2005, p. 22). Similar results of AAT have been revealed in patients in psychiatric settings. This population often experiences higher frequencies of pro-social behavior with the use of AAT (Chandler, 2005, p. 22). A group exposed to AAT is more likely to interact with other patients, report increased levels of pleasure, and be more interactive with their environment (Chandler, 2005, p. 23). Noise levels in residential facilities dropped, patients with mental illness had fewer irritated behaviors (Velde, Cipriani, & Fisher, 2005), and caregivers in psychiatric and hospital settings reported a reduction in caregiver stress and improved mood when AAT is utilized (Heimlich, 2001; Sockalingam et al., 2008). When exposed to animals, both patients and staff in hospitals report a greater sense of being valued and loved (Sockalingam et al., 2008).

Effects of AAT on Counseling

Animal assisted therapy (AAT) can affect the counseling process in many positive ways. Many changes occur because of development in the client/counselor relationship. It is natural for the client and therapy animal to develop rapport and empathy relatively quickly (Chandler, 2005, p. 5). This in turn can make the counselor be perceived as less threatening and warm when an animal is present (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). By forming a stronger relationship based on empathy, warmth, acceptance, and security, AAT can alter the way a client views the counseling environment (Dietz, Davis, & Pennings, 2012; Perry, Rubinstein, & Austin, 2012). Because a client will naturally trust an animal before the counselor (Chandler, 2005, p. 6), a calm animal signals to the client that the environment is safe and the counselor can be trusted (Parish-Plass, 2008; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). This trust and warmth signaled by the animal can reduce client anxiety and worries during unpleasant situations by further creating an environment of safety and affection (Zilcha-Mano, Mikulincer, & Shaver,

2011). This warmth can create trust between a canine and individuals who struggle to trust another human being due to traumatic experiences (Zilcha-Mano, Mikulincer, & Shaver, 2011). The animal can communicate to such individuals that counseling is friendly and safe (Parish-Plass, 2008).

It is well known that a strong therapeutic alliance increases the effectiveness of counseling, but the use of AAT can help build this bond quickly (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). Clients who bond quickly with their counselor are more willing to continue treatment (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005), and a therapy canine can help a counselor do so more effectively. Another well documented benefit of using AAT in counseling is the animal functioning as an icebreaker (Zilcha-Mano, Mikulincer, & Shaver, 2011) or social lubricant (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). This can give the client something safe to talk about during the process of getting to know their counselor. Clients also perceive relationships with animals as more stable, predictable, and secure (Zilcha-Mano, Mikulincer, & Shaver, 2011; Fine, 2010, p. 9). This in turn can help a client develop a secure attachment in counseling even if the object chosen is not the counselor. Often times this development in the relationship with the animal can transfer to the counselor leading to another secure attachment for the client (Zilcha-Mano, Mikulincer, & Shaver, 2011). This in turn can develop the counseling process as a safe haven (Zilcha-Mano, Mikulincer, & Shaver, 2011).

Another well recognized benefit of AAT includes being cost effective (Perry, Rubinstein, & Austin, 2012). AAT is easy to integrate into a variety of existing treatment plans and facilities. Using animals in treatment also increases the range of clients who participate (Perry, Rubinstein, & Austin, 2012). Researchers have seen an increase in participation with individuals who are usually inconsistent with attendance (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005).

Clients also self-report increased participation in counseling when an animal is present (Hamama et al., 2011). The presence of therapy animals can also relieve concerns related to beginning counseling (Zilcha-Mano, Mikulincer, & Shaver, 2011). AAT is effective with clients who have not responded well to other forms of treatment (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Kesner & Pritzker, 2008) and attracts clients who are normally isolative and withdrawn (Perry, Rubinstein, & Austin, 2012; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). This finding also occurs in settings such as psychiatric inpatient groups (Zilcha-Mano, Mikulincer, & Shaver, 2011) and individuals who usually refuse to come to counseling (Velde, Cipriani, & Fisher, 2005). Results with such clients and those who are uncooperative can often be rapid and increases in attendance and participation can be seen (Sockalingam et al., 2008). Clients who participate in AAT have increased chances of discharging before those who are not engaged in AAT (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). This may be tied to the findings of increased motivation with animal interaction (Velde, Cipriani, & Fisher, 2005).

Another large benefit to AAT is the availability of physical comfort. Counselors are often unable to provide needed physical comfort to clients during stressful or difficult moments throughout the counseling process. Animals have no such reservations or restrictions. With AAT a therapy animal can provide the needed comfort, warmth, and reassurance (Zilcha-Mano, Mikulincer, & Shaver, 2001; Lefkowitz et al., 2005). Animals may sit with the client or allow themselves to be held or petted. This can lead to anxiety relief for both the client and the counselor while meeting the client's need for physical comfort at the same time.

Animals are non-judgmental and non-threatening when treated with kindness and respect (Zilcha-Mana, Mikulincer, & Shaver, 2011; Reichert, 1998). Relationships with animals are viewed much differently than other interpersonal relationships clients may have (Zilcha-Mana,

Mikulincer, & Shaver, 2011). Because animals are often viewed as non-judgemental and accepting (Parish-Plass, 2008; Hamama et al., 2011), animals are often seen as a friends or allies (Hamama et al., 2011). They do not argue, are continually present, and unconditionally loving compared to their human counterparts (Reichert, 1998) This can especially be true for children and can assist in helping clients feel more comfortable sharing emotions with a counselor (Parish-Plass, 2008). The unconditional love and support animals can provide, helps clients believe that they are lovable, worthy of love, accepted, and heard (Zilcha-Mano, Mikulincer, & Shaver, 2011). This may provide a more secure attachment for the client reducing the chance the client will project ineffective relationships in counseling (Zilcha-Mano, Mikulincer, & Shaver, 2011). Others who have insecure attachments may be more comfortable working with animals knowing they have control of how the animal responds to them (Zilcha-Mano, Mikulincer, & Shaver, 2011).

Animals foster nurturance and security that many clients crave (Zilcha-Mano, Mikulincer, & Shaver, 2011). This also encourages individuals to feel safe talking about trauma previously experienced (Dietz, Davis, & Pennings, 2012). In fact Jalongo, Astorino, & Bomboy (2004) estimate that a majority, possibly over 70 percent, of children are willing to confide in animals they see as friends. Clients also often perceive animals as more emotionally available, interested in the individual, and willing to comply with client wishes (Zilcha-Mano, Mikulincer, & Shaver, 2011). AAT alters the way clients communicate during counseling. Children will often displace their feelings onto an animal and as a result, talk about those feelings externally (Reichert, 1998). Counselors can use the animal as a communication tool and talk to the client from the animal's perspective (Reichert, 1998). Adolescents also are more likely to disclose and cooperate during counseling with a therapy animal present (Reichert, 1998). Animals can help children build self-

esteem, boundaries, and trust that would otherwise be more difficult with their peers (Kesner & Pritzker, 2008).

When clients are exposed to AAT, a variety of behaviors and social expectations can change. This allows clients more freedom and flexibility to grow and develop. Clients do not experience the same cultural and social pressures they would face while interacting with humans (Zilcha-Mano, Mikulincer, & Shaver, 2011). This allows clients to be more comfortable with the risk of making mistakes. This can especially be helpful when practicing pro-social behaviors, decreasing a client's chances of having to face rejection (Zilcha-Mano, Mikulincer, & Shaver, 2011). Facilities also report lower levels of agitation when AAT is present which may be attributed to more relaxed clients (Velde, Cipriani, & Fisher, 2005). Clients also report higher frequencies of reflecting and alertness when around animals (Velde, Cipriani, & Fisher, 2005). This is frequently observed in inpatient psychiatric facilities (Dietz, Davis, & Pennings, 2012). AAT can also create a sense of anticipation and something to look forward to can be beneficial in long-term care (Velde, Cipriani, & Fisher, 2005). Patient satisfaction scores increase when animals are present (Horowitz, 2010). Children who participate in reading programs with canines may see increases in reading skills. In a study by Jalongo, Astorino, & Bomboy, (2004) students who interacted with canines during reading activities often gained two to four grade levels. And finally, when counseling is terminated or the animal no longer joins the counselor for various reasons, clients can be guided through the grieving process. Grieving the loss of an animal can mimic the loss of a close human relationship (Zilcha-Mano, Mikulincer, & Shaver, 2011).

Challenges of Animal-Assisted Therapy

While there are many benefits and positives in utilizing animal assisted therapy (AAT), there are also challenges and risks. One of the main concerns that comes up frequently is

allergies. Clients could have allergic reactions to fur or animal dander (Chandler, 2005, p. 9; Jalongo, Astorino, & Bomboy, 2004). Infections can also be a concern for clients who may struggle with immune difficulties (Lefkowitz et al., 2005; Jalongo, Astorino, & Bomboy, 2004). Some clients may even struggle with seizures that could be triggered by exposure to a therapy pet (Heimlich, 2001). In some cultures animals are considered unclean or unsanitary (Jalongo, Astorino, & Bomboy, 2004; Friesen, 2010). And in some cases clients may be afraid of a specific animal or animals in general (Chandler, 2005, p. 9; Jalongo, Astorino, & Bomboy, 2004). Clients can also be injured while interacting with the therapy animal (Chandler, 2005, p. 8). If treated poorly an animal may defend itself and bite or scratch the client (Heimlich, 2001). Clients are not the only ones at risk during AAT. Animals, particularly small ones could be injured in the process (Chandler, 2005, p. 9). Animals may also experience stress from working too much or for too long (Chandler, 2005, p. 9), which can lead to the animal becoming fatigued or burnout (Lefkowitz, 2005).

Despite these concerns, there are many ways to increase safety and take preventative measures. The first of these is to inform clients of the presence of the therapy animal and obtain client permission (Chandler, 2005, p. 59). It is important not only to obtain client permission but to also inform clients of the process. Clients should also be screened and prepared for meeting with a therapy animal (Chandler, 2005, p. 59; Sockalingam, 2008). This is also essential for respecting the client's cultural backgrounds and comfort levels while at the same time protecting the animal (Chandler, 2005, p. 70). Another important component of reducing risk is to understand when the animal is becoming stressed (Chandler, 2005, p. 59) and what they are communicating (Chandler, 2005, p. 61). Canines often shiver, put their ears down, lick, and have their tails between their legs when stressed (Friesen, 2010). Teaching clients to interact gently

and positively with animals can also reduce the risk of bites (Friesen, 2010). Ways that handler's can reduce infection and allergies is to keep the animal well cleaned and groomed (Chandler, 2005, p. 66). One particular way that infection and allergies can be reduced is to use anti-allergen powder while grooming and washing hands after contact with the animal (Friesen, 2010). And finally, perhaps the most important of all is that animals have all of their needed vaccinations (Sokalingam et al., 2008).

Importance of Therapeutic Relationship/Therapeutic Alliance

Another major component of animal assisted therapy (AAT) is the therapeutic relationship. Having a positive therapeutic relationship between the counselor and client is key to a successful counseling experience (Manthei, 2007). Relationships are important to the growth of any human being (Shaw & Murray, 2014). The therapeutic relationship plays a large role in the counselor becoming a secure attachment for clients, which in turn leads to growth for the client (Zilcha-Mano, Mikulincer, & Shaver, 2011). Animals act as a social lubricant helping the counseling relationship to develop more quickly and positively (Jalongo, Astorino, & Bomboy, 2004; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). The positive effects of animals can cast a positive light on the counseling professional (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). The base of a successful therapeutic relationship allows clients to explore and take risks in counseling (Zilcha-Mano, Mikulincer, & Shaver, 2011). One important component of such relationships is empathy, which has been proven to positively correlate with the success of counseling (Shaw & Murray, 2014). This component is especially important from the client perspective. The client's perception of how empathetic the counselor is more accurately predicts the outcome of counseling (Shaw & Murray, 2014). Animals can help counselors appear friendlier and warmer to clients giving a greater feeling of empathy (Parish-Plass, 2008). Events

that occur during counseling are also important to the development of the counseling relationship. These can be moments of understanding or sharing, empowerment, and emotions that the counselor and client experience (Timulak, Belicova, & Milar, 2010). These events, if significant, can have lasting impacts on client's outcome in counseling (Timulak, Belicova, & Milar, 2010). Animals can help these events come about naturally and provide support to clients when they do occur (Zilcha-Mano, Mikulincer, & Shaver, 2011)

Related to the therapeutic relationship is the therapeutic alliance. This alliance is composed of a unity between counselor and client when it comes to goals, methods of treatment, and the therapeutic relationship (Shaw & Murray, 2014). For a therapeutic alliance to develop it is also important that client commitment, a warm environment, and counselor expertise is present (Patterson, Anderson, & Wei, 2014). Animals particularly help with the first two components of the therapeutic alliance. Clients often report feeling more relaxed, calmer, and comfortable around animals leading to a warmer environment (Dietz, Davis, & Pennings, 2012; Perry, Rubinstein, & Austin, 2012). Client commitment often increases with the presence of animals leading to higher attendance and client involvement (Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Hamama et al., 2011). The crucial nature of alliance can be found across almost all theoretical orientations (Shaw & Murray, 2014). Outcome can often be predicted by the client's view of the alliance, with a more positive view predicting more significant results (Shaw & Murray, 2014; Thomas, Werner-Wilson, Murphy, 2005; Duff & Bedi, 2010). Change is also more likely to be longer lasting with a successful therapeutic alliance and clients are more likely to tackle harder challenges during counseling (Thomas, Werner-Wilson, & Murphy, 2005). Specific counseling practices or behaviors have been found to contribute to the building of a positive therapeutic alliance. Some of these behaviors can include asking questions, validating

the client, reflecting client feelings, being encouraging, making eye contact, smiling, not fidgeting, and remembering details (Duff & Bedi, 2010; Manthei, 2007).

Importance of Client Feedback

Research supports that the view of the client is the most valuable tool in predicting counseling success and outcomes (Shaw & Murray, 2014). In sight of this, counselors need to explore client viewpoints in order to develop a successful therapeutic relationship and alliance, which in turn can lead to more successful client outcomes (Shaw & Murray, 2014, Manthei, 2007; Henkelman & Paulson, 2006). This is especially important considering that research has found a significant difference between client and counselor viewpoints (Shaw & Murray, 2014; AP; Manthei, 2007; Bachelor, 2013). Counselors tend to report higher levels of empathy (Shaw & Murray, 2014) and more positive outcomes (Bryan, Dersch, Shumway, & Arredondo (2004) than their clients. In cases where counselor and client viewpoints were vastly different clients often declined or deteriorated during treatment (Shaw & Murray, 2014). Client feedback reduces drop-out rates, explains how a client is progressing (Henkelman & Paulson, 2006), and increases positive outcomes and satisfaction for clients (Shaw & Murray, 2014; Bryan, Dersch, Shumway, and Arredondo, 2004). Clients report that counselors who are able to meet their needs and express similarities can enhance the counseling relationship (Manthei, 2007). It is also important for counselors to check in with clients and make sure viewpoints align throughout the counseling process (Bachelor, 2013). Keeping the counseling process a team effort is an essential piece to successful counseling (Bachelor, 2013).

Summary

By understanding how AAT originated and the various benefits associated with AAT, counselors can begin to explore how AAT can contribute to counseling. This exploration can

lead to more effective counseling and client experiences. Many of the benefits associated with AAT include physical, psychological, emotional/social benefits. In this section various risks and challenges that may be associated with AAT were also discussed. The importance of therapeutic relationship and client feedback is also reflected upon as is how AAT may play a role in the development of counseling effectiveness.

CHAPTER 3. METHODS

Introduction

There is a lack of quantitative research regarding Animal Assisted Therapy (AAT), particularly in regards to data on client perceptions of AAT. Because of this, it is unclear how client's perception of the therapeutic alliance changes when a therapy canine is present. In this study, the researcher explored two primary research questions: (1) Do client perceptions of AAT in counseling differ from those stated in the literature and claimed by mental health professionals? And second, (2) are clients' perceptions of the therapeutic alliance with their counselor affected by being exposed to a therapy canine? It was hypothesized that client perceptions of therapeutic are affected in response to exposure to a therapy canine. Which would in turn provide support that counselors who utilize AAT are perceived differently. A quantitative cross-sectional descriptive (Fink, 2003a, p. 33; Fink, 2003b, p. 52) study design was used for this study. Studies regarding AAT using this design cannot be found in the literature. In this chapter the methodology for the study is presented. Specifically study participants, research design, data collection procedures, and data analysis will be discussed.

Participants

Participants were recruited through their service providers. Counselors from the United States who utilize therapy canines were identified and contacted about the study. The researcher recruited licensed counselors through an online provider list through Pet Partners and Facebook groups such as Fargo-Moorhead Animal Assisted Therapy Professionals, Animal Assisted Therapy in Counseling. The researcher provided counselors with an electronic letter containing instructions and the link to the online survey to forward to their clients in an email. Clients then had the choice to click on the link and participate in the survey within the timeline the survey

was open. This convenience sampling method allowed for a selection of participants within the context of clients exposed to therapy canines (Fink, 2003b, p. 52). Criteria for participants includes clients who have been seeing their counselor between 4 weeks and one year. This allows for time needed for a therapeutic alliance to develop (Shaw & Murray, 2014) but also prevents bias from clients who have had a significant amount of time to develop a strong relationship with their counselor. Clients with diagnosis's that included psychotic symptoms or personality disorders were excluded from the study to eliminate client bias. Participants were also asked their age to focus the sample on adults, aged 18 and above. The population sample was ideally inclusive of both men and women with a suggested sample size n of 20 or more participants to achieve a twenty percent response rate or higher. This number was determined after examining reported response rates in a study by Nulty (2008). This number was calculated using an estimated numbers of clients reached which was roughly a population size of 100.

Research Design

Before the study was conducted, the research project was approved by the Master's thesis committee. The committee was composed of the three members who had degrees in counselor education and animal science. The study was also submitted to and approved by the NDSU Institutional Review Board (IRB) before data was collected.

This study used a mixed methods design. The majority of the survey used a cross-sectional descriptive design to look at how clients perceive the counseling process and their counselor when a therapy canine is present (Fink, 2003a, p. 33). A cross-sectional descriptive design was used to gather a selected portion of the population at once (Fink, 2003a, p. 33). The final question on the survey is of qualitative design to provide space for clients to compare how client perceptions change when a therapy canine is present. This method allowed for the data

collection and analysis of the quantitative and qualitative data needed in order to more accurately understand research questions.

Instrumentation

A survey was chosen due to the ability to measure the impact that therapy canines can have on the effectiveness of the services provided by counselors (Balnaves & Caputi, 2001, p. 20). The *Client Perceptions of Animal Assisted Therapy Survey* was designed to reflect the findings in the literature review. The survey was composed of eighteen questions. The first six questions focus on demographics to eliminate compounding variables that would affect the results and better describe the research sample. The questions in the main body of the *Client Perceptions of Animal Assisted Therapy Survey* uses a summative scale, specifically a Likert scale (Balnaves & Caputi, 2001, p. 80), to measure client perceptions. A five point Likert scale was used to prevent neutral responses from participants. These questions were composed to reflect statements made in the literature and the three components of therapeutic alliance. These three components are therapeutic relationship, counseling goals, and the counseling process (Shaw & Murray, 2014). Each summative question was tabulated using a five point scale to determine strength and variability among the data. The final question was written with a qualitative design to allow clients to fill in experiences the researcher did not cover. This allowed for participants to identify differences they had experienced when exposed to therapy canines. Summative scale questions will be tabulated into one score and main themes from the final question will be identified.

Validity

To determine the face validity of the study, three professional researchers with degrees in counselor education gave feedback on a rough draft of the survey. The professionals were given

questions to consider and a form to provide recommendations while evaluating the survey. These questions focused on claims by mental health professional found in the literature and components of therapeutic alliance. The researcher used the responses to make revisions. The survey used for this study can be found in Appendix A.

Data Collection

A self-administered online survey was chosen for a variety of reasons (Fink, 2003a, p. 22). The use of an online survey offered many benefits and challenges as identified by Teo (2013). Some of the benefits include lower costs, short time needed to collect data, more available to wider and diverse populations, and data may be analyzed quicker with less errors (Teo, 2013). Despite these benefits there is little evidence to suggest that online surveys are more effective at their purpose than paper based surveys (Teo, 2013). Some challenges can include unreliable connections to the internet for specific populations, unknown security risks, and the risk that individuals may answer differently online than on paper (Teo, 2013). Despite these challenges, utilizing an online survey had the greater chances of obtaining the needed data for this study. Another benefit unique conducting the study online was clients were not pressured to answer differently because of the proximity of their counselor. There was concern that a mail based survey would influence some clients to not answer entirely truthfully.

Participants were sent an email providing an explanation and a link to the survey by their counselor. Participants had the option of following the link to take the survey. Explanations of the study's nature and purpose were further explained in the email in which the survey link was provided. Upon following the link, participants were first presented with an informed consent form before they began the *Client Perceptions of Animal Assisted Therapy Survey*. All surveys were taken using the online system Qualtrics and results were sent to the researcher to analyze.

All results were confidential and participants were not identified while taking the survey. Online data was secured using a password that was only known to the researcher. Any data that was collected on paper was locked in a file cabinet in the student office.

Data Analysis

Data was analyzed using a descriptive statistic approach. Each summative question was coded by the research to determine scores for each question. Scores were determined by the strength of answers chosen by the participants. Scores corresponded to number of the answer selected. For example, if participants selected "never" or 1 as an answer, a score of 1 was given. Participants who selected "always" or 5 were given a score of five for that question. Questions that did not have a score were marked with a dash mark. After scores were determined for each question the researcher entered the coded data into an Excel spreadsheet. After the coded data was entered the researcher cleaned the data to eliminate errors or identify missing data. Surveys that were outliers were removed from the data before the data was analyzed. Using the coded ordinal data, measures of dispersion were calculated (Fink, 2003). This included calculating non-parametric measures including the range, mean, median, mode, and standard deviation was calculated for each summative question. For the final question the researcher identified major themes in responses by participants. Themes were compared to the themes presented in the summative questions by the researcher. Each question was given an individual score as each question was analyzed separately. Research questions number one and two were addressed by using descriptive statistics to analyze questions 7-16 on the survey. Research question number one was also addressed using qualitative methods in question number 19 on the survey.

Summary

Data for the quantitative cross-sectional descriptive (Fink, 2003a, p. 33) study was collected through a convenience sampling method (Fink, 2003b, p. 52). Participants were recruited through their counselors. Counselors were recruited through an online provider list through Pet Partners and Facebook groups such as Fargo-Moorhead Animal Assisted Therapy Professionals, Animal Assisted Therapy in Counseling. All survey responses were collected through the online system called Qualtrics and kept confidential with a password that only the researcher knew. Three professional researchers examined the survey before distribution to help determine the face validity of the survey. Data analysis will be conducted through non-parametric measures such as range, mean, median, mode, and standard deviation.

CHAPTER 4. RESULTS

This section explores the survey results of 9 participants who see a therapy dog during their counseling sessions on a regular basis. A population size of 57 was reached resulting in a 15.79% survey response rate. Data analysis was conducted using a descriptive statistical analysis suggested by Fink (2003c, p. 38), consisting of central tendencies of mean, median, mode and ranges and standard deviations as measures of spread. The mean, median, and mode were chosen to further understand on average if clients ranked their counselors favorably or not. Measures of spread such as the range and standard deviation were used to determine how much client reports differed. Statistics were based on a 5 point Likert scale with 1 being low and 5 being highest with the following possible responses: *1=Never, 2=Rarely, 3=Sometimes, 4=Often, 5=Always*. The descriptive statistics chosen helped explore the concepts under study, which was to understand if a therapy canine impacts the therapeutic relationship as perceived by the client.

Participants

Questions one through six explored the demographics and characteristics of the sampled population. Three males (33%) and six females (66%) were recruited for this study, 9 participants in total ($n = 9$). All nine participants responded to the survey link from this researcher that was sent out by their counselor. All nine participants identified themselves as Caucasian. Participants ranged in age from 18 to 49 years old, with 6 out of nine participants being under the age of 25. Seven participants stated that their counselor uses a therapy dog on a frequent basis while two reported that a therapy dog is used less often in session. Two clients reported seeing their counselor for 4 to 8 weeks, 1 reported 8-12 weeks, five 3-6 months, and one 6 to 12 months. Eight of the nine participants reported a mental health diagnosis. The diagnoses reported included Generalized Anxiety Disorder, Major Depressive Disorder, Obsessive

Compulsive Disorder, Obsessive Compulsive Disorder with Hoarding Tendencies, Social Anxiety Disorder, and Attention Deficit Hyperactivity Disorder. Eight out of nine participants responded to questions 17 and 18. Seven participants reported that they had seen a different counselor before with two seeing another counselor who had utilized a therapy dog.

Question 7

Participants were asked how relaxed they feel around their counselors while a therapy dog is in session for question 7. Overall participants reported that they strongly felt more relaxed around their counselor when a therapy dog was present. Fifty six percent of participants stated that they (5) *always* feel more relaxed with a therapy dog and 89% expressed a response of (4) *often* or above. Participants responses ranged from $R=3-5$ with a standard deviation of $SD=0.75$. This suggests that participants did not differ much in their assessment of their counselors. The mean of the responses was $M=4.33$ with a median of $M2=4$ and a mode of $M3=4,5$ suggesting a positive response to question 7.

Question 8

For question 8, participants rated if they are more likely to attend counseling with the knowledge that a therapy dog will be present. On average, participants stated they are more likely to attend when a therapy dog will be in session. Seventy eight percent of participants provided a strong response with a (5) *always* or (4) *often*. Responses ranged from $R=3-5$ with a standard deviation of $SD=0.78$ suggesting little variance among participant responses. Responses were positive with the mean of the responses was $M=4.11$ with a median of $M2=4$ and a mode of $M3=4$.

Question 9

Question 9 explored the level of connection participants felt towards their counselor while a therapy dog is present in session. Participants strongly reported that they felt more connected to their counselor in the presence of a therapy dog with all nine reporting a (4) *always* or above. Variance among participant responses were very low with a range of responses at $R=4-5$ and a standard deviation of $SD=0.44$. The mean was $M=4.22$, median $M2=4$, and mode $M3=4$ implying a strong positive response.

Question 10

Participants were asked how willing they are to participate and share in session when a therapy dog is present for question 10. Eight out of nine participants reported a positive effect of a therapy dog at 89% reporting a (4) *often* or above. The range of responses was $R=3-5$ with a standard deviation of $SD=0.5$ suggesting little variance among responses. The response to question 10 was positive with a mean of $M=4$, median $M2=4$, and mode $M3=4$.

Question 11

Participants were asked if they feel more alert with a therapy dog present in session for question 11. Overall participants reported that they strongly felt more alert around their counselor when a therapy dog was present. Fifty six percent of participants stated that they (4) *often* feel more alert with a therapy dog and 89% expressed a response of (4) *often* or above. Participants responses ranged from $R=3-5$ with a standard deviation of $SD=0.71$ suggesting little variance. The mean of the responses was $M=4$ with a median of $M2=4$ and a mode of $M3=4$ implying a positive response.

Question 12

For question 12, participants rated if they are more likely to feel more positive about themselves when a therapy dog is present. On average, participants stated they are more likely to feel better about themselves when a therapy dog will be in session. Seventy eight percent of participants provided a strong response with a (5) *always* or (4) *often*. Responses suggested little variance with a range of $R=3-5$ with a standard deviation of $SD=0.83$. Participants were strong in their positive ratings on question 12 with a mean of $M=4.22$, a median of $M2=4$, and a mode of $M3=5$.

Question 13

Question 13 explored the degree to which they agree on goals with their counselor while a therapy dog is present. Participants had a fairly neutral response to agreeing on goals with six out of nine (67%) reporting a (3) *sometimes*. The range of the responses was $R=2-5$ with a standard deviation of $SD=0.83$ suggesting some variety in responses by participants. Participants were only slightly positive with a mean of $M=3.22$, median of $M2=3$, and mode of $M3=3$.

Question 14

Participants were asked to what degree including a therapy dog helps them reach their counseling goals for question 14. Fifty six percent of participants reported therapy dogs (3) *sometimes* help them reach their goals and 44% reporting a (4) *often* or above. The range of responses was $R=3-5$ with a standard deviation of $SD=0.87$ suggesting little variance in the data. Participants were only slightly positive with a mean of $M=3.67$, median of $M2=3$, and mode of $M3=3$.

Question 15

For question 15, participants rated how comfortable they are making mistakes when a therapy dog is present. On average, participants stated a slightly higher comfort level making mistakes with 56% reporting a (4) *often* or above. Responses were fairly consistent with a range of $R=3-5$ with a standard deviation of $SD=0.87$. Responses were positive with a mean of $M=4$, median of $M2=3.89$, and a mode of $M3=3$.

Question 16

Question 16 explored how much participants look forward to a counseling session when a therapy dog will be present. participants strongly reported that they look forward to a session with a therapy dog with all nine reporting a (4) *always* or above. Participants displayed very little variance in their responses with a range of $R=4-5$ and a standard deviation of $SD=0.53$. Data was very positive for question 16 with a mean of $M=4.56$, median of $M2=5$, and mode of $M3=5$.

Question 19

Participant 1	"A therapy dog seems to help me feel more comfortable and the one I have worked with seems to be able to tell when I am more stressed and appears to try comforting me."
Participant 2	"I tend to be less upset with a therapy dog in the room."
Participant 3	"The sessions with a therapy dog feel more "human." I feel like it's OK to feel however I need to feel coming in, rather than thinking intellectually through my issues."
Participant 4	"Calmer and more open during sessions when (an) animal is present."

Themes were identified from the responses provided by participants in question 19. Participants were asked to describe differences they have experienced when working a counselor who utilizes a therapy dog versus one they previously saw that did not. Four participants responded to the question. All four of the participants cited emotional benefits while working with a therapy dog. Feeling more comfortable, more human, calmer, and more open to sharing in session were common themes in the responses. Males were twice as likely to respond to question 19 with a 66 percent response rate versus 33 percent for females. Specifics quotes from the study can be referenced in Table 1. Participant Responses to Therapy Canines.

Therapeutic Relationship

The first component of therapeutic alliance, therapeutic relationship was measured by questions seven, eight, nine, twelve, fifteen, and sixteen. The questions covered various topics related to therapeutic relationship. Overall, the data suggests a strong positive connection between the involvement of a therapy dog and how a participant rated the therapeutic relationship with 84% of participant responses being a (4) *often* or above. Responses varied little with a range from $R=3-5$ and a standard deviation of $SD=0.72$. The mean for the sample was $M=4.23$, the median $M2=4$, and mode $M3=4$ suggesting a positive response. Participants identifying as male were slightly more positive in their responses with a mean of $M=4.64$ over females at $M=4.28$ who were closer to the overall averages. The same effect was found in participants who were older with those over age 25. Adults over age 25 ranked their therapeutic relationship at a mean of $M=4.5$ versus participants under age 25 at $M=4.21$. There was a strong positive pattern between the amount of time that participants have been seeing their counselors with lower levels of time resulting in lower scores. Participants who have been with their counselor for less than 3 months ranked the effects of a therapy dog on the therapeutic

relationship below average with a mean of $M=3.83$. Participants who had been with their counselor for more than three months were well above the average with a mean of $M=4.46$.

Therapeutic Process

The second main component of therapeutic alliance is therapeutic process and was explored in questions ten and eleven. Overall, the data suggests a fairly positive trend between the involvement of a therapy dog and how a participant rated the therapeutic process with 83% of participant responses being a (4) *often* or above. Responses varied little with a range of $R=3-5$ and a standard deviation of $SD=0.59$. Participants were positive in their reports of therapeutic process with a mean of $M=4$, median of $M2=4$, and mode of $M3=4$. Males were more likely to rate their experiences of counseling process with a therapy dog as more positive than their female counterparts with a mean of $M=4.17$ versus females at $M=3.92$. Age did not have significant affects on how participants rated the therapeutic process with those under 25 with a mean of $M=4.21$ and 25 and above at $M=4.5$. Slight differences were found between participants engaged in counseling for less than 3 months and 3 months or more. Participants who have seen a counselor with a therapy dog for 3 or more months rated their experiences of the counseling process at a mean of $M=4.08$ versus participants at less than 3 months at $M=3.83$.

Therapeutic Goals

The third main component of therapeutic alliance, therapeutic goals, but was examined in questions thirteen and fourteen. Overall, the data suggests a slightly positive, fairly neutral response to using therapy dogs to achieve counseling goals in counseling with a majority of responses being (3) *sometimes*. Responses were more likely to vary with a range of $R=2-5$ and a standard deviation of $SD=0.86$. The mean for the sample was $M=3.44$, the median $M2=3$, and mode $M3=3$ suggesting a neutral response. Females were more likely to rate their experiences of

counseling goals with a therapy dog as more positive than their male counterparts with a mean of $M=3.67$ versus males at $M=3$. Age had a slight affect on how participants rated the therapeutic process with those under 25 with a mean of $M=3.33$ and 25 and above at $M=3.67$. Slight differences were found between participants engaged in counseling for less than 3 months versus 3 months or more. Participants who have seen a counselor with a therapy dog for 3 or more months rated their experiences of counseling goals at a mean of $M=3.67$ versus participants at less than 3 months at $M=3.83$.

Summary

The results explored the data analysis of nine survey participants who report seeing a counselor who partners with a therapy canine in session. Data analysis was conducted using a descriptive statistical consisting of both central tendencies and measures of spread. The mean, median, mode, range, and standard deviation was calculated for questions 2-16. Participants reported varying demographics including gender, race, age, length of time with counselor, and mental health diagnosis in questions 1-6. Questions 7-16 were rated fairly positive by participants with the exception of question 13 in which participants had a fairly neutral response. Major themes identified in question 19 included feeling more comfortable, more human, calmer, and more open to sharing in session. Participants reported positive effects of therapy canines on their experiences with therapeutic relationship and therapeutic process. Participants were more neutral, although still slightly positive, in their responses to therapeutic goals.

CHAPTER 5. DISCUSSION

The goal of this pilot study was to introduce the exploration and understanding of how therapy canines influence clients' perceptions of the therapeutic relationship and therapeutic alliance. This study further investigated the alignment of client perceptions of AAT and counselor claims within the literature. The data provided by the participants suggest that therapy dogs can have positive impacts on how a counselor is perceived by their clients. Participants reported feeling relaxed, connected, alert, and self confident around their counselors when working with a therapy canine. Participants also reported that they were likely to attend and participate in sessions, comfortable making mistakes, likely to reach their counseling goals, and looked forward to sessions with a therapy canine. The only area participants were fairly neutral in their responses was agreeing on goals with their counselor in the presence of a therapy canine.

When exploring the three components of therapeutic alliance, results were slightly mixed. While results for the therapeutic relationship and therapeutic process show a strong positive trend between client perceptions and the presence of a therapy canine, therapeutic goal results suggest a more neutral trend. It would seem that having a therapy canine present has a small effect on goals made in counseling. Slight influences were found with regards to gender, age, and time with counselor. Males ranked their counselors higher in therapeutic relationship and therapeutic process while females were more likely to express positive effects of a therapy dog on therapeutic goals. It is hypothesized by this researcher that social norms may have an impact on the response of males to a therapy canine. American social norms favor male affection towards human relationships as a negative or undesirable behavior. Animals may not be included in such norms and expectations, thereby allowing males to more freely express themselves or show affection towards the canine. In this way therapy canines may form a bridge between male

clients and their counselors. Further study is needed to determine if this is indeed the case or if there are other factors. Participants 25 and older were much more likely to report positive effects of a therapy dog on therapeutic process. Participants who have been with their counselor longer also reported more positive perceptions and experiences when discussing counseling experiences.

As supported by previous studies, and clinician reports, of animal assisted therapy (Chandler, 2005, p. 6; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Dietz, Davis, & Pennings, 2012; Perry, Rubinstein, & Austin, 2012; Parish-Plass, 2008), clients rated their counselors more positively with the presence of a therapy canine. Participant reports of relaxation and connection suggest that therapy canines can act as social lubricants for counselors who bring them into session (Chandler, 2005, p. 5; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Jalongo, Astorino, Bomboy, 2004). Effects on attendance and participation measured by this study also reflected positive effects seen in previous studies with varying populations (Perry, Rubinstein, & Austin, 2012; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005). Participant's positive anticipation of their upcoming counseling session with a therapy canine is also reflected in review of the literature (Perry, Rubinstein, & Austin, 2012; Velde, Cipriani, & Fisher, 2005). Results also suggest that therapy canines may provide emotional support and project empathy, creating a sense of security for clients in the counseling environment (Hamama et al., 2011; Chandler, 2005, p. 8; Parish-Plass, 2008; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Zilcha-Mano, Mikulincer, & Shaver, 2011). This may explain positive ratings by participants on self-esteem and making mistakes. Results supported claims made by mental health professionals in the literature and no significant differences were found. This supports that claim that clinician perceptions of animal assisted therapy reflects that of their clients.

Results also support new trends and effects that may be a result of partnering with a therapy canine, specifically aspects of the therapeutic alliance. While many components of therapeutic relationship is documented in regards to AAT, there is little to be found on therapeutic process and therapeutic goals. Data from this study suggest positive effects to therapeutic process and therapeutic goals, particularly more comfort in engaging in therapeutic processes. Gender, age, and time in counseling was also accounted for in this study, which are demographics often not discussed in previous literature. To further understand differing clientele utilizing counseling services, it is important to explore these demographics further and how these groups perceive their experiences with AAT. This study suggests gender may affect how clients react to AAT, with males possibly perceiving more benefits. This effect was also reflected in participants who were older and had spent more time with their counselors.

Limitations/Areas for Future Research

After data collection began it became apparent that the population size was more limited than was originally estimated. As a result there was a much lower response to the survey than was expected and desired. Due to this findings can not be considered significant but rather indicative of patterns or opinions that may exist in the studied population. The small population size may be due to a variety of different factors. The first of these was the small number of adult clients therapy canines are used with. When recruiting counselors for this study, this researcher encountered many counselors willing to participate but many of these individuals only used therapy canines with children. While this was not true for all professionals, this greatly decreased the number of clients the survey reached. To produce a more accurate representation of the current population in which therapy canines are used, studies are needed to explore the use of therapy canines with children. The use of therapy canines with children is a long documented but

understudied practice beginning with Levinson (Chandler, 2005, p. 10; Heimlich, 2001; Hamama et al., 2011; Parish-Plass, 2008; Frieson, 2010).

Another limitation of the research was the small number of clients that participating counselors have in their case load that are exposed to a therapy canine. Many of the participating counselors only used a therapy canine with a few clients. This may be due to concerns of animal fatigue or types of practices that were willing to participate. Many of the participating counselors were working in outpatient settings and saw fewer clients over a longer period of time. To address this it may be necessary to focus efforts on reaching facilities that use a therapy canine in larger group settings such as groups or residential facilities. This also ties into the challenge of distributing the survey. Distribution of the survey to clients and reports of numbers of possible participants was based solely on counselor self reports. The researcher had no direct contact with possible participants requiring participating counselors to pass along information.

To encourage more participants it may be necessary for the researcher to attempt to establish more direct methods of delivery. This may include posting flyers in facilities who offer AAT services or bringing paper based surveys to groups that are exposed to a therapy canine. One other option that may be considered is providing a means for clients to take a survey while at the counseling facility. This would require a space for clients to be free of influence by their counselor but would create easy access to the survey for those who may not have regular access to email or a computer. Due to the recent nature and small population it may also be necessary to conduct surveys that are more qualitative in nature such as interviews before introducing further quantitative surveys. As the field grows, it is also important that further quantitative studies, particularly parametric studies, be conducted that explore the benefits of utilizing AAT. This may involve focusing on specific reported benefits rather than the broad overview this study

explores. Further studies may also focus on the differing or similar perceptions of counselors and their clients. Including client perspectives in the research process can lead to more effective and positive therapy treatments.

Further research is needed on specific populations that were included within this study. The first of these is the effects of gender. Further research is needed to explore the perceptions of males and females and how they differ in response to AAT. By exploring the components that lead male participants to rate their counselor higher counselors can provide more effective treatments and interventions with their therapy canine partners. Another confound that may have been present and would benefit from further study is how diagnosis affects client perceptions. Many of the participants in this study were around college age and most had an anxiety related diagnosis. This may have influenced how participants see therapy canines and it is important to understand how therapy canines contribute to easing tension for anxiety prone clients. The time a client has been seeing a counselor may also lead to an increase in ratings. Further study is needed to determine if this is an effect due to more time for a relationship to develop and to explore how a therapy canine influences this process. To control for confounds, in the future it is vital to conduct experimental design studies with a control group. This may be done by selecting participants who fall within the same age, diagnosis, gender, and time spent seeing their counselor. This may also be achieved by comparing clients who are seeing the same counselor. This would include both those who also see the partnered therapy canine and those who do not.

While there was a small number of possible participants reached, the response to the survey was very positive. Not only were participants positive in their responses but many counselors the researcher contacted were excited to hear more about the research and how they could help. Many professionals who did not have any clients to forward the survey to offered

help in the forms of referrals, suggested literature, and genuine encouragement. Many professionals contacted were very interested in AAT and had a desire to learn more. This supports the notion that AAT is still a fairly recent phenomena but has the potential to become a more utilized form of treatment.

Applications for Counselors

With the knowledge that the therapeutic relationship is the basis of effective counseling, it is important for counselors to explore ways of understanding and improving the strength of this relationship (Manthei, 2007). It is also important for counselors to understand how clients interpret the therapeutic relationship (Shaw & Murray, 2014). Providing a therapy canine in session may promote a more relaxed environment for the client. This may also contribute to the formation of a therapeutic relationship earlier on in the counseling process. Therapy canines can act as a social lubricant for the counselor as they interact with clients (Chandler, 2005, p. 5; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Jalongo, Astorino, Bomboy, 2004). It is also important for counselors to consider how having a therapy canine may affect client attendance and participation. Results suggest that counselors may have a higher rate of attendance and anticipation when a therapy canine is provided for services. The emotional support provided by canines in session may also encourage clients to share more freely with their counselor (Parish-Plass, 2008). Therapy canines may in fact help create a more desirable environment for therapy to occur. Which in turn may shed a more positive light on the counselor and the therapeutic relationship.

While the inclusion of a therapy canine may not be applicable in some counseling environments, the physical, emotional, and mental health benefits suggest animals may provide an avenue for many clients to find healing and growth. It is important for counselors to weigh the

risks and the benefits of using a therapy canine in their practice. While there are many reported benefits it is also important to consider many of the risks or challenges associated with the practice. Allergies, cultural considerations, fear, and animal stress should all be considered before proceeding, but for clients who are open to seeing a therapy canine there are many benefits.

As AAT begins to grow it may be applicable for mental health counselors to develop further organizations, certifications, and standards. This would lead to better partnerships with therapy animals, better trainings, and more qualified professionals. More education and awareness is needed to not only better serve clients but also the therapy animals themselves and the mental health professionals they partner with. With further research, AAT may become a popular empirically based form of treatment supported by certifications, professional networks, and ethical standards.

Summary

Overall, participant responses support the notion that counselors who partner with therapy canines are viewed more positively by their clients with regards to therapeutic relationship and alliance. This also supports that claim that client perceptions of AAT matches that of the literature review. Limitations of the research include a limited population, indirect access to participants, and limited use of AAT with adults. Despite this many of those involved in the research process were eager to support the study in a variety of ways. To understand the concepts under study it is important to explore more research focused on including children, qualitative surveying, and more specific concepts regarding client perceptions of AAT. By partnering with a therapy canine, counselors may see benefits such as social lubrication, quicker

therapeutic relationship development, more emotional support for clients, and a higher client participation and attendance.

REFERENCES

- Aoki, J., Iwahashi, K., Ishigooka, J., Fukamauchi, F., Numajiri, M., Ohtani, N., & Ohta, M. (2012). Evaluation of cerebral activity in the prefrontal cortex in mood [affective] disorders during animal-assisted therapy (AAT) by near-infrared spectroscopy (NIRS): A pilot study. *International Journal of Psychiatry in Clinical Practice*, *16*(3), 205-213. doi:10.3109/13651501.2011.644565
- Bachelor, A. (2013). Clients' and therapists' views of the therapeutic alliance: Similarities, differences and relationship to therapy outcome. *Clinical Psychology & Psychotherapy*, *20*(2), 118-135. doi:10.1002/cpp.792
- Balnaves, M., & Caputi, P. (2001). *Introduction to quantitative research methods: An investigative approach*. Thousand Oaks, CA: Sage Publications, Inc.
- Bryan, L. A., Dersch, C., Shumway, S., & Arredondo, R. (2004). Therapy outcomes: Client perception and similarity with therapist View. *American Journal of Family Therapy*, *32*(1), 11-26. doi:10.1080/01926180490255792
- Chandler, C. A. (2005). *Animal assisted therapy in counseling*. New York, NY:Routledge.
- Dietz, T. J., Davis, D., & Pennings, J. (2012). Evaluating animal-assisted therapy in group treatment for child sexual abuse. *Journal of Child Sexual Abuse*, *21*(6), 665-683. doi:10.1080/10538712.2012.726700
- Duff, C. T., & Bedi, R. P. (2010). Counsellor behaviours that predict therapeutic alliance: From the client's perspective. *Counselling Psychology Quarterly*, *23*(1), 91-110. doi:10.1080/09515071003688165
- Fink, A. (2003). *The survey handbook*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

- Fink, A. (2003). *How to design survey studies*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Fink, A. (2003). *How to manage, analyze, and interpret survey data*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early Childhood Education Journal*, 37(4), 261-267. doi:10.1007/s10643-009-0349-5
- Gellhaus Thomas, S., Werner-Wilson, R., & Murphy, M. J. (2005). Influence of therapist and client behaviors on therapy alliance. *Contemporary Family Therapy: An International Journal*, 27(1), 19-35. doi:10.1007/s10591-004-1968-z
- Hamama, L., Hamama-Raz, Y., Dagan, K., Greenfeld, H., Rubinstein, C., & Ben-Ezra, M. (2011). A preliminary study of group intervention along with basic canine training among traumatized teenagers: A 3-month longitudinal study. *Children & Youth Services Review*, 33(10), 1975-1980. doi:10.1016/j.childyouth.2011.05.021
- Heimlich, K. (2001). Animal-assisted therapy and the severely disabled child: A quantitative study. *Journal of Rehabilitation*, 67(4), 48-54.
- Henkelman, J., & Paulson, B. (2006). The client as expert: Researching hindering experiences in counselling. *Counselling Psychology Quarterly*, 19(2), 139-150. doi:10.1080/09515070600788303
- Horowitz, S. (2010). Animal-assisted therapy for inpatients: Tapping the unique healing power of the human-animal bond. *Alternative & Complementary Therapies*, 16(6), 339-343. doi:10.1089/act.2010.16603

- Jalongo, M., Astorino, T., & Bomboy, N. (2004). Canine visitors: The influence of therapy dogs on young children's learning and well-being in classrooms and hospitals. *Early Childhood Education Journal*, 32(1), 9-16.
- Kesner, A., & Pritzker, S. R. (2008). Therapeutic horseback riding with children placed in the foster care system. *Revision*, 30(1/2), 77-87.
- Lefkowitz, C., Paharia, I., Prout, M., Debiak, D., & Bleiberg, J. (2005). Animal-assisted prolonged exposure: A treatment for survivors of sexual assault suffering posttraumatic stress disorder. *Society & Animals*, 13(4), 275-295. doi:10.1163/156853005774653654
- Manthei, R. J. (2007). Clients talk about their experience of the process of counselling. *Counselling Psychology Quarterly*, 20(1), 1-26. doi:10.1080/09515070701208359
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: What can be done?. *Assessment & Evaluation in Higher Education*, 33(3), 301-314.
doi:10.1080/02602930701293231
- Parish-Plass, N. (2008). Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Child Psychology & Psychiatry*, 13(1), 7-30.
doi:10.1177/1359104507086338
- Patterson, C. L., Anderson, T., & Wei, C. (2014). Clients' pretreatment role expectations, the therapeutic alliance, and clinical outcomes in outpatient therapy. *Journal of Clinical Psychology*, 70(7), 673-680. doi:10.1002/jclp.22054
- Pedersen, I., Nordaunet, T., Martinsen, E., Berget, B., & Braastad, B. O. (2011). Farm animal-assisted intervention: Relationship between work and contact with farm animals and

- change in depression, anxiety, and self-efficacy among persons with clinical depression. *Issues In Mental Health Nursing*, 32(8), 493-500. doi:10.3109/01612840.2011.566982
- Perry, D., Rubinstein, D., & Austin, J. (2012). Animal-assisted group therapy in mental health settings: An initial model. *Alternative & Complementary Therapies*, 18(4), 181-185. doi:10.1089/act.2012.18403
- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child & Adolescent Social Work Journal*, 15(3), 177-185.
- Shaw, S. L., & Murray, K. W. (2014). Monitoring alliance and outcome with client feedback measures. *Journal of Mental Health Counseling*, 36(1), 43-57.
- Sockalingam, S., Li, M., Krishnadev, U., Hanson, K., Balaban, K., Pacione, L. R., & Bhalerao, S. (2008). Use of animal-assisted therapy in the rehabilitation of an assault victim with a concurrent mood disorder. *Issues in Mental Health Nursing*, 29(1), 73-84. doi:10.1080/01612840701748847
- Teo, T. (2013). Online and paper-based survey data: Are they equivalent?. *British Journal of Educational Technology*, 44(6), E196-E198. doi:10.1111/bjet.12074
- Timulak, L., Belicova, A., & Miler, M. (2010). Client identified significant events in a successful therapy case: The link between the significant events and outcome. *Counselling Psychology Quarterly*, 23(4), 371-386. doi:10.1080/09515070.2010.534329
- Velde, B. P., Cipriani, J., & Fisher, G. (2005). Resident and therapist views of animal-assisted therapy: Implications for occupational therapy practice. *Australian Occupational Therapy Journal*, 52(1), 43-50. doi:10.1111/j.1440-1630.2004.00442.x
- Yorke, J., Nugent, W., Strand, E., Bolen, R., New, J., & Davis, C. (2013). Equine-assisted therapy and its impact on cortisol levels of children and horses: A pilot study and meta-

analysis. *Early Child Development & Care*, 183(7), 874-894.

doi:10.1080/03004430.2012.693486

Zilcha-Mano, S., Mikulincer, M., & Shaver, P. R. (2011). Pet in the therapy room: An attachment perspective on animal-assisted therapy. *Attachment & Human Development*, 13(6), 541-561. doi:10.1080/14616734.2011.608987

APPENDIX A. INFORMED CONSENT

NDSU North Dakota State University
 Counselor Education
 1919 N. University Drive
 Fargo, ND 58108-6050
 701-231-7202

Title of Research Study: Masters Thesis: Client Perceptions of Animal Assisted Therapy

This study is being conducted by: If you have questions or concerns about this study, please contact Brea Grueneich at brea.grueneich@ndsu.edu or the committee chair, professor of Counselor Education at North Dakota State University, Brenda Hall at brenda.hall@ndsu.edu.

Why am I being asked to take part in this research study? You were selected to take part in this study because you are currently seeing a mental health counselor who currently uses a therapy dog during session.

What is the reason for doing the study? The purpose of this study is to explore client perceptions of animal assisted therapy, specifically therapy dogs in counseling.

What will I be asked to do? You will be asked to take a brief survey where you will be asked to rank your opinions. The questions are designed to collect data regarding how you feel about counselors who utilize animal assisted therapy.

Where is the study going to take place, and how long will it take? The survey will be conducted using the online system called Qualtrics. The survey should take about 10-15 minutes of your time.

What are the risks and discomforts? It is not anticipated that there will be any risks or discomfort while participating in this study. If you feel uncomfortable at any time you may stop taking the survey.

What are the benefits to me? You are not expected to get any benefit from being in this research study.

What are the benefits to other people? As a participant you will be contributing to counselor knowledge of animal assisted therapy. Client perceptions are important to improving counseling processes and experiences.

Do I have to take part in the study? Your participation in this research is your choice. If you decide to participate in the study, you may change your mind and stop participating at any time without penalty or loss of benefits to which you are already entitled.

What are the alternatives to being in this research study? Instead of being in this research study, you can choose not to participate.

Who will see the information that I give? This study is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you.

What if I have questions?

Before you decide whether to accept this invitation to take part in the research study, please ask any questions that might come to mind now. Later, if you have any questions about the study, you can contact the researcher, Brea Grueneich at brea.grueneich@ndsu.edu or 701-490-0393.

What are my rights as a research participant?

You have rights as a participant in research. If you have questions about your rights, or complaints about this research [may add, “or to report a research-related injury” if applicable], you may talk to the researcher or contact the NDSU Human Research Protection Program by:

- Telephone: 701.231.8908 or toll-free 1.855.800.6717
- Email: ndsu.irb@ndsu.edu
- Mail: NDSU HRPP Office, NDSU Dept. 4000, PO Box 6050, Fargo, ND 58108-6050.

The role of the Human Research Protection Program is to see that your rights are protected in this research; more information about your rights can be found at: www.ndsu.edu/irb .

APPENDIX B. SURVEY QUESTIONS

Client Perceptions of Animal Assisted Therapy Survey

1.) What is your gender?

Male Female

2.) How old are you?

3.) What is your ethnicity?

Caucasian African American Hispanic Native American

Asian American Other: _____

4.) My counselor uses a therapy dog during our sessions.

Yes No

5.) How long have you been seeing your counselor?

4-8 weeks 8-12 weeks 3-6 months 6-12 months more than 12 months

6.) Have you been previously diagnosed with a mental health disorder? (ex. Major Depressive Disorder, Anxiety Disorder, etc.) If yes, what is the disorder/disorders?

7.) During sessions with my counselor, the therapy dog helps me relax.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

8.) I am more likely to attend a counseling session if a therapy dog is going to be present.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

9.) Having a therapy dog in session helps me feel connected to my counselor.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

10.) I participate and share more in session when a therapy dog is present.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

11.) I feel more alert when a therapy dog is in session.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

12.) I feel better about myself when a therapy dog is in session.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

13.) My counselor and I agree more on counseling goals when a therapy dog is present.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

14.) Including a therapy dog in my sessions helps me reach my goals for counseling.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

15.) I feel more comfortable making mistakes when the therapy dog is in session.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

16.) I look forward to my next counseling session when I know a therapy dog is going to be in there.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

17.) Previous to working with your current counselor, have you ever worked with another counselor?

Yes No

18.) Previous to working with your current counselor, have you ever worked with another counselor who used a therapy dog?

Yes No

19.) If you have seen a counselor without a therapy dog and one with, please explain any differences you may have experienced.