HUMAN-ANIMAL RELATIONAL THEORY: A CONSTRUCTIVIST-GROUNDED THEORY INVESTIGATION

Tiffany L. Otting

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APPROVED:

Cynthia K. Chandler, Major Professor
Casey A. Barrio Minton, Committee Member
Delini M. Fernando, Committee Member
Elizabeth A. Prosek, Committee Member
Janice Miner Holden, Chair of the Department of Counseling and Higher Education
Bertina Combes, Interim Dean of the College of Education
Victor Prybutok, Vice Provost of the Toulouse Graduate School

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Constructs of human-animal relational theory (HART) were investigated to determine how those constructs manifested in animal-assisted therapy in counseling (AAT-C) from the perspectives of 6 participants (2 counselors, females, ages 28 and 32, both non-Hispanic and White; 2 clients, male and female, ages 55 and 23, respectively, both non-Hispanic and White; and, 2 therapy animals, canines, Labrador retriever and spaniel mix, ages 4 and 5, respectively). Using constructivist-grounded theory, a research team analyzed qualitative data from observations, interviews, and field notes. From the iterative process of multiphasic coding and constant comparison, these findings emerged: (a) consistency between Chandler's (in press) constructs and participants' experiences of AAT-C, (b) more meaningful therapeutic impacts for clients from client-initiated human-animal relational processes (HARPs) than counselor-initiated HARPs, (c) development of rich definitions and descriptions of Chandler's constructs, and (d) descriptions of interactive experiences of AAT-C and client resistance in the context of HART. Clinicians and educators in the field of AAT can apply the processes, practices, and principles from this study in their work to enhance positive therapeutic impacts for clients. As Chandler's constructs were supported in this study, AAT authors and researchers can solve a glaring problem of inconsistent terminology in the AAT literature by using those constructs in future studies and publications as operationalized nomenclature for standardized AAT interventions.

ACKNOWLEDGEMENTS

As I reflect upon and acknowledge the forces that propelled me toward the completion of this project, I am tearful. Though I had no concept of what would be required of me to complete this study, I knew I was excited about and committed to the process. Along the journey, I discovered what was required: sacrifice, creativity, humility, and perseverance.

Sacrifice: To my family, Lisa and Ross, I acknowledge your sacrifices to help me succeed. I will honor those sacrifices, as well as my own, by continuing to love you and help others.

Creativity: To Dr. Chandler, thank you for allowing me space to be creative on this and other projects. To Mom and Dad, thank you for the creativity in my genes. As a result, I have become a master of creating spaces to work in planes, trains, automobiles, and other loud places.

Humility: For me, asking for help is the definition of humility. Thank you, Maria, Lindsay, Kyrstin, Gustavo, Casey, Elizabeth, Delini, Leslie, and Dee for accepting me in my most humble of states. I am deeply grateful. To Wally, Lola, and Tucker, I continue to be humbled by your inter-animal support.

Perseverance: To my grandmother, you have modeled perseverance every day of your life and encouraged me to do the same. Thankfully, I had a double-dose of perseverance. I am an Otting, and we do not like to waste daylight. Therefore, let me conclude with the soundtrack of my perseverant mind:

"Let it be me. Let it be me. If the world is night, shine my life like a light." – Emily Saliers

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HUMAN-ANIMAL RELATIONAL THEORY: A CONSTRUCTIVIST-GROUNDED THEORY INVESTIGATION

Introduction

Animal-assisted therapy (AAT) is a goal-oriented intervention deliberately integrated into healthcare or mental health treatment plans (Chandler, 2012), and a category of a broader scope of animal-assisted practice known as animal-assisted interventions (AAIs). AAT may buffer stress, promote prosocial behaviors and alleviate symptoms for a broad range of individuals throughout the lifespan (Banks & Banks, 2005; Breitenbach & Stumpf, 2014; Dell et al., 2011; Lanning & Krenek, 2013; Waite & Bourke, 2013). In particular, AAT and related AAIs delivered positive results for individuals with cognitive, developmental, emotional, psychotic, addictive, or substance use disorders and Alzheimer's and dementia (Chandler, 2012; Kamioka, et al., 2014; Maber-Aleksandrowicz, Avent, & Hassiotis, 2016; Marr et al., 2000; Nimer & Lundahl, 2007). Although AAIs occurred in many settings, scholars described them using inconsistent terminology. For example, AAT was described as pet-facilitated therapy, pet therapy, pet-assisted therapy, pet-oriented psychotherapy, animal-assisted activity, animal-assisted intervention, dog therapy, canine therapy, equine therapy, among many other variations of the term. To add further confusion, many authors did not delineate manuscript titles between AAT in counseling or psychotherapy and AAT in physical or occupational therapy, which are distinctly different practices.

A handler-animal team consists of a human trained to work with an animal and a healthy animal meeting certain skill and aptitude requirements (Pet Partners©, 2012). Handler teams provide AAIs in a variety of settings including crises and disasters, home health, hospitals, inpatient psychiatric and chemical dependency milieus, military, outpatient mental

health agencies, rehabilitation centers, penal institutions, residential treatment centers, grade schools, and universities. Here, I detail the differences between two AAIs: animal-assisted activity (AAA) and animal-assisted therapy (AAT).

Professional and volunteer handler-animal teams may facilitate AAA in the aforementioned settings. AAA is distinctive in that it does not require specific goals, documentation, or time constraints. Examples of AAA interventions include handler-animal teams visiting nursing homes, visiting with pediatric oncology patients in hospitals, or staffing a booth at a festival or park to promote AAA by providing education about the human-animal bond (Pet Partners©, 2012, p. 18).

The International Association of Human-Animal Interactions Organizations (IAHAIO; 2014) defined AAT as goal oriented, planned, and structured therapeutic interventions provided by handler-animal teams in health, education, or human service professions. More specifically, Chandler (2012) delineated AAT-C and psychotherapy as an adjunct to existing therapy facilitated by a credentialed mental health professional. Animal-assisted therapists illuminate psychodynamic, social, and human-animal processes throughout the therapeutic treatment plan (Banks & Banks, 2005; Chandler, 2012; Parish-Plass, 2013). To provide context for the current study, I describe the conceptual foundations and current professional literature of AAIs.

Foundations

Despite a long history of humans incorporating animals into educational and therapeutic settings, scholars and researchers have only recently begun to conceptualize the role of animals in helping professions. As a result of evidence-based AAT programs, more than 20 educational

programs exist worldwide to provide training and promote advancement of the human-animal bond in AAT and related fields (Chandler, 2012). Moreover, graduates of these programs continue propel the field of AAT forward with formalized competencies and professional considerations.

Ethics, Culture, and Theory

Chandler (2012) described AAT-C as an adjunct service to traditional counseling that required the counselors to obtain specialized training. According to the American Counseling Association Code of Ethics (ACA; 2014), counselors should take steps to ensure their competence and protect others from harm through education, training, and supervised experiences when developing and working in a specialty area (Standard C.2.b). Stewart, Chang, Parker, and Grubbs (2016) developed AAT-C should also consider other cultural factors such as race, ethnicity, religious diversity, socioeconomic class, and gender (ACA, 2014; Sheade & Chandler, 2012). The widespread use of AAT as a therapeutic modality could be an indicator of the universality of AAT across various counseling approaches and theoretical orientations.

Counselors have integrated AAT into directive and nondirective counseling approaches and across theoretical paradigms. Chandler, Portrie-Bethke, Barrio Minton, Fernando, and O'Callaghan (2010) demonstrated AAT integration across major counseling theories through case examples. Regardless of a clinician's theoretical orientation, the quality of the therapeutic relationship and the therapeutic alliance were described as key factors for promoting therapeutic change (Asay & Lambert, 2009, Mearns & Cooper, 2005). The flexibility of integrating AAT into a variety of counseling paradigms, as well as the outcome of enhanced

therapeutic alliance may offer clinicians additional opportunities to promote positive client outcomes with AAT. Next, I explore the ways that contemporary authors conceptualize AAT in counseling (AAT-C) and the enhancement of the therapeutic alliance.

HART

In professional AAT literature, authors have interchanged the terms therapeutic alliance and human-animal bond (Amerine & Hubbard, 2016; Bachi, Terkel, & Teichman, 2011, Balluerka, Muela, Amiano, & Caldenty, 2014; Parish-Plass, 2013). Fine (2010) described the human-animal bond as foundational to understanding AAT; however, scholars do not agree on the definition of the term (Bayne, 2002). Bustad (1980) related the term bond to emotions of love and friendship. He borrowed the term from literature describing relationships between parents and children (Bustad, 1980; Beck, 1999). Bustad (1980), Fine (2010), Walsh (2009) and others discussed the mental health and wellness benefits of AAT in the context of companion animals over the life course; however, forming a bond with the animal is not the focus of AAT (Chandler, 2015a). Moreover, the relationship between therapy animals and clients is not meant to substitute for a therapeutic alliance between counselors and clients (Chandler, in press; Gavriele-Gold, 2011; Risley-Curtiss, Holley, & Wolf, 2006).

Chandler (2015a) offered Human-Animal-Relational Theory (HART) as an alternative explanation for the process of change in AAT-C. Chandler (2015a) acknowledged the foundational importance of the term human-animal bond in AAT literature; however, she encouraged counselors to move away from describing AAT as a function of the human-animal bond because clients do not form a bond similar to familial relationships with therapy animals. According to Chandler's (in press) HART, client's experience a series of significant human-animal

relational moments (SHARMs) with counselors and therapy animals. She explained that SHARMs may vary in significance, meaning, and therapeutic impact for client growth. Counselors must recognize when SHARMs offers therapeutic value and facilitate this opportunity for processing SHARMs with clients (Chandler, 2015a).

Counselors who effectively practice AAT increase their prospects to enhance therapeutic relationships and opportunities through facilitating and recognizing SHARMs (Chandler, 2015a). Therapy animals are additional therapeutic agents and the human counselors incorporate SHARMs into counseling sessions in a directive or non-directive manner. Chandler (2012) conceptualized the relational experiences of AAT as multi-directional among client, clinician, and therapy animal. Chandler theorized that SHARMs occur between client and therapy animal with the counselor observing, or between counselor and therapy animal with the client observing. Moreover, Chandler (in press) described the value of therapy animals' presence in this way:

> The greatest assets a therapy animal brings to a counseling session that make it such a powerful therapeutic agent for change for human clients are: 1) its ability and desire to give and receive emotional and physical nurturance with humans; and, 2) its ability to perceive and desire to signal emotional experiences of humans, especially those emotional experiences of humans that are not outwardly observable. It is incredibly useful the way a therapy animal can 'sniff out' and signal non-visible emotional distress in humans, making the invisible available for consideration and processing in the session. (pp. unknown)

The signals Chandler (in press) referred to are known as calming signals (Rugaas, 2006). Calming signals are behaviors that animals demonstrate when they are trying to calm themselves or help others remain calm. Chandler (in press) proposed that calming signals may be indications of SHARMS. Counselors and clients may utilize SHARMs as therapeutic indicators for processing, insight, and change. Aside from experiencing therapeutic opportunities—such as

catharsis or verbal processing—through SHARMs, clients may also experience the therapeutic connection of touch through a SHARM. Though many types of SHARMs can occur, the impact of therapeutic touch is a unique impact of AAT-C that clients could not experience in traditional counseling relationships limited to only humans (Chandler, 2012; Kaminski, Pellino, & Wish, 2002). The presence of one or more SHARMs in combination with counselors' effective human-animal relational processing (HARP) generates the human-animal relational therapeutic impact (HARTI; Chandler, 2015a). During the HARP, counselors or clients may recognize the significance of relational moments. Counselors and clients evaluate the therapeutic impact of SHARMs based on how effectively the SHARM is processed through HARP with clients. Chandler (in press) clarified these phenomena with the formula SHARM + HARP = HARTI. Next, I explore connections between AAT-C, HART, neurobiological science.

Odendaal (2000) hypothesized that a need for attention – attentionis egens – is inherent in both humans and animals, and physiological responses occurred among both canine and human species during positive interactions. Odendaal (2000) measured the oxytocin levels of humans and dogs with the hypothesis that levels would increase during positive human-animal interactions. Oxytocin is a marker of neurochemicals that indicate social bonding—positive feelings—across species, and facilitates pleasure, soothing, and relaxation (Kis et al., 2014; Panksepp, 2005; Uvnäs-Moberg, 2010). Odendaal (2000) found a statistically significant result of increased oxytocin for both humans and dogs in the experimental group where people interacted with familiar dogs. Thus, Odendaal (2000) posited that the human-canine relationship is a bi-directional one in which social bonding can occur on both ends. In the next section, I describe the current evidence base for animal-assisted practice with adults.

Empirical Evidence

Barker, Best, Fredrickson, and Hunter (2000) described the following constraints in measuring the effectiveness of AAT: setting, uniqueness of handler teams, rater reliability, and external constraints. Handler teams consist of living beings with unique personalities who may be tired, sick, or unavailable to provide services. Further, handler teams may not be allowed to enter a setting due to external constraints such as individuals having allergies or phobias related to certain animals (Chandler, 2012; Fine, 2010). Despite methodological difficulties, researchers have attempted to measure the phenomenon of animal-assisted practice in animal-assisted education (AAE), AAA, and AAT. Over the last decade, researchers have conducted six meta-analyses of AAT literature (Amerine & Hubbard 2016; Bert et al., 2016; Borrego et al., 2014; Kamioka et al., 2014; Maujean, Pepping, & Kendall, 2015; Nimer & Lundahl, 2007).

Nimer and Lundahl (2007) posited that AAT with adults was consistently associated with moderately high effect sizes when the treatment was facilitated with dogs, but was not the case with all other animal groups. They also suggested that neither the setting (i.e., inpatient, outpatient, medical, mental health) nor the delivery (i.e., group or individual) influenced outcomes; however, the type of animal did influence outcomes. With canines in particular, adults with disabilities benefited more than their counterparts (Nimer & Lundahl, 2007). In the most rigorous studies, Nimer and Lundahl (2007) noted positive effect sizes to indicate that AAT was as effective as or superior to a comparison treatment. For example, Marr and colleagues (2000) found that adults in an AAT group interacted more with others and smiled or displayed pleasure more often than adults in an exercise group. Moreover, Haughie, Milne, and Elliot (1992) found that adults in an AAT group demonstrated more desirable social interactions that

those in a comparison group. Nimer and Lundahl (2007) asserted that a sufficient body of quantitative and qualitative research existed to support the effectiveness and continued use of AAT; however, an increased number of rigorous studies are still needed to solidify the evidence base of AAT.

Limitations of AAT research was consistent across many studies, and included methodological issues such as small sample sizes, nonrandom assignment in experimental studies, limited analysis of confounding variables, and lack of standardized treatment interventions (Amerine & Hubbard, 2016). Despite clear limitations and methodological challenges, Amerine and Hubbard (2016) determined that the phenomenon of human-animal relating occurred during AAT interventions that had calming and prosocial effects on humans.

Kamioka and colleagues (2014) summarized the evidence of the randomized controlled trials (RCTs) according to International Classification of Diseases-10 classifications (ICD-10; World Health Organization, 1992). The reviewers described methods used to analyze AAT research as “very poor” (p. 388). Nonetheless, positive effects were observed with regard to patient outcomes, especially with regard to mental health settings. Kamioka and colleagues (2014) noted improved mental health, prosocial behaviors, and quality of life for participants experiencing mental health problems. Furthermore, researchers suggested that in future studies, investigators should provide clear descriptions and doses of the types of AAT intervention(s), clarify and provide operationalized constructs in AAT, and design rigorous methodologies.

Maujean and colleagues (2015) supported the findings of Kamioka and associates (2014). In their systematic review of RCTs in AAT, they noted the probable effectiveness of AAT

for treating mental health and behavioral disorders. Likewise, Maujean and colleagues (2015) called for more consistent terminology, and standardized treatment protocols to increase the reliability and validity of AAT investigations and protect the welfare of participants. As noted by Borrego and colleagues (2014), AAT researchers have not yet overcome those challenges.

Methodological Challenges

Borrego and colleagues (2014) reviewed 228 peer-reviewed publications that included the search terms “animal” and “assisted” with 50% of those being empirical studies. They found that AAT was the most-researched intervention (n =167) among the studies reviewed (Borrego et al., 2014). Borrego and colleagues (2014) suggested that confusion over terminology and methodological challenges has contributed to the limited number of studies published about AAI, and subsequently AAT.

Some studies included multiple labels (e.g., AAA, AAI, AAE, AAT, HAI) within one study, and several studies described AAI without clarifying the intervention as AAA, AAE, or AAT (Borrego et al., 2014). Furthermore, they found that the most prolific authors of AAI chose to publish more text with theoretical content than investigate the effectiveness or processes of animal-assisted practices (Borrego et al., 2014). Consequently, those with theoretical knowledge may not be measuring the success of their conceptualizations, or are not publishing those results in peer-reviewed venues.

Benefits and risks

Bert and colleagues (2016) reviewed 36 articles related to AAIs. Because the researchers did not focus on a particular age group or setting for their review, they described extreme

heterogeneity in their findings. One exception to this heterogeneity was that canines were the most studied animals in the review. Similar to other reviews, authors described the benefits of AAT as decreased anxiety, amelioration of depressive symptoms, improved communication, and increased prosocial behaviors (Kamioka et al., 2014; Nimer & Lundahl, 2007).

With regard to risks presented by AAT, Bert and collaborators (2016) reported that information about animal welfare and animal handler training were lacking in most studies. They questioned if animal handlers or AAT providers were required to undergo specialized training or adhere to specific guidelines (Bert et al., 2016). These unanswered questions left room for risks among animal and human welfare of participants.

Benefits of AAI

Consistent with the meta-analyses, I experienced confusion in searching for benefits of AAT. Researchers consistently reported that AAI was correlated with reduced anxiety, increased social functioning, and enhanced therapeutic rapport (Barker & Dawson, 1998; Lanning & Krenek, 2013; Mosello, et al., 2011; Nepps, Stewart, & Bruckno , 2014; Villalta-Gil et al., 2009). Here, I explore the benefits of AAI with adults in outpatient settings and delineate the type of AAI (e.g., AAA, AAT) studied with regard to therapeutic alliance.

Lanning and Krenek (2013) examined the effects of equine-assisted activity (EAA) with adults in an outpatient setting. To clarify, this intervention was employed as AAA, not AAT, with the intention of improving quality of life for combat veterans. Veterans who participated in at least 12 EAA sessions reported increases in health domains, reductions in depressive symptoms, and expressed benefits from the presence of the horse (Lanning & Krennek, 2013).

Moreover, participants sustained gains over time. This study was limited in sample size and population; thus, may not be generalizable to all veterans or adults with a history of trauma (Lanning & Krennek, 2013).

Clinicians who worked with therapy animals were described as more approachable and viewed more favorably than mental health providers who were not part of a handler team (Schneider & Pilchack-Harley, 2006; Smith-Forbes, Najera, & Hawkins, 2014; Wesley, Minatrea, and Watson, 2009). Additionally, clients who participated in AAT consistently maintained better attendance motivation for treatment than clients who participated in non-AAT control groups (Calvo et al., 2016; Hoffman et al., 2009; Lange, Cox, Bernert, & Jenkins, 2007). Furthermore, when physiological effects of positive, social interaction with a therapy animal were measured, researchers found that calming, wellness-enhancing, and social-bonding hormones were stimulated. Contrarily, stress and anxiety invoking hormones decreased in the bodies of humans and animals during positive social interactions (Cole, Gawlinkski, Steers, & Kotlerman, 2007; Odendaal, 2000; Sheade & Chandler, 2012).

Altenstein, Krieger, and Holtforth (2013) described therapeutic alliance as the "...affective bond between patient and therapist, the client's motivation and ability to accomplish work collaboratively, the therapist's empathic responding to and involvement with the client, as well as the client agreement about the goals and tasks of therapy" (p.445). Moreover, Falkenström, Granström, and Holmqvist (2015) explained therapeutic alliance as an ongoing process, and a journey that is reflective of the interactive experiences of clients and therapists. Likewise, Falkenström and associates (2015) found therapeutic alliance to be a

causal method of change in psychotherapy, and noted the importance of counselors working toward therapeutic alliance with clients along the way, not just at the beginning.

The impact of therapeutic alliance on client outcomes ranges from moderate to robust (Altenstein et al., 2013; Asay & Lambert, 1999; Flückiger et al., 2012; Liebert & Dunne-Bryant, 2015). In a meta-analysis of 11 studies and 1,301 participants, Sharf, Primavera, and Deiner (2010) found a strong negative relationship between dropout and therapeutic alliance (d = .55). In other words, the stronger the alliance, the longer clients remained in treatment, and the weaker the therapeutic alliance, the more likely patients were to dropout of treatment. Based on these findings, counselors who practice AAT may be able to build stronger therapeutic alliances, gain client trust more quickly, and curb client dropout more consistently than counselors who practice traditional counseling.

Schneider and Pilchack-Harley (2006) utilized an experimental design to determine the influence of a therapy animal on therapeutic alliance. They recruited outpatient psychotherapists who worked with their own pets as therapy animals. Clinicians in the experimental group (EG) were rated significantly higher and were perceived as significantly more trustworthy than their counterparts in the control group (CG; Schneider & Pilchak-Harley, 2006). Participants reported greater depth of self-disclosure in the EG as compared to the CG. Researchers found that participants in the EG who were least inclined to disclose actually had higher levels of disclosure than those who anticipated deep disclosures. Schneider and Pilchack-Harley (2006) concluded that the presence of a therapy animal with a clinician had a robust impact on the therapeutic alliance between counselors and clients. In particular, participants

who indicated the most resistance to counseling demonstrated the most gains in therapeutic alliance with the counselor.

Lingiardi and colleagues (2011) recruited 60 client-therapist dyads and observed one recorded session per dyad. Researchers found that depth of elaboration was significantly correlated with therapeutic alliance. Specific therapist interventions related to depth of elaboration included: therapist identifying a recurrent theme in client experience or conduct; focusing on the therapy relationship as a point of discussion; client achieving new understanding or insight, and therapist pointing out client use of defensive maneuvers. Chandler's (2015a, 2015b, & in press) HARP may contribute to increased depth of client elaboration and subsequently, enhanced therapeutic alliance.

Statement of the Problem

Chandler (2015b) developed the Human-Animal Relational Theory (HART) in response to the absence of a therapeutic framework for AAT, and offered the constructs, RM, SHARM, HARP, and HARTI as the basic tenets of HART. Despite evidence supporting the effectiveness of AAT, there is a paucity of research on the process of counseling between counselor, therapy animal, and clients in AAT (Borrego et al., 2014; Kamioka et al., 2014; Nimer & Lundahl, 2007). Likewise, Alstein and colleagues (2013) noted the need for process-oriented studies that analyze minute interpersonal processes inherent in counseling. A study to explore the process of AAT is needed to help clinicians understand the therapeutic impact of AAT.

Purpose and Research Question

The purpose of this qualitative study was to explore Chandler's (2015a, 2015b, & in press) HART in AAT-C practice with counselors, clients, and therapy dogs in a university-sponsored, community counseling clinic. I hoped to understand HART from multiple perspectives: researcher-participant, counselor-participant, and client-participant through a constructivist-grounded theory (C-GT) investigation. The central research question was: How does HART manifest in counseling?

AAT scholars have called for better controlled and designed research studies to supplement the many case studies and anecdotal reports of AAT (Maber-Aleksandrowicz et al., 2016; Marr et al., 2000; O'Haire, 2013; Kruger & Serpell, 2010). As a result of vague and inconsistent terminology, the efficacy and evidence base of AAT practices and outcomes have not yet been sufficiently disseminated in the professional literature.

Methodology

Because HART is new, relatively unknown, and has never been investigated, I utilized a constructivist-grounded theory (C-GT) approach (see Charmaz, 2014) to seek a holistic understanding of the complex phenomena of Chandler's (2015a, 2015b, & in press) HART in AAT-C. Treatment teams who provided AAT services were registered as handler teams with Pet Partners© (2012), licensed in the state of Texas to provide mental health services, and had taken at least one graduate course in AAT. Counselors practiced with their own pet dogs; thus, were very familiar with their animals' personalities. The client-participants engaged in weekly counseling sessions with the therapy teams.

Procedure

I utilized snowball sampling to recruit therapy teams (Hesse-Biber & Leavey, 2011). After consenting to participate in the study, counselors provided information about the study to their adult clients. With clients' consent, I met with client-participants, provided a copy of the written informed consent, described verbally the expectations of participation in the study, and answered any questions about their participation in the study. In addition to meeting IRB approval, primary ethical concerns for this study centered around counselor qualifications, anonymity of participants, animal welfare, and human welfare. To ensure counselor competence, counselor-participants were licensed to practice counseling, obtained specialized training in AAT, and were obtaining advanced clinical training and supervision in a doctoral counseling program (ACA, 2014; Chandler, 2012; Stewart et al., 2016).

Consistent with AAT counselor training, counselors provided care for therapy animals including access to food, water, rest, and elimination areas during therapeutic work (Pet Partners©, 2012; King, Waters, & Mungre, 2011; Kizziar & Dodds, 2014). Prior to participation in the study, therapy animals were trained with basic obedience skills, socialized to remain trustworthy under stress-related conditions, and evaluated by Pet Partners© (2012; Glenk, Stetina, Kepplinger, & Baran, 2011). Counselors attended to the welfare of clients by pre-screening for animal phobias and allergies, adhering to the ACA (2014) code of ethics, and meeting competencies of AAT-C established by Stewart and colleagues (2016). AAT-C sessions were video-recorded and stored on a closed circuit, secure intranet server to further ensure client confidentiality. Finally, I protected the anonymity of all participants—counselors, clients,

and therapy animals—by describing them as Therapy Team A and Therapy Team B in all references to this study.

Population, Setting, Participants, and Research Team

Following IRB approval, I conducted this study at a university counseling training clinic, run by a counseling program in the southwestern United States, and accredited by the Council for Accreditation of Counseling and Related Programs. I recruited counselors (*n* = 2) with therapy animals (*n* = 2) and their adult clients (*n* = 2) who had experienced the phenomenon of AAT-C at the clinic as participants (*N* = 6 participants).

The research team was comprised of one doctoral level who is a licensed professional counselor (LPC), two counselors-in-training, and one counselor educator. All members qualified as a competent animal-assisted practitioners based on Stewart and colleagues (2016) competencies for AAT-C, and had deep commitments to AAT practice and the advancement of the field of AAT in counseling.

Data Collection

Each counselor participant submitted a professional disclosure statement, six video-taped AAT-C counseling sessions (*n* = 12 sessions), and a client demographic questionnaire. In Table 1, I offer rich descriptions of each participant:

Table 1

Descriptions of Study Participants

	Team A	Team B
Client (CL)	• 22 year-old European American female • Self-described as gender-fluid and bisexual • Master's counseling student • Presenting concerns: anxiety, emotional and relational awareness • Long history of talk therapy	• 55 year-old European American male • Self-described as cisgender and heterosexual • Business owner • Presenting concerns: anger, relational awareness • Long history of talk therapy
Counselor (CO)	• 28 year-old European American female • LPC-intern, LMFT-Associate • Relational Cultural Theory • Practicing counseling 2 years • Training and supervision in AAT • 1 year of AAT supervision and practice	• 32 year-old European American female • LPC-intern • Adlerian Theory • Practicing counseling 6 years • Training and supervision in AAT • 2 years of AAT supervision and practice
Therapy animal (TA)	• 4 year-old male Labrador Retriever • Approximately 80 pounds	• 5 year-old female Spaniel mix • Approximately 20 pounds

I conducted one live observation per therapy team and wrote field notes during the observations with attention to relational moments (RMs) among counselor, client, and therapy animal. Following sessions, I met with counselor-participants to hear their perspectives of the AAT-C sessions. In alignment with Jayne (2013) and Oliver et al. (2010), I conducted two 60-120 minute, semi-structured interviews with each human participant observed in AAT sessions. I interviewed each participant two times (*n*=8 interviews). To ensure credibility and trustworthiness in this study, I collected data from multiple sources: AAT-C sessions (N = 12) and participant interviews (N = 8). The AAT-C sessions took place at the university counseling training clinic. The clinic permitted counselors to work with only canines in AAT sessions; therefore, therapy teams consisted of counselors and canines. Therapy teams entered the study during the final phase of counseling with their clients after working together for one to two years. Counselors had integrated AAT-C with clients several months prior to the beginning

the study. In Figure 1, I illustrate data collection procedures for this study.

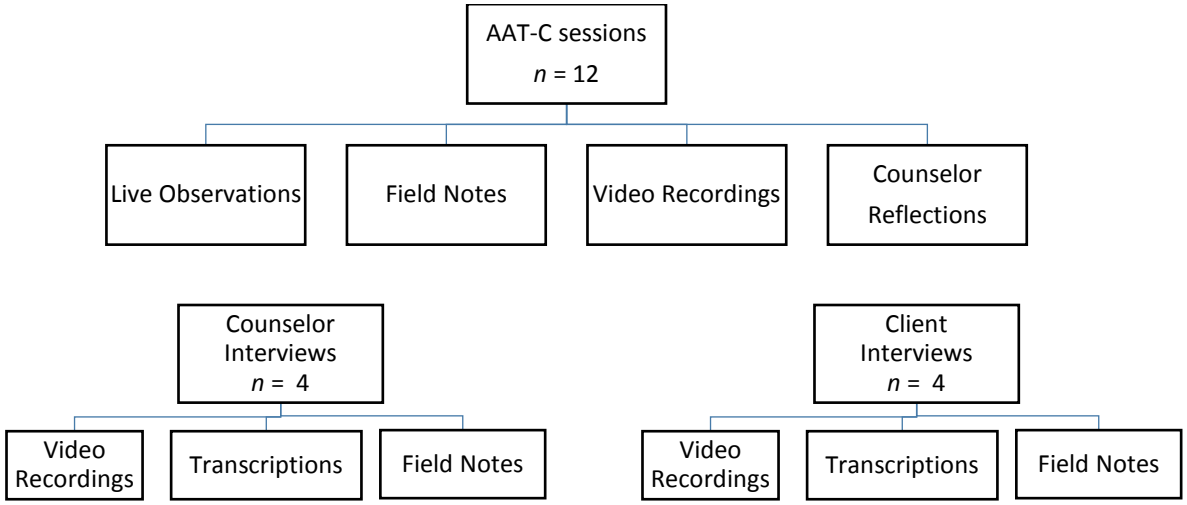

Figure 1. Data collection procedures.

I conducted participant interviews at the university clinic in the same counseling room where participants had experienced AAT-C. Interviews were semi-structured, audio/video-recorded and transcribed verbatim for data analysis. In the first set of interviews, I asked open-ended questions to ascertain participants' perspectives of their AAT-C experiences as related to HART constructs. For the second interviews, I utilized the recorded AAT-C sessions to ask participants about their experiences of specific SHARMs and HARPs from the open coding of AAT-C sessions. Notably, follow-up questions for clients differed from follow-up questions for counselors. Likely, this difference was because the counselors and clients differed in their roles and expectations of the counseling experiences (Bedi & Duff, 2014; Kivlighan et al., 2014).

Data Analysis

In Table 2, I summarized the multiphasic comparative data analysis (Charmaz, 2014; Jayne, 2013).

Table 2

Procedures in Qualitative Data Analysis

STEPS	Procedures
Training, orientation, and identity exploration of coding team	The primary researcher (PR) educated the coding team about the study and methods for data collection and analysis. The PR oriented the coding team to the central research question and facilitated a discussion of potential biases, values, and experiences that may have influenced data analysis (Charmaz, 2014).
Open coding of AAT sessions: Phase I	The PR independently analyzed video-recorded AAT-C sessions of both therapeutic triads. The PR assigned a therapeutic triad to each coding team member. The PR and coding team analyzed each AAT-C session incident-by incident based on Chandler's model of relational experiences in AAT-C. Team members individually watched each AAT-C session in its entirety to develop global impressions of sessions.
Comparison	After coding half of the assigned sessions, the coding team met to discuss coding process and compare codes. The team compared codes to observational field notes and initial analytic memos. The PR met with the faculty expert to present the latest findings and enhance trustworthiness.
Open coding of AAT sessions: Phase II	The coding team independently analyzed the last half of the video-recorded AAT-C sessions utilizing the same procedures as in Phase I.
Comparison	The research team met using the same procedures as Phase I and the PR met again with the faculty expert to ensure credibility and trustworthiness of the coding process.
Open coding of participant interviews:	The coding team independently analyzed the video-recorded participant interviews with the corresponding transcripts. Counselor interviews were coded in their entirety line-by-line.
Comparison	The research team met using the same procedures as Phases I and II of open coding for AAT-C sessions, and the PR consulted with the faculty expert to present latest findings and enhance credibility.
Focused Coding	The PR compared codes and categories from the AAT sessions to codes and categories from the participant interviews. The PR identified the most frequent and significant categories to analyze larger segments of data and to compare the participants' experiences, actions, and interpretations (Charmaz, 2014).
Theoretical Coding	The PR compared focused codes and utilize analytical memos to identify relationships between substantive categories.

In accordance with recommendations from Creswell (2014), I met with the faculty expert after each phase of open, focused, and theoretical coding to evaluate the dependability of analyses. The faculty expert provided feedback regarding the coding process and findings. Following the final peer review, I presented the preliminary findings of data analysis to the participating counselors for a member check in the form a focus group. Consistent with qualitative research methods, I chose this tactic to confirm and elaborate data categories (Charmaz, 2014). During the focus group, counselor-participants evaluated the accuracy and

trustworthiness of the preliminary findings, particularly with regard to the relatedness of core categories. Finally, I integrated the counselors' feedback into the resulting categories of HART.

Trustworthiness

In accordance with Lincoln and Guba's (1991) categories of trustworthiness, I attended to credibility, transferability, dependability, and confirmability in this study. To promote credibility, I utilized iterative questioning during participant interviews, conducted an expert peer-review following each phase of analysis, and completed a member check (Creswell, 2014; Shelton, 2004). Additionally, I had prolonged exposure with all participants in each therapeutic triad (Oliver et al., 2010; Shelton, 2004). Participant differences such as age, gender, presenting problem, theoretical orientation, and canine size, breed, and personality contributed to the transferability of the results.

To support dependability of the results, I utilized reflexivity through written memos as well as overlapping methods of data collection to capture participants' intersubjective experiences (Charmaz, 2014; Hesse-Biber & Leavey, 2011; Lincoln & Guba, 2011). Likewise, I utilized data triangulation, a theoretical trail of analysis, and a secondary literature review to support the confirmability of the results (Charmaz, 2014; Cresswell, 2014; Shelton, 2004). The theoretical trail of analysis flowed from: (a) open and focused coding of AAT-sessions, (b) open and focused coding of participant interviews, (c) comparisons of the most frequent codes with raw data, (c) emergent themes compared to HART, and, (d) completion of a secondary literature review.

Results

The purpose of this study was to explore how Chandler's (2015a, 2015b, & in press) HART manifested in counseling. Prior to HART, AAT scholars cited human-animal bond and attachment theory as primary explanations for the efficacy of AAT (Ainsworth, 1989; Bowlby, 1977; Fine, 2010; Parish-Plass, 2013). Through open, focused, and theoretical coding of AAT-C sessions and participant interviews, I developed a grounded theory of how counselors and clients experienced AAT-C, as well as how participants experienced the phenomenon of HART. In accordance with C-GT (Charmaz, 2014), the research team acknowledged prior knowledge of HART (Chandler, 2015a, 2015b, & in press). Also in accordance with C-GT (Charmaz, 2014), the HART constructs were not used as a form of axial coding (Charmaz, 2014). Still, the themes that emerged from data analysis were consistent with Chandler's (in press) definitions of RMs, SHARMs, HARPs, and HARTI. I identified the following themes: (a) RMs and SHARMs; (b) HARPs; (c) HARTI; (d) interactive experiences of HART; and, (e) resistance.

RMs and SHARMs

Counselors and clients initiated relational experiences with one another through verbal and nonverbal communication as therapy animals observed. Clients and therapy animals initiated relational experiences with one another through verbal/vocal and nonverbal/nonvocal language as the counselor observed. Counselors and therapy animals initiated relational experiences between one another through verbal and nonverbal/nonvocal communication as clients observed. Relational moments also occurred involving all participants in the therapeutic triad (client, counselor, and therapy animal). For example, therapy animals communicated

distress via calming signals such as panting, and counselors and clients simultaneously responded by comforting therapy animals through petting or nurturing verbalizations. Conversely, therapy animals also disengaged from clients and counselors by moving across the room and demonstrating calming signals such as sniffing or lip-licking. Chandler (in press) described these moments as integrated, based on her triangular model (Chandler, 2012). In other words, the integration of all sides of the triangle. In practice, these moments encompassed the therapeutic triad, appeared complex, and were difficult to decipher (see Figure 2).

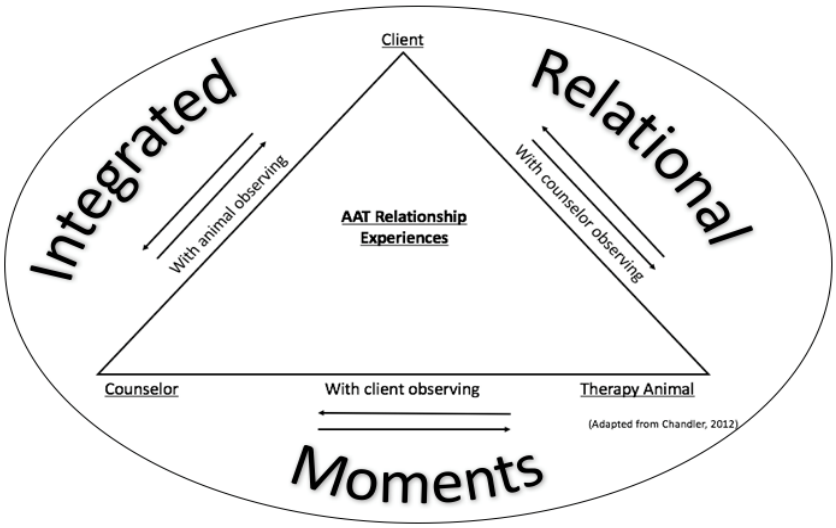

Figure 2. Diagram of integrated RMs.

Participants described RMs as tangible, intentional, and mirroring their internal emotional experiences. One counselor described the intentionality of RMs this way:

> I'm a big believer [that] it is always more beneficial to assume that everything the dog did was intentional and about what's going on in the room, than to assume that [TA] is just dogging.

The research team observed that RMs were numerous, and ranged from simple to integrated. Examples of RMs included therapy animal behavior (TABx) such as calming signals,

attending behaviors such as “greeting” and “checking-in” and play behaviors such as tug-of-war, fetch, and bowing. Participants described, and the research team observed, that the most common responses to RMs were ignoring, not recognizing, or dismissing. Less frequent, though described as most impactful, were instances when the client or counselor ascribed meaning to an RM. As a result, the RM was considered a significant human-animal relational moment (SHARM).

SHARMs occurred within the context of RMs, were facilitated by counselor or client, and were initiated by counselor, client, or therapy animal. Likewise, they occurred between client and therapy animal, counselor and therapy animal, or were integrated to include the relational dynamics of client, counselor, and therapy animal. Counselors or clients ascribed significance to SHARMs; thus, SHARMs were assigned greater value than RMs in the therapeutic process. Participants described their experiences of SHARMs primarily as reflecting their internal experiences or reflecting the immediate dynamics of the counseling environment.

Although client-participants did not specify the term SHARM during interviews, a sub-category of their experiences in AAT-C emerged regarding the impact of their relational experiences with therapy animals. Client participants described those moments most often as comforting, increasing awareness, and transformative. Counselor participants most frequently described experiences of SHARMs as models for interpersonal relationships, immediate therapeutic opportunities, and missed therapeutic opportunities. In an example of modeling relationships, a counselor stated:

> I used modeling as I was saying things to bring into [CL] awareness…Trying to actively confront [CL] without humiliating [CL]. I was modeling for [CL] how you have a relationship with people without smashing them, and having [TA] there to do that, [CL] perceived me as less threatening.

Moreover, counselors noted the frequency and complexity of RMs and SHARMs, and acknowledged the difficulty in recognizing all of them all of the time. The counselor-participants confirmed Chandler's (2012) assertion that AAT-C is a complex form of therapy.

Researchers observed the SHARMs displayed in Table 3 most often during HART. The column labeled Direction in Table 2 is related to the relational dynamics displayed Figure 2.

Participants designated SHARMs as immediate, informative, intimate, and inherent in the HART process. Moreover, participants described SHARMs as consistent, concrete, bidirectional and integrated or complex. One client participant described the immediacy of a therapy animal to client SHARM in this way:

> I went off on a little mini-tangent, and [TA] was like, 'Hey, we're coming back to what we were actually talking about.' Then as soon as I was like, 'Oh, [TA] wants my attention.' I'm pretty sure the next thing I did was kind of backtrack and go back to what I was doing. It pulled me back to where I was supposed to be talking rather than having my little bloop.

Likewise, a counselor participant explained how client to therapy animal SHARMs inform the counseling process:

> When I see [CL]… dismissing [TA], then that gives me some information. [TA] is not an anomaly. [If] you're going to dismiss her, you're going to dismiss me….When I see [CL] being really gentle with [TA], or…just dismissing like, 'Oh, you just want to be petted. You need so much attention.' Those kinds of things tell me that maybe [CL] is not ready. [CL] is not ready to have a real relational depth here. That's neither good nor bad. It's just, that's where [CL is]. I need to accept where [CL is]..

In another example, a client participant described the intimacy of SHARMs: "To me, it was more like all right, we're having a little private moment because [CO]'s not picking up on it. It's okay. [CO] doesn't have to. It was kind of sweet between me and [TA]."

Clients described SHARMs as experiences that offered empathy, comfort, awareness, and provided opportunities for processing, therapeutic distraction, resistance, and long-term impact. Here, a client who presented to counseling for trouble relating to others described the long-term impact of SHARMs with the therapy animal, "I got to learn a little bit more about myself...When I see the dog, I know I love the dog. I like the dog. I enjoy how sweet the dog is and well behaved it was."

Counselors described SHARMs as experiences that they may have ignored, as guideposts for therapeutic intentionality, and as opportunities to assess the relational dynamics among the therapeutic triad. Here, a counselor participant described the absence of a SHARM where a therapy animal had previously and consistently manifested a SHARM. The counselor assessed client progress and chose the next intervention more intentionality:

> [TA] is so quick to pant with this CL. [TA] not choosing to pant while we were recounting something that [was a difficult topic for CL]. I…was like, 'This should make [CL] anxious [based on previous sessions] but [TA] is not telling me that you're anxious, so I'm going to notice that [CL] is not anxious because of the information [TA] has given me, and comment.'

SHARMs were experienced by counselors and clients as grounding, connecting, and therapeutic or cathartic, as well as opportunities for observing and acknowledging relational dynamics within the counseling process. One counselor acknowledged the grounding nature of SHARMs in HART: "…the effect that they have on me is the grounding, re-prioritizing. Paying greater attention to timing and the dynamics in the room." Moreover, a client described experiences of SHARMs in relationship with a therapy animal in this way:

> There were times when I was just like, 'I want to disappear.' Not like die or anything dramatic like that, but just not be in the place or the situation I'm in. For the time being, you have to deal with whatever situations you are in and whatever place you are in. I saw that reflected in [TA], because I'm like yeah, [to TA when placing head in CL lap]

> ‘You just put your head down and bear it. You've just got to do it. You do what you've got to do.’ It was a grounding thing.…He kept me here. He kept me more with whatever feeling I had, because that's something that I myself was trying to work on, was thinking with feelings. By supporting and being like, ‘Let me put you in a mirror in dog form’.

This client made meaning from the SHARM with the therapy animal. That process of personal exploration in AAT-C was described by Chandler (2015a, 2015b) as the Human-Animal-Relational Process (HARP). In Figure 3, I display participants’ experiences of SHARMs.

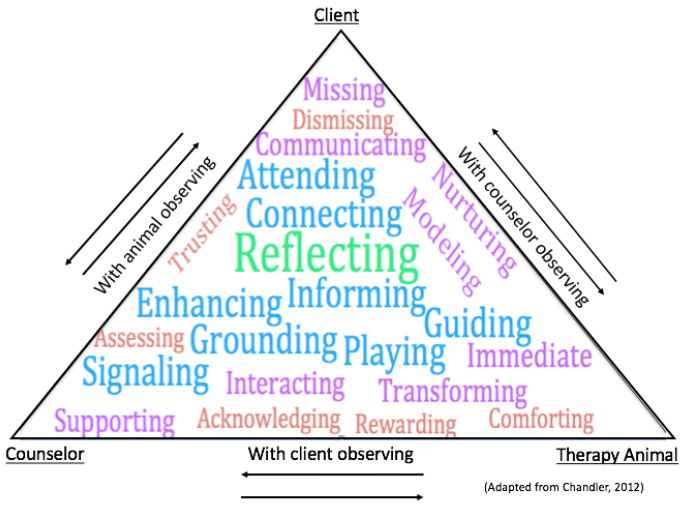

Figure 3. Participants’ experiences of SHARMs.

I created Figure 3 by comparing participants most frequently used words in focused codes related to SHARMs. Participants described their experiences of SHARMs primarily as reflecting their internal experiences or reflecting the immediate dynamics of the counseling environment. Participants described secondary SHARM experiences as connecting, informing, enhancing, connecting, attending, grounding, guiding, and signaling. Less frequently, though still prevalent in SHARM descriptors were the terms immediate, transforming, and supporting as well as assessing, trusting, and dismissing (see Figure 3). As evidenced by the myriad of SHARM descriptors, the impact of SHARMs on the process of AAT-C was varied and advantageous.

HARP

In this study, HARPS occurred within the relational context of HART, were preceded by RMs and SHARMs, and were initiated by counselors and clients. Remarkably, the timing of HARPs did not always coincide with the timing of a SHARM. SHARMs occurred in a sequence over the duration of one or multiple sessions, or as isolated incidents. HARPs occurred immediately following SHARMs, in latter sessions, and when participants were outside of AAT-C sessions. Counselor- and client-participants HARPed internally (I-HARP) as individuals, and externally (E-HARP) together.

In Figure 4, I display HARP dynamics within HART.

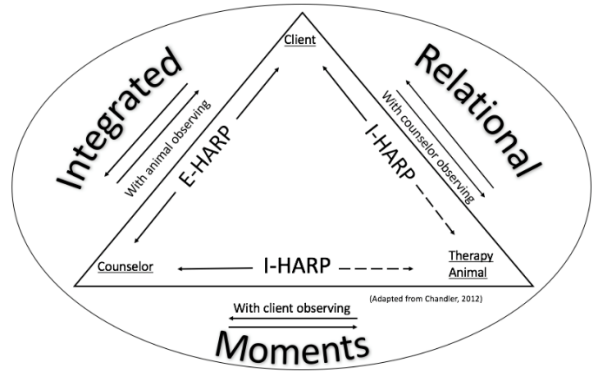

Figure 4. HARP Dynamics in HART. Diagram of HARP contextualized within RMs. E-HARPs occurred between counselors and clients. I-HARPs occurred internally for counselors and clients.

Counselor- and client-participants described some recognition or communication from therapy animal during in-session I-HARPs. Counselor participants reported experiencing I-HARPs more frequently than E-HARPs. Likewise, client-participants offered examples of I-HARPs. Some occurred inside the HART session, and other I-HARPs occurred outside the AAT-C sessions. As one client stated, 'I thought about it [driving] in the parking lot. I realized I didn't have anything

to give [TA]. I mean, I would like to be closer to [TA].' Counselor- and client-participants also acknowledged experiencing E-HARPs during AAT-C. Here, a client initiated an E-HARP in response to the therapy animal cuddling in the client's lap and looking up at the client:

CL: You ever seen [TA] do this before?
CO: Actually, no…this is bringing out a different side of you…a nurturing side…a playful side.
CL: [Laughing] I gotta take time to get to know somebody before I show all that.

Client-participants described and researchers observed the outcomes of client initiated E-HARPs as having a greater therapeutic impact, decreasing client resistance, deepening client insight and awareness, increased vulnerability, and transferred skills from the counseling environment to apply outside of the counseling environment.

Counselors described and researchers observed E-HARPs as intentional with specific purpose and appropriate timing, collaborative with the client, informative, and less frequent in occurrence than SHARMs. In contrast, I-HARPs were characterized as being based on prior knowledge of the client or therapy animal, not necessarily being shared with the client, occurring in or out of session, and being experienced with the therapy animal. Here, a counselor described the informative nature of I-HARPing: "A lot of internal HARPing happens for me with [TA]. Wondering if I should do this out loud or just use this information to understand the client. Trusting [TA] is important for me." Counselors reported and researchers observed examples of E-HARPs including reflecting TABx and human-animal interactions, open ended questions, challenging or confronting, illuminating interpersonal dynamics within HART, and the use of imagery or metaphor. For instance, below is an excerpt from an observed

session in which the counselor reflects on the TABx as well as the client content in an E-HARP. The client appeared to respond with deeper vulnerability increased insight.

CO: I'm just seeing you checking on [TA].
CL: [to TA] You're supposed to be seated over here so I can reach over and rub you when I want to. So I could just reach over and give you some lovin'.
CO: I imagine how you're feeling in general is like people should just be around and want that [attention].
CL: I'm just tired of being judged and having to defend my moods, my feelings. I have a right to pet you or not pet you and tell you to get the hell away from me.
CO: What does that mean for you with [your family]?

Counselors also acknowledged I-HARPing to assess their own intentionality and awareness during HART: "…[TA] was attending to me when I was having that internal conflict of, 'Yeah, as a clinician what does this mean for me?'" Though some outcomes of AAT-C may be measured with standardized assessments, other outcomes may not be so easily observed. I found examples of these challenges in the next theme, human-animal relational therapeutic impact (HARTI).

HARTI

HARTI is the outcome measure of AAT-C. HARTI is dependent upon the recognition of SHARMs and the effectiveness of HARPs (Chandler, 2015a, 2015b, & in press). As evidenced by confirmation from participants and observation of researchers in this study, these phenomena appeared to occur in HART as Chandler (2015a, 2015b, & in press) described. I created Figure 4 to clarify Chandler's (in press) formula for HARTI:

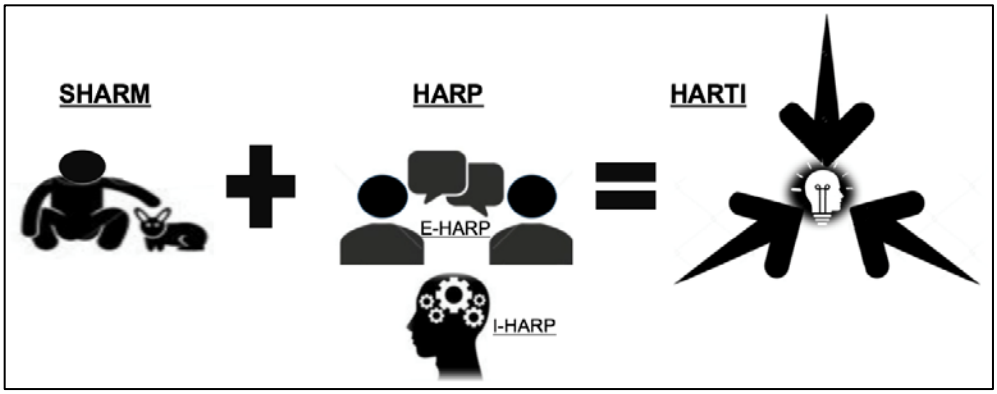

Figure 5. Visual representation of Chandler's (in press) HARTI formula.

Clients and counselors experienced differences in HARTI; however, other HARTI were described by both counselors and clients as outcomes of HART. In Table 3, I categorized these differences as client described HARTI, counselor described HARTI, and client/counselor described HARTI. In Table 4, I offer side-by-side comparisons of HARTIs.

Table 3

HARTI Descriptions

Client HARTI	**Counselor HARTI**	**Client/Counselor HARTI**
• Increased feelings-recognition • Ownership of change process • Increased insight • Decreased emotional intensity • Decreased anxiety	• CL engagement in counseling process • More intentionality • Increased congruence and vulnerability • Greater when CL initiated HARPs • Increased empathy	• Delayed • Long-term • Enhanced therapeutic alliance • Increased relational awareness • Grounding • Increased vulnerability

Table 4

HARTI Comparisons

HARTI	Client Perspective	Counselor Perspective
Delayed or long-term	"Sometimes now I relate it to my cat at home, and just be like, 'Yeah I'm totaling having this mood and you're totally doing this thing.' It just reminds me that sometimes you should self-check to see how stuff's going. It has helped me improve the habit of self-checking my emotions."	"…[TA] is my co-therapist. [TA] will talk to me and it's less processing with [CL]. [TA] lets me know things that I may have not noticed…she helps me become a better therapist."
Enhanced therapeutic alliance	"Initially, I felt more withdrawn because of how hyperactive [TA] was, but as it went on I felt like it [AAT-C] did enhance our understanding. Like, [CO]'s understanding of me. I felt like it helped a lot, especially because [CO] has a connection with [TA] as well. [CO] knows [TA]'s behavior better than I do. [CO] understands the dog and [CO] also understands me, and can therefore connect the dots."	"I am more likely to like someone who pets my dog. I can see a demonstration of this kind and caring person they could be. Dogs invite that. Witnessing that happening can soften you up for a client."
Increased relational awareness	"…very seldom the dog comes up and gives me a lot of attention…She's always real close to [CO] and so when [TA] did, I encouraged her to keep doing it. I like being liked. It was nice that she wanted to come over and talk to me… Yeah, it felt good"	"One thing for sure is it means a new level of awareness… it's not always just for me or [CL]. [TA] is another being and needs to be treated as such. Sometimes it feels like my brain is leaking out of my ear… trying to be aware of so much."
Grounding	"It was a grounding thing, yes. [TA] kept me here. [TA] kept me more with whatever feeling I had, because that's something that I myself was trying to work on, was…feeling."	"…the effect that they [SHARMS and HARPs] have on me is the grounding, re-prioritizing. I'm paying greater attention to timing and the dynamics in the room"
Vulnerability	"There would be a day when I'm particularly vulnerable that I would pet her, I like petting her some, more than other, days"	"[CL] has become more vulnerable with me. There have been times when [CL] had come in previously and all you could feel is the anger. The heat of the anger. Since working with [TA] there's been a lot more of the true sadness…the hurt and the disappointment of how relationships with people who are the most important people in [CL]'s life that turned out. I know he has said it and I have seen it in practice with him that he's taking more personal responsibility for that. There's no blaming others, which is the easier thing. I could attribute some of that to that SHARM because again it's non-threatening."

Interactive Experiences

Participants described experiencing relational interactions along the therapeutic triad. In other words, with themselves, the therapy animal, and the other human participant, either counselor or client. In Tables 5 and 6, I categorize those interactive experiences.

Table 5

Categorizations of Clients' Interactive Experiences during AAT-C

Self	Therapy Animal	Counselor
• Emotional awareness • Resistance • Vulnerability • Increased insight • Emotion identification and processing	• Responses to CL: reassurance, increasing awareness, transformative • Play • Patience • Connection and comfort • Reflection • Engagement/Disengagement • Trusting Relationship	• Responses to CL: questioning, confronting, processing • Intentional • Prompting • Annoying • Sharing in TA relationship

Table 6

Categorizations of Counselor Interactive Experiences during AAT-C

Self	Therapy Animal	Client
• Enhanced therapeutic alliance, counseling skills, here-and-now awareness, empathy toward CL • Training • Supervision	• Communicative • Immediate • Intentional • Trusting relationship • Partner/Co-therapist • Transition time • Limit-setting	• Relationship w/ TA • Resistance • Collaboration • Continuum of congruence • Change (see HARTI)

Though not a separate category, the construct of resistance was a salient finding among all HART constructs. Despite client-participants' preferences to work with therapy animals in counseling, they consistently described experiencing resistance over the course of the triadic AAT-C relationship. As described by one client:

> Sometimes I feel like I personally, I would be trying to like ... 'I'm getting pissed off with all these feels'. I would be resisting, but it wouldn't be them [CO and TA]. I feel like that

> was something I would do, and then I would reflect upon like, 'Oh, I'm doing this thing right now.'

Moreover, counselors acknowledged client resistance and found creative ways to work through those experiences. For example:

> Resistance, the way I think of it is that…I'm basically pulling my client to a place they don't want to go or aren't ready to go. The bigger picture is, 'I'm off,' is really what resistance is…I need to get with their goals. I need to get with their train of thought. That's what that means to me. That's a flag when I feel that resistance from a client towards myself or towards [TA], some idea I brought up or some education I want to share or anything like that. It's because I'm doing something that they were not ready to do, going some place they weren't ready to go…An example is...[CL] was not ready to talk about what [TA] was doing. [CL] doesn't believe in what [TA]'s doing, but [CL] is ready to talk about what [TA] brought to our attention. That something's underneath it…but that's ultimately not therapeutic to try to make [CL] believe or say [CL] believes something that [CL] doesn't want to say [CL] believes in.

Although not as prevalent as other themes, all participants described and explored the construct of resistance as a part of their experiences in AAT-C. Therefore, I also considered resistance as a key tenet in HART.

Discussion

The major findings in the study were: (a) Chandler's (in press) constructs of RMs, SHARMs, HARPs, and HARTI were consistent with participants' experiences of AAT-C; (b) client-initiated HARPs produced more meaningful HARTI for clients than counselor-initiated HARPs; (c) the research team produced rich definitions and descriptions of SHARMs, HARPs, HARTI, and resistance; (d) participants identified interactive experiences of AAT-C; and, (e) researchers identified the construct of resistance in the context of HART. For clarity, I added images to Chandler's (in press) formula (see Figure 5). Moreover, this study is significant because I offered rich descriptions of Chandler's (2015a, 2015b, & in press) key tenets of HART for further study:

RMs, SHARMs, HARPs, and HARTI. With these definitions, characteristics, and examples, future researchers have a foundation on which to build more specific and better controlled research studies. Future researchers can explore the impact of these constructs on therapeutic processes, client outcomes, and best practices in AAT.

Investigating the practice of AAT will provide an understanding of processes in AAT; thus, providing valuable pedagogical information to counselor educators and supervisors who facilitate AAT instruction. Additionally, exploring client perspectives provided a deeper understanding of the benefits of AAT in counseling. Counselors gained information about the complex practice of AAT and client perceptions of AAT as treatment intervention, subsequently improving services to clients. Additionally, future researchers could utilize this study to improve qualitative and quantitative research in AAT. AAT educators, practitioners, and researchers could clarify the process of HART through the findings of this study.

Implications for Counseling

Practitioners around the world employ AAIs (see Chandler, in press). Developing a standardized nomenclature ensures client welfare, efficacy of intervention, and practitioner competence. With this study, we have clarified the constructs of HART. HART was consistent with phenomena experienced by participants over time by observation as well as by their own reports in participant interviews. Although the counselors' AAT training occurred prior to the development of HART, researchers observed that counselors integrated HART constructs across different guiding theories of counseling. Participants reported that SHARMs and HARPs contributed to enhanced therapeutic alliance, which is a robust predictor of client outcome and

treatment adherence according to many authors (Bedi & Duff, 2014; Falkenström et al., 2013; Manthei, 2007). Also—consistent with professional literature—clients reported looking forward to AAT-C sessions more than traditional counseling because the animal was present (Calvo et al., 2016; Kamioka et al., 2014; Wolfe, Kay-Lambkin, Bowman, & Childs, 2013).

Clinically, counselors, supervisors, and counselor educators could benefit from rich descriptions of RMs, SHARMs, HARPs, and HARTIs. Supervisors and educators can train AA practitioners to use the language of HART as they begin to learn the skills of AAT, and discover new interventions as they gain competence. Moreover, we identified that both SHARMs and HARPs were utilized as interventions in HART. This may be helpful for novice AA practitioners to conceptualize the practices, processes, and principles of AAT. As one counselor described:

> Doing AAT is such a clear invitation to engage with those things that are usually so [difficult], especially with beginning counselors. It's sometimes really hard to be like, "When you say that, my reaction is [this]," like bringing yourself into the room, bringing that relationship into the room.

For example, counselors could initiate SHARMs as interventions by inviting clients to relate with the animal through play or petting. Likewise, counselors could model HARPs, and subsequently clients would initiate HARPs that glean more meaningful HARTI. Clients develop their self-initiated HARP interventions based on their internal experiences; thus, and promoting client agency and indicating the likelihood of positive client outcomes in counseling and psychotherapy (Oddli & Rønnestad, 2012; Coleman & Neimeyer, 2015; Scholl, Ray, & Brady-Moon, 2014). Moreover, the presence of the therapy animal brought additional opportunities for therapeutic feedback, similar to that of group work. RMs and SHARMs offer opportunities for interpersonal feedback. For example, a therapy animal moving away from a client and the

client introspecting about the underlying reason for the disengagement. The feedback, though perceived as less-threatening from the animal, is perceived as feedback nevertheless.

In practical terms, through this study we have affirmed that Chandler's (2015a, 2015b, & in press) HART provided a common nomenclature for clinicians. This nomenclature will be helpful for training, supervision, and research of AAT-C. Explicitly, HART offers constructs for teaching the processes for positive outcomes in AAT-C, and operationalizes constructs for further empirical research in AAT-C and about HART.

Limitations and Strengths

The limitations of this study included sample size and treatment integrity. As such, the team was not able to compare this sample to data about other animal-assisted counselors, their treatment practices, nor their clients' presenting concerns. Though small in size compared to other C-GT studies, the sample for this study provided thousands of data points that the researched team analyzed via triangulation and constant comparison. Thus, I confirmed the HART constructs of RMs, SHARMS, HARPs, HARTI. Moreover, I identified and developed new concepts of resistance and interactive experiences of those who participate in AAT-C.

The practice of investigating the processes between counselor-client dyads was consistent with other research designs in the professional counseling literature; however, client perspectives were missing from professional AAT literature (Altensetin et al., 2013; Bedi & Duff, 2014; Kivlighan, Marmarosh, & Hilsenrroth, 2014; Maggio, 2014). Moreover, the counselors in this study had training specific to the university where the study took place, and the client population was limited to adults who received outpatient counseling. To mediate these

limitations, the research team analyzed multiple sources of data including interviews, observations, and field notes.

A primary strength of the study was the setting. The university training clinic was appropriate for this study because animal-assisted policies and procedures were already in place, and the university offered a graduate level course in AAT (Chandler, 2012; UNT, 2014). As a result of the proactive AAT policies at the university clinic, the research team did not encounter typical barriers to AAT research such as limited access to facilities, or negative attitudes toward animals or AAT (Borrego et al., 2014; Stern & Chur-Hansen, 2013; UNT, 2014). The research team for this study provided a foundation for the process of AAT in counseling and an opportunity for follow-up studies based on findings of the current study (Creswell, 2014).

Despite our learnings from this study, future researchers still have some questions to answer: (a) Is HART consistent with AAIs in other settings; (b) How effective is HART in the treatment of various symptoms with diverse populations; and, (c) What are the experiences of the therapy animal in HART? Based on prior knowledge, therapy animals experience stress and oxytocin exchange, and receive nurturing and comforting touch and verbalizations (Glenk, 2011; Odendaal, 2000). Nonetheless, future researchers would do well to give more attention to the internal experiences of therapy animals, assess the impact of SHARMs and HARPs with valid and reliable measures; design interventions to validate the efficacy of AAT-C based on rigorous standards such as randomized controlled trials and using operationalized language from HART; and, design longitudinal studies to explore the long-term impacts and continued

client HARPing to produce HARTI after counseling has ended. This study may improve the research practices, training, and competence of counselors who investigate and practice AAT.

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APPENDIX A

EXTENDED LITERATURE REVIEW

This review of the professional literature related to AAT is organized into major headings, themes, and sub-themes. I begin by defining animal-assisted (AA) terms in the literature and reviewing of the history of AA settings and practices. Then, I provide conceptual foundations for animals in psychotherapy, theoretical integrations of AAT in counseling, and the impact of AAT on the therapeutic alliance. Next, I offer a review of empirical literature about the benefits of animal-assisted interventions (AAI) in mental health settings. Finally, I provide the rationale for this study of HART in AAT-C.

Animal-Assisted Practice

Definitions for animal-assisted practice are inconsistent across literature (Amerine, & Hubbard, 2016; Kruger & Serpell, 2010; O'Haire, 2013). Animal-assisted therapy was referred to as pet-facilitated therapy, pet therapy, pet-assisted therapy, pet-oriented psychotherapy, animal-assisted activity, animal-assisted intervention, dog therapy, canine therapy, and equine therapy, as well as many other variations of the term. To add further confusion, many authors do not delineate manuscript titles between AAT in counseling or psychotherapy and AAT in physical or occupational therapy, which are distinctly different practices. Here, I provide definitions and examples of animal-assisted practices and related terms inherent in this study.

AA practice requires the presence of at least one human and at least one animal, often referred to as a handler-animal team. A handler-animal team consists of a human trained to work with an animal and a healthy animal meeting certain skill and aptitude requirements (Pet Partners©, 2012). Organizations that evaluate skills and aptitudes of canines include the American Kennel Club (AKC), Therapy Dogs International (TDI), and Pet Partners©,. (AKC, 2013; Pet Partners©, 2012; TDI, n.d.). Pet Partners© (2012) also provides evaluations for handler-

animal teams including birds, cats, chickens, cows, domestic rats, ducks, goats, guinea pigs, hamsters, horses, llamas, miniature pigs, and rabbits. Other animals that may participate in AAI, but are not evaluated include birds, dolphins, snakes, and turtles (Antonioli & Reveley, 2005; Jessen, Cardiello, & Baun, 1996; Oren & Parish-Plass, 2013). Handler-animal teams provide animal-assisted interventions (AAI) in a variety of settings including crises and disasters, home health, hospitals, inpatient psychiatric and chemical dependency milieus, military, outpatient mental health agencies, rehabilitation centers, penal institutions, residential treatment centers, grade schools, and universities (Bachi et al., 2011,; Behling, Haefner, & Stowe, 2011; Breitenbach & Stumpf, 2014; Chandler, 2012; Chumley, 2012; Conniff, Scarlett, Goodman, & Appel, 2005; Dell et al., 2011; Hergovich, Monshi, Semmler, & Zieglmayer, 2002; Huss, 2012; Koppel, 2010; Laning & Kranek, 2013; Marr et al., 2000; Mossello et al., 2011; Mulcahy & McLaughlin, 2013; Nepps, Stewart, & Bruckno, 2014; Parish-Plass, 2013; Schubert, 2012; Villalta-Gil et al., 2009; Wesley, Minatrea, & Watson, 2009). As aforementioned, AAIs are not always well defined in the literature. Here, I categorize them as animal-assisted activity (AAA), animal-assisted education (AAE), or animal-assisted therapy (AAT).

AAA and AAE

Professional, paraprofessional, and volunteer handler-animal teams may facilitate AAA in the settings described above. AAA is distinctive in that it does not require specific goals, documentation, or time constraints. Examples of AAA interventions include handler-animal teams visiting nursing homes, visiting with pediatric oncology patients in hospitals, or staffing a booth at a festival or park to promote AAA by providing education about the human-animal bond (Pet Partners©, 2012, p. 1.8).

The International Association of Human-Animal Interaction Organizations (IAHAIO, 2014) defined AAE, or animal-assisted pedagogy (AAP), as an intervention delivered with a specially trained animal by an educational professional or related service professional qualified by an academic degree and specialized handler-animal training. AAE interventions are documented, and general or special education teachers monitor student progress. The foci of AAE are academic achievement, social skills, and enhanced cognitive functioning. Examples of AAE include dog-assisted reading programs, qualified animals as pedagogical models for interpersonal boundaries and social skills in elementary, secondary, and postsecondary classrooms, or teaching responsibility through caring for the animal (Axelrad-Levy & Motro, 2013/2009; Fisher & Cozens, 2014; L. Stewart, personal communication, March, 3, 2015).

AAT

The IAHAIO (2014) defined AAT as goal oriented, planned, and structured therapeutic interventions provided by handler-animal teams in health, education, or human service professions. More specifically, Chandler (2012) delineated AAT-C and psychotherapy as an adjunct to existing therapy facilitated by a credentialed mental health professional. AA therapists illuminate psychodynamic, social, and human-animal processes throughout the therapeutic treatment plan (Banks & Banks, 2005; Chandler, 2012; Parish-Plass, 2013). Chandler, Potrie-Bethke, Barrio Minton, Fernando, and O'Callaghan (2010) described the following intentions of AA therapists: building therapeutic rapport, facilitating insight, enhancing client's social and relationship skills, enhancing client's self-confidence, modeling specific behaviors, encouraging sharing of feelings, providing a reward for a client, enhancing therapeutic trust, and facilitating feelings of therapeutic safety. According to Chandler (in

press), these intentions may be activated through recognizing SHARMs and counselor-facilitated HARPing. Chandler hypothesized that SHARMs are most impactful when recognized by a counselor or client during a session, and processed through the HARP with the counselor through basic processing skills for exploring thoughts and feelings, facilitating insight, and illuminating the here-and-now (Chandler 2015b; Hill, 2009; Yalom, 2002). In an effort to provide context for the current study, I describe the historical narrative of AAI.

Historical Narrative

From before recorded history to present day, humans and other animals developed relationships with one another (Serpell, 2010). Ancient civilizations believed that animals had souls and should be treated with great respect. Kato Indians described the time of creation as so dark and lonely that "when God went forth to create his world, he took his dog with him" (Bone, 2013, p. 57; Rosen, 1998). Shamans believed that in the beginning of time there were no clear distinctions between humans and animals and that animals are familiars, or helpers, from the spirit world. Many shamanic familiars such as dogs, cats, caged birds, domestic mice, and ferrets are kept as pets in the modern day (Serpell, 2010). American Indians, specifically the Ojibwa believed that animals were honored servants and guardian spirits that varied in terms of power (Serpell, 2010). They elevated bears, bison, wolves, and eagles as the greatest of protectors and helpers (Benedict, 1929). Inuit, Shamanic, American Indian, and Mayan societies viewed animals as helpful, healing, and temporary manifestations of ancient archetypes (Serpell, 2010).

In classical Egyptian times, dogs and serpents were viewed as curative (Serpell, 2010). One of the first records of animal-assisted treatment was inscribed on tablets of the temple at

Epidaurus, akin to a modern day health resort, and attested to the healing powers of dogs (Toynbee, 1973). As Christianity spread throughout Europe, the early saints Francis, Anthony, Roch, and Christopher were known not only for their healing gifts, but also for their rapport with physical and spiritual incarnations of animals. In 16th century Europe, dogs continued to be viewed as healers, comforters, and companions (Jesse, 1866). However, anyone who believed in pre-Christian, shamanic, or ethereal attitudes toward animals or nature were persecuted as heretics during the Papal Inquisition waged between the 13th and 17th centuries in Europe. Animal-assisted healers, clergy, and even saints were considered witches and degenerates by those in power, despite thousands of years of healing traditions (Serpell, 2010).

Historians described the Age of Enlightenment as a return to humans viewing animals, particularly domesticated animals, as helpful and socially acceptable (Serpell, 2010). In particular, the acclaimed Enlightenment philosopher John Locke (1699) proposed AAE as an intervention to teach responsibility and empathy to children. Likewise, other enlightenment thinkers supported the idea that children could learn to regulate impulsive behaviors through caring relationships with companion animals such as dogs, cats, birds, and squirrels (Myers, 2006).

During the eighteenth century William Tuke, a Quaker, developed the first animal-assisted treatment facility for the individuals with mental illness (Tuke, 1813). At Tuke's York Retreat, named after its location in York, England, patients were encouraged to wander about the internal courtyards and interact with intentionally supplied animals such as chickens, gulls, hawks, and, rabbits. This early form of AAA represented Tuke's belief that the engaging with the animals would enhance one's mood and social skills (p. 96).

Europe continued to lead in the practice of AAT through the 19th century. During the 1800's, the staff at Bethlem, also known as Bedlam, Hospital in London, England provided innovative AAT by including aviaries with canaries and other birds, cats, dogs, and squirrels in their treatment programs (Andrews, 1997). Further, in her work with the chronically ill, Florence Nightingale (1860/2010) observed that her patients responded positively to small companion animals. In 1867, Bethel Center was founded as a healing center in Bielefeld, Germany (Chandler, 2012). From its inception, the staff and patients therapeutically interacted with small pets, farm animals, and wild game. As late as 1977, Bethel Center continued to utilize AAT with the inclusion of horses in the treatment (Bustad, 1980).

The first record of AAT in the United States was in 1919 at Saint Elizabeth's Hospital in Washington, DC. Saint Elizabeth's was considered the premiere federal psychiatric facility at the time. Soldiers diagnosed with shell shock, as well as civilians who were diagnosed with mental illnesses, were referred to Saint Elizabeth's for care (D'Amore, 1976). At the request of Franklin K. Lane, Secretary of the Interior, the chief psychiatrist of Saint Elizabeth's, Dr. William Alanson White, included dogs for AAT with the goals of improved balance, enhanced mood, and increased social interactions for the patients (p. 2).

Howard Rusk (1901-1989), a medical internist turned Air Force physician, employed the next wave of AAT in the United States at Pawling Air Force Convalescent Hospital in Pawling, New York in 1944 (Rusk, 1972). Rusk's holistic program infused physical therapy and psychoeducation with caring for pet dogs and working with farm animals. Rusk (1972) desired to promote generativity and a sense of purpose in veterans who suffered physical and psychological disabilities after World War II.

Chandler (2012) compiled facilities with AAA or AAT programs inherent in patient treatment planning. She found 86 medical and psychiatric hospitals across 24 states and the District of Columbia. Clinicians, educators, and researchers continue to develop AAA, AAE, and AAT intervention programs and empirical research efforts in Australia, Austria, Canada, China, Germany, Hungary, India, Israel, Italy, Japan, Norway, Spain, South Africa, South Korea, and the United Kingdom (Animal Angels Foundation, 2015; Bachi et al., 2013; Balluerka, Muela, Amiano, Caldentey, 2014; Bone, 2013; Chandramouleeswaran & Russell, 2014; Chandler, 2012; Fung & Leung, 2014; Iwahashi, Waga, & Ohta, 2007; Mosello et al., 2013; Mulcahy & McLaughlin, 2013; Prothmann, Bienert, & Ettrich, 2006; Schneider & Harley, 2006; Tissen, Hergovich, & Spiel, 2007; Waite & Bourke, 2013; Wells, 2004). In the next section, I describe the conceptual foundations of AAT in counseling and psychotherapy inherent in some of these programs.

Conceptual Foundations

Despite a long history of humans incorporating animals into educational and therapeutic settings, scholars and researchers have only recently begun to conceptualize the role of animals in helping professions. Here, I review conceptual literature as related to animals in psychotherapy, theoretical integrations of AAT, and AAT in counseling.

Animals and Psychotherapy

Sigmund Freud (1856-1939), considered the father of modern psychology, utilized his family dogs during therapy sessions with patients (Corey, 2009; Gavriele-Gold, 2011). Freud included family dogs in all of his sessions while they were alive and healthy. First, Wulfie, a German shepherd, then chows Yo-Fie and Lun-Yug, respectively. Freud theorized about the

psychoanalytic possibilities of human-animal interactions, but he did not describe intentional inclusion of his dogs in patient treatment plans.

Contrarily, in the 1960's the first clinically trained professionals documented the intentional inclusion of animals in therapy. In New York, child psychologist Boris Levinson observed his dog, Jingles, disarm children who had previously been unresponsive to therapy (Chandler, 2012; Levinson, 1962; Levinson & Mallon, 1997). Jingles demonstrated acceptance and positive social interactions through licking, playing, and cuddling with Levinson's patients (Levinson & Mallon, 1997). In Colorado, the North American Riding for the Handicapped Association (NARHA) developed the first formal equine-assisted physical therapy program. NARHA changed its name to Professional Association of Therapeutic Horsemanship International (PATH Intl.) in 2011. PATH Intl. currently boasts more than 850 centers around the world (PATH Intl., 2015) that provide AAA and AAT in physical and psychotherapy to over 54,000 men, women, and children with and without disabilities.

The latter half of the 20th century and the new millennium saw a resurgence of faith in the curative power of animals. In 1974, Green Chimneys Children's Services was opened in Brewster, New York as a residential treatment center (RTC) for children with developmental disabilities and psychological needs. Today, Green Chimneys continues with award-winning RTC programming, as well as a farm and wildlife center, research institute, special education school, summer camps, and youth community programs (Ross, 2011). As a result of evidence-based AAT programs, more than 20 educational programs were developed worldwide to provide training and promote advancement of the human-animal bond in AAT and related fields

(Chandler, 2012). Moreover, graduates of these programs have continued to propel the field of AAT forward with formalized competencies and professional considerations.

Ethical Considerations

Chandler (2012) described AAT-C as an adjunct to traditional counseling that required the counselors to obtain specialized training. According to the ACA Code of Ethics (American Counseling Association [ACA], 2014), counselors should take steps to ensure their competence and protect others from harm through education, training, and supervised experiences when developing and working in a specialty area (Standard C.2.b). Stewart, Chang, Parker, and Grubbs (2016) developed AAT-C competencies to guide counselors who wish to develop in this speciality area. Here, I offer the nine major competencies in order of relation to knowledge, skills, and attidudes: (for more detail see Stewart et al., 2016, pp. 4-6):

- Knowledge
    - Formal AAT-C training.
    - In-depth animal knowledge.
    - Knowledge of existing ethical requirements with professional codes of ethics.
- Skills
    - Mastery of basic skills.
    - Intentional incorporation of AAT-C into the counseling relationship, plan, and process.
    - Specialized skill set appropriate to the practice of AATC.
- Attitudes
    - Animal advocacy.
    - Professional development.
    - Professional values.

ACA adopted those competencies for counselors who incorporate their own animal into AAT-C (Stewart et al., 2016). However, in other parts of the world, clinicians have different methods of incorporating animals into therapy.

Cultural Considerations

Despite the presence of AA practice around the world, the implementation of AAT varies based on geographic limitations and cultural considerations (Chandler, in press; Sheade & Chandler, 2012). For example, Minal Kavishwar, founder and president of Animal Angels Foundation in India (Animal Angels Foundation, 2015), reported logistical challenges of AAT in India including community values inconsistent with the belief that animals could enhance human wellness, and a population density that inhibited many people from providing appropriate housing for therapy or companion animals (personal communication, March 11, 2015). She described networking with local pet owners who lent their dogs to Animal Angel therapists for working with children in school settings. She stated that this practice ensured more animals could participate in aiding human wellness; thus, helping more humans. In Dubai, AAT clinicians worked to educate community members and client families about the benefits of AAT (personal communication, Z. Poonawala, March 13, 2015). According to Poonawala, the majority of citizens in the community viewed animals, canines in particular, as dirty and not appropriate for inclusion in therapeutic work. Finally, clinicians in Israel created therapy zoos for AAT work with clients (Parish-Plass, 2013). Therapists worked with creatures including canines, fish, chickens, ferrets, goats, snakes, and other animals. Some zoos were maintained with one therapist who worked with all the animals, and other zoos were maintained by a team of therapists who shared the responsibility for the animals and zoo maintenance.

Clinicians would do well to consider other cultural factors such as race, ethnicity, religious diversity, socioeconomic class, and gender (Sheade & Chandler, 2012). The widespread use of AAT as a therapeutic modality could be an indicator of the universality of AAT across various counseling approaches and theoretical orientations.

Theoretical Integrations

Counselors integrated AAT into directive and nondirective counseling approaches, and across theoretical paradigms in counseling. Chandler and colleagues (2010) demonstrated how AAT could be integrated across major counseling theories through case examples. Here, I review literature related to the following therapeutic approaches: psychoanalytic and psychodynamic/attachment, humanistic, behavioral/cognitive-behavioral, constructivist, and systems.

As previously mentioned, Freud incorporated canines into his psychoanalytic approach for many years (Gavriele-Gold, 2011; Ghetie, 2011). Glucksman (2005) and Sacks (2008), contemporary psychoanalysts, described that their therapy dogs offered a soothing presence for their patients during psychoanalytic therapy. Boris Levinson (1969) suggested that animals could be psychodynamic objects of attachment. Today, mental health clinicians apply attachment theory (Ainsworth, 1989; Bowlby, 1977) when facilitating AAT with canines, horses, and therapy zoos in Israel, Spain, and the United States (Bachi, 2013; Balluerka et al., 2014, Parish-Plass, 2013; Sable, 2013).

Animals can be incorporated into humanistic approaches such as existential, gestalt, and person-centered (Chandler, et al., 2010; Perls, 1973; Rogers, 1961; van Deurzen, 2012). Humanistic counselors aim to gain a holistic understanding of their clients' subjective experiences (Hansen, 2014). For example, an existential counselor might encourage a client to disclose fears or secrets to the therapy animal to facilitate insight and authenticity (Chandler et al., 2010l; van Deurzen, 2012). Kemp, Signal, Botros, Taylor, and Prentice (2014) described a gestalt model of AAT utilizing equines with child survivors of sexual abuse in Queensland,

Australia. They focused on groundwork with horses to help the children with intrapersonal conflict and interpersonal boundaries. A person-centered (Rogers, 1961) counselor might reflect or comment on one's relationship with the therapy animal and spontaneous HAIs, or provide the presence of a therapy animal without any directive interventions in order to build rapport and enhance trust in the therapeutic environment (Chandler, et al., 2010). AAT can also be incorporated into behavioral and cognitive-behavioral approaches.

O'Callaghan (2008) surveyed counselors who practiced AAT. Counselors who identified as behavioral or cognitive-behavioral tended to describe more directive interventions when they integrate AAT into therapeutic practice (O'Callaghan, 2008). Lange, Cox, Bernert, and Jenkins (2006) described a behavioral counseling group for adolescents who accomplished behavioral goals for the therapy dog such as teaching tricks, feeding treats, and grooming the dog properly with an ultimate goal of decreasing aggressive behaviors by the adolescents. Hamama and colleagues (2011) facilitated a canine training program as a cognitive behavioral therapy (CBT) intervention with adolescents who experienced trauma in Israel. Hunt and Chizkov (2014) suggested that including canines in CBT decreased stress of rumination on unpleasant topics and facilitated positive outcomes with adults, particularly those with a history of trauma. In addition to psychodynamic, humanistic, and behavioral approaches, AAT may also be integrated into constructivist approaches.

Much like existentialism, constructivism is a philosophy that developed into a psychotherapeutic approach (Fall, Holden, & Marquis, 2010). Mahoney (2003) defined constructive psychotherapy as a metatheory with the aim of creating personal meaning. Other constructive approaches include solution-focused and narrative therapies (De Shazer & Berg,

1997; White & Epston, 1990). A constructivist counselor might encourage the client to create new narratives incorporating the therapy animal, or structure developmentally appropriate activities to encourage HAI between the client and therapy-animal. Through these interventions counselors could facilitate therapeutic opportunities for clients to create new meanings to personal experiences (Chandler, 2012; Chandler et al., 2010; Dietz, Davis, & Pennings, 2012).

Fall and colleagues (2010) described systems as an umbrella term for several therapeutic approaches with similar foundational philosophies. According to Corey (2009), counselors who practice from a systems perspective assume that a client's problematic symptoms may serve a purpose for one's family, be inadvertently maintained by family processes, be an output of the family's inability to function constructively, or be an intergenerational pattern (p. 412). In other words, individuals do not exist in isolation and should be helped with attention to bidirectional relationships in one's environment (Mueller, 2014). Working from this perspective, a counselor might focus one's interventions on the development of a therapeutic relationship between client and therapy animal as an example of a bi-directional, mutually beneficial relationship with another sentient being. The counselor would assume that a positive outcome with the therapy animal would positively influence the client's relationships in environments outside the therapy setting.

Regardless of a clinician's theoretical orientation, the quality of the therapeutic relationship and the therapeutic alliance were described as key factors for promoting therapeutic change (Asay & Lambert, 2009, Mearns & Cooper, 2005). The flexibility of integrating AAT into a variety of counseling paradigms as well as enhanced therapeutic alliance through AAT may offer clinicians additional opportunities to promote positive client outcomes.

Next, I explore the ways that current authors conceptualize AAT in counseling (AAT-C) and the enhancement of the therapeutic alliance.

AAT-C and HART

In professional AAT literature, authors have interchanged the terms therapeutic alliance and human-animal bond (Amerine & Hubbard, 2016; Bachi, Terkel, & Teichman, 2011, Balluerka, Muela, Amiano, & Caldenty, 2014; Parish-Plass, 2013). Fine (2010) described the human-animal bond as foundational to understanding AAT; however, scholars do not agree on the definition of the term (Bayne, 2002). Bustad (1980) related the term bond to emotions of love and friendship. He borrowed the term from literature describing relationships between parents and children (Bustad, 1980; Beck, 1999). Bustad (1980), Fine (2010), Walsh (2009) and others discussed the mental health and wellness benefits of AAT in the context of companion animals over the life course; however, the focus of AAT is not to form a bond with the animal (Chandler, 2015a). Moreover, the relationship between therapy animals and clients is not meant to substitute for a therapeutic alliance between counselors and clients (Chandler, in press; Gavriele-Gold, 2011; Risley-Curtiss, Holley, & Wolf, 2006).

Chandler (2015a) offered Human-Animal-Relational Theory (HART) as an alternative explanation for the process of change in AAT. Chandler (2015a) acknowledged the foundational importance of the term human-animal bond in AAT literature; however, she encouraged counselors to move away from describing AAT as a function of the human-animal bond because clients do not form a bond similar to familial relationships with therapy animals. According to Chandler's (in press) HART, client's experience a series of significant human-animal relational moments (SHARMs) with counselors and therapy animals. She explained that SHARMs may vary

in significance, meaning, and therapeutic impact for client growth. A counselor must recognize when a SHARM offers therapeutic value and facilitate this opportunity for processing with a client (Chandler, 2015a)

Counselors who effectively practice AAT increase their opportunities to enhance the therapeutic relationship and therapeutic opportunities through facilitating and recognizing SHARMs (Chandler, 2015a). The therapy animal is an additional therapeutic agent and the human counselor incorporates SHARMs into counseling sessions, in a directive or no directive manner. Chandler (2012) conceptualized the relational experiences of AAT as multi-directional among client, clinician, and therapy animal (p. 134; see Figure A1).

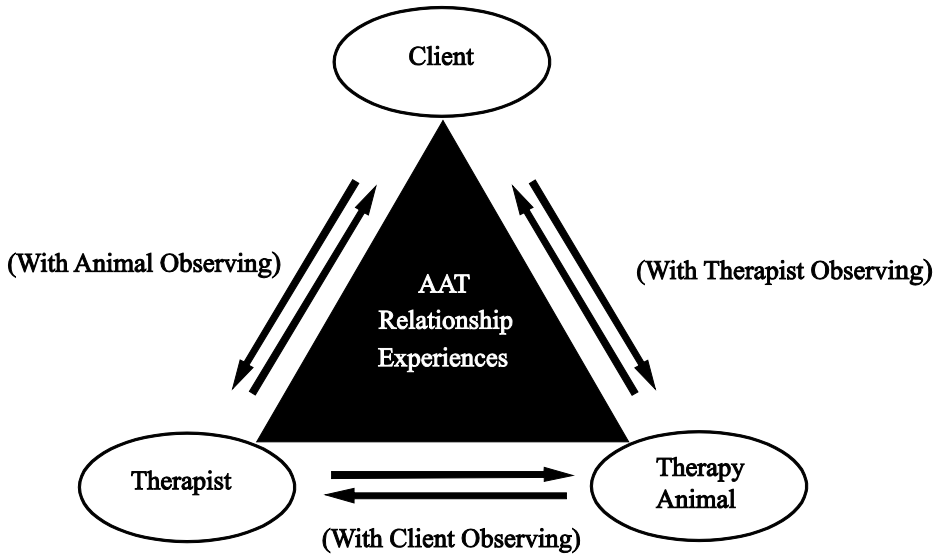

Figure A1. Psychodynamics of animal-assisted therapy. Used with permission (Chandler, 2012, Figure 7.1)

Chandler theorized that SHARMs occur between the client and therapy animal with the counselor observing, or between the counselor and therapy animal with the client observing. Moreover, Chandler (in press) described the value of the presence of therapy animals in this way:

> The greatest assets a therapy animal brings to a counseling session that make it such a powerful therapeutic agent for change for human clients are: 1) it's ability and desire to give and receive emotional and physical nurturance with humans; and, 2) it's ability to perceive and desire to signal emotional experiences of humans, especially those emotional experiences of humans that are not outwardly observable. It is incredibly useful the way a therapy animal can 'sniff out' and signal non-visible emotional distress in humans, making the invisible available for consideration and processing in the session. (pp. unknown).

Likewise, Rugaas (2006) described the signals Chandler (in press) referred to as calming signals. Calming signals are behaviors that animals demonstrate when they are trying to calm themselves or help others remain calm. Chandler (in press) proposed that calming signals may be indications of SHARMS. Counselors and clients may utilize SHARMs as therapeutic indicators for processing, insight, and change. Aside from experiencing therapeutic opportunities—such as catharsis or verbal processing—through SHARMs, clients may also experience the therapeutic connection of touch through a SHARM. Though many types of SHARMs can occur, the impact of therapeutic touch is a unique impact of AAT-C that clients could not experience in traditional counseling relationships limited to only humans (Chandler, 2012; Kaminski, Pellino, & Wish, 2002)). Relationships between people and animals develop as a result of these connections (Ghetie, 2011).

The presence of one or more SHARMs in combination with the counselor's effective human-animal relational processing (HARP) generates the human-animal relational therapeutic impact (HARTI; Chandler, 2015a). During the HARP, either the counselor or the client may be the first to recognize that a relational moment has significance. The counselor and client evaluate the therapeutic impact of a SHARM based on how effectively the SHARM is processed through HARP with the client (C. Chandler, personal communication May 5, 2015). Chandler (in

press) clarified these phenomena with the formula SHARM + HARP = HARTI. Finally, I explore connections between AAT-C, HART, neurobiological science.

In a landmark study of human-animal interaction in healthy humans, Odendaal (2000) hypothesized that a need for attention – attentionis egens – is inherent in both humans and animals, and physiological responses would occur among both canine and human species during a positive interaction. Odendaal (2000) measured the oxytocin levels of humans and dogs with the hypothesis that levels would increase during positive human-animal interactions. Oxytocin is a marker of neurochemicals that indicate social bonding—positive feelings—across species, and facilitates pleasure, soothing, and relaxation (Kis et al., 2014; Panksepp, 2005; Uvnäs-Moberg, 2010). The stress response system is calmed by decreases in adrenalin, cortisol, and aldosterone and the social response system is stimulated by increases in dopamine, endorphins, and oxytocin (Olmert, 2009; Panskepp, 1998, 2005; Uvnas-Moberg, 2010, July). Odendaal (2000) found a statistically significant result of increased oxytocin for both humans and dogs in the experimental group where people interacted with familiar dogs. Thus, Odendaal posited that the human-canine relationship is a bi-directional one in which social bonding can occur on both ends (see Figure 1).

Dan Siegel, an interpersonal neurobiology (IPNB) researcher, described relational experiences as the sharing of energy and information (2008). He suggested that the process of relating to others in therapeutic manner facilitates neural plasticity. Siegel (2006) defined neural plasticity as changes in neural connectivity through therapeutic experiences, and stated that the subsequent neural flexibility may be essential for therapeutic change (p. 250). The presence of a therapy animal increases the opportunities for clients to experience SHARMs in

counseling. The HARP enhances relational experiences in counseling (Chandler, in press); thus, increasing opportunities for neural plasticity and therapeutic change. One might infer that a counselor's use of AAT could improve the therapeutic alliance between counselor and client as a result of decreased stress, increased social bonding, and amplified empathy on physiological and neurological levels during AAT. In the next section, I describe the current evidence base for animal-assisted practice with regard to adults.

Empirical Evidence

Animal-assisted practice is inherently difficult to investigate (Borrego, et al., 2014). Barker, Best, Fredrickson, and Hunter (2000) described the following constraints in measuring the effectiveness of AAT: setting, uniqueness of handler teams, rater reliability, and external constraints. Handler teams consist of living beings with unique personalities who may be tired, sick, or unavailable to provide services. Further, handler teams may not be allowed to enter a setting due to external constraints such as some individuals having allergies or phobias related to certain animals (Chandler, 2012; Fine, 2010).

O'Haire (2013) found highly inconsistent definitions of AA practice in the literature. For example, AAT was described as animal-assisted psychotherapy, animal-assisted therapy in counseling, pet-assisted therapy, pet-oriented psychotherapy, and pet-facilitated therapy (Brodie & Bailey, 1999; Chandler, 2012, Levinson & Mallon, 1997; Parish-Plass, 2013). Consistent terminology is needed to standardize treatment protocols for more rigorous study (Kruger & Serpell, 2010; O'Haire, 2013). Despite methodological difficulties, researchers have attempted to measure the phenomenon of AA practice in AAA, AAE, and AAT. Here, I discuss the findings of studies related to adults and AAT.

Treatment Outcomes

Nimer and Lundahl (2007) analyzed 49 studies on AAT that met the following criteria, a) studied AAT, not AAA or pet ownership; b) included at least five participants in the treatment group; c) were written in English; and, d) provided sufficient data to calculate an effect size. Thirty-three studies in the meta-analysis focused on treatment outcomes of adults (Nimer and Lundahl, 2007). Nimer and Lundahl (2007) analyzed descriptive statistics, design, rigor, and effect sizes of the studies. Among the studies focused on the adult population, Nimer and Lundahl (2007) posited that the use of AAT with adults was consistently associated with moderately high effect sizes when the treatment was facilitated with dogs, but was not the case with all other animal groups. The researchers did not find significant differences in individual AAT versus group AAT. Nimer and Lundahl (2007) suggested that neither the setting (i.e., inpatient, outpatient, medical, mental health) nor the delivery (i.e., group or individual) influenced outcomes; however, the type of animal did influence outcomes. With canines in particular, adults with disabilities ($d = 0.96$, $k = 3$) benefited more than their counterparts ($d = 0.33$, $k = 5$).

In the most rigorous studies Nimer and Lundahl (2007) analyzed, they found that researchers noted positive effect sizes to indicate that AAT was as effective as or superior to a comparison treatment. For example, Marr and colleagues (2000) found that adults in an AAT group interacted more with others and smiled or displayed pleasure more often than adults in an exercise group ($d = 0.68$). Haughie, Milne, and Elliot (1992) found that adults in an AAT group demonstrated more desirable social interactions than those in a comparison group ($d = 0.41$). Nimer and Lundahl (2007) asserted that a sufficient body of quantitative and qualitative

research exists to support the effectiveness and continued use of AAT, but an increased number of rigorous studies are still needed to solidify the evidence base of AAT.

Amerine and Hubbard (2016) completed a systematic review of the meta-analyses disseminated to date in the professional AAT literature. They found that the limitations of AAT research studies were consistent across many studies, and included such methodological issues as small sample sizes, nonrandom assignment in experimental studies, limited analysis of confounding variables, and a lack of standardized treatment interventions. Despite clear limitations and methodological challenges, Amerine and Hubbard (2016) concluded that AAT did not produce negative effects on those with mental disorders. Moreover, they determined that the phenomenon of human-animal relating occurred during AAT interventions that had calming and prosocial effects on humans (Amerine & Hubbard, 2016).

Randomized Controlled Trials (RCTs)

Kamioka and associates (2014) reviewed all RCTs disseminated in professional literature about AAT from 1990-2012 (N = 11). These investigations were conducted with adult participants in medical, rehabilitation, and mental health settings. Kamioka and colleagues (2014) evaluated these RCTs based on method of randomization, level of client and provider blindness to intervention, group composition, similarity of control interventions, compliance, drop-out rate, outcome assessments, and post-intervention analysis. Moreover, the researchers summarized the evidence of the RCTs according to International Classification of Diseases-10 classifications (ICD-10; World Health Organization, 1992). The reviewers described methods used to generate concealment, blinding, heterogeneity, and post-intervention analyses as “very poor” (p. 388). Nonetheless, positive effects were observed with regard to

patient outcomes, especially with regard to mental health settings. Kamioka and colleagues (2014) noted improved mental health, prosocial behaviors, and quality of life for participants experiencing mental health problems. Furthermore, researchers suggested that in future studies, investigators would do well to provide clear descriptions and doses of the type of AAT intervention(s), clarify and provide operationalized constructs in AAT, and design rigorous methodologies.

Maujean and colleagues (2015) supported the findings of Kamioka and associates (2014). In their systematic review of RCTs in AAT, they noted the probable effectiveness of AAT for treating mental health and behavioral disorders. Likewise, Maujean and others (2015) called for more consistent terminology, and standardized treatment protocols to increase the reliability and validity of AAT investigations and protect the welfare of participants. As noted by Borrego and colleagues (2014), AAT researchers have had difficulty overcoming those challenges.

Current Status and Challenges

Borrego and colleagues (2014) reviewed 228 peer-reviewed publications that included the search terms “animal” and “assisted” with 50% of those being empirical studies. They found that AAT was the most-researched intervention (n = 167) among the studies reviewed (Borrego et al., 2014). Borrego and colleagues (2014) suggested that confusion over terminology and methodological challenges has contributed to the limited number of studies published about AAI, and subsequently AAT. Some studies included multiple labels (e.g., AAA, AAI, AAE, AAT, HAI) within one study, and several studies described AAI without describing the intervention as AAA, AAE, or AAT (Borrego et al., 2014).

Furthermore, they found that the most prolific authors of AAI chose to publish more text with theoretical content than investigate the effectiveness or processes of animal-assisted practices (Borrego et al., 2014). Consequently, those with theoretical knowledge may not be measuring the success of their conceptualizations, or are not publishing those results in peer-reviewed venues.

Benefits and risks. Bert and colleagues (2016) reviewed 36 articles related to AAT that met the following criteria: (a) were conducted in hospitals or long-term care (LTC) facilities; (b)were written in English, Spanish, or Portuguese; (c) were described as AAT, AAA, or AAI. Because the researchers did not focus on a particular age group or setting for their review, they offered extreme heterogeneity in their findings. One exception to this heterogeneity was that canines were the most studied animals in the review (N=32). Similar to other reviews (Kamioka et al., 2014; Nimer & Lundahl, 2007), authors described the benefits of AAT as decreased anxiety, amelioration of depressive symptoms, improved communication, and increased prosocial behaviors.

With regard to risks presented by AAT, Bert and collaborators (2016) reported that information about animal welfare and animal handler training were lacking in most studies. They questioned if animal handlers or AAT providers were required to undergo specialized training or adhere to specific guidelines (Bert et al., 2016). These unanswered questions leave room for risks among animal and human welfare of participants.

Benefits of AAI

Consistent with the meta-analyses, I experienced confusion in searching for benefits of AAT. Researchers consistently reported that AAI was correlated with reduced anxiety, increased

social functioning, and enhanced therapeutic rapport in inpatient and outpatient settings (Barker & Dawson, 1998; Lanning & Krenek, 2013; Mosello, et al., 2011; Nepps et al., 2014; Villalta-Gil et al., 2009). Here, I explore the benefits of AAI with adults and delineate the type of AAI (e.g., AAA, AAT) studied with regard to inpatient and outpatient settings as well as therapeutic alliance.

Inpatient

Barker and Dawson (1998) measured anxiety ratings of hospitalized psychiatric patients (N = 230) who participated in AAT with canines compared to recreational therapy/treatment as usual (TAU). Researchers employed pre/post measures with the State-Trait Anxiety Inventory (Spielberger, 1977) before and after one AAT session and one TAU, utilized a mixed-models repeated measures analysis to compare differences between and within the AAT condition and the TAU condition, and stratified results by diagnostic category. Barker and Dawson (1998) found a significant reduction in anxiety levels among patients in the AAT condition who were diagnosed with mood disorders, psychotic disorders and other disorders; however, only patients with mood disorders showed reductions in anxiety following TAU. Further, patients diagnosed with psychotic disorders experienced twice the amount of anxiety relief following AAT than TAU. The authors acknowledged the limitation that they only measured immediate effects of AAT and encouraged further research to determine longer-term benefits of AAT (Barker & Dawson, 1998).

Similar to Barker and Dawson (1998), Nepps and colleagues (2014) measured symptoms of distress via self-report on the Burns Depression Checklist (Burns, 1993) and the Burns Anxiety Inventory (Burns, 1993) following one AAA session and one TAU session (N = 218). TAU was a

psychoeducational group about stress management facilitated by hospital care staff, and AAA was facilitated by an experienced volunteer and her Border Collie. For increased rigor, the researchers measured patients' blood pressure, pulse, and salivary cortisol (Nepps et al., 2014). These are biological signs of the stress response system (Marcus, 2013; Panskepp, 1998, 2005). Nepps and colleagues (2014) concluded that AAA in a therapeutic milieu could improve ratings of depression anxiety, pulse, and pain as effectively as a stress management group. Of note, AAA sessions were more frequently attended and maintained higher attendance than TAU over the course of one year (Nepps, et al., 2014). Researchers demonstrated that AAIs could improve treatment attendance and alleviate perceived and biologically measured distress in adults hospitalized for mental health concerns.

Outpatient

Lanning and Krenek (2013) examined the effects of equine-assisted activity (EAA) with adults in an outpatient setting. For clarity, this intervention was employed as AAA, not AAT, with the intention of improving quality of life for combat veterans. Facilitators were not mental health clinicians; however, they were certified by PATH Intl. (2015) to provide EAA. Lanning and Krenek (2013) used mixed-method design over 24 weeks with 13 veterans. They assessed health behaviors and depressive symptoms through pre/post administrations of the Short Form Health Survey version 2 (SF-36v2; Ware & Sherbourne, 1992), Beck Depression Inventory-2nd edition (BDI-II; Beck, Steer, & Brown, 1996), and qualitative responses from participants. Veterans who participated in at least 12 EAA sessions reported increases in health domains, reductions in depressive symptoms, and expressed benefits from the presence of the horse such as "They give you kindness and compassion…they're just there for you" (p. xi) and "The

horse interacts with me…I get a natural raw benefit from it…"(p. xi). Moreover, participants who participated beyond 12 sessions sustained gains over time (Lanning & Krennek, 2013). This study was limited in sample size and population; thus, results may not be generalizable to all veterans or adults with a history of trauma.

Therapeutic alliance

Altenstein, Krieger, and Holtforth (2013) described the therapeutic alliance as the "...affective bond between patient and therapist, the client's motivation and ability to accomplish work collaboratively, the therapist's empathic responding to and involvement with the client, as well as the client agreement about the goals and tasks of therapy (p.445)." Moreover, Falkenström, Granström, & Holmqvist (2015) described therapeutic alliance as an ongoing process, and a journey that is reflective of the interactive experiences of clients and therapists. Likewise, Falkenström and associates (2013) found therapeutic alliance to be a causal method of change in psychotherapy, and noted the importance of counselors working toward therapeutic alliance with clients along the way, not just at beginning.

Researchers have found the impact of therapeutic alliance on client outcomes to range from moderate to robust (Altenstein et al., 2013; Asay & Lambert, 1999; Flückiger et al., 2012; Liebert & Dunne-Bryant, 2015). Moreover, in their meta-analysis of 11 studies and 1,301 participants, Sharf, Primavera, and Deiner (2010) found a strong relationship between dropout and therapeutic alliance (d = .55). In other words, the stronger the alliance, the longer patients remained in treatment, and the weaker the therapeutic alliance, the more likely patients were to dropout of treatment.

Clinicians who worked with therapy animals were described as more approachable and viewed more favorably than mental health providers who are not part of a handler-animal team (Schneider & Pilchack-Harley, 2006; Smith-Forbes, Najera, & Hawkins, 2014; Wesley, Minatrea, and Watson, 2009). Additionally, clients who participated in AAT consistently maintained better attendance motivation for treatment than clients who participated in non-AAT control groups (Calvo et al., 2016; Hoffman et al., 2009; Lange et al., 2007). Furthermore, when physiological effects of positive, social interaction with a therapy animal were measured, researchers found that calming, wellness-enhancing, and social-bonding hormones were stimulated. Contrarily, stress and anxiety invoking hormones decreased in the bodies of humans and animals during positive social interactions (Cole, Gawlinkski, Steers, & Kotlerman, 2007; Odendaal, 2000; Sheade & Chandler, 2012). Based on these findings, counselors who practice AAT may be able to build stronger therapeutic alliances, gain client trust more quickly, and curb client dropout more consistently than counselors who practice traditional psychotherapy.

In 2009, Wesley and colleagues conducted an experimental study to measure therapeutic alliance in AAT at a residential treatment center (RTC) for chemical dependency in Kentucky. Participants (N = 231) participated in an experimental therapy group facilitated by a counselor who integrated AAT and choice theory (Glasser, 1998) or a control therapy group (TAU). The therapy animal was a Beagle with Pet Partners© (2012). Participants completed the Pet Attitude Scale (Templar et al., 1981) and the Helping Alliance Questionnaire Revised (HAQ-II; Luborsky et al., 1996) to measure attitudes toward pets and therapeutic alliance, respectively. Participants in the AAT groups reported statistically significantly higher therapeutic alliance than those in groups without AAT. Researchers concluded that the

presence of the animal in the experimental group enhanced the therapeutic alliance between counselor and clients (Wesley, et al., 2009).

Schneider and Pilchack-Harley (2006) utilized an experimental design to determine the influence of a therapy animal on therapeutic alliance. They recruited outpatient psychotherapists who worked with their own pets as therapy animals, a Collie/Labrador mix and a Golden Retriever. Undergraduate and graduate students (N = 85) completed the Counsellor Rating Form-Short Version (CRF-S; Corrigan & Schmidt, 1983) to measure the perception of the counselor on such constructs as trustworthiness, expertise, and credibility; the Disclosure to Therapist Inventory-II (DTI-III; Farber & Hall, 2002) to measure the participant's intention to self-disclose to the counselor; the Pet Attitude Scale (PAS; Templer, et al., 1981) to measure favorableness toward pets, and a background questionnaire. Then, they participated in introductory counseling sessions with trained psychotherapists who either had a dog present (experimental group; EG) or did not have a dog present (control group; CG).

According to Schneider & Harley-Pilchack (2006), clinicians in the EG were rated significantly higher on the CRF-S and were perceived as significantly more trustworthy than their counterparts in the CG. Participants reported greater depth of self-disclosure on the DTI-III in the EG as compared to the CG. Researchers conducted a post hoc analysis and found that participants in the EG who were inclined to disclose the least as indicated by the DTI-III actually had higher levels of disclosure than those who anticipated deep disclosures. Schneider and Pilchack-Harley (2006) concluded that the presence of a therapy animal with a clinician had a robust impact on the therapeutic alliance between counselors and clients. In particular, participants who indicated the most resistance to counseling demonstrated the most gains in

therapeutic alliance with the counselor. This study was limited by the homogenous sample and length of treatment.

Although results may not be generalizable to all adults in counseling or to adults in longer term counseling, depth of client elaboration was significantly correlated with therapeutic alliance (Lingiardi, Colli, Gentile, & Tanzilli, 2011). Lingiardi and colleagues (2011) recruited 60 client-therapist dyads and observed one recorded session per dyad. Participants completed the Psychotherapy Q-Set (Jones, 1985, 2000), Working Alliance Inventory-Observer Version (Horvath, 1981, 1982; Horvath & Greenberg, 1989), and the Depth Scale Session of Evaluation Questionnaire (Stiles & Snow, 1984). The researchers found that depth of elaboration was significantly correlated with therapeutic alliance. Specific therapist interventions related to depth of elaboration included: therapist identifying a recurrent theme in client experience or conduct; focusing on the therapy relationship as a point of discussion; client achieving new understanding or insight, and therapist pointing out client use of defensive maneuvers.

Conclusion

Humans have developed curative relationships with animals since before medieval times; however, researchers and practitioners began to measure the benefits of AAT over the last 50 years (Bone, 2013; Chandler, 2012; Nimer & Lindhal, 2007; Serpell, 2010). A licensed mental health professional with specialized training in animal behavior facilitates AAT as an adjunct modality to traditional counseling and psychotherapy practice (Pet Partners©, 2012). Although many types of animals may be included in AAT, canines and equines are most prominently included in research and practice.

Animals are therapeutic agents in the counseling process and provide opportunities for growth and change that would not exist without HAI (Chandler, 2015a, 2015b, in press). During AAT-C, similar hormonal processes occur among humans and other mammals during SHARMs. The counselor who practices AAT competently is aware of these hormonal changes and utilizes them to facilitate HARP. The inter-relational neurobiological process of HARP may facilitate neural plasticity, defined by Siegel (2006) as changes in neural connectivity through experiences. Siegel (2006) proposed that neural plasticity could be the essential means of psychotherapeutic change. Because of similarities in chemical processes between humans and other mammals, it is possible that neural plasticity occurs among human and other mammals. Adding the therapy animal as a therapeutic agent in counseling increases opportunities for neural plasticity, enhanced therapeutic alliance, and therapeutic change.

As evidenced by the historical review, counselor competences, and attention to human and animal welfare, the phenomenon of AAT is not new, not magical, and not merely bringing one's dog to work. Counselors should meet practical, clinical, and ethical standards when integrating AAT into counseling. Despite the long history of humans and animals engaging in mutually beneficial relationship, AAT is still considered a new and innovative (Stewart, et al., 2016) counseling specialty. Scholars have noted that methodological challenges, rather than intervention efficacy, may explain the current gaps in professional AAT evidence base (Amerine & Hubbard, 2016; Hamrick, 2011; Palley, O'Rourke, & Niemi). Operationalizing AA practice may be especially difficult because AAIs are as unique as the handler-teams that provide them.

Thus far, researchers have focused on the effectiveness of AAT-C through pre/post, outcome-focused studies, but a gap exists in the current research base for process-oriented

studies of AAT-C. HART may offer researchers and practitioners a more standardized language by which to study and facilitate AAT. Next, I describe how the research team investigated HART through qualitative methods in this proposed study.

APPENDIX B

DETAILED METHODOLOGY

In this study, the research team identified, described, and evaluated Chardler's HART (2015a, 2015b, & in press) in AAT-C. The central research question was: How does HART manifest in counseling from the perspectives of counselors and clients? Through the iterative process of qualitative investigation, I developed several subquestions: What is the experience of the counselor during HART; What is the experience of the client during HART; and What is the experience of the therapy animal during HART?

This qualitative study was designed to investigate the constructs of HART when counselors incorporate the modality of AAT-C (Chandler, 2015a, 2015b, & in press). In this section, I explain the design, procedures, sampling and data collection plans, and data analysis plan for this study.

Design

I developed this study through a C-GT approach (see Charmaz, 2014). to seek a holistic understanding of the complex phenomena of HART (Chandler, 2015a, 2015b, & in press). Glaser and Strauss (1967) established grounded theory as a method to guide researchers toward generating theory based on observations and constructed meanings. Charmaz developed constructivist-grounded theory to attend to the inherent and inter-subjective position of the researcher in investigative studies (Grbich, 2013). A grounded approach was appropriate for this study because HART is new, relatively unknown, and has never been investigated (Creswell, 2014). Therefore, a need exists for exploration and theory development in the field of AAT-C (Grbich, 2013; O'Haire, 2013; Amerine & Hubbard, 2016). Jayne (2013) and Oliver, Nelson, and Ybanez (2010) utilized similar approaches to examine process-oriented interventions in counseling and supervision, respectively. Moreover, choosing a C-GT approach added to the

transparency and credibility of this study. Throughout, I acknowledged the positions of the research team members and valued the participants' roles and perspectives (Charmaz, 2014; Grbich, 2013; Koro-Ljungberg et al., 2009).

Research Team

The research team was comprised of one doctoral candidate who is licensed professional counselor (LPC), two counselors-in-training, and one faculty member from the counseling department. I, the primary researcher, am a 36-year-old female of European-American descent. I am an LPC and doctoral candidate who has completed three courses in AAT, two years of AAT supervision, and training in qualitative analysis and investigative methods. I qualify as a competent animal-assisted practitioner based on Stewart and colleagues (2016) competencies for AAT-C. Moreover, I identify as a constructivist counselor, supervisor, educator, and researcher. I believe that people actively construct their own meanings about experiences based on their subjective knowledge of said experiences, and that therapeutic change occurs within the context of authentic, accepting, and empathic relationships. I believe that therapy teams can provide opportunities for such relationships through AAT. Furthermore, I have witnessed personal growth for myself, clients, supervisees, and students in the context of AAIs. I have also participated in a global research project to explore AAT in cross-cultural settings. As a result of these experiences, I have a deep commitment to AAT practice and the advancement of the field of AAT in counseling and psychotherapy.

The two counseling students were clinical counseling interns in a master's-level counseling training program, and completed at least one didactic course in AAT. Both team members were in their mid-twenties, of European-American descent, and identified as female.

Although both research members were clinical interns in community counseling settings during the study, one member was also an equine specialist and intern in an animal-assisted practice. Both research team members were passionate about the field of AAT, and believed in the efficacy of the intervention prior to joining the research team.

The faculty member served as an expert consultant and peer reviewer for credibility and dependability in the research process. She was distinguished in the field of AAT with decades of AAT clinical practice, teaching, and supervisory experience, and dozens of publications in the field of AAT. She has written a book about AAT in counseling and psychotherapy that is now in its third edition. She is an LPC-Supervisor, a Licensed Marriage and Family Therapist Supervisor, and holds innovation awards from the American Counseling Association and a humanitarian service award from the Hospital Corporation of America.

Population, Setting, and Participants

I conducted this study at a university counseling training clinic, run by a counseling program in the southwestern United States, and accredited by the Council for Accreditation of Counseling and Related Programs. Counselors who practiced in the training clinic served students and the local community by providing individual, group, couples, family, and career counseling across the lifespan at a sliding scale rate. The clinic referred clients whose presenting concerns were substance abuse, psychosis, or suicidal or homicidal ideation. First, I obtained Institutional Review Board (IRB) approval through the university and permission from the training clinic director to conduct the study. Then, I recruited counselors (n = 2) with therapy animals (n=2) and their adult clients (n = 2) who had experienced the phenomenon of AAT-C at the clinic as participants (N = 6).

Counselors who provided AAT services were registered as handler teams with Pet Partners© (2012), licensed in the state of Texas to provide mental health services, and had taken at least one graduate level course in AAT. The counselors and their therapy animals were defined as therapy teams. The clients participated in weekly, 50-minute counseling sessions with the therapy teams. The practice of investigating the processes between counselor-client dyads was consistent with other research designs in the professional counseling literature (Altensetin et al., 2013; Kivlighan, Marmarosh, & Hilsenrroth, 2014; Maggio, 2014); however, client perspectives are currently missing from professional literature in AAT (Bedi & Duff, 2014). In Table B1, I offer rich descriptions of each participant:

Table B1

Descriptions of Study Participants

	Team A	Team B
Client (CL)	• 22 y/o European-American female • Self-described as gender-fluid and bisexual • Master's counseling student • Presenting concerns: anxiety, emotional and relational awareness • Long history of talk therapy	• 55 y/o European American male • Self-described as cisgender and heterosexual • Business owner • Presenting concerns: anger, relational awareness • Long history of talk therapy
Counselor (CO)	• 28 y/o European American female • LPC-intern, LMFT-Associate • Relational Cultural Theory • Practicing counseling 2 years • Training and supervision in AAT • 1 year of AAT supervision and practice	• 32y/o European American female • LPC-intern • Adlerian Theory • Practicing counseling 6 years • Training and supervision in AAT • 2 years of AAT supervision and practice
Therapy animal (TA)	• 4 y/o male Labrador Retriever • Approximately 80 pounds	• 5 y/o female Spaniel mix • Approximately 20 pounds

Procedures

I utilized snowball sampling to recruit therapy teams (Hesse-Biber & Leavey, 2011). That is, I recruited counselors who utilized AAT from a known network of animal-assisted counselors

at the university. I met face-to-face with each therapy team, provided written informed consent, explained verbally the expectations of their participation in the study, and answered questions regarding their participation in the study. The informed consent described the purpose of the study, procedures, foreseeable risks and benefits to participants or related parties, and confidentiality of research information. After consenting to participate in the study, counselors provided information about the study to their adult clients. With the clients' consent, I met with client-participants, provided a copy of the written informed consent, described verbally the expectations of participation in the study, and answered any questions about their participation in the study.

In addition to meeting IRB approval, primary ethical concerns for this study centered around counselor qualifications, anonymity of participants, animal welfare, and human welfare. To ensure counselor competence, counselor-participants were licensed to practice counseling in the state, obtained specialized training in AAT, and were obtaining advanced clinical training and supervision in a doctoral counseling program (ACA, 2014; Chandler, 2012; Stewart et al., 2016). Consistent with AAT counselor training, counselors provided care for therapy animals including access to food, water, rest, and elimination areas during therapeutic work (Pet Partners©, 2012; King, Waters, & Mungre, 2011; Kizziar & Dodds, 2014). Prior to participation in the study, therapy animals were trained with basic obedience skills and socialized to remain trustworthy under stress-related conditions (Glenk, Stetina, Kepplinger, & Baran, 2011). Counselors attended to the welfare of clients by pre-screening for animal phobias and allergies, adhering to the ACA (2014) code of ethics, and meeting competencies of AAT-C established by Stewart and colleagues (2016). AAT-C sessions were video-recorded and stored on a closed

circuit, secure intranet server to further ensure client confidentiality. Finally, I protected the anonymity of all participants—counselors, clients, and therapy animals—by describing them as Therapy Team A and Therapy Team B in all references to this study.

Sampling Plan and Data Collection

I used purposive, snowball sampling to select participants who have experienced the phenomenon of AAT (Creswell, 2014; Hesse-Biber & Leavy, 2011). I identified two (n = 2) therapy teams of counselors and therapy animals who met the following criteria: (a) were registered through Pet Partners© with their therapy animals; (b) practiced AAT with adult clients; and, (c) attended weekly group supervision of AAT with an expert faculty member.

Each participating counselor submitted a professional disclosure statement, six video-taped AAT-C counseling sessions, and a demographic questionnaire from their clients. I conducted one live observation per therapy team, and wrote field notes during the observations with attention to relational moments (RM) among the counselor, client, and therapy animal. Following the sessions, I met with counselor-participants to hear their perspectives of the AAT-C sessions. In alignment with Jayne (2013) and Oliver et al. (2010), I conducted 60-120 minute, semi-structured interviews with each counselor observed in AAT sessions. I asked the counselors to identify, describe, and reflect upon the SHARMs and HARP in the sessions. I also conducted interviews with each client in the semi-structured manner described above. I interviewed each counselor and each client two times (n=8). In Figure B1, I illustrate data collection procedures for this study.

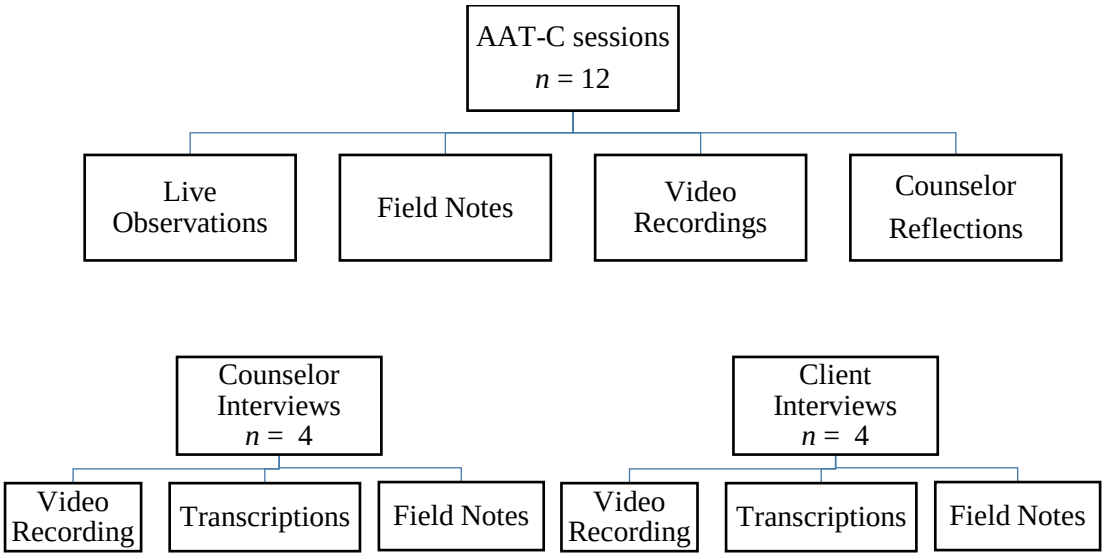

Figure B1. Data collection procedures

Data sources

To ensure the credibility and trustworthiness of the study, I collected data from multiple sources: AAT-C sessions (N = 12) and participant interviews (N = 8). The AAT-C sessions took place at the university counseling training clinic. The clinic permitted counselors to work with only canines in AAT sessions; therefore, therapy teams consisted of counselors and canines. AAT-C sessions occurred weekly for 50 minutes, and both therapy teams entered the study during the final phase of counseling with their clients after working together for one to two years. Counselors introduced the therapy animals several months prior to the beginning of the study.

I conducted the participant interviews at the university clinic in the same counseling room where participants had experienced AAT-C. The interviews were audio- and video-recorded and transcribed verbatim for data analysis. I, the primary investigator conducted the interviews that ranged from 60 to 120 minutes in length. I utilized counselor reflection notes,

researcher field notes, and participant identification of SHARMs and HARPs from counseling sessions to guide the interview questions. Interview questions included:

- How did you facilitate the HARP after you or your client acknowledged a SHARM?
- How do you feel about your ability to identify SHARMs and facilitate HARP?
- Could you tell me about how this SHARM and HARP have impacted you, if at all.
- What was it like for you to experience SHARMs and HARP?

Because semi-structured interviews evolve as an iterative process (Hesse-Biber & Leavey, 2011) the aforementioned questions were posed in each interview, and I asked follow-up questions to each participant that were based on each one's perspective.

Finally, I interviewed each participant a second time. In the second interviews I utilized the recorded AAT-C sessions to gain information from participants about their experiences of specific SHARMs and HARPs from the open coding of AAT-C sessions. Notably, follow-up questions for clients differed from follow-up questions for counselors. Likely, this difference was because the counselors and clients differed in their roles and expectations of the counseling experiences (Bedi & Duff, 2014; Kivlighan et al., 2014).

Data Analysis

I used multiphasic comparative data analysis as a guide for analyzing data (Charmaz, 2014; Jayne, 2013). First, the research team wrote a coding manual based on the framework of Chandler's (Chandler, 2015a, 2015b, & in press). HART. Then, the team coded the data in three phases: (1) open coding, (2) focused coding, and (3) theoretical coding (Charmaz, 2014; Glaser & Strauss, 1967). In Table B2, I describe the multiphasic comparative data analysis procedures.

Table B2

Procedures in Qualitative Data Analysis

Steps	Procedures
Training, orientation, and identity exploration of coding team	The primary researcher (PR) educated the coding team about the study and methods for data collection and analysis. The PR oriented the coding team to the central research question and facilitated a discussion of potential biases, values, and experiences that may have influenced data analysis (Charmaz, 2014).
Open Coding of AAT Sessions: Phase I	The PR independently analyzed video-recorded AAT-C sessions of both therapeutic triads. The PR assigned a therapeutic triad to each coding team member. The PR and coding team analyzed each AAT-C session incident-by-incident based on Chandler's model of relational experiences in AAT-C. Coding team members individually watched each AAT-C session in its entirety to develop global impressions of sessions.
Comparison	After coding half of the assigned sessions, the coding team met to discuss coding process and compare codes. The team compared codes to observational field notes and initial analytic memos. The PR met with the faculty expert to present the latest findings and enhance trustworthiness.
Open Coding of AAT Sessions: Phase II	The coding team independently analyzed the last half of the video-recorded AAT-C sessions utilizing the same procedures as in Phase I.
Comparison	The research team met using the same procedures as Phase I and the PR met again with the faculty expert to ensure credibility and trustworthiness of the coding process.
Open Coding of Participant Interviews	The coding team independently analyzed the video-recorded participant interviews with the corresponding transcripts. Counselor interviews we recoded in their entirety line-by-line.
Comparison	The research team met using the same procedures as Phases I and II of open coding for AAT-C sessions, and the PR consulted with the faculty expert to present latest findings and enhance credibility.
Focused Coding	The PR compared codes and categories from the AAT sessions to codes and categories from the participant interviews. The PR identified the most frequent and significant categories to analyze larger segments of data and to compare the participants' experiences, actions, and interpretations (Charmaz, 2014).
Theoretical Coding	The PR compared focused codes and utilize analytical memos to identify relationships between substantive categories.

Training and Orientation

To begin, I facilitated training for the coding team. The training included a review of canine behaviors such as calming signals, manifestations of canine emotion, and social bonding behaviors (Bekoff, 2007; Chandler, 2012; Rugaas, 2006; Pet Partners©, 2012).

Next, I demonstrated the open coding protocol of incident-by-incident coding (Charmaz, 2014) with attention to SHARMs and HARPs (Chandler, 2015a, 2015b & in press). Likewise, I consulted the faculty expert prior to and following the training to help clarify any questions about the coding process.

Open coding

During the first phase of open coding, the team independently analyzed the video-recorded AAT-C sessions. The researchers watched each AAT-C session in its entirely to develop holistic representations of the sessions. In accordance with recommendations from Charmaz (2014), the team coded each AAT-C session incident-by-incident, time-stamped, and described each RM and HARP. The team coded each RM based the type and direction of the RM. For example, they noted the relational behavior of a member of the therapeutic triad and described toward whom that relational behavior was directed. The team also coded each HARP by noting who initiated the HARP, describing the language and nonverbal communication of the HARP, and the reporting outcome of the HARP. For instance, whether the counselor or client initiated the HARP, what they said or how they appeared during the HARP, and what followed the HARP during that session. Following initial coding, the team met to discuss the coding process and compared codes and field notes. The research them repeated this process until all sessions (n = 12) were coded, compared, and analyzed.

Next, the coding team independently analyzed interview transcripts through open coding and met to compare codes. The team coded each transcript line-by-line. Glaser (1978) described the process of line-by-line coding as a means of naming each line of written data, and Charmaz (2014) suggested utilizing line-by-line coding when one has already obtained a point of

view from previous data or knowledge. Following the open coding phases of AAT-C sessions and participant interviews (n = 8), I conducted further analysis through focused coding.

Focused and Theoretical Coding.

Focused coding is the process of categorizing large amounts of data by identifying the most frequent or significant initial codes (Charmaz, 2014). In this study, the coding team conceptually coded the SHARMs and HARPs through triangulation of previously coded data sources: field notes, analytic memos, live and video observations, and participant interviews. During this phase, unexpected ideas emerged through triangulation of previous and newly developed codes (Charmaz, 2014). I used Charmaz's (2014, p. 140-141) questions for comparison as a guide for focused coding:

1. What do you find when you compare your initial codes with data?
2. In which ways might your initial codes reveal patterns?
3. Which of these codes best account for the data?
4. Have you raised these codes to focused codes?
5. What do your comparisons between codes indicate?
6. Do your focused codes reveal gaps in the data? (pp.140-141)

Throughout, I used constant comparison to increase the credibility, dependability, and confirmability of the findings (Glesne, 2006).

I performed theoretical coding (Charmaz, 2014) to theorize the data, narrow focused codes, and identify relationships between the fundamental categories of HART in AAT (Chandler, 2015a, 2015b, & in press). I chose theoretical as opposed to axial coding because the purpose of the theoretical coding is to integrate the categorized elements of data into a developed grounded theory; thus, negating the need for axial coding (Glaser, 1992). Then, I constructed theoretical codes from focused codes and analytical memos to codify (Charmaz,

2014) the constructs of HART (Chandler, 2015a, 2015b, & in press). Specifically, by coding SHARMs and HARPs, I identified their relationships within HART (Chandler, 2015b).

Peer review and member check

I met with the faculty expert after each phase of open, focused, and theoretical coding to evaluate the dependability of analyses (Creswell, 2014). The faculty expert provided feedback regarding the coding process and findings.

Following the final peer review, I presented the preliminary findings of data analysis to the participating counselors for a member check in the form of a focus group. Consistent with qualitative research methods, I chose this tactic to confirm and elaborate data categories (Charmaz, 2014). I audio-recorded the focus group and recruited the faculty expert to write field notes about the participants' dialogue, questions, and nonverbal communication throughout the focus group. I asked the counselor-participants to evaluate the accuracy and trustworthiness of the preliminary findings, particularly with regard to the relatedness of core categories. Finally, I integrated the counselors' feedback into the resulting categories of HART.

Trustworthiness

To establish trustworthiness, credibility, transferability, dependability, and confirmability, I employed the following qualitative strategies during data collection and analysis.

- Reflexivity – Throughout the research study, I reflected upon my own epistemological and ontological beliefs about knowledge and knowing, and examined how those assumptions influenced this study. I examined field notes, observations, and coding

processes to develop analytical memos in an iterative process consistent with Charmaz's (2014) C-GT.

- Prolonged exposure – Adding to the credibility and rigor of this study, I had prior relationships with the counselors, their animals, and the faculty expert (Morrow, 2005). Moreover, the entire research team spent extensive time together training, coding and comparing videotapes of AAT-C sessions and participant interviews.
- Peer review – To enhance consistency and dependability of the study, I frequently described the coding team's analytical processes and findings to the faculty expert for review (Morrow, 2005).
- Member checking – I met with the counselor-participants to present preliminary findings of the data analysis and obtain their evaluations of the preliminary categories and the evolving grounded theory.
- Purposive sampling – I chose participants who directly experienced the phenomenon of AAT-C and practitioners who were qualified to practice this therapeutic modality based on standards of the ACA (2014) and Stewart and associates (2016).
- Triangulation - I utilized multiple data sources including live observations of AAT sessions, video-recorded AAT sessions, counselor interviews, client interviews, field notes, and counselor notes to guide theoretical sampling processes, coding procedures, and therapy development (Hesse-Biber & Leavy, 2011). Additionally, a second coder with advanced counseling and basic AAT training will independently code video-recorded AAT sessions, counselor interviews, and client interviews. The research team

will employ constant comparative analysis to compare data points from multiple sources (Charmaz, 2014).

- Literature review – I completed a secondary literature review to compare research findings with current literature and identify limitations in the evolving grounded theory.

APPENDIX C

UNABRIDGED RESULTS

The purpose of this study was to explore how Chandler's (2015a, 2015b, & in press) HART manifested in counseling. Prior to HART, AAT scholars cited human-animal bond and attachment theory as primary explanations for the efficacy of AAT (Ainsworth, 1989; Bowlby, 1977; Fine, 2010; Parish-Plass, 2013). Whereas, attachment theory and human-animal bond may describe relational dynamics among humans and companion animals those constructs do not encompass the principles, practices, and processes that occur in AAT-C (Zilch-Mano, Mikulincer, & Shaver, 2011). Chandler (2015a, 2015b, & in press) proposed HART to clarify these discrepancies. This study is the first process-oriented study (Borrego et al., 2014; Kamioka et al., 2014; Nimer & Lundahl, 2007) of AAT and the first related to Chandler's (2015a, 2015b, & in press) HART.

Because of the exploratory nature of this study, I chose the qualitative framework of constructivist-grounded theory (C-GT; Charmaz, 2014; Creswell, 2014). This decision was consistent with other scholars who utilized C-GT when researching process-oriented questions in counseling (Jayne, 2013; Oliver, Nelson, and Ybanez, 2010). Through open, focused, and theoretical coding of AAT-C sessions and participant interviews, I codified a grounded theory of how counselors and clients experienced Chandler's (in press) constructs of RMs, SHARMs, HARPs, and HARTI, as well as how participants experienced the phenomenon of HART. Through the multiphasic coding process, the research team identified the following themes: (a) RMs and SHARMs; (b) HARPs; (c) HARTI; (d) Interactive experiences of HART; and, (e) resistance. I have organized this chapter by the major themes, followed by a concluding summary.

RMs and SHARMs

RMs and SHARMs were identified through verbal and nonverbal communication. In comparison to traditional counseling, the element of a therapy animal in AAT-C added another dimension to RMs, as evidenced by Figure C1, adapted from Chandler (2012).

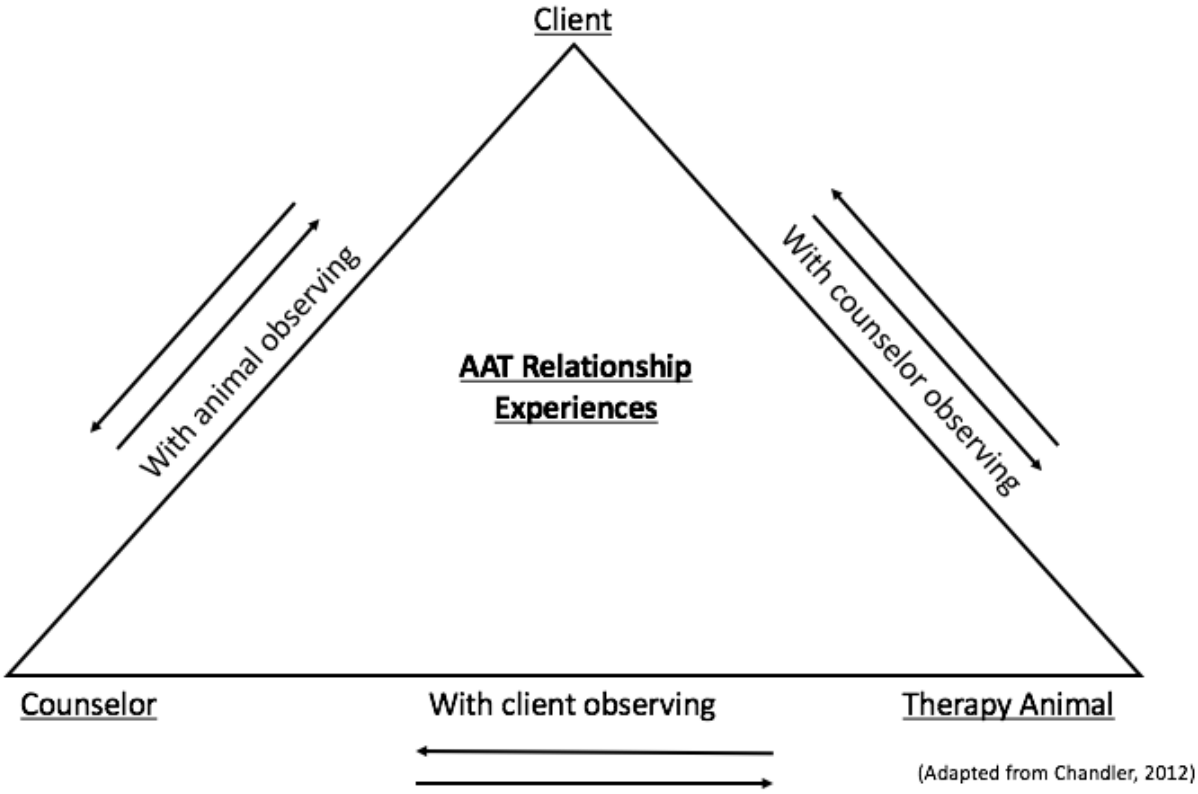

Figure C1. Depiction of RM dynamics. Adapted from "Animal-assisted Therapy in Counseling," by C. Chandler, p. 134. Copyright 2012 by Routledge.

In this study, the research team found that the interactions of participants were consistent with Chandler's (2012) model. Counselors and clients initiated relational experiences with one another through verbal and nonverbal communication as therapy animals observed. Clients and therapy animals initiated relational experiences with one another through verbal and nonverbal language as the counselor observed. Counselors and therapy animal initiated relational experiences between one another through verbal and nonverbal communication as clients observed.

As evidenced by participant descriptions, as well as live and video observations of AAT-C, relational moments also occurred involving all participants in the therapeutic triad (client, counselor, and therapy animal). For example, a therapy animal communicated distress via a calming signal, such as panting, and the counselor and client simultaneously responded by comforting the therapy animal through petting or nurturing verbalizations. Conversely, a different therapy animal disengaged from both client and counselor by moving across the room and demonstrating calming signals such as sniffing or lip-licking. Chandler (in press) described these moments as integrated, based on her triangular model (Chandler, 2012). In other words, the integration of all sides of the triangle. In practice, these moments encompassed the therapeutic triad, appeared complex, and were difficult to decipher (see Figure C2).

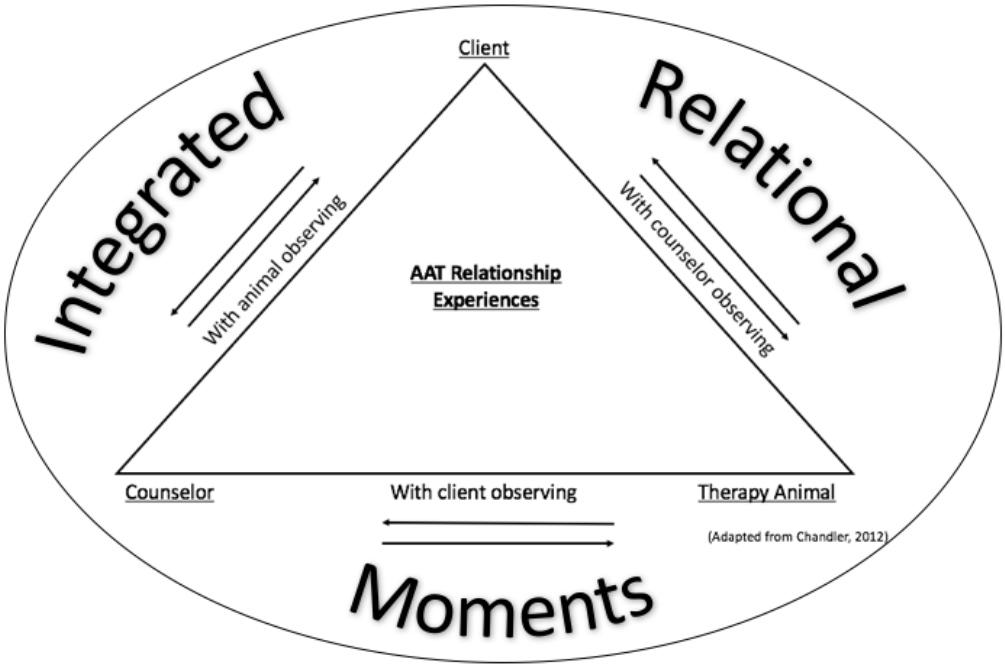

Figure C2. Diagram of integrated RMs.

Notably, the research team found that integrated relational moments in the 12 observed AAT-C sessions ranged from 1% to 25% of relational moments identified per session. In Table C1, I offer descriptions of RM characteristics, examples, and outcomes or responses.

Table C1

RM Descriptions

Characteristics	**Examples**	**Outcomes/Responses**
• Tangible • Intentional • Mirroring • Simple • Integrated	• Calming signals • Attending behaviors • Play	• Ascribed meaning • Often ignored/missed • Dismissed

Participants described RMs as tangible, intentional, and mirroring their internal emotional experiences. The research team observed that RMs were numerous, and ranged from simple to integrated. Examples of RMs included therapy animal behavior (TABx) such as calming signals, attending behaviors such as “greeting” and “checking-in”, and play behaviors such as tug-of-war, fetch, and bowing. Participants described, and the research team observed, that the most common responses to RMs were ignoring, not recognizing, or dismissing. Less frequent, though described as most impactful, were instances when the client or counselor ascribed meaning to an RM. As a result, the RM was considered a significant human-animal relational moment (SHARM).

SHARMs occurred within the context of RMs, were facilitated by counselor or client, and were initiated by counselor, client, or therapy animal. Likewise, they occurred between client and therapy animal, counselor and therapy animal, or were integrated to include the relational

dynamics of client, counselor, and therapy animal. Counselors or clients ascribed significance to SHARMs; thus, SHARMs were assigned greater value than RMs in the therapeutic process.

Figure C3. Participant experiences of SHARMs.

As displayed in Figure C3, participants described their experiences of SHARMs primarily as reflecting their internal experiences or reflecting the immediate dynamics of the counseling environment. Participants described secondary SHARM experiences as connecting, informing, enhancing, attending, grounding, guiding, and signaling (see Figure C3). Remarkably, participants also described SHARMs as enhancing the therapeutic alliance and counseling skills for counselor-participants and enhancing interpersonal skills for client-participants. Although

client-participants did not specify the term SHARM during interviews, a sub-category of their experiences in AAT-C emerged regarding the impact of their relational experiences with therapy animals. Client-participants described those moments most often as comforting, increasing awareness, and transformative. Counselor-participants most frequently described experiences of SHARMs as models for interpersonal relationships, immediate therapeutic opportunities, and missed therapeutic opportunities. In an example of modeling relationships, a counselor stated:

> I used modeling as I was saying things to bring into [CL] awareness…Trying to actively confront [CL] without humiliating [CL]. I was modeling for [CL] how you have a relationship with people without smashing them, and having [TA] there to do that, [CL] perceived me as less threatening.

Moreover, counselor-participants noted the frequency and complexity of RMs and SHARMs, and acknowledged the difficulty in recognizing all of them all of the time. The counselor-participants confirmed Chandler's (2012) assertion that AAT-C is a complex form of therapy.

Researchers observed the SHARMs displayed in Table C2 most often during HART. The column labeled Direction in Table C2 is related to the relational dynamics displayed Figure C1. The descriptors in the Type column of Table C2 were the most common type of SHARM for each relational dynamic, and the examples in the Team A and B columns were observed among each participant team.

Table C2

Common SHARMs within the Therapeutic Triad

Direction	Type	Team A Examples	Team B Examples
TA to CL	Changes in posture and/or location	TA moved from sitting on couch between CO and CL to lying in CL lap with belly exposed	TA stands from sitting w/ CO, stretches, walks to CL and sits down facing CL.

CL to TA	Petting and/or verbalization	CL rubbing TA ears while discussing guilt says, “Yeah. It’s not a good feeling, [TA]”	CL: "I missed you, too"…"Did you miss me?"…"You glad I'm here?"...
CO to TA	Petting and/or verbalization	CO reaching to pet TA as TA begins demonstrating calming signals	After TA comes to CO, CO begins petting and offering verbal reassurance to TA
TA to CO	Change in location or position with calming signals	Moves from couch to floor, lies facing CO, begins to make growling sounds	Following harsh tone from CL, TA walks to CO from CL, hides face in corner of sofa
CO to CL (with TA observing)	CO and CL speaking to one another	CO and CL processing presenting problems as TA makes eye-contact with both	CO and CL processing CL presenting problems as TA falls asleep
CL to CO (with TA observing)	CO and CL speaking for TA or to one another	CL: "What are you doing, [TA]?" CO: "Being weird" CL: "I'm just hiding my face right now."	CL asking CO about TA life history as TA lays on floor.
Integrated (including all beings in environment	Moving toward or moving away	TA demonstrating calming signals (panting, wagging) while looking at counselor, client verbalizing reassurance to TA, while both CO and CL pet TA	TA moves across the room from sitting in between CO and CL, begins to demonstrate calming signals (sniffing, lip-licking)

Note: CL = client; CO =Counselor; TA =Therapy Animal

In Table C3, I displayed a full description of SHARMs including characteristics, examples, and outcomes/responses as described by participants. The table should be read by column from top to bottom.

Table C3

SHARM Descriptions

Characteristics	Examples	Outcomes/Responses

• Immediate
• Informative
• Intimate
• Inherent in AAT-C
• Consistent
• Concrete
• Bidirectional
• Integrated(complex)
	• Calming signals: changes in position or location, panting, look-away, moving away, scratching, pacing, sniffing, wagging, shaking-off, splitting, trembling, whining, growling,
	• Attending Bx: moving toward, eye-contact, checking-in, close proximity, nudging, waiting, cuddling, exposed belly
	• Limit-setting
	• Greeting
	• Reassuring
	• Playing
		• Clients
		  • Empathy
		  • Comfort
		  • Awareness
		  • HARP
		  • Resistance
		  • Therapeutic distraction
		  • Long-term impact
		• Counselors
		  • Assessment
		  • Guidepost
		  • Ignoring
		• Counselors and Clients
		  • Grounding
		  • Connecting
		  • Observing
		  • Acknowledging/recognizing
		  • Therapeutic/cathartic

Characteristics

Researchers observed that the direction of SHARMs were either bidirectional or integrated; therefore, consistent with Chandler's (2012) model described in Figure C1. Participants designated SHARMs as immediate, informative, intimate, and inherent in the HART process. Moreover, participants described SHARMs as consistent, concrete, bidirectional and integrated or complex. One client participant described the immediacy of a therapy animal to client SHARM in this way:

> I went off on a little mini-tangent, and [TA] was like, 'Hey, we're coming back to what we were actually talking about.' Then as soon as I was like, 'Oh, [TA] wants my attention.' I'm pretty sure the next thing I did was kind of backtrack and go back to what I was doing. It pulled me back to where I was supposed to be talking rather than having my little bloop.

Likewise, a counselor participant explained how client to therapy animal SHARMs inform the counseling process:

> When I see [CL]… dismissing [TA], then that gives me some information. [TA] is not an anomaly. [If] you're going to dismiss her, you're going to dismiss me….When I see [CL] being really gentle with [TA], or…just dismissing like, 'Oh, you just want to be petted. You need so much attention.' Those kinds of things tell me that maybe [CL] is not ready. [CL] is not ready to have a real relational depth here. That's neither good nor bad. It's just, that's where [CL is]. I need to accept where [CL is].

In another example, a client participant described the intimacy of SHARMs: "To me, it was more like all right, we're having a little private moment because [CO]'s not picking up on it. It's okay. [CO] doesn't have to. It was kind of sweet between me and [TA]."

Examples

Participants described examples of SHARMs as calming signals, attending behaviors, limit-setting, greeting, and reassuring. Of note, counselor-participants seemed more focused on calming signal SHARMs and client-participants appeared to focus more on attending behavior SHARMs. This was consistent with the role of each human being in the room. Counselors are expected to be observing SHARMs to gain information about the client and the dynamics within the therapeutic relationship. Likewise, clients expect to be attended to when participating in the counseling process.

Calming Signals (Rugaas, 2005) were the most common indicators of SHARMs to counselor- and client-participants. Participants and researchers acknowledged the calming signals listed in Table C3 as the most frequent and consistent signals demonstrated by therapy animals. Participants described, and researchers observed, that signals such as changes in position or location, panting, look-away, moving away, splitting, and scratching, were typical

during the course of any HART session. A counselor participant described this experience of splitting:

> We're sitting on this low, little couch and [TA] will come and stand over us and put [TA]'s body right in front of [our faces]. It's a big, meat wall between you and the other person and it's always meaningful. [TA] wants to be between us…For me, it's coming from that place of, 'Everything [TA] is doing is intentional'…and if I work from those assumptions, then what does this [SHARM] mean?

Another counselor described the SHARM of the therapy animal moving away from the client to make eye-contact and be with the counselor:

> I didn't entice [TA]. I didn't call [TA]. I didn't stare until [TA] scudded to me looking at me. [The SHARM] was helping my client, as well as myself, coming to the here-and-now. That really helps these relationships, I believe. It's indisputable. [CL] saw it happen. [CL] experienced that with me. I'm just helping [CL] put meaning on that. 'What did that mean when [TA] moved? [TA] felt you. [TA] felt you like humans do, but humans aren't going to run away because that's socially awkward.'

Other signals such as wagging, sniffing, pacing, and shaking-off were less frequent and occurred at either the beginnings or endings of sessions. Here, a counselor describes the calming phenomenon of shaking-off:

> [TA] does the full body shake calming signal thing sometimes…It is almost like, 'Oh. We're getting up? Okay, I'm going to shake, and we're going to walk out the door.' Or [unprompted by neither CO nor CL], 'I'm going to get up and shake it off to be like, 'Okay guys I'm leaving, what are you doing?'

Finally, the least observed calming signals exhibited by therapy animals were whining, growling, and trembling. These signals appeared to garner the most immediate attention from participants because they were so rare, and because they were TA demonstrations of the most intense distress. A counselor expounds on experiencing the animal co-therapist growl during AAT-C:

> I trust [TA] now in a way that I've never realized before…If [the dynamics are] unmanageable [TA] has a particular cue for me that [the dynamics] need to be

addressed right now…[TA] does a little growl, and won't stop. So, if there's something to be said, something that I'm sitting on…[TA] feels it so intensely that [TA] cannot just let that moment pass…Whether it feels like it is to me or not, it is to [TA] and I have to trust [TA] because [TA is] my co-therapist…not just my dog coming to work with me.

Participants and observers recognized attending behaviors as consistent aspects of HART. The most common attending behaviors demonstrated by the therapy animal were moving toward, making eye-contact, checking-in, having close proximity, nudging, waiting, cuddling, exposing belly. The following is an excerpt about attending behaviors between the primary investigator and a client participant after reviewing a clip of the client's HART session, which included an expressive art activity:

Interviewer: …I noticed that it seemed like [TA] was really looking at you, and hearing every word...I wonder how you experienced that?

CL: [TA] is definitely very attentive to what I got out of our sessions…I know that particular session I didn't quite know where my life was going to go... I remember thinking like, 'Man, I'm really going to miss this counseling relationship. It's significant.' I was going to miss [CO] and I was going to miss [TA]. I felt like [TA] was just kind. I felt the need to be closer to [CO]. Because I felt the need to be like, okay, I'm going to be close to you via, let me draw this stuff that you helped me with. [TA] was still very attentive to me as I was communicating that closeness.

Interviewer: …Is there anything new that comes up as you watched it? Any new feelings? Or perceptions, or thoughts?

CL: Me really recognizing what [TA] was doing. Because, I just remember …that session was really hard…and I was like, 'this is kind of rough.' I don't know, just watching that I was like [to TA], 'So that's what you were up to, okay. I got you.'

Participants also described SHARMs as greeting, reassuring, playing, and limit-setting. Participants described greeting SHARMs occurring at the beginning of sessions. Occasionally, greeting SHARMs were spontaneous as the team walked together to the counseling room. In other instances, counselors purposefully facilitated greeting SHARMs as an intervention to promote therapeutic opportunities. For example:

> [CL] started becoming really excited whenever I would greet [CL] at the door because [TA] would run to [CL], and you can see that authentic happiness to see [TA], and [CL] would still be authentic as we walked down the hallway to the room, where [CL] would start showing a lot more sadness. I think it had to do with starting the authenticity at the door.

The research team also observed human participants reassuring therapy animals through petting or speaking in nurturing tones when therapy animals exhibited calming signals such as panting or wagging. For instance, when a client leaned down to pet a therapy animal who was moving away from the counselor the client stated nurturingly, "You don't want to leave, do you?"

Counselor-participants noted that limit-setting SHARMs occurred frequently, and suggested that completing basic training for play therapy prior to practicing AAT-C could be helpful in managing relational dynamics when a therapy animal is present. Specifically, skills taught in introductory play therapy courses such as observing, reflecting, and limit-setting in a gentle and immediate manner could help enhance the therapeutic alliance among therapeutic triad. Furthermore, all participants acknowledged the experience of setting limits with an animal as less threatening than setting interpersonal limits with humans; thus, this type of SHARM may be transformative in offering an opportunity to practice setting boundaries within a non-threatening relationship. For instance,

> I would hope that my clients could really see that [TA] really trusts me. It really sets the precedent that [TA] really trusts me, [TA] really loves me, and our relationship continues to be good. Even when I step in and do things like, 'Well, clients are not for chewing on.'

Outcomes/Responses

As noted in Table C3, some outcomes or responses were described by either clients or counselors, and others were experienced by both clients and counselors. Clients described

SHARMs as experiences that offered empathy, comfort, awareness, and provided opportunities for processing, therapeutic distraction, resistance, and long-term impact. Here, a client who presented to counseling for trouble relating to others described the long-term impact of SHARMs with the therapy animal, "I got to learn a little bit more about myself...When I see the dog, I know I love the dog. I like the dog. I enjoy how sweet the dog is and well behaved it was." Counselors described SHARMs as experiences that they may have ignored, as guideposts for therapeutic intentionality, and as opportunities to assess the relational dynamics among the therapeutic triad. Here, a counselor participant described the absence of a SHARM where a therapy animal had previously and consistently manifested a SHARM. The counselor assessed client progress and chose the next intervention more intentionally:

> [TA] is so quick to pant with this CL. [TA] not choosing to pant while we were recounting something that [was a difficult topic for CL]. I…was like, 'This should make [CL] anxious [based on previous sessions] but [TA] is not telling me that you're anxious, so I'm going to notice that [CL] is not anxious because of the information [TA] has given me, and comment.'

SHARMs were experienced by counselors and clients as grounding, connecting, and therapeutic or cathartic, as well as opportunities for observing and acknowledging relational dynamics within the counseling process. One counselor acknowledged the grounding nature of SHARMs in HART: "…the effect that they have on me is the grounding, re-prioritizing. Paying greater attention to timing and the dynamics in the room." Moreover, a client described experiences of SHARMs in relationship with a therapy animal in this way:

> There were times when I was just like, 'I want to disappear.' Not like die or anything dramatic like that, but just not be in the place or the situation I'm in. For the time being, you have to deal with whatever situations you are in and whatever place you are in. I saw that reflected in [TA], because I'm like yeah, [to TA when placing head in CL lap] 'You just put your head down and bear it. You've just got to do it. You do what you've got to do.' It was a grounding thing.…He kept me here. He kept me more with whatever

> feeling I had, because that's something that I myself was trying to work on, was thinking with feelings. By supporting and being like, 'Let me put you in a mirror in dog form'.

This client made meaning from the SHARM with the therapy animal. That process of personal exploration in AAT-C was described by Chandler (2015) as the Human-Animal-Relational Process (HARP).

HARP

Chandler (in press) described HARPs as the meaning-making processes utilized by counselors and clients in AAT-C. In this study, HARPS occurred within the relational context of HART, were preceded by RMs and SHARMs, and were initiated by counselors and clients. Remarkably, the timing of HARPs did not always coincide with the timing of a SHARM. SHARMs occurred in a sequence over the duration of one or multiple sessions, or as isolated incidents. HARPs occurred immediately following SHARMs, in latter sessions, and when participants were outside of AAT-C sessions. Participants HARPed internally (I-HARP) as individuals, and externally (E-HARP) together.

In Figure C4, I display HARP dynamics within HART.

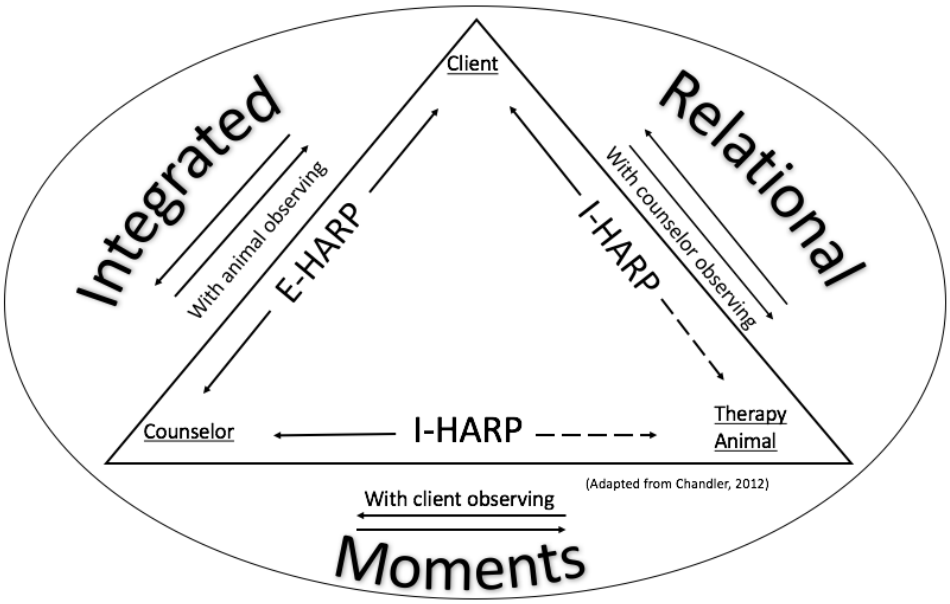

Figure C4. HARP dynamics in HART. Diagram of HARP contextualized within RMs. E-HARPs occurred between counselors and clients. I-HARPs occurred internally for counselors and clients.

Counselor- and client-participants described some recognition or communication from therapy animal during in-session I-HARPs. Counselor-participants reported experiencing I-HARPs more frequently than E-HARPs. For example:

> I've had moments where the client was saying something and [TA] would check-in with the client, and [TA] would turn around and come and check-in with me...I'd have that internal dialog moment, 'Okay. Am I okay? Am I in the room? Is [TA] checking on me, because [TA] wants to check on me, or is [TA] checking on me because something just came up for me?' So far, it's just like, 'Okay. Maybe I just need to refocus.'

In a different example, the counselor experienced the I-HARP and perceived that the therapy animal also experienced the HARP (see dotted line in Figure C4). The counselor stated,

> Sometimes I do feel like when we [CO and TA] don't process something with other people, but I know we both feel [the relational dynamics]. We have our little secret because [TA] just told me something that only I know.

Likewise, client-participants offered examples of I-HARPs. Some occurred inside the HART session, and other I-HARPs occurred outside the AAT-C sessions. As one client stated, 'I thought

about it coming in the parking lot. I realized I didn't have anything to give [TA]. I mean, I would like to be closer to [TA].' Participants also acknowledged experiencing E-HARPs during AAT-C. Here, a client initiated an E-HARP in response to the therapy animal cuddling in the client's lap and looking up at the client:

CL: You ever seen [TA] do this before?
CO: Actually, no…this is bringing out a different side of you…a nurturing side…a playful side.
CL: [Laughing] I gotta take time to get to know somebody before I show all that.

Clients described and researchers observed client-initiated HARPs as unprompted, reflective, and indicative of client engagement in AAT-C. In Table C4, I delineate the client experiences of client-initiated HARPs by characteristics, examples, and outcomes.

Table C4

Client-initiated HARP Descriptions

		External (E-HARP)	Internal (I-HARP)
Client Initiated	Characteristics	• Unprompted • Collaborative with CO • Indicator of CL engagement	• Unprompted • Experienced w/ TA • Not immediately verbalized • May occur in or out of session
	Examples	• Reflecting Therapy Animal Behavior (TABx) • Questioning TABx • Projecting onto TA • Reflecting on TA/CO/CL relationship	• Internal dialogue • Thinking about TA relationships • Self-assessing • Recalling other animal relationships
	Outcomes	• Greater HARTI • Less CL Resistance • Deeper insight and awareness • Vulnerability • Transfer of skills	• Motivational • Commitment to process • Emotion Recognition

Client-initiated HARPs

Client-initiated E-HARPs were viewed as unprompted, collaborative with counselors, and an indicator of client engagement. Comparatively, client-initiated I-HARPs were also

described as unprompted, as well as occurring in or out of session, being shared with the therapy animal, and not immediately, if ever, verbalized.

Examples of client-initiated I-HARPs included, reflecting and questioning therapy animal behavior, projecting personal experiences onto the therapy animal, and reflecting the relational dynamics among the counselor, client, and therapy animal. Examples of client-initiated I-HARPs included internal dialogue, thinking about TA relationships, self-assessing, and recalling other animal relationships. Here, a client who verbalized strong resistance to E-HARPing shared about an I-HARP that often occurred out of session regarding relational dynamics of HART:

> Driving up here and leaving, I've always wanted to have a fun time with [CO] and bring [TA] some snausages or whatever, and have [TA] rolling over on the floor when [TA]'s never done it before, and have [TA] speak when [CO] never realizes that [TA] will speak…

Client-participants described and researchers observed the outcomes of client initiated E-HARPs as having a greater therapeutic impact, decreasing client resistance, deepening client insight and awareness, increased vulnerability, and transferred skills from the counseling environment to apply outside of the counseling environment.

In Table C5, I delineated counselor initiated HARP in a similar fashion as Table C4.

Table C5

Counselor-Initiated HARP Descriptions

		External (E-HARP)	Internal (I-HARP)
Counselor Initiated	<u>Characteristics</u>	• Intentional (e.g., purpose and timing) • Collaborative • Informative • Less frequent than SHARMs	• Based on prior knowledge • May or may not share with CL • May occur in or out of session • Experienced with TA
	<u>Examples</u>	• Reflecting TABx and HAIs • Open ended questions • Challenging/Confronting • Imagery/Metaphor	• Assessment of self, CL, and/or TA • Internal Dialogue • Nonverbal with TA

		• Illuminating interpersonal dynamics	• Monitoring TA needs
	Outcomes	• Seed Planting • Awareness • Model for CL • May hinder CL process • Refocusing session	• Guiding interventions • Discernment • Grounding

Counselor-initiated HARPs

Counselors described and researchers observed E-HARPs as intentional with specific purpose and appropriate timing, collaborative with the client, informative, and less frequent in occurrence than SHARMs. In contrast, I-HARPs were characterized as being based on prior knowledge of the client or therapy animal, not necessarily being shared with the client, occurring in or out of session, and being experienced with the therapy animal. Here, a counselor described the informative nature of I-HARPing: "A lot of internal HARPing happens for me with [TA]. Wondering if I should do this out loud or just use this information to understand the client. Trusting [TA] is important for me." In another instance, a counselor described the importance of timing when initiating E-HARPs:

> Timing again is super important of when to bring in what [TA]'s up to and what that might mean in session. That doesn't mean we never process it with [CL]... When it's irritating to [CL], I don't find it really helpful.

Counselors reported and researchers observed examples of E-HARPs including reflecting TABx and human-animal interactions (HAIs), open ended questions, challenging or confronting, illuminating interpersonal dynamics within HART, and the use of imagery or metaphor. For instance, below is an excerpt from an observed session in which the counselor reflects on the TABx as well as the client content in an E-HARP. The client appeared to respond with deeper vulnerability and increased insight.

CO: I'm inspired because [TA] went all belly up. [CL content] feels really vulnerable.

It sounds like what you really want is for [someone] to show you that they care enough…to come to you.

CL: Right. And that's the other scary thing…[CL continues to disclose further]

In another counselor initiated E-HARP, the client and counselor were discussing the client's family dynamics when the client initiated a SHARM with the therapy animal:

CO: I'm just seeing you checking on [TA].

CL: [to TA] You're supposed to be seated over here so I can reach over and rub you when I want to. So I could just reach over and give you some lovin'.

CO: I imagine how you're feeling in general is like people should just be around and want that [attention].

CL: I'm just tired of being judged and having to defend my moods, my feelings. I have a right to pet you or not pet you and tell you to get the hell away from me.

CO: What does that mean for you with [your family]?

Here, a counselor describes one instance of the internal dialogue and self-assessment that often occurred during HART:

> I have to say I think [TA] was trying to draw my attention to my inconsistency, my incongruence there, because [CL] said, 'I don't really care,' and I said, 'Yeah,' like I believed [CL]. I didn't believe [CL], and I even felt that in that second and…that's when [TA] laid down. I was like [internally to TA], 'Yeah, I know, you're right, you're right.' [TA] came to me and was with me because I was going through my own process of … 'How do I be with [CL] and not totally agree with everything…and not disagree with everything…'

Counselors and clients reported the following outcomes of counselor initiated HARPs: Seed planting, increasing awareness, modeling for client, hindering client process, guiding interventions, increasing discernment, refocusing session, and grounding. Here, a client described increased awareness as an outcome of counselor initiated HARPs:

> Well I mean, [TA] was behaving in a certain way...I could look in a reflection and see myself doing it. I can't really deny that because I'm looking at it, and that makes some things harder to deny or run away from or step away, because you can see it. [CO] would make good points. [CO] would be like, 'This is happening.' I'd be like, 'I know. I'm looking at it.'

Similarly, during a focus group of counselor-participants, they discussed the impact of counselor modeling through E-HARPs on client resistance and awareness:

> CO A: I am just so not surprised about less resistance with client initiated HARPS. Sometimes client initiated HARP moments were things I had said before. So I had done the foundation work.
> CO B: I felt a lot of resistance with my client. Planting seeds is a phrase I use a lot and this is how I felt over and over: I say something, [CL] denies it, rejects it, we move on, and [CL] comes back to it as if [CL] discovered it on [CL]'s own.
> CO A: Yeah…I feel like when client initiated ones happened, a significant portion were [CL] repeating things I had laid out before.

Here, a counselor participant described an experience of E-HARPing to refocus a session:

> I don't know if proud is the right word but, I am really glad that I did that. I think that was really therapeutic and it moved us to where [the relational dynamic] was therapeutic. It moved us to a different direction instead of the superficial, what's on top of the water, into the undercurrent…

Counselors also acknowledged I-HARPing to assess their own intentionality and awareness during HART: "…[TA] was attending to me when I was having that internal conflict of, 'Yeah, as a clinician what does this mean for me?'" Another counselor described I-HARPing this way:

> Sometimes, I feel like…if I'm paying attention to the client and [TA] does something, and I think 'I know what that means and therefore I need to talk about it. I could just adjust my reflections.' Sometimes, it's, 'Well, I don't know what that was, but [CL]'s on a roll, so I'm going to keep an eye on that, but I don't know what that [TABx] is and I'm not really ready to break in to what the client is doing to ask about what the dog just did.'

Though some outcomes of AAT-C may be measured with standardized assessments, other outcomes may not be so easily observed. I found examples of these challenges in the next theme, Human-Animal Relational Therapeutic Impact (HARTI).

HARTI

Chandler (2015a, 2015b, & in press) described HARTI as the measurable impact of AAT-C. In other words, HARTI is the outcome measure of AAT-C. HARTI is dependent upon the

recognition of SHARMs and the effectiveness of HARPs (Chandler, in press). As evidenced by confirmation from participants and observation of researchers in this study, these phenomena appeared to occur in HART as Chandler (in press) described. Because many HARPs may occur internally in or out of session for the client, it is difficult to observably measure HARTI. Moreover, participants acknowledged that some HARTIs were experienced immediately, other HARTIs were delayed, and some HARTIs were only realized when participants reviewed their AAT-C sessions on video with the primary investigator. I created Figure C5 to clarify Chandler's (in press) formula for HARTI:

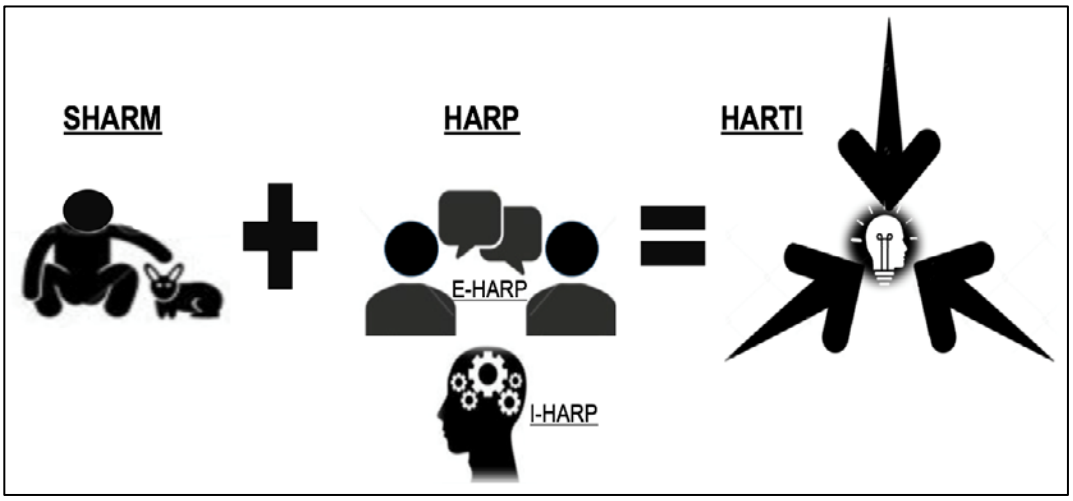

Figure C5. Visual representation of Chandler's (in press) HARTI formula.

Clients and counselors experienced differences in HARTI; however, other HARTI were described by both counselors and clients as outcomes of HART. In Table C6, I categorized these differences as CL described HARTI, CO described HARTI, and CL and CO described HARTI.

Table C6

HARTI Descriptions

CL Described HARTI	CO Described HARTI	CL and CO Described HARTI
• Increased feelings-recognition • Ownership of change process • Increased insight • Decreased emotional intensity • Decreased anxiety	• CL engagement in counseling process • More intentionality • Increased congruence and vulnerability • Greater when CL initiated HARPs • Increased empathy	• Delayed • Long-term • Enhanced therapeutic alliance • Increased relational awareness • Grounding • Increased vulnerability

Clients described personal HARTIs as increased feelings-recognition, ownership of the change process, increased insight, decreased anxiety, and decreased emotional intensity. Here, a client who presented to counseling for difficulties recognizing and processing emotions described a HARTI related to feelings recognition, ownership of the change process, and increased insight:

> CL: I've started to do it [identify feelings] on my own. I try to do it more often. I try to check in more often. That way, I know what's happening.
> Interviewer: You mean check in with yourself?
> CL: Yes, definitely. Check in with myself. 'How did you just feel about whatever just happened? Let's find a mindset that you can operate from to make this work'…I'm like okay, 'I feel this way. I feel this way because blah, blah, blah.' Then I'll be like 'Well, now that I've acknowledged this, how can I use that to have thoughts but still respect my feelings rather than giving full power to thoughts?'

Both client-participants presented to counseling for difficulty maintaining relationships. As such, they described increased insight and relational awareness as a result of their relationships with the therapy animals. Here, a client participant reported the HARTI related to decreased anxiety: "We would have moments where I'd be like, 'I'm so anxious but I don't even know why', and we'd do a lot of imagery work that [TA] would help lead into. I found that usually quite helpful."

Counselors considered HARTI to include client engagement in counseling process, increased intentionality, increased congruence and vulnerability, more meaningful HARTI when clients initiated HARPs, and increased empathy toward clients. Here, a counselor explored the HARTI of increased intentionality as a result of the SHARM and HARP sequence:

> … the client won't have changed topic, but apparently they got [emotional]…the panting is such a clear marker. [TA] starts panting when the client is feeling anxious [SHARM]. One of the most persistent feelings this client [has] in life is anxiety. …there'll be moments where the panting will start up and I [think], 'Oh, I would not have even known that this was a thing that made [CL] anxious' (I-HARP). I might have known later, but now I know right now. [TA] will shift when [CL] says something, and I say, 'Well, that would make me anxious (E-HARP)'. I need to notice [TA] and be like, 'Oh, I'm going to ask different feeling questions, because the anxiety indicator is so clear with this client.'

Client- and counselor-participants described some similar experiences of HARTI as related to having delayed or long-term impact, enhancing the therapeutic alliance, increasing relational awareness, and grounding them in the here-and-now of HART. In Table C7, I offer side-by-side comparisons of these HARTIs.

Table C7

HARTI Comparisons

HARTI	CL Perspective	CO Perspective
Delayed or long-term	"Sometimes now I relate it to my cat at home, and just be like, 'Yeah I'm totaling having this mood and you're totally doing this thing. It just reminds me that sometimes you should self-check to see how stuff's going. It has helped me improve the habit of self-checking my emotions."	"…[TA] is my co-therapist. [TA] will talk to me and it's less processing with [CL]. [TA] lets me know things that I may have not noticed…she helps me become a better therapist."
Enhanced therapeutic alliance	"Initially, I felt more withdrawn because of how hyperactive [TA] was, but as it went on I felt like it [AAT-C] did enhance our understanding. Like, [CO]'s understanding of me. I felt like it helped a lot, especially because [CO] has a connection with [TA] as well. [CO] knows [TA]'s behavior better than I do. [CO] understands	"I am more likely to like someone who pets my dog. I can see a demonstration of this kind and caring person they could be. Dogs invite that. Witnessing that happening can soften you up for a client."

	the dog and [CO] also understands me, and can therefore connect the dots."	
Increased relational awareness	"…very seldom the dog comes up and gives me a lot of attention…She's always real close to [CO] and so when [TA] did, I encouraged her to keep doing it. I like being liked. It was nice that she wanted to come over and talk to me… Yeah, it felt good"	"One thing for sure is it means a new level of awareness… it's not always just for me or [CL]. [TA] is another being and needs to be treated as such. Sometimes it feels like my brain is leaking out of my ear… trying to be aware of so much."
Grounding	"It was a grounding thing, yes. [TA] kept me here. [TA] kept me more with whatever feeling I had, because that's something that I myself was trying to work on, was…feeling."	"…the effect that they [SHARMS and HARPs] have on me is the grounding, re-prioritizing. I'm paying greater attention to timing and the dynamics in the room"
Vulnerability	"There would be a day when I'm particularly vulnerable that I would pet her, I like petting her some, more than other, days"	"[CL] has become more vulnerable with me. There have been times when [CL] had come in previously and all you could feel is the anger…Since working with [TA] there's been a lot more of the true sadness…the hurt and the disappointment of how relationships with people who are the most important people in [CL]'s life that turned out…I have seen it in practice with him that he's taking more personal responsibility for that. There's no blaming others, which is the easier thing. I could attribute some of that to that SHARM because again it's non-threatening."

Interactive Experiences

Based on the frequency of open codes as well as focused coding through comparative contrast with raw data, interactive experiences emerged as the final theme from data. Human participants interacted with one another and with the therapy animal. For clarity, I organized these experiences by client and counselor interactions.

Client Interactive Experiences

In Table C8, I categorized client interactions with self, of the therapy animal, and of the counselor.

Table C8

Categorizations of Clients' Interactive Experiences during AAT-C

Self	**Therapy Animal**	**Counselor**
• Emotional awareness • Resistance • Vulnerability • Increased insight • Emotion identification and processing	• Responses to CL: reassurance, increasing awareness, transformative, • Play • Patience • Connection and comfort • Reflection • Engagement/Disengagement • Trusting Relationship	• Responses to CL: questioning, confronting, processing • Intentional • Prompting • Annoying • Sharing in TA relationship

Clients described interactions with themselves as experiencing emotional awareness, resistance, vulnerability, increased awareness, emotion identification, emotion processing and unique experiences compared to other experiences with themselves in non-AAT counseling. Here, a client described the experience of emotional awareness during AAT-C:

> There's definitely instances where I struggled with sitting with my emotions. I'd have emotions, but I wouldn't identify them or I'd have them and then I'd automatically want to switch to a head space rather than a heart space. I feel like whenever [CO] would do that, [E-HARP]. I'd have to think about…those interactions [SHARMS].

In another instance, a client described experiences of increased vulnerability during HART: "I'd be more willing to discuss what might be happening with [TA] and I. That also could be the result of me also opening up emotionally some."

Clients described their interactive experiences with therapy animals as reassuring, and offering opportunities for increased awareness and transformation. Here, a client reflected on a SHARM between the client and the therapy animal during when reviewing the session video with the primary investigator:

> [pointing to screen] See that moment? At that moment, [TA] started cuddling…That was a reassurance cuddle. That was a, [translating for TA] 'You're expressing this and you're kind of on the fence with how you feel about all this stuff. I'm here for you, Hi.' I'm like, 'Hey.' I felt like I had a little bit of support in my decision to be like, 'I don't really know

> what's happening right now but we're just kind of going with whatever together. I felt like that was definitely reassuring. I just felt like I was processing a lot and I felt like [TA] was giving me the support whenever I needed it to help me process.'

Furthermore, clients reported experiencing play, pacing, connection and comfort, reflection, engagement and disengagement, and a trusting relationship with the therapy animal. One client stated, "We [CL and TA] figured out a way for it [AAT-C] to work for us. I started playing with her, and [TA] figured out a comfortable spot…" In another example, a client described the therapy animal as playful and patient as the client learned to be more present with emotions in AAT-C sessions:

> Sometimes we'd interact with [TA]'s toy. There were some days when [TA] was all about it. There were other days where [TA] would be more patient with his toy. A lot of times if I just held it, [TA] might bump me or…try to bite it. [TA] would try to actively obtain the toy…there were other times when I might be talking about something serious or something that requires a lot of elaboration and I'd hold the ball, and [TA] would sit and wait for me to throw it. [TA] would be patient with me, and I could do it on my own pace. It wasn't on [TA]'s pace. It was on my pace. Sometimes you have to do things at other peoples' paces… Every now and then, [TA] would want to be patient with me and I would really respect that. I felt like okay, [TA] is satisfying this need that I have, that I need this patience in my life right now.

A different client, who described experiencing the presence of the therapy animal as playful and comforting, stated:

> It's a very pleasant distraction from just sitting on cold leather couches with people watching you. I like to have something….I trust [TA]. [TA] is comforting and [TA] is playful. [TA] is sweet and something to distract from the sterile environment.

Clients also described the therapy animal as a reflection of their own experiences. For instance, a client said this about the therapy animal being a reflection of self:

> [TA] was doing a thing ... I could look in a reflection and see myself doing it. I can't really deny that because I'm looking at it, and that makes some things harder to deny or run away from or step away, because you can see it.

In another example, a client reported this about being in relationship with the therapy animal, "I trust [TA]…I miss [TA]. I like [TA] being there. When [TA] not around I realize, 'where's the dog?'" Finally, a client reported wanting to share these words with the therapy animal about their relationship:

> I liked you because you were furry at first. I didn't care for a lot of your hyperness but over time, you helped me a lot. I'd want to tell [TA] thank you…keep doing what you're doing. You're growing, I'm growing. We're getting this down. I just would want to really express how [TA] made a lot of this easier, and let [TA] know that that's a good thing. It's good to be someone's…WD-40.

Clients described their interactive experiences with counselors as responding to them questioning, confronting, and processing. Clients also described experiencing counselors as prompting, annoying, and sharing in their relationship with the therapy animal. Here, a client described the way a counselor worked with the therapy animal to confront and prompt the client to process toward deeper insights.

> [CO] would bring up [TA]'s panting. [CO]'d be like, 'I'm wondering how anxious you're feeling right now.' I'd be like 'Well, on a scale'... and we'd go on….We'd use that as an entry point into well, 'What else could be [causing anxiety]?' [CO] would use it to get deeper insight and [CO] would do it with a lot of good intentionality.

Here, a client described another experience of a counselor prompting the client to HARP about SHARMs:

> If the dog was picking up something from me, pheromone wise or however you want to say it, [CO] would know that, [CO] was trying to see if I knew it. I felt tested. I felt tested on a situation that I really didn't care to learn about. It felt kind of annoying. I was annoyed by [CO] making it about the dog and what the dog's thinking or feeling. I'm like, 'Really? Come on.'

The same client said this about sharing the counseling relationship with the therapy animal: "...with [TA] here, I see that [CO] has a genuine ability to share. I find out a little bit about [CO]'s character…it let's me know that [CO] is not so self-involved." Additionally, a client reported

increased awareness from experiencing counselor prompting in this way, "[CO] would make good points. [CO] would be like, this is happening. I'd be like, 'I know. I'm looking at it.'"

Counselor Interactive Experiences

To ensure credibility and trustworthiness of the data analysis process, counselors participated in a member check in the form of a focus group. Based on a word count, focused coding through comparative contrast with raw data, and field notes from the focus group, counselors described a range of interactive experiences during AAT-C. In Table C8, I categorized them by counselor experiences of themselves, of the therapy animal, and of the client.

Table C9

Categorizations of Counselors' Interactive Experiences during AAT-C

Self	Therapy Animal	Client
• Enhanced therapeutic alliance, counseling skills, here-and-now awareness, empathy toward CL • Training • Supervision	• Communicative • Immediate • Intentional • Trusting relationship • Partner/Co-therapist • Transition time • Limit-setting	• Relationship w/ TA • Resistance • Collaboration • Continuum of congruence • Change (see HARTI)

Counselors described HART as enhancing their therapeutic alliance with clients, counseling skills, here-and-now awareness, and empathy toward clients. Counselors also described AAT-C as a vulnerable experience that required specialized training and supervision. Here, a counselor described how AAT-C enhanced the therapeutic alliance with the client:

> ...[CL] would tease me like, 'You just want to bring your dog to work. You can just play with your dog all day. That must be nice for you.' That is also in line with how [CL] has treated me during the rest of our relationship. Dismissive of my education. Dismissive of my experiences until [CL] decides the joke's over. [Other] times [CL] will say, 'I know you've worked really hard with me. I appreciate it.' Now, [CL] really thanks me for everything that we've been through together. I do attribute a lot of that to [TA]. She makes it a less intimidating place. [TA] takes some of my ego out, too.

Regarding enhanced counseling skills, a counselor stated, “I had to think and be creative…. I do really think that has challenged me in particular in my ability to be creative in all of my counseling skills and especially with [TA].” Likewise, another counselor described this experience of skill enhancement regarding immediacy:

> …It's just such cool work…really paying attention for the dog's language and what [TA] is sharing…I feel like Yalom is a big believer, like immediacy work, and here and now work, it's where the [work] happens. Doing AAT is such a clear invitation to engage with those things that are usually so abstract…like bringing yourself into the room, bringing that relationship into the room.

Moreover, counselors experienced enhanced empathy toward clients. Here, a counselor described such an experience: “I felt more grounded more frequently when [TA] was present, which increased my empathy with [CL].” Counselors also described increased intentionality as a skill enhancement after practicing AAT-C. One counselor explored intentionality and the ability to move more quickly from client content to the underlying emotion within client content:

> My response [to CL] would be different [post-SHARMs]. Perhaps my response might have been, ‘Oh, tell me more about the story, tell me more about how you responded.’ Whereas, when [TA] comes to me in a moment like that, I can process with [CL], ‘Hey, I felt that shift. You're really intense with that. That really hurt you.’

Counselors also reported enhanced awareness and utilization of the here-and-now experience during AAT-C. For example:

> To do AAT is to do here-and-now and immediate work, because you have to. The dog just did that thing, and [TA] doesn't know that your reaction is about a story that happened a week ago. [TA] knows what happened right now.

Moreover, counselors enhanced their own assessments of themselves in the here-and-now through I-HARPing, as described here:

> It’s like a mini self-checking …when I have that moment of feeling like, ‘Oh. I spaced out a little bit there. Is this me? Am I hungry? A little tired? Did I have a snack today? Did I sleep well last night?’ It’s that skillset of, ‘Okay, if I can rule myself out, then what other

> options are there [referring to TA]?' I think it starts with realizing that something needs to be addressed, and I think the interesting thing about having the dog in the room is that like, those [SHARMs] will happen….I feel like sometimes we'll have those moments of like 'What? Nothing's going on with me.' I wonder if...[TA] can feel me shifting before I've really noticed that I'm shifting.

Counselors stated the importance of training and supervision in the advanced and complex practice of HART. Likewise, counselors agreed upon the importance of competence in traditional counseling prior to integrating HART:

> I would say, especially the first real semester…being with [TA]…as my co-therapist, it was like learning therapy all over again…because…everything that you get used to and you're not really as aware of anymore comes right back at you in new and deeper ways…So, that level of discernment is different because what I think as a priority is also different from what [TA] might feel like is a priority, and there are lots of times when I'll defer to [TA].

Another counselor described the complexity of AAT-C in this way:

> To be honest, it was a little awkward, but it makes me look like being in basic skills and the first time you're told, 'Count on their body language.' I'm like, 'Maybe their shifting is they're uncomfortable physically, maybe their butt hurts.' It feels like that place. But, now it would be something like, 'I noticed that [TA] got up. What do you think that means for him? Tell me about what you think is going for [TA].'

Counselors also agreed that they felt vulnerable and awkward when they began working with therapy animals in AAT-C. For example:

> Especially when I was starting, I had this worry that clients would look at me and be like, 'What? No, we're talking about me. I don't want to tell you about what the dog did. The dog is fine.'…For a long time it's been trying to build that comfort. It's not where you tell the client about their body language anymore and it's becoming more comfortable to talk about the dog's body language, but sometimes, it's still like that. I can tell that it's a new risk scale.

Moreover, counselors described gaining confidence and competence through ongoing supervision from experts and peers:

> Okay, great. This is the research. This is me, based on my supervision, this is what's happening with the dog right now. This is the information I garnered from that. All of

> these things [SHARMs] happened. It's more than just bringing your dog in. I think part of [AAT-C] being more than that is that you need to be ready….Even…peer supervision, I know that I will frequently grab [peers] and be like, 'Okay…what just happened?' I still feel like that, and I'm certain when I start with a new CL that [TA] will do things that I've never seen [TA] do with a person before. I'm being aware that he's doing this thing, and I'll have to figure out…'What does that mean?'

Therapy Animal. Counselors reported experiencing the therapy animal as communicative, immediate, intentional, and as a partner or co-therapist. Counselors also described experiences with the therapy animal related to limit-setting, transition-time, and trusting relationship. One counselor described the therapy animal as communicative, and as a result the counselor reported enhanced here-and-now experiences:

> It's not always highlighting [TA]'s behavior for my client. When [TA] does something like that [SHARM], I am more in here, now. [TA]'s really bringing me more present and it's making me have that relational moment with [TA], noticing [TA]. I'm more present with [CL]. I know what just happened. It strengthens our [CO and TA] bond because [TA]'s communicating something to me. It's inter-personal and it's inter-animal.

Counselors also explained developing a trusting relationship through recognizing and responding to the therapy animal's communicative signals:

> You know your animal a different way...a more intentional way, because for me, the assumption is that if [TA] is doing this on purpose, then it must have a meaning. I'm continuing to have those moments of insight, like this belly-up thing doesn't just mean, 'I want to show and for you touch my tummy.' It also means like, 'I feel safe with that. This is okay to do right now. I can surrender to this thing that feels really good, because it's okay to do that.' It's just really cool to know more stuff about [TA].

Counselors described therapy animals as immediate and intentional. For instance, "[TA] doesn't have a reaction to the fact that your girlfriend got in a fight with you four weeks ago. [TA] has a reaction to the feeling you're having while you told that story right now." Likewise, a counselor expounded upon therapy animal intentionally,

> "I'm a big believer [that] it is always more beneficial to assume that everything the dog did was intentional and about what's going on in the room, than to assume that it's [TA] is just dogging."

Another commonality among counselor-participants in this study was the use of language such as co-therapist, partner, or team when they described themselves in relation to the therapy animal during HART work. For example:

> I really see us as a team. I can't do as well without [TA]…[TA]'s a co-therapist, a co-counselor even when…not in a counseling or supervision room. I really do trust that [TA] can feel the temperature of a room. Whether that's in my house in my living room, or here [at clinic] dealing with emotional, trauma, and attachment issues. [TA] can still feel those with or without me. It's that I'm paying a different kind of attention.

Another counselor described working with the therapy animal in this way:

> If everything [TA]'s saying is important, how do I make certain I'm in touch with [TA] while also really being with the client? It's sort of like doing group or couples work because there's multiple people [beings] to attend to, but it's also different because it's more like [TA]'s there in the role of co-therapist. [TA] doesn't need me to directly turn to [TA] and be like, 'Gosh, what is it like for you when you hear the client say…?' [TA] doesn't need that direct attention because [TA]'s showing me [what it is like for TA].

Lastly, a counselor described the therapy animal as a partner:

> I'm really fortunate to have [TA]…as a partner because [TA] is so non-assuming, non-threatening, and people…generally just love [TA] at first sight…I think we work really well together because I can come across as intimidating….[TA] also shows people more of that humanness of mine.

Counselors reported the experience of limit-setting with therapy animals as an integral part of AAT-C. They described in-session limits such as limiting licking or chewing, as well as limiting the work time of the therapy animal to allow for rest and attend to the welfare of the animal. Here, a counselor described an example of limit-setting and the usefulness of this skill in AAT-C:

> Sometimes, [TA] wants to play and will get … a little rambunctious, and sometimes I have to be a bit of the dog mom in the room, and be like, 'All right. This is

> cool, but also check yourself.' I always imagine too…that those things are…a good model…'Look at me. I'm setting boundaries for this dog. I could take care of [TA]. When [TA]'s not regulated, I can help regulate [TA]. Look, we can all do this together.'

Counselors also described struggling to provide appropriate transition time for the therapy animal. They explained the importance of preparing the therapy animal for work including appropriate rest, exercise, grooming and bathing. Likewise, they explored time considerations of transporting the therapy animal to the work setting and how to manage their animals' needs for food, water, elimination, and rest with the counselor's other work responsibilities. In light of the aforementioned challenges, counselors appeared to be more likely to utilize the communication [RMs] from the therapy animal during session as opportunities for HARTI:

> …I can't imagine if you're going to choose to do AAT and choose to do the work and bringing your animal…It's not easy to arrange to have a dog here in this building, to make the time in my day, to make certain [TA]'s okay, to schedule your time in the room, to make certain…that [TA] has all the stuff [TA] needs to feel great and be excited about being here. If you're going to do all that work to get [TA] here, you might as well be like, 'Well, I don't know. What do you think that [SHARM] means? [TA] just did this thing.' It provides such rich fodder that it's almost like, 'Well, why wouldn't I [HARP]?'

Counselors characterized their experiences of clients related to their relationship with the therapy animal, resistance, collaboration, congruence, and therapeutic change. During the focus group, counselors tearfully described their responses to client disclosures about their experiences of HART in AAT-C:

> CO A: It is very moving that it [AAT-C] meant something to [CL]. I noticed [CL] would miss [TA] when [TA] wasn't there. Internally something was happening that I was hoping for. It is relieving that it made a difference for [CL], that something positive happened for [CL].
> CO B: I am also very aware that doing this was anxiety provoking and hard work for [TA], and I am glad that the client got something out of it.

Here, a counselor described a client's response to scheduling a final session before ending the counseling relationship:

> I know that my client and I have built this relationship, but I wonder if some of the excitement to be here and motivation to come back was like, 'I want to say goodbye to [TA]. I want to have an hour to be with the dog for a little bit.'

Remarkably, this was congruent with the client's account of ending the counseling relationship with counselor and therapy animal.

Just as client's described themselves as resisting the HART process, counselors experienced client resistance as both a challenge and a therapeutic opportunity. One counselor described this example of reviewing a video of AAT-C in which a client demonstrated resistance:

> I'm realizing, 'Oh, [TA] was saying you're incongruent because actually this moment right now you're full of shit. You're lying to yourself, and you're not doing a good job.' It's that frustration of seeing those two invitations to HARP, and having the client dance past them and the client saying, 'Nope. Let's just go right around that. I'm not going to go where you want me to go with this HARP.'

Similarly, researchers observed an AAT-C session in which a counselor working with client resistance resulted in a client HARTI of increased insight and vulnerability.

> CO: You're not sure if you're buying into it.
> CL: No.
> CO: If you were to humor me, and I believe,that she's up to something, she's feeling something, would you be willing to help me figure that out..?
> CL: Yeah, if you tell me what that looks like. That would be a start.
> CO: Yeah, just … maybe what else is going on for you underneath this story?... There's some depth to that that we're not touching on yet
> CL: Oh my gosh, there's a billion other… I call it an undertow… You look at a nice river, and you see a leaf that's floating a little further at a 10th of a mile an hour but you can tell it's moving. You dive in the water, but at 10 feet you come up and you're two miles down the line and the leaf is just now passing where you dove from. There's an undertow.
> CO: Talk to me about that.
> CL: I'm totally displaced…[CL continues to disclose deeper feelings]

Moreover, the counselor from the preceding excerpt discussed the meaning of resistance as a HARTI of the SHARM and HARP sequence:

> Resistance, the way I think of it is that…I'm basically pulling my client to a place they don't want to go or aren't ready to go. The bigger picture is, 'I'm off,' is really what resistance is…I need to get with their goals. I need to get with their train of thought. That's what that means to me. That's a flag when I feel that resistance from a client towards myself or towards [TA], some idea I brought up or some education I want to share or anything like that. It's because I'm doing something that they were not ready to do, going some place they weren't ready to go…An example is...[CL] was not ready to talk about what [TA] was doing. [CL] doesn't believe in what [TA]'s doing, but [CL] is ready to talk about what [TA] brought to our attention. That something's underneath it…but that's ultimately not therapeutic to try to make [CL] believe or say [CL] believes something that [CL] doesn't want to say [CL] believes in.

This counselor experienced the impact of resistance from a client as informative, and utilized that information to be more intentional in collaborating with the client.

Counselors also reported experiencing clients along a dynamic continuum of congruence. In other words, they noticed that the therapy animal behaved differently when the client was more authentic and congruent, as opposed to when the client was more guarded, or incongruent. Moreover, clients' positions along the continuum of congruence varied from session to session, from SHARM to SHARM, and often from SHARM to subsequent HARP. For instance,

> I feel like when [TA] does this kind of play, the really rough play is [TA] saying, 'Be congruent. We're going to wrestle it out, and you're going to get on my level. Just be real with me, let's just do it.' I feel like this is almost always like an invitation from [TA] saying, 'Okay, pace yourself. Slow down. Take that moment to think your thought by picking the ball up. Or take that moment to hear what you're going to say as you throw the ball.'

Finally, counselors experienced HARTI with clients. Counselors observed clients demonstrating increased insight, relational awareness, vulnerability, and ameliorated some

symptoms as compared to presenting concerns (see Table C5). Here, a counselor described experiencing client HARTIs, "It worked! [CL] started talking about deeper things, even if [CL] did not directly acknowledge how helpful [TA] was. [ATT-C] was meaningful and impactful for [CL]."

Summary of Findings

In this section I described findings from this study. The research team concluded that (a) Chandler's (in press) constructs of RMs, SHARMs, HARPs, and HARTI were consistent with counselors' and clients' experiences of AAT-C; (b) Client-initiated HARPs had greater HARTI than counselor-initiated HARPs; (c) Rich definitions and descriptions of SHARMs, HARPs, HARTI, and resistance; and, (d) examples of interactive experiences of those participating in AAT-C; and, (e) Resistance in HART. Though not as prevalent as the major themes, all participants described and explored the construct of resistance as a part of their experiences in AAT-C. Therefore, resistance was also considered a key tenet in HART. Here, I provide a list of key tenets of HART in order of prevalence from all data from this study:

1. RMs and SHARMs
2. HARPs
3. HARTI
2. Interactive Experiences
3. Resistance

Next, I will discuss these findings as related to literature, explore the hypothesized experiences of the therapy animals, and discuss implications for future research, clinical practice, and teaching of AAT-C.

APPENDIX D

EXTENDED DISCUSSION

The purpose of this study was to investigate the ways that HART (Chandler, 2015a, 2015b, & in press) manifested in AAT-C. Chandler (in press), delineated four major constructs and offered a formula to explain client change in AAT-C. The four constructs were RMs, SHARMs, HARPs, and HARTI. She delineated the explanatory formula as SHARM + HARP = HARTI. For clarity, I added images to Chandler's formula (see Figure D5). Through C-GT (Charmaz, 2014), multiphase coding, and constant comparison, I found consistency with Chandler's (in press) theory among participants' experiences, developed rich descriptions of Chandler's (in press) constructs, illuminated interactive experiences of the therapeutic triad in AAT, and added resistance as a key tenet of HART. Here, I discuss how these findings align, diverge, and challenge the professional literature, and explore implications for AAT practice, supervision, teaching, and research.

Although many researchers have conducted studies to validate the efficacy of AAT, methodological challenges have kept those studies from having the rigor needed to validate the intervention. Those challenges included inconsistent nomenclature about the intervention and individual difference among treatment providers, therapy animal species, and therapy animal personalities. For example, researchers measured the efficacy of interventions that met the IAHAIO definition of AAA or AAE, but described the interventions as some variation of AAT (i.e., pet-assisted, -facilitated). For example, Braun and colleagues (2009) conducted a quasi-experimental study to measure the impact of AAT on pain relief for hospitalized children. However, the intervention they described utilized unlicensed, volunteer, handler-animal teams sitting with patients for 15 minutes at a time, meets the definition of AAA, not AAT. The researchers found the animal visits to have a positive impact on children's' pain relief. Still, the

intervention was not AAT. Other studies with positive participant outcomes and similar discrepancies in nomenclature included Banks & Banks (2005), Kršková, Talarovičová, & Olexová (2010), Walters-Esteves and Stokes (2008), and Heimlich (2001). Chandler (2015a) offered HART as a framework that could apply to any AAT, regardless of animal species or counselor guiding therapy. Moreover, Chandler developed her theory based on the relational constructs: RM, SHARM, HARP, and HARTI. Because all AAIs are relational, Chandler's constructs could be measured regardless of the type of AAT being studied.

The major findings in the study were: (a) Chandler's (in press) HART constructs of RMs, SHARMs, HARPs, and HARTI were consistent with participants' experiences of AAT-C; (b) client-initiated HARPs produced more meaningful HARTI for clients than counselor-initiated HARPs; (c) the research team produced rich definitions and descriptions of SHARMs, HARPs, HARTI, and resistance; (d) Participants identified interactive experiences of AAT-C; and, (e) resistance in the context of HART. Here, I explore each of these findings in the context of this study and professional literature.

Participant Experiences Consistent with HART

The research team identified dozens of RMs, tens of SHARMs, and an average of seven HARPs in each of the 12 AAT-C sessions. Likewise, counselor and client-participants identified therapeutic changes that were specific to the integration of AAT into counseling sessions.

Researchers observed and participants described that client-initiated HARPs were more meaningful than counselor-initiated HARPs, as evidenced by increased client insights and depth of disclosures. This finding was consistent with previous researchers who found that (a) the presence of a therapy animal increased client self-disclosures (Schneider & Pichack-Harley,

2006), and (b) depth of client elaboration was highly correlated with therapeutic alliance (Lingiardi et al., 2011). Lingiardi and colleagues (2011) described interventions that correlated with therapeutic alliance, depth of disclosure, and positive client outcomes. Remarkably, these included several interventions that were consistent with the HARPs described in this study such as identifying themes in RMs and SHARMs, discussing the relationships within the therapeutic triad, clients initiating HARPs that increased awareness, and counselors confronting client resistance in creative ways. That said, HARPing may be a useful intervention to promote positive client outcomes (HARTI), especially when clients take ownership of the HARP.

Descriptions of HART Constructs

Participants described RMs as tangible and intentional with behaviors such as calming signals and attending behaviors. RMs were observed as bidirectional based on Chandler's (2012) Psychodynamics of AAT (see Figure D1) and integrated among the therapeutic triad (see Figure D2). Participants' most common responses to RMs were to ignore, dismiss, or ascribe meaning to them. When participants ascribed meaning to RMs, they were recognized as SHARMs. The most salient theme from participant experiences of SHARMs was that SHARMs reflected the internal experiences of those who participated in AAT-C. Common SHARMs included changes in posture or location with calming signals directed toward the client or counselor from the therapy animal, petting or verbalizations from the counselor or client toward the therapy animal, counselor and client conversing with the therapy animal observing, and counselor and client speaking for the therapy animal. For example, a client looked at the therapy animal with its head buried under a blanket and stated, "I'm just hiding my face right now." Additionally, the most common integrated RMs and SHARMs included the therapy

animal moving away from both client and counselor and the counselor and client simultaneously petting the therapy animal, who was exhibiting calming signals.

Participants experienced HARPs internally (I-HARP) and externally (E-HARP). Participants described E-HARPs and those that occurred between counselor and client, and that I-HARPs occurred introspectively with oneself. Additionally, participants perceived that they shared I-HARP experiences with the therapy animals. Specifically, participants described feeling supported and comforted by the therapy animal during I-HARPs.

The research team developed rich descriptions of client- and counselor-initiated HARPs. Client-initiated HARPs were unprompted and an indicator of client engagement. Examples included (a) E-HARPs: Reflecting or questioning TABx, reflecting on relational dynamics within the therapeutic triad, and projecting internal experiences onto therapy animal; and (b) I-HARPs: introspecting about the therapeutic triad, self-assessing, and recalling or comparing other human/animal relationships. Client outcomes (HARTI) of these HARPs included increased motivation to participate in counseling, deeper insights, increased awareness and vulnerability, emotion recognition, and transfer of skills outside AAT-C sessions. Counselor-initiated HARPs were based on prior knowledge of the therapeutic triad, informative, and intentional. Examples included (a) E-HARPs: Reflecting on TABx and interactions within the therapeutic triad, challenging client resistance, and confronting client incongruence through open-ended questions and illuminating the here-and-now; and, (b) I-HARPs: monitoring needs of therapy animals and assessing self, client, or therapy animal. Outcomes (HARTI) of these HARPS included modeling for the client, seed planting, increased awareness, guiding and refocusing interventions, and grounding the counselor. Counselors noted that continuing to E-HARP during

a period of client resistance seemed to hinder—rather than facilitate—patient progress. In those instances, counselors suggested I-HARPing to discern future interventions was more beneficial to the counseling process than E-HARPing.

Participants described both similarities and differences in their perceptions of HARTI. All participants described HARTIs as enhanced therapeutic alliance, increased relational awareness, increased grounding during AAT-C, and increased vulnerability. Counselors reported HARTI as increased engagement, congruence, and vulnerability in clients, increased empathy toward clients, and more intentionality during AAT-C sessions. Likewise, clients reported HARTI such as increased feelings-recognition, ownership of the change process, increased insight, and decreased emotional intensity.

Interactive Participant Experiences and Resistance

Participants described their interactive AAT-C experiences as relational among themselves, the therapy animal, and the other human (e.g., counselor or client) in the therapeutic triad. Whereas, participants differed in certain perceptions and responses to those experiences, other perceptions were congruent between counselor and client-participants. For example, clients perceived their interactions with therapy animals as reassuring and playful, and counselors experienced their interactions with therapy animals as communicative and intentional. Additionally, counselor and client-participants described their relationships with therapy animals as trusting and connected. The differences in perception of the therapy animal indicated that all participants trusted and valued the therapy animal within the therapeutic triad; however, clients valued the animal as a supportive presence while counselors valued the therapy animal as an informative co-therapist.

Counselors experienced interactions with clients as both resistant and resulting in client change such as increased insight and relational awareness. Likewise, clients described their experiences of themselves as resistant, as well as experiencing personal changes in insight, emotional awareness, and introspective processing skills as a result of AAT-C. In other words, counselor and client perceptions of client change remained congruent even after their AAT-C relationships ended. Moreover, participants noted that their integrated relationships with one another and the therapy animals was a meaningful aspect of their interactive experiences during AAT-C.

A glaring difference among interactive experience was between client-therapy animal and client-counselor. Clients described therapy animals as responding to their presenting concerns in ways that facilitated reassurance, awareness, and transformation. Contrarily, clients described counselor responses to their disclosures as questioning, confronting, and occasionally annoying. Remarkably, therapy animals appeared to demonstrate conditions to clients that promoted therapeutic growth, while clients had more negative perceptions of counselors within the therapeutic triad. One explanation for this finding could be the perception that therapy animals are genuine and nonjudgmental (Amerine & Hubbard, 2016; Ford, 2013; Huff-Mercer, 2015; Reichert, 1998; Sheade & Chandler, 2012). Whereas, another explanation could be that as a result of the comforting and reassuring presence of the therapy animal, counselors had more latitude to utilize skills such as challenging and confronting to promote client change (Hill, 2009).

Finally, participants described examples of resistance throughout the AAT-C process. Clients described feeling the most resistance when counselors E-HARPed repeatedly about

similar SHARMs. Counselors described being aware of client resistance when clients ignored or dismissed counselor-initiated E-HARPs. When clients responded to E-HARPs in these ways, counselors either confronted the resistance by illuminating it in the here-and-now, utilized the resistance as informative and changed their approach to the client, or acknowledged that they had offered the E-HARP to the clients before they were ready. Counselors noted that, despite client resistance to counselor-initiated E-HARPs, they recognized client-initiated E-HARPs as iterations of E-HARPs that counselors had previously modeled. In other words, though often met with client resistance, client-initiated HARPS—which produced the greatest HARTI—were modeled after counselor-initiated HARPS. Therefore, HARP interventions were a necessary part of AAT-C despite client resistance. The way that counselors responded to resistance seemed more important than the presence of resistance. Moreover, clients did not indicate that the presence of the therapy animal decreased their resistance to exploring difficult or painful topics. However, the clients did describe the therapy animals as comforting and supportive once they decided to broach difficult topics. In other words, the resistance was still present, and the therapy animal served as a salve during the painful process of emotional work in AAT-C.

I was surprised that clients reported resistance to the HARP. Based on prior experiences with therapy animals and researchers who found that the presence of therapy animals enhanced therapeutic alliance and motivation, I assumed that clients would be less resistant to therapeutic work when counselors integrated therapy animals (Evans & Gray, 2012; Ghetie, 2011; Kemp et al., 2014; Lange et al., 2006). The counselors in this study described that clients maintained consistent levels of resistance regarding therapeutic growth as related to presenting concerns. In other words, the clients were equally as resistant to exploring difficult

topics as they were before the animals were integrated; however, the animal presence gave the counselors and clients new and different opportunities to work through the resistance. These opportunities included therapeutic distractions such as play and therapeutic touch between client and therapy animal that would not be appropriate client-counselor interactions.

Furthermore, I was surprised at clients' perceptions of therapy animal responses to their concerns as compared to clients' perceptions of counselor responses to their presenting concerns. I found this remarkable because client-participants also described their relationships with the counselors as enhanced compared to other therapeutic relationships. I was also surprised to find that during the member check counselors were pleased at being viewed as challenging or confronting:

> CO B: I am proud that annoyed is up there. I am not here to be your friend. I am here to be confronting, prompting, annoying.
> CO A: This is what I love about having an animal in the room. I have more freedom to be a little more aggressive. Because the dog is supportive, I get to be the one to play bad cop.

Finally, I was surprised at the impact of client-initiated E-HARPS, and the frequency of client-initiated I-HARPs out of session. Although scholars have found client-agency to be related to improved client outcomes in counseling (Manthei, 2007; Mcelvaney & Timulak, 2013; Oddli & Rønnestad, 2012), I was surprised to discover the deep impact of client-initiated HARPs. Moreover, I was surprised at the degree of I-HARPing that clients engaged in outside of the AAT-C sessions. Clients described I-HARPing with their own companion animals, as well as introspecting about ways to build relationship with the therapy animal once the returned to AAT-C sessions. The practical implication of this finding is the confirmation that outcomes are

more meaningful to clients when they have an active part in guiding interventions, and when they continue to practice those interventions out of session.

Limitations and Strengths

The number of participants in this study (N = 6; humans, n = 4; canines, n = 2), though small in size compared to other C-GT studies, provided thousands of data points that were analyzed by the research team. Thus, we triangulated data from observed AAT-C sessions, participant interviews, and field notes to confirm and expand the HART constructs of RMs, SHARMS, HARPs, HARTI, and resistance and the interactive experiences of those who participate in AAT-C.

The limitations of this study included sample size and treatment integrity. We were not able to compare our sample to data about other animal-assisted counselors, their treatment practices, nor their clients' presenting concerns. The counselors in this study had training specific to the university where the study took place, and the client population was limited to adults who received outpatient counseling. To mediate these limitations, we analyzed multiple sources of data including interviews, observations, and field notes.

A primary strength of the study was the setting. The university training clinic was appropriate for this study because animal-assisted policies and procedures were already in place, and the university offered a graduate level course in AAT (Chandler, 2012; UNT, 2014). As a result of the proactive AAT policies at the university clinic, we did not encounter typical barriers to AAT research such as limited access to facilities, or negative attitudes toward animals or AAT (Borrego et al., 2014; Stern & Chur-Hansen, 2013; UNT, 2014). Furthermore, through the use of video and live observations provided by the training clinic we were able to

observe the body language of canines as well as humans to gain a more holistic understanding of the underlying process of AAT in counseling. The research team for this study provided a foundation for the process of AAT in counseling and an opportunity for follow-up studies based on findings of the current study (Creswell, 2014).

Implications for Practice and Research

Practitioners around the world are employing AAIs. It is important to develop standardized nomenclature to ensure client welfare, efficacy of intervention, and practitioner competence. With this study, we have clarified the constructs of HART. From these clarifications we can derive theoretical, clinical, and research implications. HART was consistent with phenomena experienced by counselors and clients over time by observation as well as by their own reports in participant interviews. Although the counselors' AAT training occurred prior to the development of HART, researchers observed that counselors integrated HART constructs across different guiding theories of counseling. Participants reported that SHARMs and HARPs contributed to enhanced therapeutic alliance, a robust predictor of client outcome and treatment adherence (Bedi & Duff, 2014; Falkenström et al., 2013; Manthei, 2007). Also consistent with professional literature about positive client outcomes, clients reported that they looked forward to coming to AAT-C more than traditional counseling because the animal was present (Calvo et al., 2016; Kamioka et al., 2014; Wolfe, Kay-Lambkin, Bowman, & Childs, 2013).

Clinically, counselors, supervisors, and counselor educators could benefit from rich descriptions of RMs, SHARMs, and HARPs. Supervisors and educators can train AA practitioners to use the language of HART as they begin to learn AAT-C skills, and discover new interventions

as they gain competence. Moreover, we identified that both SHARMs and HARPs were utilized as interventions in HART. This may be helpful for novice AA practitioners to conceptualize the practices, processes, and principles of AAT. As one counselor described:

> Doing AAT is such a clear invitation to engage with those things that are usually so [difficult], especially with beginning counselors. It's sometimes really hard to be like, "When you say that, my reaction is [this]," like bringing yourself into the room, bringing that relationship into the room.

For example, counselors could initiate SHARMs as interventions by inviting clients to relate with the animal through play or petting. Likewise, counselors could model HARPs, and subsequently clients would initiate HARPs that glean more meaningful HARTI. Clients developed their self-initiated HARP interventions based on their internal experiences. Thus, interventions based on HART (Chandler, 2015a, 2015b, & in press) constructs promoted client agency and indicated the likelihood of positive client outcomes in counseling and psychotherapy (Oddli & Rønnestad, 2012; Coleman & Neimeyer, 2015; Scholl, Ray, & Brady-Moon, 2014). Moreover, the presence of the therapy animal brought additional opportunities for therapeutic feedback, similar to that of group work. RMs and SHARMs offer opportunities for interpersonal feedback. For example, a therapy animal moving away from a client and the client introspecting about the underlying reason for the disengagement. The feedback, though perceived as less-threatening from the animal, is perceived as feedback nevertheless.

In practical terms, through this study we have affirmed that Chandler's (2015a) HART provided a common nomenclature for clinicians. This nomenclature will be helpful for training, supervision, and research of AAT-C. Explicitly, HART offers constructs for teaching the processes for positive outcomes in AAT-C, and operationalizes constructs for further empirical research in AAT-C and about HART.

Despite all our learnings from this study, we still have some burning questions for future researchers: (a) Is HART consistent with AAIs in other settings; (b) How effective is HART in the treatment of various symptoms with diverse populations; and, (c) What are the experiences of the therapy animal in HART? Based on prior knowledge, we know that therapy animals experience stress and oxytocin exchange, and receive nurturing and comforting touch and verbalizations (Glenk, 2011; Odendaal, 2000). Nonetheless, future researchers would do well to give more attention to the internal experiences of therapy animals, measure the impact of SHARMs and HARPs, design interventions to validate the efficacy of AAT-C using operationalized language from HART based on rigorous standards such as randomized controlled trials, and design longitudinal studies to explore the long-term impacts and continued uses of HARPing to produce HARTI.

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