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ACCEPTANCE

This dissertation, **COMPETENCIES IN ANIMAL ASSISTED THERAPY IN COUNSELING: A QUALITATIVE INVESTIGATION OF THE KNOWLEDGE, SKILLS AND ATTITUDES REQUIRED OF COMPETENT ANIMAL ASSISTED THERAPY PRACTITIONERS**, by **LESLIE A. STEWART**, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education, Georgia State University.

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Stewart, L., Chang, C., Kress, V.E. (2013). Animal Assisted Therapy in Counseling. *ACA: Practice Briefs*. Retrieved from: <http://counseling.org/knowledge-center/center-for-counseling-practice-policy-and-research>.

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ABSTRACT

COMPETENCIES IN ANIMAL ASSISTED THERAPY IN COUNSELING: A QUALITATIVE INVESTIGATION OF THE KNOWLEDGE, SKILLS AND ATTITUDES REQUIRED OF COMPETENT ANIMAL ASSISTED THERAPY PRACTITIONERS

by
Leslie A. Stewart

Existing authors (Reichert, 1998; Watson 2009) have described the unique positive impact of Animal Assisted Therapy in Counseling (AAT-C) on the client's perception of the therapeutic alliance as well as the professional counselor's ability to build positive alliances quickly. When implemented with appropriate education and training, AAT-C can positively impact the therapeutic experience of a diverse range of clients across a wide variety of settings (Chandler, 2012; Fine, 2004). AAT-C requires a specialized set of skills and competencies that allows professional counselors to incorporate specially trained animals into the counseling process to influence the therapeutic process in ways that are beyond the scope of traditional counselor-client helping relationships (Stewart & Chang, 2013). However, there is currently no definition of counseling-specific competencies to guide practitioners in this specialty area.

To address this gap, the presenters conducted an investigation using the Grounded Theory Method (Charmaz, 2006; Guba & Lincoln, 1989) to address the following research question: What knowledge, skills, and attitudes are required of competent practitioners of AAT-C? Based on the themes and subthemes that emerged from the data, the authors constructed a theoretical framework which represents competencies in AAT-C. Using this theoretical framework, the authors uncovered a total of nine essential competency areas for professional counselors utilizing AAT-C. They are divided into three domains in accordance with the competency framework that includes Knowledge, Skills, and Attitudes (Myers & Sweeny, 1990).

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ASSISTED THERAPY PRACTITIONERS

by
Leslie A. Stewart

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ABBREVIATIONS

ACA	American Counseling Association
AAT	Animal Assisted Therapy
AAT-C	Animal Assisted Therapy in Counseling

CHAPTER 1

DEFINING ANIMAL ASSISTED THERAPY AND IMPLICATIONS FOR PROFESSIONAL COUNSELORS

Introduction

Animal assisted therapy in counseling (AAT-C) is defined as the incorporation of pets as therapeutic agents into the counseling process; thus, professional counselors utilize the human-animal bond in goal-directed interventions as part of the treatment process (Chandler, 2005). Professional counselors can integrate AAT-C into sessions in a variety of ways and may be appropriate across a variety of settings (Chandler, 2005). AAT-C is delivered or directed by a professional health or human service provider who demonstrates skill and expertise regarding the clinical applications of human-animal interactions (Pet Partners, 2013). Although training and evaluation standards are often similar for therapy pet and handler teams in other therapeutic settings (e.g., therapy pet team visits in hospitals, schools or older adult care centers), animal assisted therapy in counseling involves an intentional intervention, implemented by a mental health professional, that is part of the client's treatment process. When implemented with the appropriate education and training, AAT-C has the potential to impact the therapeutic experience of a diverse range of clients across a wide variety of settings in a highly positive manner (Chandler, 2005, 2012; Fine, 2004). Although AAT-C presents a valuable treatment option for many clients, research and evidence-based treatment strategies appropriate to the topic remains limited (Shelton, Leeman & O'Hara, 2011). In this manuscript, the author will provide a summary and critique of both the conceptual and empirical literature of AAT-C and discuss implication for future studies.

Conceptual Works

Boris M. Levinson (1962) is regarded as the first professionally trained clinician to introduce and document the impact of companion animals on the therapeutic process (Mallon, 2006). Chandler (2010, 2012) and Fine (2004) have contributed to the conceptual AAT-C literature base through defining AAT-C and establishing a standard for practitioner and animal training and evaluation. Through their work, they have raised awareness about the intervention, provided formal training and education about AAT-C, shared their own invaluable observations as professional counselors who employ the technique, and provided a thorough discussion of practical considerations related to AAT-C. Reichert (1998) has also added to the literature base of AAT-C by describing the unique positive impact that AAT-C has on the therapeutic alliance. Reichert, a licensed clinical social worker who provided psychotherapy to child survivors of sexual abuse, observed positive differences in her clients' perception of the therapeutic relationship, willingness to disclose, and self-reported feelings of safety and security in the presence of her pet dog. Reichert (1998) asserted that the therapy animal's warm, non-judgmental nature might facilitate client disclosure during counseling sessions. Additionally, Reichert (1998) observed that a therapy animal can often serve as a transitional object for the client, allowing the client to convey feelings through the animal, thus bridging the gap between client and counselor and easing the process of trust building. Further, Fine (2000, 2004) suggested that incorporating AAT-C components into psychotherapy could help the counselor build positive therapeutic alliances more quickly. This supports Chandler's (2005) assertion that the relationship between the therapy pet and the client facilitates the rapport between the client and the human

counselor. Considering that the quality of the therapeutic alliance is the strongest predictor of treatment success (Barber, Connolly, Crits-Christoph, Gladis & Siqueland, 2009) regardless of specific intervention used, the inclusion of AAT may contribute to positive outcomes in counseling. According to Horvath and Symonds (1991), a good helping relationship (i.e., therapeutic alliance) is characterized by mutual liking, respect, rapport, trust, warmth, acceptance, and collaboration. The incorporation of a therapy animal into the therapeutic process may help facilitate the trust, warmth, and acceptance that is so vital to the therapeutic process (Reichert, 1998).

George (1988) observed that the need for language in therapy decreases when a therapy animal is introduced in counseling, as the client may find it easier to express him or herself through physical interaction with the animal - potentially providing an avenue for the counselor and client to communicate about painful or emotionally charged topics. Another benefit of AAT-C is to ease the emotional burden placed on the professional counselor (Fine, 2004). The therapy animal can physically express sympathy and comfort to the client without compromising the professional counselor's personal boundaries (Fine, 2004).

Chandler, Portrie-Bethke, Barrio Minton, Fernando and O'Callaghan (2010) illustrated that AAT techniques can be used to develop the therapeutic relationship across counseling theories and to support specific theory-based interventions. In this conceptual article, Chandler et al. (2010) summarized how AAT-C interventions and techniques correspond to each of nine major counseling theoretical orientations (person-centered, cognitive-behavioral, behavioral, Adlerian, psychoanalytical, Gestalt, existential, reality therapy, and solution-focused). Through concrete examples of AAT-C interventions and

detailed case examples described through the lens of each theoretical approach, Chandler et al. (2010) demonstrated that AAT-C interventions may be consistent with the major premises of the practitioner's theoretical orientation.

Geist (2011) wrote a conceptually-based article how AAT-C might be utilized to help address the physiological, psychological and cognitive aspects of children presenting with behavioral disturbances and attachment disorders. To conceptualize this model, Geist (2011) drew upon her own clinical experience and unique interpretation of AAT-C literature. Although it follows the precedence set by Chandler et al.'s (2010) article in providing detailed examples of how AAT-C interventions fit within established clinical approaches to psychotherapy, this article lacks a clearly- identified and integrated conceptual framework that is supported and endorsed by experts in AAT-C.

Although the clinical works of the authors discussed above sheds light on the theoretical and practical applications of AAT-C by experienced practitioners, these works leave gaps in the areas of evidence based-practice. Overall, very little is known about the unique phenomenon of AAT-C in counseling, especially regarding the experiences of the professional counselors and clients involved.

Empirical Works

Existing empirical literature relevant to the topic of AAT-C is presented in following sections. Empirical literature on AAT-C covers a wide variety of topics, including practitioner approaches and outcome-based studies with various client populations and presenting concerns. Although the prevalence of AAT-C studies continues to be limited in counseling literature, Animal Assisted Therapy's (AAT) impact on client outcomes may be found in the literature of related health and human service

fields. While AAT-C and AAT share certain commonalities (e.g., inclusion of a specially trained and evaluated therapy animal, an appropriately credentialed human health and services professional, clearly defined treatment goals), there are considerable differences in the application and delivery of AAT interventions depending on the professional identity of the health or human service provider involved (e.g., physical therapist, nurse, physician, mental health professional). AAT-C represents a subspecialty within the field of AAT, with specific approaches, interventions, and theoretical underpinnings that are unique to counseling professionals such as professional counselors, counseling psychologists, and clinical social workers (Stewart, Chang & Rice, 2013). Thus, some AAT literature may not be relevant to the practice of AAT-C. In this section, the author will present brief overviews of extant empirical works in AAT-C and relevant studies in AAT. The following sections will represent the major topic areas of empirical AAT literature: models of practice, meta-analyses, psychophysiological health, anxiety, depression, severe mental illness, substance abuse, disabilities, and emotional regulation.

Models of Practice

Existing authors (e.g., Chandler, 2005; Fine, 2004; Reichert, 1998, Wesley, Mintrea & Watson, 2009) have found that AAT interventions can potentially provide a valuable treatment modality, but Kruger and Serpell (2006) identified that AAT lacks a theoretical framework to guide its application. To address this aspect of AAT-C, some authors (O'Callaghan, 2008; Stewart, Chang & Rice, 2013) conducted studies intended to provide or describe an AAT-C model of practice.

O'Callaghan (2008) found that a majority of AAT-C practitioners use AAT-C interventions with the intention of enhancing the therapeutic relationship by building

rapport, enhancing trust, and facilitating feelings of safety. Further, O'Callaghan (2008) found that a majority of AAT-C practitioners use the following AAT-C intervention techniques: a) reflecting or commenting on the client's relationship with the therapy animal; b) encouraging the client to interact with the therapy animal; c) sharing information about the animal's history with the client; d) sharing animal stories, themes and metaphors with the client; e) allowing the therapy animal to be present without directive intervention; and f) allowing the therapy animal to engage in spontaneous moments that facilitate the therapeutic discussion. O'Callaghan (2008) provides an empirically-based explanation of how and why AAT-C practitioners integrate this approach in clinical work, but it fails to identify the theoretical underpinnings of such interventions.

To uncover the theoretical underpinnings of mental health professionals who incorporate AAT-C techniques into clinical practice, Stewart, Chang & Rice (2013) conducted a qualitative investigation of experienced AAT-C practitioners. Based on the themes and subthemes which emerged from the data, the authors constructed a model with four main components. Counseling professionals who utilize AAT-C: (1) Develop a specific set of skills and competencies, (2) Utilize a highly developed working relationship with a therapy animal, (3) Purposefully impact the therapeutic process, (4) Enhance the scope of traditional counselor-client relationships. Although each of the components is described separately, the model is integrated and cyclical; each component has a reciprocal relationship with the other components. This model revealed the purposeful and skillful approach that AAT practitioners weave into the counseling relationship and therapeutic process and explains the role of developing AAT-related

hard skills (such as animal training techniques, understanding of animal behavior/physiology, and animal care skills) and soft skills (such as the clinical application of facilitating human-animal interactions and strategies for integrating AAT into previously acquired general counseling skills) as a foundational aspect of AAT-C interventions. Additionally, the data revealed that working with a therapy animal often benefits the counselor by preventing and combating symptoms of burnout and vicarious trauma, which represents a unique finding in the AAT and AAT-C literature.

Despite the relative scarcity of evidence-based intervention strategies, O'Callaghan (2008) and Stewart et al. (2013) found that mental health professionals who practice AAT-C select intervention strategies purposefully and with intentionality. While empirical support for AAT-C remains limited, AAT-C is growing in use and popularity, and empirical support for its efficacy is steadily increasing (Chandler, 2012) and the intervention's broad and flexible applicability and positive impact on the therapeutic process make it an attractive and valuable treatment option. A review of outcome-based empirical literature relevant to AAT-C is presented below.

Meta-Analysis

Nimer and Lundahl performed a comprehensive meta-analysis of AAT literature in 2007. To conduct this investigation, the authors conducted an extensive search of outcome-based AAT studies through three strategies: (1) a computer-based search of electronic databases using 19 AAT-related keywords, (2) a hand-search of three journals that frequently publish AAT studies (*Anthrozoos*, *Applied Animal Behavior*, and *Society & Animals*), and (3) a citation search through the reference sections of all retrieved articles. This search yielded a total of 250 studies, 49 of which were identified as meeting

the author's criteria for inclusion in meta-analytic procedures. The inclusionary criteria for this investigation were: (1) studies that investigated AAT, not AAA or pet ownership, (2) included a treatment group sample size of at least five participants (3) were written in English, and (4) provided sufficient data to compute an effect size (Cohen's D) (Nimer & Lundahl, 2007). Based on the results of the meta-analysis, the authors concluded that "AAT was associated with moderate effect sizes in the treatment of Autism-spectrum disorders, medical difficulties, behavioral problems, and emotional well-being". The authors also concluded that participant characteristics did not significantly impact treatment outcomes with AAT interventions. Based on these findings, Nimer and Lundahl (2007) suggested that AAT is a promising intervention and called for future research to investigate which conditions AAT may be most helpful.

Psychophysiological Health

AAT and AAA interventions have been found to be effective with regards to decreasing symptoms of physiological stress in healthcare settings. DeCoursey, Russel, and Keister (2010) summarized the results of five of those studies (Baun, Berstrom, Langston, & Thomas, 1984; Wu, Niedra, Pendergast, & McCrindle, 2002; Sobo, Eng, & Kassity-Krich, 2006; Kaminski, Pellino & Wish, 2002; Cole, Gawlinski, Steers & Kotlerman, 2007) and concluded that AAT enhances a healthcare provider's ability to provide holistic patient care in the form of physiological and emotional relief and support, while offering a unique opportunity for patients to experience therapeutic touch. DeCoursey et al. (2010) also highlighted AAT's cost-effectiveness and general flexibility as an intervention as valuable asset to critical care units.

Odendaal (2000) investigated the physiological impact of therapeutic human-animal interactions on both human participants and therapy dogs by measuring the blood plasma levels of a variety of neurochemicals in the human participants and the dog in a pre-post design. Odendaal's results revealed that after interacting with the therapy dog, a significant increase in neurochemicals associated alleviation of some physiological symptoms of stress (endorphin, oxytocin, prolactin, phenyllic acid, and dopamine) occurred in both the human participant and the therapy dog. In human participants, a significant decrease in cortisol levels occurred, suggesting that the interaction reduced the physiological symptoms of stress in the human participant. No significant changes were noted in the cortisol levels of the therapy dog. Odendaal (2000) suggested that this result may be explained by the therapy dog's experience of excitement in a novel environment. Odendaal discussed the significant changes in neurochemical activity as a strong rationale for including AAT in a variety of clinical settings, and confirmed the reciprocal and mutually beneficial nature of positive human-animal interactions. To date, no other author has investigated the physiological impact of such interactions on the therapy animal. Further, Odendaal was able to identify that the maximum psychophysiological benefits occurred within a range of 5 to 24 minutes after the beginning of the interactions. Therefore, Odendaal concluded that interactions of shorter or longer duration may not offer additional benefits. Odendaal suggested that future studies continue to investigate the physiological impact of positive human-animal interaction using methods that are less invasive than blood draws.

Wu et al. (2002) conducted a study that evaluated the impact of a volunteer pet therapy visitation program on 30 pediatric cardiology patients and their families.

Participants engaged in a total of 31 pet visits, during which one of three specially-trained (although not formally registered) dogs was brought into the patient's room. Interactions between the dog, the patient, and the patient's family were purposefully unstructured, non-directive, and flexible. Patients and their families were allowed to engage the dog in spontaneously and creatively in any way they wished (within reasonable limits, as defined by the dog's handler). Pre and post visit measures of patient's heart rate, respiratory rate and oxygen saturation rate were collected with each visit, and after each visit patients and their families completed open-ended surveys describing their thoughts about the visitation session, their overall satisfaction with each visitation session, and a four-point Likert scale describing how the pet visit impacted their perception of the hospital environment, and a description of the benefits they experienced as a result of the dog visitation sessions. Results showed significant positive differences in patients' beginning and ending heart rate and respiration. 26 of the 30 patients reported that the dog's visit generated positive feelings. Further, a positive correlation was found between the level of rapport reported on the visit satisfaction survey and the positive feelings reported by the patients. With regards to the program's impact on the participants' perception of the hospital environment: 35% of the patients and 48% of the families reported that the dog visitation program helped to normalize their hospital experience; while 61% of the patients and 40% of the families reported that the dog visitation program was a pleasant distraction from the hospitalization. With regards to the most important specific benefits that participants experienced as a result of the program, 73% of the patients identified feelings of relief, 19% identified unconditional love from the dog, and 8% identified the dog as a motivator to get well. Among the families, 52%

identified feelings of relief, 16% identified the unconditional love from the dog, 16% believed that they experienced no benefit, 12% identified the facilitation of social interactions, and 4% identified having the dog present as an object for the projection of feelings. The authors concluded from this data that the dog visitation program improved physiological symptoms related to stress, provided relief for patients and their families, normalized the hospital environment, and improved patient and family morale.

Similarly, Sobo, Eng, and Kassity-Kritch (2006) conducted a study investigating the impact of a registered therapy dog visitation program in pediatric hospital patients' pain management. Participants were 25 children, ranging in age from 5-18 years, who experienced acute postoperative pain. However, rather than investigating the impact of a visitation program that occurred over a span of time, Sobo et al. (2006) investigated the impact of a one-time visit from a therapy dog. Before engaging in interaction with the dog, participants were asked to choose their preferred level of interaction from among three options (passive, low, high). Passive interaction involved the dog sitting quietly with the participant; low interaction involved occasional dog tricks and obedience; while high included active play and/or walks with the dog. To measure the impact of this interaction, patients were asked to rate their level of both physical and emotional pain before and after the therapy dog visit and to provide feedback about their experiences in an open-ended post-session interview. The results of a paired sample t-test revealed a significant difference between pre and post levels of physical and emotional pain, and 8 themes were identified from an analysis of the post-session interview content: (1) the dog provided a distraction from pain, (2) the dog brought pleasure/happiness, (3) the dog was fun/entertaining, (4) the dog reminded patients of home, (5) the patients enjoyed physical

contact with the dog, (6) the dog offered company, (7) the presence of the dog was calming, and (8) the dog's presence helped ease pain. The authors interpreted these results to mean that therapy dog visitation programs may be a helpful and cost/resource effective adjunct to traditional pain management for pediatric hospital patients.

Cole, Gawlinski, Steers and Kotlerman (2007) investigated the impact of therapy dog visits in adult patients hospitalized with heart failure. 76 participants were randomly assigned to one of three groups: the treatment group which included a 12-minute therapy dog and handler visit; a comparison group that received a 12-minute visit from a human volunteer without a dog; and the control group which included only usual patient care (no volunteers human or dog visitations). Although the dog handlers adhered to the therapy animal registration organization's strict guidelines regarding hygiene and safety precautions for interacting with potentially immunocompromised patients, dog-participant interaction were unstructured and patient-directed. The authors collected participant data at baseline, 8-minute and 12-minute intervals. Sources of data included systolic pulmonary pressure and pulmonary capillary wedge pressure (collected from monitors already connected to patients), epinephrine and norepinephrine levels, and scores on the Spielberger State-Trait Anxiety Inventory. When compared to the control group, the dog-volunteer group showed significant improvements cardiopulmonary pressure, epinephrine and norepinephrine levels, and state anxiety. Although the dog-volunteer group showed the most significant improvement in all 3 areas, the volunteer only (no dog) group also significantly improved in anxiety levels and cardiopulmonary pressure. The authors concluded from these results that visits from a therapy dog improve cardiopulmonary pressure, neurohormone levels, and anxiety in adult patients

hospitalized with heart failure. Although visits from human-only volunteers also improved cardiopulmonary pressure and anxiety levels, the interaction with the dog-volunteer team was unique in improving patient neurohormone levels.

Anxiety and Stress

Stewart, Dispenza, Parker, Chang and Cunnien (in press) investigated the impact of a therapy dog visitation outreach program on college student anxiety and loneliness. 55 participants engaged in an unstructured, 2-hour interaction with a registered therapy dog and handler in the common area of one of the college's residence halls. Data was collected in a pre-test, post-test design and sources for data included the University of the Philippines Loneliness Assessment Scale (UPLAS), the Burns State Anxiety Inventory (B-AI), the Session Rating Scale, and an open ended survey regarding the most helpful aspects of the outreach program. Results showed that after participating in interactions with the therapy dog, participant state anxiety scores and loneliness scores were significantly reduced. The Session Rating Scale allowed the authors to determine that the approach of the intervention (animal assisted therapy) and the goals of the session (to reduce anxiety and loneliness) as significant predictive factors in the reduction of anxiety and loneliness. Student responses on the open-ended survey were analyzed by the authors and sorted into the following categories: interactions with the therapy dog, interaction with other students, interaction with counseling center staff members, or other. Their rankings were taken into account, and a one-sample chi square test was used to analyze the results. A statistically significant difference was noted, with interaction with the dog being identified as the most significant aspect of the outreach helping with the reduction of anxiety and loneliness when compared to interaction with other students, interaction

with staff, and other. The authors interpreted the results of this study reveal that animal assisted therapy outreach interventions may be an efficient and effective way for university and college counseling centers to meet the growing demands of their student populations in a way that students view as relevant.

Barker and Dawson (1998) examined whether a session of AAT reduced the anxiety levels of hospitalized psychiatric patients and whether any differences in reductions in anxiety were associated with patients' diagnoses. 230 patients referred for therapeutic recreation sessions participated in the investigation. Participants were assigned to either a treatment group, which included an AAT session as the patient's recreational activity, or a control group which included other standard recreational activities offered by the hospital. Pre session and post session data was measured using the state scale of the State-Trait Anxiety Inventory. Participants in the AAT treatment group reported statistically significant reductions in anxiety scores. While the anxiety scores of patients diagnosed with mood disorders improved in both groups, patients with psychotic disorders and other disorders only improved in the treatment group. The authors concluded that a single session of AAT may be effective in reducing the state anxiety of hospitalized psychiatric patients with a variety of disorders.

Hansen, Messinger, Baun and Megel (1999) measured physiological arousal and behavioral distress in 34 pediatric patients who were undergoing a routine physical examination, ranging in age from 2 through 6 yrs. Participants were randomly assigned either to a treatment group in which a therapy dog was present during the examinations or to a control group which had the usual pediatric exam without a dog present. Physiological variables (systolic, diastolic, and mean arterial pressures, heart rate, and

fingertip temperatures) were measured at baseline and at 2-minute intervals during each examination. Participants were videotaped during the examination for analysis of behavioral distress, using the Observation Scale of Behavioral Distress (OSBD). No significant differences in physiological measurements were found between the treatment and control groups, and distress scored increased over time in both groups. However, statistically significant reductions in behavioral distress were found when the dog was present. These findings indicate that the presence of a companion dog could lower the behavioral distress of children during a laboratory simulated physical examination.

Tsai, Friedman and Thomas (2010) examined the effects of AAT on the cardiovascular response, state anxiety, and medical fear of hospitalized pediatric patients. The authors utilized a quasi-experimental, repeated measures design was used. 15 participants, ranging in age between 7 and 17 years, participated in AAT visits and comparison visits (with no therapy animal present) on two consecutive days.

Participant's systolic blood pressure (SBP), diastolic blood pressure (DBP), and heart rate (HR) were measured at 3 intervals: pre-, during, and post-visit. State anxiety was measured using the Spielberger State-Trait Anxiety Inventory for Children, and medical fear was measured using the Child Medical Fear Test after each visit. The authors analyzed the data using a repeated measures ANOVA. SBP decreased in both comparison groups, but the decreases in SBP after AAT continued after the intervention was over. The findings suggest that the cardiovascular effect of AAT may continue for at least a few minutes after the AAT ends. The authors found no significant differences in medical fear or state anxiety between the comparison groups. The authors discussed that this

study was exploratory, and concluded that based on these results, AAT can decrease physiological arousal in hospitalized children.

Klontz, Bivens, Leinart and Klontz (2007) described a treatment model for an equine-assisted experiential therapy approach and evaluated the effectiveness of the model on the distress and psychological wellbeing of 31 adult participants. The assessment instruments used were the Brief Symptoms Inventory (BSI) and Personal Orientation Inventory (POI). All participants in this study had clinically significant scores of general psychological distress, as defined by the BSI. The authors of this study collected data at 3 points: pre-test, post-test and 6 month follow up. A repeated MANOVA was used to assess for significant differences between pre-test and post-test, and post-test and follow up. Significant improvement was found between pre-test and post-test, and no significant difference was found between post-test and follow up. According to the authors, this reveals that treatment outcomes as measured by the assessment instruments were both efficacious and stable. The authors point out that since this is a pilot study intended to evaluate the effectiveness of one particular treatment model; the study lacks a control group, which makes determining treatment effects difficult. The authors identified 6 major outcome themes which were identified by participants: (1) more present-oriented, (2) better able to live in the here and now, (3) less burdened by regret, guilt, or resentment, (4) less focused on fears of the future, (5) more independent, and (6) more self-supportive.

Depression

Folse, Minder, Aycock and Santana (1994) conducted a study on 44 adult outpatient psychotherapy clients. Participants were selected for participation based on

their Beck Depression Inventory (BDI) scores, then randomly placed into one of three groups. The first group was a directive psychotherapy group that included AAT with a registered therapy dog, the second group was a non-directive (no group psychotherapy offered) group which included AAT with a registered therapy dog, and a control group of directive group psychotherapy with no therapy dog present. Pre-test and post-test scores were collected and analyzed in a one way analysis of variance (ANOVA). The authors found significant decreases in the BDI scores of the non-directive (AAT only) group when compared with the control group. The authors found nonsignificant results between the directive AAT group and control group; although a majority of participants in the directive AAT group did show reductions in BDI scores. The authors pointed out that their analysis of data failed to investigate issues of clinical significance or effect sizes, and postulated that more significant results may have been found if they had used a more sensitive effect size statistic. With regards to the significant results found in the non-directive AAT group, the authors explained that these participants may have experienced some symptom relief or distraction from symptoms during the interaction with the therapy dog, whereas participants in the directive AAT group and the control group may have spent considerable time focusing on their depressive symptoms as part of psychotherapy.

 Sockalingam, Li, Krishnadev, Hanson, Balaban, Pacione, and Bhalerao (2008) described a single case study of an adult male psychiatric patient with a history of bipolar disorder. Although the patient had been stabilized for a period of approximately six years before the study, he experienced an increase in depressive symptoms after an assault and concurrent head injury, and was re-admitted to the psychiatric care facility for

rehabilitation. According to the researchers, the participant experienced “atypical depression, consisting of low mood, hopelessness, persistent tearfulness, rejection sensitivity, reduced spontaneous speech, and worsening self-esteem, and significant lack of motivation”. In addition to these symptoms, authors noted “significant residual anxiety related to the assault” including symptoms of “psychomotor agitation, irritability, insomnia, and difficult concentrating”. The patient received mood-stabilizing medication and psychotherapy with no response. The authors reported that the participant’s treatment team opted to supplement the participant’s care with animal assisted therapy. The participant spent several hours per day, over a period of 3 weeks, with a registered therapy dog in the treatment facility. The AAT sessions were relatively unstructured, although the participant was encouraged to care of the dog as if the dog’s primary care was his responsibility. In addition to spending unstructured time interacting with the therapy dog, the patient fed and watered the dog, walked the dog, and provided grooming for the dog. According to the authors, the participant’s treatment team observed the following: improvements in mood, increased frequency of spontaneous speech, decreased anxiety and psychomotor agitation, improved sleep quality and ability to concentrate, increased self-esteem. The patient reported that as a result of his AAT sessions, he felt less socially isolated, more physically healthy, and experienced a greater sense of self-control. Although the authors pointed out that the results of a single clinical case study cannot be generalized to larger populations, AAT was effective in treating symptoms of anxiety and depression in the treatment of this participant.

In 2007, Souther and Miller conducted a meta-analysis of five studies to determine the effectiveness of AAT on depressive symptoms. Criteria for inclusion in the

meta-analysis were: random assignment, inclusion of a comparison/control group, use of a participant self-report assessment to measure symptoms of depression, and sufficient information to calculate effect sizes. The authors conducted a comprehensive electronic search for articles in a variety of scholarly research databases, and searched the recommended resources of universities that offered AAA/AAT programs. Out of 165 articles located, the following five studies met the inclusionary criteria and were analyzed: Brickel (1984), Struckus (1989), McVarish (1995), Wall (1994), and Panzer-Koplow (2000). All five studies took place in an institutional setting, and participant ages ranged from 47 to 85 years. The authors found that the aggregate effect size of these studies was significant and interpreted their results to mean that AAA and AAT are effective treatments for depressive symptoms with some populations.

Psychiatric Patients & Severe Mental Illness

Marr, French, Thompson, Drum, Greening, Mormon, Henderson and Hughes (2000) conducted a study on 69 psychiatric inpatient clients being treated for substance abuse and chemical dependency with comorbid mental illness. Participants, who ranged in age from 20-66 years, were randomly assigned to a psychiatric group with AAT, or a psychiatric group without AAT (a control group). Among the participants, 48% had diagnoses of schizophrenia, 27% had diagnoses of bipolar disorder, 18% with unspecified psychosis, and 7% with depression. Participants in the AAT group were permitted to engage non-directively (by holding, petting, or playing) with a variety of animals which included dogs, rabbits, ferrets and guinea pigs. Prosocial behaviors were measured daily for a period of 4 weeks using the Social Behavior Scale. Participants in the AAT rehabilitation group showed significant improvements on social behavior scale scores and

were observed to be significantly more responsive, active, social, and helpful than participants in the control group. The authors concluded that AAT played an important role in enhancing the prosocial behavior of psychiatric patients being treated for substance abuse, and that AAT is a valuable additive to conventional therapeutic techniques and approaches.

Barak, Osnat, Mavashev and Beni (2001) conducted a year-long study which evaluated the effect of AAT in a closed psychiatric hospital with 10 elderly patients diagnosed with schizophrenia. AAT sessions occurred in weekly sessions lasting four hours, and outcomes were measured using scores on the Scale for Social Adaptive Functioning. Both dogs and cats were included in the AAT treatment, which encouraged mobility, interpersonal contact, communication, and reinforced activities of daily living such as personal hygiene and independent self-care. Participants were encouraged to view the animals as “modeling companions”, and participants provided care such as feeding, bathing, grooming and walking as if the animal belonged to the participant. Social Adaptive Functioning baseline scores improved significantly at termination. The authors concluded that AAT was an effective tool for enhancing socialization, daily living activities, and general well-being in elderly psychiatric patients with schizophrenia.

Berget, Eckeberg, and Braastad (2008) conducted an investigation in Norway that examined the effects of a 12-week AAT intervention with farm animals for patients hospitalized with schizophrenia, affective disorders, anxiety and personality disorders. A total of 90 participants (59 women and 31 men) completed measures assessing self-efficacy (Generalized Self-Efficacy Scale), coping ability (Coping Strategies Scale), and quality of life (Quality of Life Scale) at three points during the investigation: at baseline,

immediately after termination, and at six-months follow up. 60 participants were randomly assigned to the AAT treatment group, while 30 were assigned to a control group. The authors found significant improvements in coping ability and self-efficacy with the treatment group, but no significant changes in quality of life were found in either group. The author concluded that AAT with farm animals may be an effective intervention for increasing self-efficacy and coping ability among psychiatric patients with long-term mental illness diagnoses.

Kovács, Kis, Rózsa, and Rózsa (2004) conducted a study in a social institution in Budapest, Hungary which investigated animal assisted therapy sessions for resident adult inpatients with schizophrenia. A sample of seven patients participated in weekly, hour-long AAT group sessions for a period of nine months. The researchers collected pre-intervention and post-intervention data using the Independent Living Skills Survey (ILSS), which is an observational report measure designed to assess the living skills of chronic psychiatric patients. This staff-report instrument measures skills in the following eight areas: eating, grooming, domestic activities, health, money management, transportation, leisure, job-seeking or job-related skills. The therapy team present in each AAT session included the therapy dog, its handler, a psychiatrist, and a social worker. Patients were encouraged to engage in non-directive greetings with the therapy animal while simultaneously interacting with the therapy team and the other group members. A series of both simple and complex interactive tasks such as feeding, grooming, walking, and other caretaking activities were gradually introduced into the treatment sessions. A paired samples t-test revealed that participant ILSS scores significantly improved in the areas of domestic activities, social skills, and health. The authors concluded that AAT

was a helpful rehabilitation intervention for hospitalized patients with schizophrenia living in a social situation.

Kovacs, Kis, Bulucz and Simon (2006) conducted an exploratory study on the impact of AAT group therapy on nonverbal communication skills in adult patients with schizophrenia that were considered to be severely disabled. Three patients were selected to participate in weekly, hour-long AAT group therapy session over a span of six months. The therapy intervention was designed to address both nonspecific (general wellbeing) and specific (nonverbal communication skills) areas in the patients' activities. The intervention team consisted of two therapy dogs (one large dog and one small dog), each dog's handler, and therapist who were part of the hospital's staff. Each session consisted of a 'warm up' phase which included non-structured greeting interactions with the therapy dogs (such as petting, talking to, etc.) during which the therapy dogs made contact with each patient. The researchers defined the goals of this phase were intended to "elevate patient motivation; enhance general wellbeing of patients, and to let them speak freely about their problems or good experiences in a comfortable and pleasant environment". The second phase of each session was goal oriented and directive during which patients were encouraged to engage in caretaking activities (such as feeding walking and grooming) and role-play exercises with the dogs. Goals of the second phase were defined by the researchers as "enhancing verbal and non-verbal communication, psychomotor functions, concentration", as well as "development of adaptive verbal and non-verbal communication and gestures in certain situations". The researchers utilized a 109-item scale which rated items related to anatomy of movement, space usage, dynamics, touch, and type of gesture. The researchers noted post-intervention

improvements in usage of space, anatomy of movement, dynamics of gestures, and regulator gestures. The authors concluded that AAT group interventions can improve certain aspects of nonverbal communication in patients with schizophrenia, and called for future research on this topic.

Prothmann, Beinert, and Ettrich (2006) investigated with impact of AAT sessions on child and adolescent psychiatric inpatients' 'state of mind' during therapy interventions. A sample of 100 children, ranging in age from 11 to 20 years, participated in the study. 61 participants were assigned to the AAT treatment group, while 39 were assigned to a non-AAT comparison group. Participants in both groups participated in a total of 5 weekly non-directive therapy sessions held in a playroom. The AAT treatment group included the presence of a therapy dog in the playroom during the treatment sessions. Pre-session and post-session scores on the Basler Befindlichkeits-Skala (BBS) assessment, which is a self-report instrument that measures changes in state of mind over time and across four dimensions. The authors used a paired t-test to analyze the mean scores of participants in each group (AAT vs. no AAT). Participants in the AAT group showed significant increases in all dimensions of the BBS, whereas significant changes were not found in the non-AAT group. The authors concluded from this data that including a therapy dog in psychotherapy with children and adolescents can catalyze the therapeutic process.

Nathans-Barel, Feldman, Berger, Modai, and Silver (2005) conducted a study of AAT on symptoms of anhedonia, which the authors identified as a detrimental phenomenon associated with schizophrenia. According to the authors, symptoms of anhedonia are attributed to poor social functioning and resistance to psychotherapeutic

treatment in patients hospitalized with schizophrenia. The authors measured the hedonic tone in a sample of twenty psychiatric patients hospitalized with chronic schizophrenia who participated in a series of ten, hour-long weekly group psychotherapy sessions. Ten patients were randomly assigned to an AAT group, while ten others were assigned to a non-AAT control group. Scores in hedonic tone were analyzed using analysis of variance. Participants in the AAT group showed significant improvements in hedonic tone when compared to the control group. Staff also noted that participants in the AAT group also showed improvement in use of leisure time and tendency towards motivation. The authors concluded from these results that AAT may be an effective intervention for increasing hedonic tone in patients hospitalized with schizophrenia.

Substance Abuse

Wesley, Mintrea, and Watson (2009) investigated the impact of AAT on the therapeutic alliance with an adult, residential, substance abuse population. A total of 231 participants were randomly assigned to one of two group therapy options. 96 participants were assigned to a non-AAT control group, while 135 were assigned to an AAT treatment group. Participants received a total of 26, hour-long treatment sessions over a span of 3 weeks. Both treatment groups were structured from the same therapeutic orientation and treatment philosophy - Glasser's Choice Theory. The authors collected data using participant responses on the Helping Alliance Questionnaire (HAQ-II) at the end of each treatment session. Results showed that participants in the AAT group had significantly more positive perceptions of the helping alliance than participants in the control group, regardless of patient demographics. The authors concluded from this data that AAT could aid addictions professionals by incorporating AAT into treatment.

Persons with Disabilities

Farias-Tomaszewski, Jenkins and Keller (2001) investigated the impact of a 12-week therapeutic horseback riding program on the self-efficacy and self-confidence of adult participants with physical disabilities. A total of 22 adult therapeutic riding clients participated in the study. Types of disabilities included in this sample of participants included cerebral palsy, multiple sclerosis, closed head injury with concomitant physical impairments, spinal cord injuries and scoliosis. Participants completed pre test and post test measures on a physical self-efficacy scale and a behavioral self-efficacy scale. Both instruments were developed by the authors for the purposes of the study. Results revealed that participants' scores significantly increased on both scales following the intervention. The authors concluded that these results offer support for the psychological value of therapeutic riding activities for adults with physical disabilities, particularly in the area of self-efficacy, but cautioned that the rating scales used for the study have limited validity and reliability.

Krskova, Talarovicova, and Olexova (2010) conducted a study that investigated the impact of AAT with small animals on children with autism. Nine children with autism, ranging in age between 6 and 13 years, were observed in social situation both in the presence of the guinea pig and in the presence of an unfamiliar person. The researchers observed and recorded the number and type of social contacts the participants made with their acquaintances in both situations (in the presence of the guinea pig, or in the presence of an unfamiliar person). The authors found that the quality and frequency of social contacts made by the participants increased significantly in the presence of the guinea pig, as compared to when participants were in the presence of an unfamiliar

person. The authors concluded that the presence of a small therapy pet such as a guinea pig may have a positive impact on the social behaviors of children with autism.

Sams, Fortney, and Willenbring (2000) investigated the efficacy AAT when included as part of a school-based occupational therapy program with a sample of 22 children with autism, whose ages ranged between 7 and 13 years. The children participated in one traditional occupational therapy session and one AAT occupational therapy session per week, for a duration of 15 weeks. Each session lasted approximately 30 minutes. Both types of sessions (traditional and AAT) included activities that addressed sensory integration, language use, sensory skills, and motor skills. In the non AAT-group, traditional activities were utilized to address each of the four goals, and in the AAT sessions, participants engaged in directive activities with therapy rabbits, dogs, and llamas to address the four goals. Participants were observed by the research team during each session, and instances of language use and social interaction were recorded on a behavioral rating form. Data were analyzed using a paired sample t-test and showed significant increases in use of language and social skills during that AAT occupational therapy sessions as compared to the non-AAT occupational therapy sessions. The authors concluded that incorporating AAT into occupational therapy sessions for children with autism is an effective approach and called for further study on AAT in general.

Emotion Regulation and Recognition

Kogan, Granger, Fitchett, Helmer and Young (1999) conducted a case study of AAT interventions with two child clients with emotional disturbances. The authors used direct observation of therapy sessions, videotapes of therapy sessions, and the ADD-H Comprehensive Teacher Rating Scale to track the clients' progress. Each child

participated in weekly AAT sessions, lasting between 45 and 60 minutes each. The following client goals were identified: decrease negative comments, decrease negative self-talk, decrease distractibility, decrease learned helplessness, decrease tantrums, improve relationships with peers, and increase eye contact with others. Sessions were divided into rapport building time at the beginning of each session, then transitioned to animal training and animal care skills time. This second, more directive segment consisted of brushing, petting, and obedience training wherein the child used a variety of commands and training techniques with the therapy dog. Using the aforementioned observational methods, the authors identified that significant progress was made in all seven treatment goal areas. The authors concluded that AAT may be a useful intervention for children with emotional disturbances, but caution that their results were not intended to be generalized due to the nature of case study investigations.

Mallon (1994) used a mixed methods approach to assess both the benefits and drawbacks of a program which placed therapy dogs in the residential dormitories of children diagnosed with conduct disorder. Mallon used questionnaires, observations and interviews to assess the impact of the therapy dog's presence on the resident youth as well as the staff. The results of the investigation showed that the dogs' presence provided children with therapeutic love, affection and companionship, but that there were major drawbacks associated with the program: 1) Some of the dogs were abused or mistreated by the children, 2) caring for the dogs and cleaning up after them was labor intensive for the staff, and 3) not all of the therapeutic staff members supported the program. Although the drawbacks were identified as a concern, Mallon found that the staff and residents believed that the therapeutic benefit of the dogs' presence outweighed the drawbacks.

Program staff recommended more intensive supervision of child-dog interactions to prevent abuse towards the dogs, and staff expressed interest in having more input into the design of the program and related interventions.

Heindl (1996) examined the impact of AAT interventions at a community-based day treatment program for children with emotional disturbances and conduct issues. One group participated in weekly, hour long AAT sessions, while a control group received standard hour long treatment sessions without AAT interventions. Heindl assessed participants' self-concept with the Primary Self-Concept Screening test and behavior problems using the Woodcock-Johnson Scales. In this randomized control group, pre-test/post-test design, the investigator used two separate one way analyses of variance to assess changes in the participants' scores. The results revealed no significant changes in participant's self-concept, but significant improvements were found regarding the participants' behavior problems as measured by the Woodcock-Johnson Scales. The investigator concluded from these results that AAT is a valuable treatment option for decreasing behavioral problems in children diagnosed with emotional disturbances in a day-treatment program. The investigator recommended future research be done on the topic of AAT as an intervention to reduce behavioral problems, as the investigator asserted that decreasing behavioral problems may help accompanying therapeutic interventions become more effective.

Trotter, Chandler, Goodwin-Bond and Casey (2008) conducted a study which investigated the efficacy of an equine assisted counseling intervention for elementary school children who are at risk for academic and social failure. A sample of 164 children identified as being at risk for social and/or academic failure participated in twelve weekly

sessions Equine Assisted Counseling (EAC) sessions. The EAC program was compared with another empirically-supported, classroom-based counseling curriculum called Kid's Connection. Participant scores were measured on the Basic Assessment System for Children (BASC), which measures scores for externalizing, internalizing, maladaptive, and adaptive behaviors. The authors used a within-groups paired-samples t-test comparison of participants' pre-treatment and post-treatment scores. The authors' analysis showed that the EAC group made significant improvements in seventeen behavior areas, whereas the comparison group made significant improvements in only five behavioral areas. The only common area shared by both treatment groups was improvement on the emotional symptom index. Results from a between-groups analysis of covariance of pre-treatment and post-treatment scores for participants in this area showed that the EAC group showed significantly greater improvements when compared directly with the improvements experienced by the classroom-based program. The authors concluded from this data that EAC is an efficacious treatment modality for children with emotional and behavioral problems, and that EAC was found to be superior to one classroom-based treatment curriculum.

Thompson (2008) completed a study of the use of canines in nondirective play therapy to present a model for combining animal-assisted therapy and play therapy as well to investigate its effect on a child's response to play therapy. Mixed-methods data were collected. Quantitative data was collected according to an ABAB design; qualitative data was collected through participant narratives. A total of 8 participants engaged in 16 weekly 45-minute individual nondirective play therapy sessions. Differences in children's behavior in the presence/absence of a therapy dog were measured using Play Therapy

Session Summary (PTSS) scores, which were based on the frequency of positive behaviors (participation in play, engagement in fantasy play, attention to task, response to tracking, positive affect, positive vocalizations, adherence to limits) and negative behaviors (play disruptions, distractibility, negative affect, resistance to tracking, negative vocalizations, breaking of limits, aggression) per session. Results showed that the presence of the therapy dog had a significant impact on a child's response to play therapy. In the presence of the dog, children in the study showed an improvement in mood and affect, an increased ability to engage in thematic play, and more readily established rapport. They also exhibited a decrease in aggressive behavior and play disruptions. The authors noted that the PTSS instrument used in this study was developed by the authors for use in this study, thus the validity and reliability of the instrument are not well-established. Also, the PTSS is a clinician-report measure, and the author also served as the clinician for the participants in this study.

Conclusions

As demonstrated by the studies presented above, empirical research supports the physiological and psychological benefits associated with AAT. However, overall, the existing empirical investigations of AAT-C continue to present problems related to generalizability of findings as well as problems related to the authors' inability to control for the impact of other influencing variables. There is a wide variety in the quality of the empirical studies related to AAT-C, which makes the quality of the interventions used difficult to assess. This variability in quality is especially visible in Souter and Miller's (2007) meta-analysis of the effectiveness of AAT-C. Although the authors set relatively basic quality-control criteria for inclusion in the meta-analysis (random assignment,

inclusion of a comparison/control group, use of a participant self-report assessment to measure symptoms of depression, and sufficient information to calculate effect sizes), only 5 of the 165 articles that the authors located met these criteria. Further, all five studies took place in an institutional setting. Thus, it remains difficult to assess the efficacy of AAT-C in outpatient settings.

Another concern related to the overall literature base supporting AAT-C is the inability to determine the professionalization of the AAT-C providers or the quality of the AAT-C interventions. Out of the studies described above, only a handful included a description of the qualifications of the handler and animal team, and many included interventions provided by non-evaluated animals and handlers. A potential explanation for this concern is AAT-C's status as an emerging discipline within the field of counseling, thus, AAT-C models of practice are newly emergent and a formal set of AAT-C competencies has yet to be established. In order for the quality of AAT-C's empirical support to continue growing, the practice of AAT-C must continue to become more professionalized by adhering to models of practice and by establishing formal competency guidelines for practitioners.

Implications for Future Research

In order for the overall quality of AAT-C related investigations to continue improving, more must be understood about how AAT-C is applied in psychotherapeutic settings. Thus, more research is needed to examine the professionalization and intentionality of AAT-C interventions. To date, it remains difficult to determine the qualifications and competency of professionals providing AAT-C services because the field lacks a generally accepted set of competency standards. As discussed by Stewart et.

al (2013), experienced AAT-C providers must acquire and implement a highly specific and specialized set of skills which include hard and soft skills. In order to evaluate the competency of AAT-C providers and AAT-C interventions, future research should focus on defining the specialized skill set utilized by AAT-C practitioners.

References

- Adamle, K. N., Riley, T. A., & Carlson, T. (2009). Evaluating college student interest in pet therapy. *Journal of American College Health, 57*(5), 545-548. doi: 10.3200/JACH.57.5.545-548
- Adams, M. (1999). Emily Dickinson had a dog: An interpretation of the human-dog bond. *Anthrozoos, 12*(3), 132-141. doi: 10.2752/089279399787000192
- Anderson, K. L., & Olson, M. R. (2006). The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoos, 19*(1), 35-49. doi: 10.2752/089279306785593919
- Banks, M. R., & Banks, W. A. (2002). The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences, 57A*(7), M428-M432. doi: 10.1093/gerona/57.7.M428
- Banks, M. R., & Banks, W. A. (2005). The effects of group and individual animal-assisted therapy on loneliness in residents of long-term care facilities. *Anthrozoos, 18*(4), 396-408. doi: 10.2752/089279305785593983
- Barak, Y., Savorai, O., Mavashev, S., & Beni, A. (2001). Animal-assisted therapy for elderly schizophrenic patients: A one-year controlled trial. *The American Journal of Geriatric Psychiatry, 9*(4), 439-442. doi: 10.1176/appi.ajgp.9.4.439
- Barker, S. B., & Dawson, K. S. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services, 49*(6), 797-801.

- Barker, S. B., Knisely, J. S., McCain, N. L., Schubert, C. M., & Pandurangi, A. K. (2010). Exploratory study of stress-buffering response patterns from interaction with a therapy dog. *Anthrozoos, 23*(1), 79-91.
- Baun, M. M., Bergstrom, N., Langston, N. F., & Thoma, L. (1984). Physiological effects of human/companion animal bonding. *Nursing Research, 33*(3), 126-129. doi: 10.1097/00006199-198405000-00002
- Berget, B., Ekeberg, Ø., & Braastad, B. O. (2008). Animal-assisted therapy with farm animals for persons with psychiatric disorders: Effects on self-efficacy, coping ability and quality of life, a randomized controlled trial. *Clinical Practice and Epidemiology in Mental Health, 4*. doi: 10.1186/1745-0179-4-9
- Chandler, C. K. (2012). *Animal assisted therapy in counseling (2nd ed.)*. New York, NY US: Routledge/Taylor & Francis Group.
- Chandler, C. K., Portrie-Bethke, T. L., Barrio Minton, C. A., Fernando, D. M., & O'Callaghan, D. M. (2010). Matching animal assisted therapy techniques and intentions with counseling guiding theories. *Journal of Mental Health Counseling, 52*(4), 354-374.
- Chitic, V., Rusu, A. S., & Szamoskozi, S. (2012). The Effects of Animal Assisted Therapy on Communication and Social Skills: A Meta-Analysis. *Transylvanian Journal of Psychology, 13*(1), 1-17.
- Cole, K. M., Gawlinski, A., Steers, N., & Kotlerman, J. (2007). Animal-assisted therapy in patients hospitalized with heart failure. *American Journal of Critical Care, 16*(6), 575-585.

- DeCoursey, M., Russell, A. C., & Keister, K. J. (2010). Animal-Assisted Therapy: Evaluation and Implementation of a Complementary Therapy to Improve the Psychological and Physiological Health of Critically Ill Patients. *Dimensions of Critical Care Nursing, 29*(5), 211-214
210.1097/DCC.1090b1013e3181e1096c1071a.
- Farias-Tomaszewski, S., Jenkins, S. R., & Keller, J. . (2001). An evaluation of therapeutic horseback riding programs for adults with physical impairments. *Therapeutic Recreation Journal, 35*(5), 250-257.
- Fawcett, N. R., & Gullone, E. (2001). Cute and cuddly and a whole lot more? A call for empirical investigation into the therapeutic benefits of human-animal interaction for children. *Behaviour Change, 18*(2), 124-133. doi: 10.1375/behc.18.2.124
- Fine, A. H. (2000a). Animals and therapists: Incorporating animals in outpatient psychotherapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. (pp. 179-211). San Diego, CA US: Academic Press.
- Fine, A. H. (2000b). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. San Diego, CA US: Academic Press.
- Fine, A. H. (2006a). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. San Diego, CA US: Academic Press.
- Fine, A. H. (2006b). Incorporating animal-assisted therapy into psychotherapy: Guidelines and suggestions for therapists. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (2nd Ed)*. (pp. 167-206). San Diego, CA US: Academic Press.

- Folse, E. B., Minder, C. C., Aycock, M. J., & Santana, R. T. (1994). Animal-assisted therapy and depression in adult college students. *Anthrozoos*, 7(3), 188-194. doi: 10.2752/089279394787001880
- 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
- Gee, N. R., Crist, E. N., & Carr, D. N. (2010). Preschool children require fewer instructional prompts to perform memory task in the presence of a dog. *Anthrozoos*, 23(2), 173-184. doi: 10.2752/175303710X12682332910051
- Gee, N. R., Harris, S. L., & Johnson, K. L. (2007). The role of therapy dogs in speed and accuracy to complete motor skills tasks for preschool children. *Anthrozoos*, 20(4), 375-386. doi: 10.2752/089279307X245509
- Geist, T. (2011). Conceptual framework for animal assisted therapy. *Child & Adolescent Social Work Journal*, 28, 243-256. doi: 10.1007/s10560-011-0231-3
- Hanselman, J. L. (2001). Coping skills interventions with adolescents in anger management using animals in therapy. *Journal of Child & Adolescent Group Therapy*, 11(4), 159-195. doi: 10.1023/A:1014802324267
- Hansen, K. M., Messinger, C. J., Baun, M. M., & Megel, M. (1999). Companion animals alleviating distress in children. *Anthrozoos*, 12(3), 142-148. doi: 10.2752/089279399787000264
- Harbolt, T., & Ward, T. H. (2001). Teaming incarcerated youth with shelter dogs for a second chance. *Society & Animals: Journal of Human-Animal Studies*, 9(2), 177-182. doi: 10.1163/156853001753639279

- Heindl, B. A. (1996). The effectiveness of pet therapy as an intervention in a community-based children's day treatment program. *Dissertation Abstracts International*, 57(4-A), 1501.
- Holcomb, R., & Meacham, M. (1989). Effectiveness of an animal-assisted therapy program in an inpatient psychiatric unit. *Anthrozoos*, 2(4), 259-264. doi: 10.2752/089279389787057902
- Kaminski, M., Pellino, T., & Wish, J. (2002). Play and pets: The physical and emotional impact of child-life and pet therapy on hospitalized children. *Children's Health Care*, 31(4), 321-335. doi: 10.1207/S15326888CHC3104_5
- Klontz, B., Bivens, A., Leinart, D., Klontz, T. (2007). The effectiveness of equine-assisted experimental therapy: results of an open-ended trial. *Society and Animals*, 15, 257-267.
- Kogan, L. R., Granger, B. P., Fitchett, J. A., Helmer, K. A., & Young, K. J. (1999). The human-animal team approach for children with emotional disorders: Two case studies. *Child & Youth Care Forum*, 28(2), 105-121. doi: 10.1023/A:1021941205934
- Kovács, Z., Bulucz, J., Kis, R., & Simon, L. (2006). An exploratory study of the effect of animal-assisted therapy on nonverbal communication in three schizophrenic patients. *Anthrozoos*, 19(4), 353-364. doi: 10.2752/089279306785415475
- Kovács, Z., Kis, R., Rózsa, S., & Rózsa, L. (2004). Animal-assisted therapy for middle-aged schizophrenic patients living in a social institution. A pilot study. *Clinical Rehabilitation*, 18(5), 483-486. doi: 10.1191/0269215504cr765oa

- Kršková, L., Talarovičová, A., & Olexová, L. (2010). Guinea pigs—The 'small great' therapist for autistic children, or: Do guinea pigs have positive effects on autistic child social behavior? *Society & Animals: Journal of Human-Animal Studies*, *18*(2), 139-151. doi: 10.1163/156853010X491999
- Kruger, K. A. S., J. A. . (2006). Animal-assisted interventions in mental health: Definitions and theoretical foundations. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (pp. 21-38). San Diego, CA US: Academic Press.
- 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: Journal of Human-Animal Studies*, *13*(4), 275-295. doi: 10.1163/156853005774653654
- Levinson, B. (1962). The dog as co-therapist. *Mental Hygiene*, *46*, 59-65.
- Mallon, G., Ross, S., Klee, S., & Ross, L. . (2006). Designing and implementing animal-assisted therapy programs in health and mental health organizations. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: theoretical foundations and guidelines for practice* (2 ed.). San Diego: Academic Press.
- Mallon, G. P. (1994). Some of our best therapists are dogs. *Child & Youth Care Forum*, *23*(2), 89-101. doi: 10.1007/BF02209256
- Marr, C. A., French, L., Thompson, D., Drum, L., Greening, G., Mormon, J., . . . Hughes, C. W. (2000). Animal-assisted therapy in psychiatric rehabilitation. *Anthrozoos*, *13*(1), 43-47. doi: 10.2752/089279300786999950

- McVarish, C. A. (1995). *The effects of pet-facilitated therapy on depressed institutionalized inpatients*. (55), ProQuest Information & Learning, US. Retrieved from <http://ezproxy.gsu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1995-95001-167&site=ehost-live> Available from EBSCOhost psych database.
- Minatrea, N. B., & Wesley, M. C. (2008). Reality therapy goes to the dogs. *International Journal of Reality Therapy*, 28(1), 69-77.
- Nathans-Barel, I., Feldman, P., Berger, B., Modai, I., & Silver, H. (2005). Animal-Assisted Therapy Ameliorates Anhedonia in Schizophrenia Patients. *Psychotherapy and Psychosomatics*, 74(1), 31-35. doi: 10.1159/000082024
- Nimer, J., & Lundahl, B. (2007). Animal-Assisted Therapy: A Meta-Analysis. *Anthrozoos*, 20(3), 225-238. doi: 10.2752/089279307X224773
- Odendaal, J. S. J. (2000). Animal-assisted therapy—Magic or medicine? *Journal of Psychosomatic Research*, 49(4), 275-280. doi: 10.1016/S0022-3999(00)00183-5
- Panzer-Koplow, S. L. (2000). *Effects of animal-assisted therapy on depression and morale among nursing home residents*. (61), ProQuest Information & Learning, US. Retrieved from <http://ezproxy.gsu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2000-95014-192&site=ehost-live> Available from EBSCOhost psych database.
- 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 and Psychiatry*, 13(1), 7-30. doi: 10.1177/1359104507086338

Pichot, T., & Coulter, M. (2007). *Animal-assisted brief therapy: A solution-focused approach*. New York, NY US: Haworth Press.

Prothmann, A., Bienert, M., & Ettrich, C. (2006). Dogs in child psychotherapy: Effects on state of mind. *Anthrozoos*, 19(3), 265-277. doi: 10.2752/089279306785415583

Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child & Adolescent Social Work Journal*, 15(3), 177-185. doi: 10.1023/A:1022284418096

Shelton, L., Leeman, M., O'Hara, C. (2011). Introduction to Animal Assisted Therapy in Counseling: A Paper Based on a Program Presented at the 2011 American Counseling Association Conference. Retrieved from American Counseling Association http://www.counseling.org/docs/vistas/vistas_2011_article_55.pdf

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

Souter, M. A., & Miller, M. D. (2007). Do Animal-Assisted Activities Effectively Treat Depression? A Meta-Analysis. *Anthrozoos*, 20(2), 167-180. doi: 10.2752/175303707X207954.

Stewart, L., & Chang, C., (2013). Animal Assisted Therapy in Counseling. *ACA: Practice Briefs*. Retrieved from: <http://counseling.org/knowledge-center/center-for-counseling-practice-policy-and-research>.

Stewart, L., Chang, C., Jaynes, A. (2013, May). Creature Comforts. *Counseling Today*, 52-57.

Stewart, L., Chang, C., & Rice, R. (2013). Emergent Theory and Model of Practice in Animal Assisted Therapy in Counseling. *Journal of Creativity in Mental Health*, 8:4, 329-384, DOI: 10.1080/15401383.2013.844657.

Stewart, L., Dispenza, F., Parker, L., Chang, C., & Cunnien, T. (in press). Effectiveness of an Animal Assisted College Outreach Program on Student Anxiety and Loneliness. *Journal of Creativity in Mental Health*.

Thompson, M. J. (2009). Animal-assisted play therapy: canines as co-therapists. from G.R. Walz, J.C. Bleuer, R.K. Yep.

Trotter, K. S., Chandler, C. K., Goodwin-Bond, D., & Casey, J. (2008). A comparative study of the efficacy of group equine assisted counseling with at-risk children and adolescents. *Journal of Creativity in Mental Health*, 5(3), 254.

Tsai, C.-C., Friedmann, E., & Thomas, S. A. (2010). The effect of animal-assisted therapy on stress responses in hospitalized children. *Anthrozoos*, 23(3), 245-258. doi: 10.2752/175303710X12750451258977.

Vidrine, M., Owen-Smith, P., & Faulkner, P. (2002). Equine-facilitated group psychotherapy: Applications for therapeutic vaulting. *Issues in Mental Health Nursing*, 23(6), 587-603. doi: 10.1080/01612840290052730.

Wesley, M. C., Minatrea, N. B., & Watson, J. C. (2009). Animal-assisted therapy in the treatment of substance dependence. *Anthrozoos*, 22(2), 137-148. doi: 10.2752/175303709X434167.

- Wu, A. S., Niedra, R., Pendergast, L., & McCrindle, B. W. . (2002). Acceptability and impact of pet visitation on a pediatric cardiology inpatient unit. *Journal of pediatric nursing, 17*(5), 354.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine--Human bonding in recovery from trauma. *Anthrozoos, 21*(1), 17-30. doi: 10.2752/089279308X274038.
- Zamir, T. (2006). The Moral Basis of Animal-Assisted Therapy. *Society & Animals: Journal of Human-Animal Studies, 14*(2), 179-199. doi: 10.1163/156853006776778770.

CHAPTER 2

COMPETENCIES IN ANIMAL ASSISTED THERAPY IN COUNSELING: A QUALITATIVE INVESTIGATION OF THE KNOWLEDGE, SKILLS AND ATTITUDES REQUIRED OF COMPETENT ANIMAL ASSISTED THERAPY PRACTITIONERS

Introduction

Competencies in Animal Assisted Therapy in Counseling

Animal assisted therapy in counseling (AAT-C) is defined as the incorporation of specially trained and evaluated animals as therapeutic agents into the counseling process; whereby, professional counselors use the human-animal bond in goal-directed interventions as part of the treatment process (Chandler, 2012). AAT-C shares certain commonalities with AAT, such as the inclusion of a specially trained and evaluated therapy animal, an appropriately credentialed health or human services provider, and clearly defined goals for treatment; however, the application and delivery of AAT interventions vary greatly depending on the professional identity of the health or human service provider involved (e.g., physical therapist, nurse, physician, mental health professional). Thus, AAT-C represents a subspecialty within the field of AAT which is unique to mental health professionals such as professional counselors, counseling psychologists, and clinical social workers (Stewart, Chang & Rice, 2013). Fine (2000, 2004) asserted that incorporating AAT-C facilitates the therapeutic alliance. This is further supported by Chandler (2005) who stated that the relationship between the therapy pet and the client facilitates the rapport between the client and the human counselor. According to Pet Partners (2010), AAT-C is delivered or directed by a professional health or human service provider who encompasses the skill and expertise regarding the clinical applications of human-animal interactions. AAT-C requires a

specialized set of skills and competencies that allows professional counselors to incorporate specially trained animals into the counseling process and together the professional counselor and the therapy animal influence the therapeutic process in ways that are beyond the scope of traditional counselor-client helping relationships (Stewart, Chang, & Rice, 2013). Despite the need and the call for specialized training in order to provide AAT-C, there are no established competencies for AAT-C; therefore, the purpose of this study was to propose competencies for implementing AAT-C.

Animal Assisted Therapy-Counseling

Although AAT-C presents a valuable treatment option for many clients, research and evidence-based treatment strategies appropriate to the topic remains limited (Shelton, Leeman & O'Hara, 2011). When implemented with the appropriate education and training, AAT-C has the potential to impact the therapeutic experience of a diverse range of clients across a wide variety of settings in a highly positive manner (Chandler, 2005, 2012; Fine, 2004). Despite the relative scarcity of evidence-based intervention strategies, Stewart, et al. (2013) found that mental health professionals who practice AAT-C select intervention strategies with intentionality.

A number of benefits to the therapeutic process are associated with AAT-C, including facilitating and enhancing the therapeutic alliance (Chandler, 2012; Fine, 2004; Wesley, Mintrea, & Watson, 2009), decreasing the need for language in therapy (Fine, 2006), increasing client disclosure (Reichert, 1998), and providing pivotal therapeutic experiences for survivors of trauma (Reichert, 1998; Yorke, Adams & Coady, 2008). Although the idea of AAT-C is discussed in the conceptual works of authors such as Chandler (2005; 2012), Fine (2004), and Reichert (1998), the existing empirical

investigations of AAT and AAT-C continue to present problems related to generalizability of findings as well as concerns related to the authors' inability to control for the impact of other influencing variables. Studies exist in other disciplines (e.g. social work, nursing, and veterinary science) that have examined the human animal bond; however, there is a dearth of empirical studies that specifically examine AAT-C (Chandler, 2012). Further, extant empirical research on the topic presents problems related to homogeneous sample populations, unspecific interventions, small sample sizes, and exclusive inclusion of participants with presenting concerns that are defined as clinically severe (Chandler, 2012).

AAT-C is growing in use and popularity, and the empirical support for its efficacy is steadily increasing (Stewart, Chang, & Jaynes, 2013). The intervention's broad and flexible applicability and positive impact on the therapeutic process make it an attractive and valuable treatment option. Thus, the popularity and prevalence of this approach in the profession of counseling is likely to continue growing. If professional counselors are to provide this intervention ethically and effectively, specialized knowledge and training are necessary. Counselor competency is an especially important component to the safe and efficacious implementation of AAT-C skills (Shelton, Leeman & O'Hara, 2011; Stewart et al., 2013). Demonstration of AAT-C competency is relevant to both practitioners and counselor educators, as professional counselors who wish to utilize an AAT-C approach must develop more than effective counseling skills, they must also develop AAT-C related hard skills (such as animal training techniques, understanding of animal behavior/physiology, and animal care skills) and soft skills (such as the clinical application of facilitating human-animal interactions and strategies for

integrating AAT-C into previously acquired general counseling skills) (Stewart, et al., 2013; Stewart, et al., in press). The model developed by Stewart, et al. (2013) clearly revealed that the purposeful and skillful approach of experienced AAT-C practitioners directly impacts the overall quality of the AAT-C intervention by influencing the key components of AAT-C: the practitioner's relationship with the therapy animal, the practitioner's ability to effectively advocate for the animal, and the ability to interpret the animal's responses in a therapeutically meaningful way. However, the critical component of AAT-C competency can be challenging for practitioners to quantify, as the lack of formal registration procedures specific to counseling can make finding appropriate education resources difficult. The issue of practitioner competence is another factor which may impact the quality AAT-C studies. Without a set of competencies for AAT-C practitioners, the limited numbers of existing empirical studies on the topic are difficult to compare as the competence of the individuals providing the AAT-C interventions is unknown. Stewart, et al. (2013) found that a sample of experienced practitioners (n=14) of AAT-C unanimously voiced the need for a more rigorous training process as well as a set of competencies that are specific to the practice of AAT-C.

Professional Competency

Competency can be thought of as the ability, understanding, and knowledge to practice ethically and effectively (Toporek, Lewis, Heath & Crethar, 2009). According to Dunkin (1987), competencies are needed to emphasize a minimum standard and to add criterion levels, value orientations and qualities. In short, competencies are the areas in which professional counselors have adequate capability and preparation to uphold a certain standard of performance (Dunkin, 1987; Myers, 1992). Defining those

competences is crucial to ensuring ethical practice (Toporek, 2006), as “individual counselors are left to their own experiences to determine how to proceed ethically (Ratts, Toporek & Lewis, 2010) without them. Competencies provide structure for counselors and offer a conceptual framework for implementing skills, strategies, and interventions (Ratts, et. al, 2010). According to Dunkin (1987), competencies must be based on the qualities of effective practitioners. These qualities may be derived from theoretical perspectives, but must take a step further by including specific, operationally defined knowledge, skills, and attitudes (Myers & Sweeny, 1990). Multicultural counseling competencies and advocacy competencies underwent this transformation process, as theoretical concepts and models were streamlined into concrete and operational standards of competency. Toporek, Lewis and Crethar (2009) recognized that counselors must demonstrate both multicultural and advocacy competency in order to serve client populations and that lacking such competencies can create serious limitations in the counseling process. In order to address the realization that multiculturally competent professional counselors must demonstrate awareness, knowledge and skills in these respective areas, the Association for Multicultural Counseling and Development (AMCD) selected a handful of multicultural counseling experts and commissioned them to draft specific multicultural competencies for the counseling profession (Toporek et. al, 2009), which resulted in the creation of multicultural counseling competencies (MCC). In a similar process, the 2001 president of the American Counseling Association (ACA) selected a handful of advocacy experts to create a taskforce which was charged with developing advocacy competencies for the counseling field (Toporek, 2009), which resulted in the establishment of the ACA Advocacy Competencies. According to Ratts

(2011), the competency standards which resulted from both of these initiatives created a framework for implementing multicultural and advocacy interventions for practitioners and by defining standards of competence expected of all professional counselors, which are now embedded in the ACA ethical code.

In addition to demonstrating professional competencies in areas essential to general counseling, ethical professional counselors must also demonstrate competency in specialty areas (Myers, 1992). With regards to specialty areas, the American Counseling Association (ACA) code of ethics clearly states “Counselors practice in specialty areas new to them only after appropriate education, training, and supervised experience. While developing skills in new specialty areas, counselors take steps to ensure the competence of their work and to protect others from possible harm” (C.2.b.; ACA, 2005). To address the important issue of professional competency and to uphold the ACA code of ethics, many specialty areas such as play therapy (Play Therapy International, 2013), substance abuse counseling (Baez, Eckert-Norton & Morrison, 2004), and gerontological counseling (Myers, 1992) have developed a unique and specialized set of professional competency standards. AAT-C can be considered a relatively new specialty area within professional counseling, and as discussed in the literature review, lacks a set of competency definitions oriented to this specialized skill set. In a previous study, the authors developed a theoretical model of practice, but as competencies must go a step further than theoretical concepts and models (Dunkin, 1987), further work is needed in this area.

Stewart, et al. (2013) found that many current AAT-C providers rely on the formal training and evaluation offered by therapy animal registration organizations to

acquire a minimum set of knowledge and skills. However, reliance on such registration processes has certain limitations. The first of these is that this process is not required of AAT-C practitioners. Thus, formalized training or evaluation of the handler's skills or of the animal's temperament and training cannot be enforced. This is especially problematic for the application of AAT-C, considering the increased risk of harm associated with this intervention. Secondly, although such registration processes define and evaluate a minimum standard of competencies for AAA and AAT practitioners, the training curriculum is broad so as to be applicable to a wide variety of volunteers as well as health and human service professionals. Although the breadth of this training and evaluation can be an advantage with regards to the intervention's flexibility, the lack of counseling-specific knowledge and training continues to be a problem that is recognized by experienced AAT-C practitioners (Stewart, et al., 2013). In order to address the unique needs of mental health providers who wish to employ AAT-C techniques, a counseling-specific set of AAT-C competencies is required. Such competencies would assist AAT-C practitioners by facilitating the training and ethical decision-making process, and offering a framework of practice so that AAT-C practitioners do not need to rely solely on their individual experiences to guide this process.

Purpose of Study and Research Question

AAT-C requires a specialized set of skills and competencies that allows professional counselors to incorporate specially trained animals into the counseling process and together the mental health professional and the therapy animal influence the therapeutic process in ways that are beyond the scope of traditional counselor-client helping relationships. However, there is currently no definition of counseling-specific

competencies to guide practitioners in this specialty area. The purpose of this study was to define the abilities, understanding, and knowledge that are essential for professional counselors wishing to implement AAT-C interventions. This study was intended to address the clear call for such standards of competence by many researchers and experienced practitioners of AAT-C. Numerous previous studies and articles (Chandler, 2012; Fawcett, 2001; Souter & Miller, 2007; Stewart et al., 2013) emphasized the importance of clearly-defined AAT-C competencies, but to date, these competencies remain undefined. In order to facilitate this investigation, the following research question was considered: What knowledge, skills, and attitudes are required of competent practitioners of AAT-C?

Method

Conceptual Framework

AAT-C's impact on the therapeutic process (Stewart, et al., 2013) makes it an intervention that could be attractive and highly beneficial to many professional counselors; thus, AAT-C is an important area for counseling researchers to investigate. Most studies that examine AAT-C as an intervention focus on outcomes or propose concepts and practice guidelines. Although this primarily positivistic approach may be useful for investigating the effectiveness of AAT-C approaches on a variety of clinical concerns; understanding the complex and diverse nature of counseling competence requires a different approach. In social sciences, a heuristic approach is often preferred over more positivistic methods due to the nature of the problems being studied (Adler & Ziglio, 1996). According to Merriam (1998), qualitative researchers seek to understand meaning placed on experiences by individuals. Since uncovering and defining competent

AAT-C practice involves understanding the meaning that competent AAT-C practitioners place on their experiences with AAT-C, a post-positivistic qualitative approach may be best suited to investigating this topic. Frey (1994) suggested that qualitative research should be an egalitarian process that empowers both the researcher and the participant. In this process, researcher and participant negotiate outcomes that are beneficial to the participant while contributing to the literature base at the same time. These concepts suggest that qualitative methodology is the best method of research to address the complexities associated with the research question: “What knowledge, skills, and attitudes are required of competent practitioners of AAT-C?” Through this process, the current study has the potential to positively impact the practice of AAT-C directly (through competence-related discourse with the participant) and indirectly (by contributing to the literature base and providing a framework to guide practitioners and counselor educators). This study used a qualitative paradigm because the purpose is to develop a model and understand participant perspectives rather than to test a hypothesis. This is particularly relevant to the topic of AAT-C, as there is currently no generally accepted set of competencies about the process of incorporating AAT-C into the therapeutic process.

Design

AAT-C can be considered an emerging area of knowledge and more research is needed to fully understand the impact of this approach in counseling, thus, an approach which is designed for use under conditions of incomplete data is especially appropriate. Adler and Ziglio (1996) asserted that under such conditions, which occur frequently in the social sciences, researchers are left with two options: 1) wait (possibly indefinitely)

until adequate data is collected, or 2) make the most of incomplete data by collecting the insights of expert participants and systematically analyzing those perspectives. The Grounded Theory Method (Charmaz, 2006; Strauss & Corbin, 1990) is a post-positivistic method in which research questions are constructed to identify processes and patterns to construct a model (Hays & Wood, 2011). As described by Charmaz (2006), the Grounded Theory approach consists of “systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories ‘grounded’ in the data themselves”. The resulting analytical categories and relationships between them provide a conceptual representation of the topic being studied, thus an “analytic grasp of the data begins to take form”. For this reason, the Grounded Theory approach is an appropriate method of research to address the research question: What knowledge, skills, and attitudes are required of competent practitioners of AAT-C?

The Grounded Theory method is heavily influenced by the process of heuristic decision-making and reliant on a collaborative and empowering group process. Therefore, the research team investigating this project followed the Hermeneutic Dialectic Process (Guba & Lincoln 1989), which is a quality control function intended to establish quality of goodness standards as defined by Guba and Lincoln (1989). This process involves negotiation and shared power between the research team and participants. Consensus among all parties is sought, and if consensus is not possible, differences are clarified through negotiation. Guba and Lincoln (1989) list six conditions for a successful hermeneutic dialectic process that will serve as the basis for interaction in this study. The minimal conditions for all parties are:

- 1) A commitment to work from a position of integrity.

- 2) Minimal competence to communicate.
- 3) A willingness to share power.
- 4) A willingness to change if they find negotiations persuasive.
- 5) A willingness to reconsider value positions as appropriate.
- 6) A willingness to make commitment of time and energy that may be required in the process.

This process is well suited to the development of AAT-C competencies, as its emphasis on collaboration and consultation allows many voices and perspectives to be equally considered, while preserving an egalitarian process which cannot be dominated by one particular voice, vested interest, or strong personality.

Although the Grounded Theory method is currently noted as one of the most influential research traditions in education and the social sciences (Patton, 2002) due to its rigor, this study's design included quality control functions to address the study's trustworthiness. The four components of trustworthiness are confirmability, transferability, dependability, and credibility (Lincoln & Guba, 1985). To address confirmability, the research team must demonstrate objectivity. To address this component in this study, the primary researcher maintained an audit trail, including peer debriefing and memoing, which were reviewed by an external auditor with expertise in counseling competency and qualitative research. The component of dependability, or the trustworthiness of the procedure, was addressed by the research team through the use of Strauss and Corbin's (1990) constant comparative method during the data collection and data analysis stages. The constant comparative method is used to develop concepts from the data by coding and analyzing at the same time, thus ensuring a close link between the

data and the emerging theory (Kolb, 2012). The research team addressed this by coding each participant response individually, then compared the emergent codes to the codebook and to all other participant responses. Existing codes were examined and updated after each participant response. Following the establishment of a final codebook, all data were recoded to ensure the final codebook's relevance and accuracy. To establish integrity of the data in this way, the researchers presented evidence of how the codes and themes fit the data by providing direct participant quotes to support each interpretation (Williams & Morrow, 2009). A participant quote book was created which provided direct participants quotes in support of each major theme and subtheme. The research team also included participant member-checking, wherein participants were invited to review the final codebook for accuracy and request changes if needed. Further, the process of memoing was used as another method of constant comparison as the researchers 'compared incidents applicable to each category' (Kolb, 2012). The primary researcher kept a log of all thoughts, reflections and personal responses to the data, which were reviewed by the research team and discussed during meetings. The memo contents' potential impact on the interpretation of data were discussed, challenged, and negotiated during each meeting.

According to Lincoln and Guba (1989), credibility is achieved when the researcher can show a link between realities constructed by the participants and the realities the researchers reconstruct and attribute to the participants. The hermeneutic process as well as the process of member checking allows the primary researcher to clarify and verify the link between the researcher's realities and the participants' realities. Member-checking and triangulation of data between research team members and between researchers and

participants was employed throughout the analysis to reach consensus and gain multiple perspectives. The process of member checking included feedback and consensus regarding themes and codes from all research team members. The codes and themes identified by each research team member were compared to the other members' responses by the primary researcher. The research team convened after the first two questionnaires were completed, then after every fifth questionnaire throughout the data collection process. Further, the primary researcher employed participant member-checking once a final codebook was created, wherein participants reviewed the codebook and verified the themes identified by the research team.

Procedures

The second step towards establishing goodness is purposeful sampling, data collection, and data analysis (Frey, 1994; Guba & Lincoln, 1989). Purposeful sampling gives power to the study by including information-rich realities that directly address the current research question. Such information rich data may be difficult to achieve through a random selection process (Frey, 1994; Merriam, 1998). The primary researcher purposefully sampled a pool of expert participants among a group of counseling professionals. Additional participants were recruited through the process of chaining.

Chaining, a concept similar to snowball sampling, involves asking knowledgeable participants to identify information-rich people who then identify other participants, who identify other participants to interview (Merriam, 1998). This process differs from snowball sampling in its purposeful and deliberate approach— as it seeks to identify participants most likely to provide information-rich experiences. Participants were recruited via the American Counseling's Association's Animal Assisted Therapy in

Mental Health (AATMH) interest network. Further, published authors of textbooks and articles on AAT-C were contacted individually and invited to participate, as well as appropriately qualified members of therapy animal organizations, human-animal bond organizations, and instructors of AAT-C specific courses and workshops. Recruitment emails were sent to the AATMH email listserv, to published authors, AAT-C course instructors, and therapy animal organization leadership. The primary researcher continued the process of chaining by asking potential participants to forward study information to other AAT-C professionals who may be interested in participating in the study.

The primary researcher emailed each participant a structured interview questionnaire via Qualtrics, an electronic research survey tool. Informed consent was collected from each participant. After the first two questionnaires were collected, the research team met to open code, revise questions, and began developing themes and categories. The research team repeated this process of open coding and revision periodically throughout the data collection process (Guba & Lincoln, 1989). Saturation (i.e., replication of data) is accomplished when the addition of new participants and information fits into established categories and the data replicates (Charmaz, 2000). The condition of saturation was determined by consensus of the research team, and then confirmed through coding two additional questionnaires with all data fitting into established categories (Francis, Johnston, Robertson, Glidwell, Entwistle, Eccles & Grimshaw, 2010). Saturation was reached with participant 4 and confirmed through participant responses 5 and 6. Although saturation was confirmed at participant 6, the authors chose to continue the process of

data collection through participant twenty to meet the minimum *N* of a Grounded Theory Method investigation as established by Hays and Wood (2011).

Participants

Twenty (N=20) mental health professionals who met the criteria for expert status in AAT-C participated in this study (Hays & Wood, 2011). According to Adler and Ziglio (1996), appropriate experts must be selected using explicit criteria. This involves “the acquisition of experience, special skill or knowledge of a particular subject”, but not necessarily “standard academic qualifications” (p.14). For the purposes of this study, an AAT-C expert met the following criteria:

- 1) Licensed as a professional counselor, psychologist, or clinical social worker, with a minimum of 3 years of post-degree experience in clinical practice;
- 2) History of registration with a recognized therapy animal organization (e.g., Pet Partners, Professional Association for Therapeutic Horsemanship, InterMountain Therapy Animals, Therapy Dogs, Inc.), with a minimum of 1 year of experience as an AAT-C practitioner;

And at least one (1) of the following:

- A) Currently practicing counseling with a registered therapy animal;
- B) History of offering AAT-C specific consultation services or clinical supervision;
- C) Evidence of leadership in the area of AAT-C (e.g., professional presentations or publications on AAT-C, leadership positions within AAT organizations);

D) Instructed (or designed curriculum for) formal AAT coursework for counseling students.

Although the pool of participants contacted varied by age, gender, race and ethnicity, all participants identified as Caucasian women aged 27 to 64 years old ($M = 50$ years) and represented various regions of the United States and Canada. Participants were recruited through the American Counseling Association's Animal Assisted Therapy in Mental Health Interest Network, Pet Partners, Inc., The Association for Human Animal Bond Research (HABRI), the International Society for Anthrozoology, and a Canine Assisted Play Therapy interest network. A total of 27 participants began the survey, and 20 participants completed the survey. Among the 20 participants, 3 identified as licensed clinical social workers, 5 identified as psychologists, and 12 identified as professional counselors. Participants' professional experience ranged from 3-35 years ($M = 16$ years). Half of the sample ($n = 10$) identified as doctorate-level professionals, while the remaining half ($n = 10$) identified as master's-level professionals. As a group, participants reported both current and previous AAT-C experience with a wide variety of animal species, including: dogs, cats, horses, rabbits, goats, guinea pigs, sheep, pigs, cows, rats, and water fowl. The animal species most frequently identified as therapy partners by participants were dogs ($n = 18$) and horses ($n = 12$). Participants described experience working in traditional outpatient office settings, residential facilities (such as correctional institutions, psychiatric hospitals, and elder care facilities) and farm/ranch settings, and in nature/ecology centers. All client age ranges were represented among the participant sample (children, adolescents, adults, and older adults) as well as a wide variety of client presenting concerns.

Data Sources

Demographics sheet. Demographic information was collected (i.e., gender, age, location, professional identity). Additionally, participants were asked about the counseling/work setting, type(s) of animal worked with, and AAT-C relevant training and experience.

Structured interview questionnaire. Participants were asked to respond to the following structured interview questions:

- 1) What is competence in AAT-C?
- 2) What should a competent AAT-C practitioner know? What knowledge should they have?
- 3) What should a competent AAT-C practitioner be able to do/demonstrate?
What skills/ abilities should they have?
- 4) What are the attitudes that should be espoused by a competent AAT-C practitioner?
- 5) Is there anything else that you think we should know about competent AAT-C practice/practitioners that was not covered by the above questions?

Research team. The research team consisted of three researchers. At the time of the study, the principle investigator was a counseling doctoral candidate. She identifies as a Caucasian female. She is a licensed professional counselor and a registered Pet Partners team with her dog. Additionally, she has experience incorporating AAT into counseling practice. The primary researcher's additional experience includes qualitative research on AAT-C, AAT-C consultation experience, and leadership roles within the area of AAT-C. The primary researcher is the only research team member with experience related to the

incorporation of AAT in a counseling setting. The second research team member is a Caucasian female who is a licensed professional counselor and has experience in career and academic counseling and experience conducting qualitative research. The third research team member, a recent graduate of a counseling doctoral program, identifies as an African-American female who is a practicing school counselor and has experience conducting qualitative research. The research team identified several biases. The primary research member identified that she had strong opinions about what should be included in AAT-C competency literature and discussed debriefing plans to help address those biases throughout the data analysis process. The inclusion of two additional research team members without direct applied experience as an AAT-C practitioner was an intentional choice by the primary researcher. The primary researcher believed that the inclusion of non-AAT-C professionals would help balance her biases about the topic of investigation. The second team member disclosed strong biases towards her definition of professional competencies as concrete, operationalized descriptions of minimum standards. The third member disclosed personal biases about her belief in AAT-C's value as an intervention and discussed how her lack of experience with the intervention might influence her objectivity. Throughout the data analysis process, research team members were invited to raise questions about interpretations of data and to challenge one another on potential biases.

Auditor. The study's auditor identifies as a Caucasian female, is a licensed professional counselor and has experience in an alternative school setting and experience conducting qualitative research.

Memoing. As an active participant in the study, the primary researcher kept a journal or memo of the interview process and record reactions, feelings, and biases. Memoing allowed for ongoing analysis of data, codes, and the process (Charmaz, 2006; Guba & Lincoln, 1989). The primary researcher's memos were regularly reviewed by the research team and discussed during meetings. A record of the memoing became part of the data used in the data analysis.

Data Analysis

In order to uncover the knowledge, abilities and attitudes required for competency in AAT-C, the analysis of data followed the grounded theory approach of Guba and Lincoln (1989) and Charmaz (2006). Data collection and analysis occurred through a process of open coding, axial coding, selective coding, memoing, and model/theory development. The primary researcher collected all responses to the questionnaire and gave copies of the responses to each research team member. The researchers coded each response independently, convened, and began the hermeneutic dialectic process of negotiation and theory development. Member checks among the research team were conducted throughout the coding process, following the first two participant responses, then after every fifth response. The initial meeting which was held after the first 2 participant responses served as a bracketing meeting. During this bracketing meeting, the individual biases of each research team member were outlined, discussed, and included in the audit trail. The research team identified and discussed each research team member's personal beliefs about competency in AAT-C and the potential impact of the primary researcher's experience as an AAT-C provider. Further, the research team discussed the incorporation of participant responses that appeared to represent ideal AAT-C practice

rather than adequate AAT-C practice. One team member initially thought that competency standards should be comprised of minimal, observable, and measurable standards of AAT-C practice. Other team members believed that competency may be conceptualized along a continuum of low competence versus high competence. Moreover, competency standards regarding beliefs and attitudes that are not always observable are traditionally included in other counseling competency standards, such as multicultural competencies and advocacy competencies. By following the hermeneutic dialectic process of negation through shared power across the team members, the team members came to the consensus of including participants' self-defined conceptualization of what constitutes AAT-C competency for them. The research team decided that the participants' unique understanding of competencies is what should be ultimately considered and represented in the results of the study. Therefore, for the purpose of data analysis, if the participant stated that an immeasurable belief or absolutely perfect skill represented AAT-C competency, then that should be included in the analysis just as a minimal and measurable standard of practice should be included.

The research team held a total of five regularly scheduled coding meetings. Additional member checks were conducted periodically between meetings as questions, concerns, and discrepancies arose in the data. The research team engaged in a total of four additional member checking meetings which were initiated sporadically throughout the data collection process. The additional meetings consisted of in-person, telephone, and electronic communication. Summaries of in-person and telephone meetings as well as records of all electronic communication were included in the activity log and memos and became part of the audit trail for this study.

Open coding. In open-coding, phenomena or events are identified and categorized through line-by-line investigation of the data (Charmaz, 2006). Open coding is the initial step of data analysis and describes the qualities of the categories. Data was arranged into values and levels along a continuum of categories, sub-categories, and variables. As questions arose from the data, they were entered in the memo journal (Charmaz, 2006; Guba & Lincoln, 1989).

Axial coding. Axial coding began as the content derived from the open coding process was arranged into codes. Relationships between the codes were observed and established. A codebook was developed after the fourth response was coded to organize the data relationships into specific categories, sub categories, and variables. The causal relationships established by the axial coding formed a ‘coding paradigm’ which led to better understanding of the phenomena, experiences, or events. The ‘coding paradigm’ led to selective coding and the development of themes and a theory (Charmaz, 2006).

Selective coding. The selective coding process initiated the development of theory that involved comparing participant-to-participant, experiences-to-experiences, interviewees with themselves, and categories to categories (Charmaz, 2006). This process involved the research team verifying, defining, and developing the themes, through the hermeneutic dialectic process of negotiation, into a theory (Guba & Lincoln, 1989). During this phase, the research team negotiated to create a condensed and finalized codebook that represented all important codes and themes derived from the data. Sub-themes and major categories were examined and rearranged into overarching themes and supporting sub-themes that represented the shared experiences and approaches of the participants, as perceived by the research team. Complete consensus among research

team members was considered vital to the development of a final codebook. Memos were reviewed, considered, and challenged by the primary researcher during this process. When consensus was reached, a final codebook was developed, and each participant's responses was re-coded according to the new codebook. Key ideas were presented to the research team for verification, negotiation and consensus.

Member checking and auditor. Once a final codebook was developed by the research team, participants were invited to review the codes and provide feedback, express agreement/disagreement, or request changes. The primary researcher emailed a copy of the final codebook to all participants who provided a viable email address. Twelve participants provided viable email addresses and seven (n=7) of those twelve responded to the primary researcher's invitation to review the final codebook. All of the participants who responded agreed with the codebook, no changes were requested. At the end of the investigation, the auditor reviewed all sources of data (participant responses to the questionnaire, codebooks, memos, and activity logs) to verify that the research team's activities followed the established procedure. The auditor verified that the research team provided sufficient evidence that researcher-identified themes and concepts are grounded in participant data.

Ethical Considerations

Participants received an informed consent approved by IRB. Participants received a final copy of the drafted document to review. Confidentiality and privacy were maintained at all times.

Results

Based on the themes and subthemes that emerged from the data, the authors constructed a theoretical framework which represents competencies in AAT-C. Using this theoretical framework, the authors proposed a total of nine essential competency areas for professional counselors utilizing AAT-C. They are divided into three domains in accordance with the competency framework that includes Knowledge, Skills, and Attitudes (Myers & Sweeny, 1990). Participants articulated the need for professional counselors practicing AAT-C to be familiar with all nine areas of these competencies in order to demonstrate minimum competency in the practice of AAT-C. These domains and essential areas are represented in figure 1.0 and described below. It is important to note that the purpose of this section is to illustrate the major themes and subthemes which emerged from the data. A more detailed list of specific AAT-C competencies which are based on participant responses can be found in appendix B. Appendix B represents the final codebook compiled from participant data, and it contains specific items which participants identified as essential to competency in AAT-C. Each major theme represented in appendix B is supported by direct participant quotes. A detailed participant quote book is available for readers to view upon request. The authors hope that the data represented in appendix B may serve as a guide for the development of formal AAT-C competency standards.

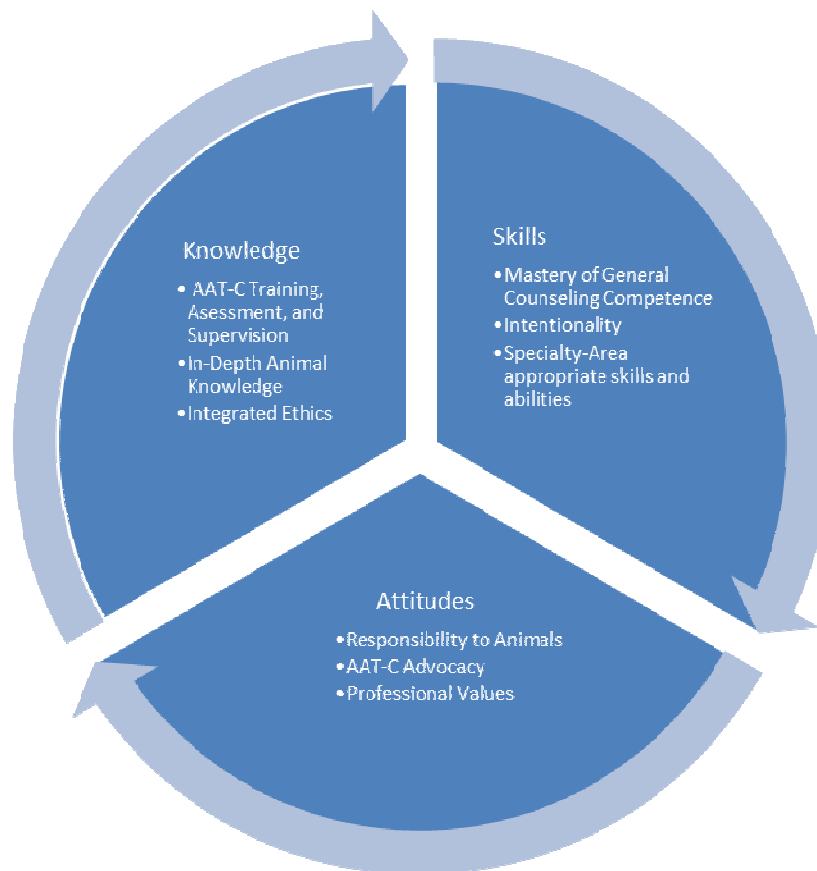


Figure 1.0. Model of Competencies in AAT-C.

Knowledge

All 20 participants described specific areas of knowledge that are essential to the competent practice of AAT-C. The participants unanimously stated that competent practitioners of AAT-C gained both didactic knowledge and applied experience related to AAT-C before integrating the approach into clinical work. The essential competency areas that support the domain of knowledge are: (a) AAT-C training, assessment, and supervision; (b) in-depth animal knowledge; and (c) integrated ethics.

AAT-C Training, Assessment and Supervision. Most participants (n=18) described that the acquisition of formal training, assessment, and supervision were essential to competency as an AAT-C provider. As one participant shared: “it is

imperative that a formal certification process is undertaken and passed by the counselor/animal providing services”, and another disclosed: “I believe there are a lot of people who use animals in a therapy setting that do not have enough formal training”. Additionally, participants stated that competent AAT-C providers have knowledge of specific AAT-C counseling techniques and a thorough understanding of the impact of the human-animal bond. As one participant wrote: “I think an understanding of somatic experiencing and sensorimotor work is valuable in AAT-C work also and an understanding of the neurology of the brain is helpful”. Another participant echoed: “A solid background in linguistics as well as applying nonverbal communication”. In addition to the successful completion of AAT-C specific coursework, participants stated that supervised professional practice in AAT-C is an essential aspect of competence. Participants discussed that such experiences should encourage the integration of AAT-C into the trainee’s personal model of counseling and that supervisors should include continuous verbal and written feedback and assessment of a trainee’s skills. A participant stated: “One must have experience doing this work, and now that it’s more available, supervised experience! Ideally, it would be great to have enough AAT-C practitioners out there to provide quality supervised experiences to new AAT-C enthusiasts”. Another shared: “If they are learning it is critical that they work under supervision until they gain this expertise”.

In-Depth Animal Knowledge. All 20 participants described that in-depth knowledge of animals is essential to competence in AAT-C. Thus, competent providers must possess extensive, species-specific ethological knowledge about the animal they

integrate into AAT-C work and recognize that knowledge about one particular species of animal is not transferrable to other species. A participant wrote:

This includes a deep understanding of the ethology (or cognitive ethology) of the species, what current knowledge is about the species, behavior, purposes of behavior for the animal. This also includes an understanding of development from birth, socialization, and the various things that can go wrong. It also includes an understanding of how to assess animals' basic behavior problems, and common medical or genetic issues.

This knowledge includes knowledge of and efficacy with positive animal training techniques and an ability to develop a strong working relationship with the therapy animal. One participant stated:

Competence in developing a mutual, positive relationship with the animal that serves as a healthy metaphor for the therapeutic relationship as well as relationships in general. This also means that the counselor knows how to avoid any force-based methods of training or behavior modification.

Another participant wrote: “Competence in positive training. Counselors should know the basics of positive training; i.e., non-aversive ways of helping the animal develop behaviors related to the therapy (or living with humans in general)”.

Integrated Ethics. Every participant stated that competent AAT-C providers are able to recognize and discuss the unique ethical implications associated with AAT-C and understand how those considerations are integrated into the existing ethical standards appropriate to the provider’s professional identity (e.g., American Counseling Association, American Psychological Association, etc.). As one participant wrote:

AAT-C counselors should also be able to discuss the ethical implications of having an animal in session. This includes the purpose of AAT-C and potential safety issues, e.g. accidentally scratched, as well as plan for the therapy animal becoming ill, retiring, or dying.

Another participant asserted: “risks are discussed with potential clients and informed consent provided, and potential benefits and limitations are addressed”. Other considerations include understanding the social and cultural factors related to using AAT-C with different populations. As stated by a participant: “minimum basic knowledge of and sensitivity to cultural attitudes about animals and ability to take that into consideration during sessions”. Another participant shared: “Clinicians should understand how different client groups view animals (pets, protectors, to be feared, revered)”. Participants also described that a competent AAT-C provider must be adept at maximizing the potential for safe human-animal interactions. One participant wrote: “competence in AAT is being able to provide as safe learning place, being able to provide a safe therapeutic session”, and another stated: “an AAT therapist needs to understand the negative issues that may arise from using animals and be able to address those concerns using best practice research and standards”. Another participant added: “clinicians must be able to state honestly to potential clients the facts verses myths in the field of animal assisted therapy”. Participants also discussed the importance of understanding local and national laws associated with human-animal interaction and protecting one’s self and the therapy animal from liability. One participant wrote: “an AAT therapist should have liability insurance as part of their practice whether their employer covers them or not”.

Another shared the importance of: “documentation skills that follow insurance regulations (as needed) and accurately reflect session content”.

Skills

All 20 participants described specific skill areas which competent providers of AAT-C must demonstrate. The essential competency areas that support the domain of skills are: (a) mastery of general counseling competence; (b) intentionality; and (c) specialty area-appropriate skills and abilities.

Mastery of General Counseling Competence. Every participant stated that AAT-C is not recommended for beginning-level counselors and discussed that AAT-C should be integrated into counseling work only after basic counseling competency is established. As one participant shared: “The practitioner should be highly experienced in their area of expertise BEFORE they attempt to integrate animals”. Another participant echoed that: “to become competent first in counseling is critical so the individual is not floundering around trying out two new things at once”. In order to ensure that AAT-C is practiced within the boundaries of a provider’s scope of practice, participants shared that potential AAT-C providers must demonstrate strong counseling skills without an animal before the provider chooses to integrate AAT-C interventions with clients. One participant wrote: “an AAT therapist should understand and demonstrate competence as a clinical practitioner independently of using AAT”, which was supported by another participant’s statement: “they also need to have strong clinical skills without the presence of the animal - as it is my belief that AAT-C is supplemental to the overall counseling process”.

Intentionality. All participants asserted that competent AAT-C providers demonstrate intentionality in their work and clarified that AAT-C involves much more than choosing to have an animal present in the counseling setting. One participant wrote:

It is more than just loving animals or owning an animal. For example, many counselors might assume simply having animal in the counseling office is therapeutic (and it certainly can be!). However, AAT-C means using the animal as part of the treatment plan for a particular client/ population.

Another participant stated:

So many people think it's okay to just take their nice animals to work. I would never dream of conducting EMDR, hypnosis, or art therapy, for example, without getting substantial training and supervision. I do not see this same attitude in terms of AAT in general. Perhaps practitioners do not realize the complexities involved.

According to the participants, competent AAT-C providers are knowledgeable in theory-based interventions and able to articulate how AAT-C fits within their theoretical orientation or personal model of counseling. One participant wrote: "they need to have a strong philosophical approach for incorporating AAT-C in their clinical practice" and another participant shared the importance of "a defined philosophy of practice and [knowledge of] how this correlates with the academic literature". Further, competent AAT-C providers skillfully select AAT-C interventions based on a client's treatment plan, and regularly assess the effectiveness of the AAT-C intervention. A participant stated:

Competence in facilitating/leading the sessions means that the counselor knows how to match specific interventions or processes to the client's needs, and how to incorporate the animal in a way that meets specific principles or standards of humane treatment and mutual respect.

Another wrote: “An AAT-C practitioner should be able to demonstrate that the animal has a specific purpose in the therapeutic setting and be able to document how the animal assists the client in reaching treatment goals”.

Specialty Area-Appropriate Skills and Abilities. All 20 participants stated that competent AAT-C providers master a specific set of skills that allows them to effectively utilize human-animal interaction as a counseling intervention. One of these specific skills is the ability to care for the animal and the client simultaneously. One participant shared:

The AAT-C counselor should be able to demonstrate that they can handle the animal while taking care of the client. I think this is the hardest skill to develop. For example, the animal is the counselor's (if also handler's) responsibility. That being said, we cannot be too focused on the animal and ignore the client.

Another participant wrote: “much like family therapy, AAT requires the practitioner to balance the well-being of every participant and make each feel safe and heard”.

Another AAT-C specific skill is the ability to assess, interpret, and utilize the animal's responses in a therapeutically meaningful way. A participant described “[one must] identify and process psychological information produced by interactions with [animals], then use that information to create interactions that will further growth and healing”. Another participant stated: “this also includes the ability to think creatively and

on one's feet to capitalize on therapeutic moments and opportunities that occur and to tie them back to the therapeutic goals”.

Finally, participants shared that competent AAT-C practitioners must demonstrate an ability to objectively assess an animal's suitability for AAT-C, despite the provider's potential emotional bond with or bias towards the animal or AAT-C in general. As one participant asserted: “we must learn how to read our animals, as well as how to objectively evaluate animals that may be utilized in this capacity”. Another participant described the importance of remaining attuned to one's:

Individual biases - this is so important - as so much of the field has been hindered by anecdotal evidence, because I believe most of us practice this because we are passionate about the potentials of this work - yet it is important that we continue to build the academic literature.

Attitudes

All 20 participants described specific attitudes, awareness, and professional orientations which are espoused by competent providers of AAT-C. The essential competency areas which support the domain of attitudes are: (a) responsibility to animals; (b) AAT-C advocacy; and (c) professional values.

Responsibility to Animals. Participants unanimously asserted that competent AAT-C providers prioritize animal advocacy. As one participant shared: “As a counselor it is part of our ethical code to not cause maleficence, as an AAT-C practitioner I believe this holds true in regard to our animals”. Competent AAT-C providers understand that the therapy animal is the provider's responsibility, and understand the direct link between animal welfare and client safety. One participant stated the need for: “determined,

constant vigilance for animal welfare and well-being. If the animal's welfare is assured, then the client's welfare is also assured". Another participant cautioned:

If the handler inadvertently over-stresses the dog, puts the dog in an unsafe position, does not recognize that the dog does not have an affinity for the work, etc., great risks arise for the dog, handler, and all those involved.

Further, competent AAT-C providers respect the animal's right to choose whether to participate in AAT-C work and take active steps to prevent and address animal fatigue, stress, and burnout. A participant asserted that a "practitioner must demonstrate ability to protect an animal from undue stress during a session and outside a session" and "should also be able to demonstrate the ability to identify their animal's stress and/or calming signals and how they will manage it within the session".

AAT-C Advocacy. 16 participants stated that competent AAT-C providers prioritize professionalism and help promote awareness of the field of AAT-C among other professionals, communities, and institutions. A participant wrote: "as this is still a new field, the AAT-C counselor must be cognizant of staying professional to help reduce any stigma or misunderstanding others may have about AAT", and another stated:

We represent an important burgeoning field that is often profoundly misrepresented whereby potentially impeding our ability to do our work. For instance, other "handlers" acting as though they are trained in the field and taking advantage of the system and then showing unprofessional, unsafe behaviors around others which could potentially stop a program for everyone involved.

Participants shared that the competent practice of AAT-C requires continuing education and a commitment to collaboration and continued professional development. Participants

asserted that competent AAT-C providers stay abreast of existing and emerging literature and actively promote the development of AAT-C specialty credentials. As one participant described: “clinicians should be in ongoing training with their animal partners and other animals to hone their skills” and another wrote: “they should be able to refer clients and employers to resources and literature for further explanation if they so desire”.

Professional Values. 12 participants shared that in order to be most effective, AAT-C providers espouse certain professional values. For example, a participant shared: “attitudes should include flexibility, ability to command a situation in the event of an emergency, compassion, and strong ability to create an experiential therapy”. Participants emphasized the importance of passion and enthusiasm for the practice of AAT-C and many participants stated that they believe competent AAT-C providers strive to be open, flexible, empathetic, and able to remain calm during unexpected events. Further, participants stated that a willingness to work in the “here-and-now” and embrace the inherent spontaneity of animal behavior are important aspects of AAT-C competency. One participant stated: “AAT-C practitioners should be able to demonstrate an extraordinary amount of flexibility within their work environment due to the inherently unpredictable nature of animals, even when they are trained for a specific purpose”.

Discussion

The voices of the 20 participants in this study provide a grounded theory that emerged from expert practitioners of AAT-C. On the basis of these findings, competent practitioners of AAT-C are required to develop specialized knowledge, skills and attitudes that are additional to those required for general counseling competency. This reflects the participants’ unanimous assertion that AAT-C must be considered a specialty

area within the practice of professional counseling, thus; potential practitioners of AAT-C have an ethical responsibility to ensure their competency to provide such services (ACA Ethics code C.2.b., 2005). The participants of this study represented a wide variety of professional identities, practice settings, client populations, and choice of therapy animal species. However, despite this wide variability, the research team reached saturation quite early in the data collection process, which remained consistent throughout the remaining responses. This early and consistent saturation may reveal the unified perspectives of expert practitioners of AAT-C, that regardless of professional identity, counseling setting, population, or choice of therapy animal partner. The importance of these findings within the practice of counseling follows.

Description of the Model

Based on the themes and subthemes that emerged from the participants' voices, the authors constructed a model with three main domains and nine essential competency areas. Competent practitioners of AAT-C:

1. Develop specialized knowledge which includes: (a) the acquisition of AAT-C specific training, assessment and supervision; (b) in depth- animal knowledge; and (c) integrated ethics.
2. Develop specialized skills which include: (a) mastery of general counseling competence; (b) intentional incorporation of AAT-C interventions into the counseling process; (c) and specific AAT-C appropriate skills and abilities.
3. Espouse specialized attitudes which include: (a) awareness of responsibility to animals; (b) commitment to AAT-C professional advocacy; (c) and a specific set of professional values.

Although each of the competency areas were described and addressed discreetly in the data, it is important to note that all domains and areas of competency are interrelated and mutually influence one another. For example, the essential knowledge competencies directly influence a provider's ability to demonstrate essential skills associated with AAT-C. Further, providers must be well-informed in order to fully understand and promote the essential attitudes of competent AAT-C providers. In turn, skills and attitudes continuously influence and contribute to the existing knowledge base surrounding AAT-C. Thus, incomplete mastery of any of the nine essential areas of AAT-C competency impacts the provider's competency as a whole. Although each area is critical to the model, no single area alone fully illustrates the holistic grounded theory of AAT-C competency which emerged from the data. This model reveals the highly specialized nature of AAT-C interventions and illustrates the need for potential AAT-C providers to develop specific competencies appropriate to the intervention.

Implications for Practice

Based on the model which emerged from the data, the development of appropriate AAT-C specific competencies is crucial to the safe, ethical, and effective practice of AAT-C interventions. This model clearly illustrates that without developing specialized knowledge, skills, and attitudes, mental health professionals who choose to incorporate an animal into the counseling process are operating outside their scope of practice. This is especially relevant to mental health professionals and mental health training programs, because mental health professionals wishing to implement AAT-C interventions must have an awareness of what constitutes competency in AAT-C. The findings also highlight the need for the recognition of AAT-C as a specialty area within

the field of counseling with specific implications for training and supervision. Although mental health professionals interested in AAT-C may find the process of identifying appropriate training and education resources challenging, the development of these nine essential competency areas may provide a framework to guide competency development. The authors hope that these findings help guide curriculum development for training programs aimed towards providing an AAT-C specialty, as instructors and administrators may utilize the identified competencies to structure and design AAT-C specialty courses. Further, the authors hope these findings will help inform clinical supervision for AAT-C providers by providing a clear set of competencies for supervisors to reference during supervisee feedback and evaluation.

These findings further highlighted the need for formal ethical codes related to animal advocacy to be included in the American Counseling Association (ACA) code of ethics, as well as in the ethical standards for other mental health disciplines. As many participants discussed, animal advocacy not only impacts the wellbeing of the therapy animal(s) involved in AAT-C, but also directly impacts client safety as well as the counselor's ability to demonstrate essential AAT-C specific skills. According to the perspectives of the participants, the impact of effective animal advocacy extends far beyond the experience of an individual therapy animal, and has the potential to influence the entire process of AAT-C. Although the acquisition of appropriate knowledge and training may help reduce the risk of therapy animal harm and exploitation, further steps are needed in order to promote the principle of maleficence with regards to animals involved in the professional counseling process.

Another consideration that emerged from these findings is the unique position of AAT-C providers who must maintain an ability to objectively assess the strengths, limitations, and suitability of a therapy animal, which in many cases is also the provider's beloved pet. Many AAT-C providers have relationships with the therapy animal(s) outside of the counseling relationship (e.g. pet ownership, equestrian sportsmanship, etc.) which may influence the provider's biases regarding that particular animal. The research team was unable to identify other situations wherein a mental health professional is routinely required to maintain a certain level of professional objectivity towards a personal companion. While an AAT-C provider's strong working relationship with the therapy animal is critical to the successful implementation of AAT-C interventions, that relationship can also present opportunities for transference and countertransference that may be both beneficial and detrimental to the counseling process. Like all mental health providers, AAT-C providers must continuously engage in an examination of one's own personal biases and the impact of those biases on the counseling process. However, this finding illustrates the need for AAT-C providers to identify and negotiate additional biases unique to the practice of AAT-C, and highlights the need for AAT-C providers to better understand the impact of the relationship with the therapy animal on the counseling process. Given the unique nature of the relationship between the therapy animal and the AAT-C provider, the AAT-C provider should remain mindful of the multiple relationships they have with the therapy animal. This can be considered a unique consideration of a mutually enhancing relationship as outlined by the ACA code of ethics.

Limitations and Implications for Future Research

Although the current study contributes to the AAT-C literature by identifying the essential knowledge, skills, and attitudes that expert AAT-C practitioners believe are essential to the competent practice of AAT-C and providing a framework of competencies, there are limitations to the study. While the grounded theory approach does not seek to generalize participant data, the study is nonetheless limited by a homogeneous sample. Even though participants varied greatly with regards to professional identity, practice settings and choice of therapy animal, the sample was exclusively comprised of white women. Thus, the perspectives of these participants may not represent the perspectives of all expert practitioners of AAT-C. Efforts should be made in future research to recruit and include a more diverse sample of participants. In future studies, the authors hope to develop a measurement for assessing AAT-C competencies and to investigate the clinical supervision of AAT-C. The authors also hope to qualitatively investigate the relationship between AAT-C providers and their therapy animal partners and the impact of that relationship on the counseling process.

As in all qualitative studies, researcher bias presents limitations. The research team took considerable steps to minimize the impact of researcher bias by verifying the link between the researchers' and participants' realities by using the hermeneutic process, member checking, peer debriefing, and reflexive journaling. To further validate this link, participants were invited to review and verify themes identified by the researchers in the final code book.

This study represents a step towards addressing the gap the empirical AAT-C literature, but further research is needed to better understand this specialty area. Some topics that the authors hope to explore in future projects include the ethics of AAT-C,

client perceptions of AAT-C and expanding the population of participants to include more diversity.

References

- Adler, M., Ziglio, E. (1996). *Gazing into the Oracle: The Delphi Method and its Application to Social Policy and Public Health*. London: Jessica Kingsley Publishers.
- Arredondo, P., Toporek, M.S., Brown, S., Jones, J., Locke, D.C., Sanchez, J., Stadler, H. (1996). Operationalization of the multicultural counseling competencies. AMCD: Alexandria, VA.
- Baez, A., Eckert-Norton, M., & Morrison, A. (2004). Interdisciplinary collaboration on substance abuse skill OSCEs. *Substance Abuse*, 25(3), 29-31. doi: 10.1300/J465v25n03_04.
- Chandler, C. K. (2012). *Animal assisted therapy in counseling (2nd ed.)*. New York, NY US: Routledge/Taylor & Francis Group.
- Chandler, C. K., Portrie-Bethke, T. L., Barrio Minton, C. A., Fernando, D. M., & O'Callaghan, D. M. (2010). Matching animal assisted therapy techniques and intentions with counseling guiding theories. *Journal of Mental Health Counseling*, 52(4), 354-374.
- Charmaz, K. (2006). *Constructing Grounded Theory*. London, Thousand Oaks, CA: Sage.
- Corbin, J., & Strauss, A. . (2008). *Basics of qualitative research: techniques and procedures for developing grounded theory (3d ed.)*. Thousand Oaks, CA: Sage.
- Dean, J. K. (2009). *Quantifying social justice advocacy competency: Development of the social justice advocacy scale*. (69), ProQuest Information & Learning, US.
Retrieved from:
<http://ezproxy.gsu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?dir>

[ect=true&db=psyh&AN=2009-99110-258&site=ehost-live](#) Available from EBSCOhost psych database.

- Denzin, N. K., & Lincoln, Y. S. (2008). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry (3rd ed.)*. (pp. 1-43). Thousand Oaks, CA US: Sage Publications, Inc.
- Driedger, S. M., Gallois, C., Sanders, C. B., & Santesso, N. (2006). Finding Common Ground in Team-Based Qualitative Research Using the Convergent Interviewing Method. *Qualitative Health Research, 16*(8), 1145-1157. doi: 10.1177/1049732306289705.
- Fine, A. H. (2000a). Animals and therapists: Incorporating animals in outpatient psychotherapy. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. (pp. 179-211). San Diego, CA US: Academic Press.
- Fine, A. H. (2000b). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. San Diego, CA US: Academic Press.
- Fine, A. H. (2006). Incorporating animal-assisted therapy into psychotherapy: Guidelines and suggestions for therapists. In A. H. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (2nd Ed.)*. (pp. 167-206). San Diego, CA US: Academic Press.
- Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalising data saturation for theory-based interview studies. *Psychology & Health, 25*,

1229–1245. doi:10.1080/08870440903194015.

- Frey, L. R. (1994). The naturalistic paradigm: Studying small groups in the postmodern era. *Small Group Research, 25*(4), 551-577. doi: 10.1177/1046496494254008
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Thousand Oaks, CA US: Sage Publications, Inc.
- Guba, E. G., & Lincoln, Y. S. (2008). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research (3rd ed.)*. (pp. 255-286). Thousand Oaks, CA US: Sage Publications, Inc.
- Hays, D. G., & Wood, C. (2011). Infusing qualitative traditions in counseling research designs. *Journal of Counseling & Development, 89*(3), 288-295. doi: 10.1002/j.1556-6678.2011.tb00091.x.
- Kolb, S. (2012). Grounded theory and the constant comparative method: valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies, 3*(1), 83-86.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey Bass.
- Myers, J. E. (1992). Competencies, credentialing, and standards for gerontological counselors: Implications for counselor education. *Counselor Education and Supervision, 32*(1), 34-42. doi: 10.1002/j.1556-6978.1992.tb00172.x.

- Nalavany, B. A., Ryan, S. D., Gomory, T., & Lacasse, J. R. (2005). Mapping the Characteristics of a 'Good' Play Therapist. *International Journal of Play Therapy, 14*(1), 27-50. doi: 10.1037/h0088895.
- Nimer, J., & Lundahl, B. (2007). Animal-Assisted Therapy: A Meta-Analysis. *Anthrozoos, 20*(3), 225-238. doi: 10.2752/089279307X224773
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3d ed.). Thousand Oaks, CA: Sage.
- Play Therapy International (2013). *Play therapist competence profile*. Retrieved from: <http://www.playtherapy.org>.
- Ratts, M., Toporek, R., Lewis, J. (2010). *ACA Advocacy Competencies: A Social Justice Framework for Counselors*. Alexandria, VA: American Counseling Association.
- Ratts, M. J. (2011). Multiculturalism and social justice: Two sides of the same coin. *Journal of Multicultural Counseling and Development, 39*(1), 24-37. doi: 10.1002/j.2161-1912.2011.tb00137.x.
- Ratts, M. J., & Hutchins, A. M. (2009). ACA advocacy competencies: Social justice advocacy at the client/student level. *Journal of Counseling & Development, 87*(3), 269-275. doi: 10.1002/j.1556-6678.2009.tb00106.x.
- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child & Adolescent Social Work Journal, 15*(3), 177-185. doi: 10.1023/A:1022284418096.
- Rice, R. E. (2012). *Group leadership of experienced middle school counselors*. (72), ProQuest Information & Learning, US. Retrieved from <http://ezproxy.gsu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?dir>

[ect=true&db=psych&AN=2012-99090-163&site=ehost-live](#). Available from EBSCOhost psych database.

Shelton, L., Leeman, M., O'Hara, C. (2011). Introduction to Animal Assisted Therapy in Counseling: A Paper Based on a Program Presented at the 2011 American Counseling Association Conference. . from American Counseling Association http://www.counseling.org/docs/vistas/vistas_2011_article_55.pdf.

Stewart, L., Chang, C., Jaynes, A. (2013, May). Creature Comforts. *Counseling Today*, 52-57.

Stewart, L., Chang, C., Rice, R. (2013). Emergent Theory and Model of Practice in Animal Assisted Therapy in Counseling. *Journal of Creativity in Mental Health* 4:8, 329-348. DOI:10.1080/15401383.2013.844657.

Stewart, L., Dispenza, F., Parker, L., Cunnien, T., Chang, C. (in press). Effectiveness of an Animal Assisted College Outreach Program on Student Anxiety and Loneliness. *Journal of Creativity in Mental Health*.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Sue, D. W., Arredondo, P., & McDavis, R. J. (1992). Multicultural counseling competencies and standards: A call to the profession. *Journal of Counseling & Development*, 70(4), 477-486. doi: 10.1002/j.1556-6676.1992.tb01642.x.

Toporek, R. L., Lewis, J. A., & Crethar, H. C. (2009). Promoting systemic change through the ACA advocacy competencies. *Journal of Counseling & Development*, 87(3), 260-268. doi: 10.1002/j.1556-6678.2009.tb00105.x.

- Wesley, M. C., Minatrea, N. B., & Watson, J. C. (2009). Animal-assisted therapy in the treatment of substance dependence. *Anthrozoos*, 22(2), 137-148. doi: 10.2752/175303709X434167.
- Williams, E. N., & Morrow, S. L. (2009). Achieving trustworthiness in qualitative research: A pan-paradigmatic perspective. *Psychotherapy Research*, 19(4-5), 576-582. doi: 10.1080/10503300802702113.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine--Human bonding in recovery from trauma. *Anthrozoos*, 21(1), 17-30. doi: 10.2752/089279308X274038.

APPENDIXES

APPENDIX A

Qualitative Interview Questionnaire

Q1 Note from the Research Team

Thank you for participating in our study. This qualitative interview has been converted to an electronic format for your convenience. You may take as much time as you need in your responses. There are no word or character limits in the response boxes - please use as much space as you need. You may choose to respond directly in the response boxes provided, or you may copy & paste from word processing software. If you experience any difficulties or notice any inconveniences with this survey software program, please contact the primary student investigator directly (lstewart5@student.gsu.edu). We appreciate your willingness to share your time and expertise.

Q2 DEMOGRAPHIC INFORMATION

On this page, we invite you to share information about yourself, your educational background, and your professional background.

Q3 Please indicate your gender:

Q4 Please indicate your age:

Q5 Please indicate your ethnicity:

Q6 What is the highest degree you've earned?

Q7 Please indicate your professional orientation:

- Licensed Professional Counselor (1)
- Licensed Psychologist (2)
- LCSW (3)
- Other (4) _____

Q8 How long have you been licensed in your profession?

Q9 Which of the following position(s) do you currently hold?

- Clinician/Practitioner (1)
- Academic (e.g. professor, part-time instructor, researcher, etc) (2)
- Animal health/Animal behavior professional (3)
- Therapy animal organization (e.g. evaluator, executive council, etc) (4)
- Consultant/Clinical Supervisor (5)

Other (6) _____

Q10 ANIMAL ASSISTED THERAPY BACKGROUND

On this page, we invite you to share more about your AAT-C related training and experience.

Q11 Please describe your training/education in AAT-C:

Q12 Are you currently engaging in clinical work with AAT-C?

Yes (1)

No (2)

Other (3) _____

Q14 What kind of animal(s) have you worked with in an AAT-C capacity?

Q15 Which therapy animal registration organization(s) have you registered your therapy animal(s) with?

Q16 Please describe any experience providing AAT-C consultation services or clinical supervision:

Q17 Please describe any publication/presentation history relevant to AAT-C:

Q18 Please describe any leadership positions that you have held relevant to AAT-C:

Q19 Please describe any formal coursework that you have designed or instructed relevant to AAT-C:

Q63 INTERVIEW QUESTIONS

Please respond to the following open-ended questions, and please describe each answer in detail. Feel free to use as much space as you need in your response. You may also copy & paste from word processing software if you wish. The main focus of our interview today is to define the abilities, understanding, and knowledge that are essential for mental health professionals wishing to implement Animal Assisted Therapy in Counseling (AAT-C) interventions and to understand your experiences and perceptions as an expert in the area of AAT-C. We consider you the expert at your work so there are no wrong answers to any of our questions. I may also be doing perception checks with you after you complete this questionnaire to make sure I understand you accurately. Everything you tell us is strictly confidential. Although your identity will not be entirely anonymous to the primary student investigator, your identity will remain anonymous to all other participants.

Q21 What is competence in AAT-C?

Q22 What should a competent AAT-C practitioner know? What knowledge should they have?

Q23 What should a competent AAT-C practitioner be able to do/demonstrate? What skills/ abilities should they have?

Q24 What are the attitudes that should be espoused by a competent AAT-C practitioner?

Q25 Is there anything else that you think we should know about competent AAT-C practice/practitioners that was not covered by the above questions?

Q26 WRAP-UP PROCESS QUESTIONS

Q27 What was this interview process like for you?

Q28 Is there anything you feel that we did not cover or that you would like to add?

Q29 Would you be willing to be contacted in the future for follow up and clarification questions?

Q30 Thank you very much for your willingness to share your time and experiences with us. Please feel free to contact us at any time with additional questions, comments, or concerns.

APPENDIX B
Summary of Data

A. Knowledge

1. Competent providers of AAT-C acquire AAT-C specific training, assessment, and supervision.
 - a. Successful completion of formal, counseling-specific coursework
 - i. Evaluation of animal knowledge
 1. Knowledge of how animals are utilized in therapeutic settings
 2. Ability to work effectively as a team with therapy animal
 - ii. Evaluation of AAT-C knowledge
 1. AAT-C Professional Identity
 2. History of AAT-C
 3. Literature and evidence-based practice of AAT-C
 - b. Knowledge of AAT-C specific counseling techniques & principles
 - i. Implications for specific client populations
 - ii. Implications for specific presenting concerns
 - c. Understanding the impact of the human-animal bond
 - i. Understanding the physiological & neurological impact of human-animal interaction
 - ii. Understanding that human-animal interaction can illicit unexpected vulnerability and disclosure in others
 - iii. Knowledge of how the human-animal bond can impact the therapeutic process
 1. Advantages
 2. Limitations
 3. Indications & contraindications
 - d. Participation in supervised professional practice
 - i. Gaining applied experience under the supervision of an appropriately qualified AAT-C provider to supplement didactic knowledge
 - ii. AAT-C is successfully integrated into provider's persona model of counseling
 - iii. Feedback and assessment of AAT-C skills
2. Competent providers of AAT-C possess in-depth knowledge about the therapy animal on an individual, breed, and species level.
 - a. Extensive, species-specific ethological knowledge about the therapy animal(s)
 - i. Physiology, behavior & history
 - ii. Care & husbandry
 - iii. Understanding that knowledge about one particular species is not necessarily generalizable to other species
 - b. Knowledge of animal training techniques
 - i. Positive, non-coercive training methods

- ii. Ability to train animal(s) for a variety of counseling environments and situations
 - iii. Ability to facilitate animal's socialization, desensitization and comfort
 - c. Establish & maintain a strong working relationship with the therapy animal(s)
 - i. Knowledge of triggers to unwanted behavior
 - ii. Ability to educate others about the animal's triggers
 - iii. Ability to recognize and apply effective calming interventions to a stressed therapy animal
- 3. Competent providers of AAT-C demonstrate integrated ethics. Thus, competent providers of AAT-C are aware of AAT-C specific ethical considerations and are able to incorporate ethical professional mental health practice with ethical AAT-C practice.
 - a. Able to recognize and discuss the ethical implications of AAT-C
 - i. Inform clients of purpose of AAT-C
 - ii. Discuss and address potential safety issues
 - iii. Maintain respect for the animal(s), the client(s), and the therapeutic process
 - iv. Awareness of the provider's personal biases, including the impact of the provider's emotional bond with the animal and its impact on the therapeutic process
 - b. Understanding the social and cultural factors relevant to AAT-C and multicultural implications of AAT-C
 - i. Respecting the attitudes of others, particularly those concerned with the animal's presence
 - ii. Understanding that human-animal interaction may hold different meanings across a variety of cultures
 - c. Ability to maximize the potential for safe interactions between clients and animals
 - i. Infection prevention/control and consideration of other zoonotic agents
 - ii. Considerations for allergies, phobias, past history of animal abuse, and past history of animal-related trauma
 - d. Effective risk management strategies and skills
 - i. Knowledge of liability issues related to AAT-C
 - ii. Knowledge of legal issues associated with AAT-C
 - iii. Inclusion of appropriate documentation procedures
 - iv. Confirm personal and professional insurance coverage for AAT-C

B. Skills

- 1. Competent providers of AAT-C demonstrate a mastery of general counseling skills prior to integrating AAT-C interventions. AAT-C is practiced only within the boundaries of a provider's professional scope of practice.
 - a. Awareness that AAT-C is not recommended for beginning-level practitioners
 - i. Gaining knowledge and experience with basic counseling skills before integrating AAT-C

- ii. Possessing familiarity and competence with client population and presenting concerns before integrating AAT-C
 - b. Demonstrating counseling effectiveness without the integration of a therapy animal
 - i. Recognizing that AAT-C is utilized to enhance the therapeutic process rather than as a stand-alone intervention
- 2. Competent providers of AAT-C demonstrate intentional incorporation of AAT-C into the counseling relationship, plan, and process.
 - a. Knowledge that AAT-C is a skillful intervention
 - i. More than owning/loving animals
 - ii. More than simply including an animal in the counseling setting
 - b. Knowledge and integration of theory-based interventions
 - i. Ability to articulate the role of AAT-C within a provider's personal theoretical approach or personal model of counseling
 - ii. Understanding the goals of AAT-C interventions
 - iii. Awareness of the validity of the AAT-C interventions being used
 - c. Skillful selections and assessment of AAT-C intervention strategies
 - i. Select appropriate interventions and strategies for each client, in each session, based on treatment goals
 - ii. Ability to assess the outcome of AAT-C interventions
- 3. Competent providers of AAT-C recognize that AAT-C is a specialty area with a learned and practiced skill set. Competent AAT-C providers demonstrate specialized skills and abilities that are appropriate to the specialty area of AAT-C.
 - a. Understanding the experiential nature of AAT-C interventions
 - b. Ability to attend to/care for the client(s) and therapy animal(s) simultaneously
 - i. Demonstrates effective judgment when assessing the session's impact on the therapy animal(s)
 - ii. Demonstrates effective judgment when assessing the session's impact on the client(s)
 - iii. Demonstrates effective judgment when assessing the session's impact on volunteers/assistants/paraprofessionals (if applicable)
 - c. Ability to assess, interpret, and utilize the animal's responses in a therapeutically meaningful way
 - i. Ability to link animal/client interactions to client behaviors/goals/conceptualization
 - ii. Willingness to allow natural client/animal interactions to occur
 - iii. Ability to link unexpected negative events of interactions to client goals or presenting concerns
 - iv. Ability to model appropriate, respectful, and empathetic animal care
 - d. Ability to prevent and respond to animal stress, fatigue, and burnout
 - i. Actively prevent animal burnout and fatigue
 - ii. Proactively plan stress-relief and stress-prevention strategies for the animal(s)

- 1. Ability to immediately address unexpected animal stress
- iii. Ability to identify and respond to animal's signals and body language, especially when the animal does not want to interact
- iv. Ability to provide for the animal's needs, both at the site and in general
 - 1. Access to water, a quiet rest/retreat area, and regular bathroom breaks
 - 2. Attend to animal's overall wellness through appropriate provision of quality nutrition, exercise, grooming and veterinary care
- e. Ability to objectively assess an animal's suitability, strengths, and limitations despite the provider's potential emotional bond with or personal bias towards the animal
 - i. Ability to identify and address personal biases towards the therapy animal(s)
 - 1. Awareness of transference/countertransference considerations related to AAT-C interventions
 - 2. Ability to objectively assess an animal's suitability for AAT-C in general
 - 3. Ability to objectively assess an animal's suitability for each AAT-C session on an individual basis
 - ii. Ability to identify and address personal biases towards AAT-C interventions in general

C. Attitudes

- 1. Competent providers of AAT-C prioritize their responsibility to animals involved in AAT-C and are effective animal advocates.
 - a. Understanding that the animal(s) involved in AAT-C is(are) the provider's responsibility
 - i. Understanding that animal welfare/advocacy directly impacts client safety
 - ii. Understanding that animal advocacy is essential to the ethical practice of AAT-C
 - b. Respecting animal rights, animal welfare, and recognition that animals have a right to choose their level of participation in AAT-C
 - i. Awareness of the potential for animal exploitation, either accidentally or intentionally
- 2. Competent providers of AAT-C have a well-developed professional identity and are professional advocates for AAT-C.
 - a. Active involvement in continuing education and engagement in professional development
 - i. Regular consultation and collaboration with other AAT-C providers
 - ii. Regular consultation and collaboration and consultation with professional animal specialists

- b. Maintaining familiarity with existing and emerging AAT-C literature
 - i. Familiarity with current AAT-C language/terminology
 - ii. Encouraging and supporting the continued development of AAT-C literature
 - c. Promoting awareness of AAT-C awareness at micro and macro levels (individual, community, public)
 - i. Awareness that AAT-C providers are ambassadors for the field of AAT-C
 - 1. Maintaining appropriate professional behavior when representing AAT-C
 - 2. Willingness to speak to and educate individuals, groups, and organizations/institutions about AAT-C
 - ii. Supporting learning opportunities for AAT-C enthusiasts, students and trainees
 - 1. Supporting and advocating for the development of AAT-C specialty credentials
3. Competent providers of AAT-C strive towards AAT-C specific professional values
- a. Enthusiasm and passion for AAT-C
 - b. Demonstrating flexibility, openness, and creativity
 - c. Demonstrating a calm demeanor during unexpected events/situations
 - d. Demonstrating empathy for humans and animals
 - e. Willing to embrace the experiential nature of AAT-C by being cognitively present and responsive to ever-changing situational factors