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2017

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UNIVERSITY OF CALIFORNIA

Santa Barbara

Therapeutic Processes in Equine Assisted Psychotherapy:

An Exploratory Qualitative Study

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Counseling, Clinical, and School Psychology

by

Anna Nina Lee

Committee in charge:

Professor Collie Conoley, Chair

Professor Maryam Kia-Keating

Professor Melissa Morgan Consoli

September 2017

The dissertation of Anna Nina Lee is approved.

Maryam Kia-Keating, Ph.D.

Melissa Morgan Consoli, Ph.D.

Collie Conoley, Ph.D., Committee Chairperson

August 2017

Therapeutic Processes in Equine Assisted Psychotherapy:
An Exploratory Qualitative Study

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by

Anna Nina Lee

ACKNOWLEDGEMENTS

I would like to thank my parents, Maria Dziemidok and Eugeniusz Dziemidok, as well as my brother, Lukasz Dziemidok, for their relentless support of my pursuits in academia. Also, I would like to thank my great research team. Finally, I would like to express my deepest gratitude to my amazing dissertation committee for all their guidance, help, and support. I could not have done it without all of you!

VITA OF ANNA NINA LEE
September 2017

EDUCATION

Counseling, Clinical, and School Psychology – Ph.D. (September 2017)

Emphasis: Counseling Psychology

University of California Santa Barbara

Clinical Psychology - M.A. (May 2011)

California State University Northridge

Sociology – Diplom Sociology (June 2007)

Minors in Psychology and Business Administration

Ludwig-Maximilians University of Munich, Germany

TEACHING EXPERIENCE

Lecturer, California State University Channel Islands (CSUCI), Camarillo, CA

Psychology of Art and Artists (Fall 2012 - present, 9 sections, 3-6h/week)

Introduction to Research Methods (Spring 2012, 1 section, 3h/week; Fall 2011, 2 sections, 6h/week)

Research Methods in Sociology (Spring 2011, 1 section, 4h/week)

Race and Ethnicity (Spring 2011, 1 section, 3h/week)

Supervisors: Prof. Elizabeth Hartung, Ph.D., Prof. Luke Matjas, M.F.A, Prof. Jack Reilly, M.F.A, Prof. Virgil H. Adams III, Ph.D.

Teaching Associate, University of California Santa Barbara (UCSB), Santa Barbara, CA

Introduction to Applied Psychology (Winter 2014, 1 section, 3h/week)

Supervisor: Prof. Tania Israel, Ph.D.

Teaching Associate, California State University Northridge (CSUN), Northridge, CA

Teacher Intern Program (TIP)

Principles of Human Behavior (Fall 2009—Spring 2011, 5 sections, 3-6h/week)

Supervisors: Prof. Gabriela Chavira, Ph.D., Prof. Brennis Lucero-Wagoner, Ph.D.

Teaching Associate, California State University Northridge (CSUN), Northridge CA

Teaching in Research Program (TRP)

Experimental Psychology (Spring 2009 and Spring 2010, 3 sections, 2-4h/week)

Supervisor: Prof. Ellie Kazemi, Ph.D., B.C.B.A.-D

Teaching Assistant, Ludwig-Maximilian's University of Munich (LMU), Munich, Germany

Research Methods for Social Sciences; Social Stratification (4/2004 -5/2007; 2h/week)

Supervisors: Prof. Norman Braun, Ph.D., Prof. Dr. Thomas Hinz, Prof. Dr. Ulrich Beck, Michael Schillmeier, Ph.D.

CLINICAL EXPERIENCE

Metropolitan State Hospital

Norwalk, CA

Supervisors: Amy Choi, Ph.D., Kimberly Smith, Psy.D.

Pre-Doctoral Internship

Inpatient population:

1. *Lanterman-Petris-Short (LPS) Act* patients who are severely disabled and represent a danger to themselves or others due to mental illness, and are treated under a conservatorship agreement.
2. *Incompetent to Stand Trial (Penal Code 1370)* felony defendants found mentally incompetent to stand trial by a court.

Clinical Psychology Intern

Provided treatment planning, diagnostic clarification, and individual and group therapy. Conducted intake assessments and comprehensive psychological assessments.

(Fall 2016—Fall 2017; 44h/week)

Sanctuary Centers of Santa Barbara

Santa Barbara, CA

Supervisor: Denise Mock, Ph.D.

Co-occurring Disorders Program

Court mandated outpatient and inpatient clients with substance abuse disorders and severe mental illness.

Therapist-Intern

Provided individual and group therapy, created a mindfulness-based art therapy group, conducted psychological assessments.

(Fall 2015—Spring 2016; 12h/week)

Hearts Therapeutic Equestrian Center,

Santa Barbara, CA

Supervisor: Mary Ann Evans, Ph.D.

Equine Assisted Psychotherapy (EAP) with veterans on Veterans Affairs (VA) Grant, community clients with developmental disorder, and at risk youth.

Therapist-Intern

Provided individual, couples, and group therapy.

(Fall 2014—Present; 5h/week)

UCSB Counseling and Psychological Services (CAPS)

University of California Santa Barbara (UCSB), Santa Barbara, CA

Supervisors: Ryan Stevenson, MSW Psychology Intern, Kirsten Olson, Ph.D., Danny Zamir, Psy.D., Juan R. Riker, Ph.D.

Undergraduate and graduate students

Therapist-Intern

Provided individual and group therapy.

(Fall 2013—Spring 2014; 10h/week)

Hosford Counseling and Psychological Services Clinic

University of California Santa Barbara (UCSB), Santa Barbara, CA

Supervisor: Ron Brooks, Ph.D.

Campus and community clients

Therapist-Intern

Provided individual and child therapy, conducted psychological and research assessments.

(Fall 2012—Spring 2013; 10h/week)

Hosford Counseling and Psychological Services Clinic

University of California Santa Barbara (UCSB), Santa Barbara, CA

Supervisor: Prof. Collie Conoley, Ph.D.

Therapist-Intern

Provided individual, group, and couples therapy, conducted psychological and research assessments.

(Fall 2011—Spring 2012; 10h/week)

Parent-Child Interaction Program (PCIP) Clinic

California State University Northridge (CSUN), Northridge, CA

Supervisor: Prof. Dee Shepherd-Look, Ph.D.

Parents of children with autism and other developmental disabilities

Therapist-Intern

Provided parenting training groups for families of children and adolescents with Autism and other Neurodevelopmental Disorders who were clients of the Regional Center.

Conducted psychological and research assessments.

(Fall 2008—Spring 2010; 8h/week)

Child and Adolescent Assessment Clinic

California State University Northridge (CSUN), Northridge, CA

Supervisor: Prof. Gary S. Katz, Ph.D.

Campus and community clients

Assessment Psychologist-Intern

Conducted comprehensive psychological assessments for children and adolescents.

(Spring 2011; 5h/week)

EMPLOYMENT

Graduate Student Researcher, Graduate Assistant to the Dean of the Gevirtz Graduate School of Education, University of California Santa Barbara, Santa Barbara, CA

Supported Dean's research projects, program evaluation projects, outreach programs, and presentations.

Supervisor: Professor and Dean Jane Close Conoley, Ph.D.

(Fall 2011—Spring 2013)

Behavior Therapist and Behavior Consultant Supervisor

Addison Behavioral Resources and Channel Islands Social Services, Camarillo, CA

Provided direct Applied Behavior Analysis interventions to children with Autism and other Neurodevelopmental Disorders and their families, as well as training and supervision to Enhanced Behavioral Respite Caregivers.

Supervisor: Laura Addison, Ph.D.

(5/2009—7/2010; 5-15h/week)

SCHOLARSHIP AND PROFESSIONAL ACTIVITIES

PUBLICATIONS

Conoley, C. W., Conoley, J. C., Spaventa-Vancil, K. Z., & Lee, A. N. (2014). Positive psychology: Possible influences on 21st century teaching. In O.S. Tan & W.C. Liu (Eds.), *Teacher effectiveness: Capacity building in a complex learning era*. Singapore: Cengage Learning Press.

Conoley, C. W., Conoley, J. C., Spaventa-Vancil, K. Z., & Lee, A. N. (2014). Positive psychology in schools: Good ideas are never enough. In R. Gilman, E. S. Huebner, & M. J. Furlong (Eds.), *Handbook of positive psychology in the schools*, 2nd edition. Oxford, UK: Taylor & Francis.

Lee, A. N., Conoley, C. W., & Vasquez, E. (2012). Self-affirmation: A positive psychology intervention study. *Positive Psychology: Theory and Application*, 9(1), 21-22.

Vasquez, E., Lee, A. N., & Conoley, C. W. (2012). The effects of capitalization on the celebrator: A positive psychology intervention study. *Positive Psychology: Theory and Application*, 9(1), 21-22.

Dziemidok, A. N. (2007). *Anti-aging society: An ethnographic study of beauty and fitness culture* (Master's thesis). Ludwig-Maximilians University of Munich, Munich, Germany.

CONFERENCE PRESENTATIONS

Lee, A. N., Conoley, C. W., & Lee, D. B. (2013, August). *How does mindfulness work in psychotherapy?* Poster session presented at the meeting of American Psychological Association Annual Convention, Honolulu, HI.

Vasquez, E., Conoley, C. W., & Lee, A. N. (2012, August). *Capitalization: A positive psychology intervention study*. Poster session accepted for the meeting of American Psychological Association Annual Convention, Orlando, FL.

Lee, A. N., Conoley, C. W., & Vasquez, E. (2012, August). *Self-affirmation: A positive psychology intervention study*. Poster session accepted for the meeting of American Psychological Association Annual Convention, Orlando, FL.

- Lee, A. N. (2011, April). *Positive psychology in the classroom: Teaching applications*. Paper presented at the meeting of Western Psychological Association, Los Angeles, CA.
- Lee, A. N. & Malakoff, L. (2008, December). *Animal effect and its therapeutic potential*. Poster session presented at the meeting of CSUCI Student Research Celebration Conference, Camarillo, CA
- Lee, A. N. & Lee, D. B. (2007, November). *The Sociology curriculum in Germany*. Paper presented at the meeting of California Sociological Association, Berkeley, CA

COMMUNITY PRESENTATIONS

- Lee, A. N., Brown, L., Eichler, W., & Conoley, C. W. (2012, May). *Mindfulness for health and wellness*. Psychoeducational group workshop presented at the UCSB Hosford Counseling and Psychological Services Clinic, Santa Barbara, CA.

AWARDS

Chancellor's Doctoral Incentive Program (CDIP) Fellowship.

Forgivable loan award that supports doctoral students who graduated from California State University (CSU) and intend to return to CSU as faculty members upon completion of their doctoral degree.

CERTIFICATIONS

Level 1: Bridging the Couple Chasm — Gottman Method Couples Therapy – A Research Based Approach.

Certified as Level 1 Gottman Method Couples Therapist, in a University of California Santa Barbara affiliated training, presented by John Gottman, Ph.D. and Julie Schwartz Gottman, Ph.D., October 2015.

Level 2: Assessment, Intervention, and Co-Morbidities — Gottman Method Couples Therapy – A Research Based Approach.

Certified as Level 2 Gottman Method Couples Therapist, in a University of California Santa Barbara affiliated training, presented by John Gottman, Ph.D. and Julie Schwartz Gottman, Ph.D., February 2016.

ABSTRACT

Therapeutic Processes in Equine Assisted Psychotherapy:

An exploratory qualitative study

by

Anna Nina Lee

Equine Assisted Psychotherapy (EAP) is an innovative approach in the field of alternative psychotherapies that has been gaining recognition for the last decade. Nevertheless, the research on EAP processes is sparse and not well understood. Furthermore, based on the elements of mindfulness described in the literature, a therapeutic synergy may exist between mindfulness and EAP. This study explored clients' perceptions of their feelings, sensations, and changes experienced during and as a result of mindfulness-based EAP in order to gain a deeper understanding of therapeutic processes involved. The study utilized qualitative interviews with nine military veterans, six women and three men, who participated in mindfulness-based EAP. They had a mean age of 56 (range 31-86). Eight self-identified as Caucasian, and one self-identified as African American. The study utilized methodology based on Consensual Qualitative Research (CQR) approach. Four domains emerged from the data revealing effects of the EAP interventions, the horses' actions and the participants' interpretation of the horses' actions, participants' level of satisfaction with EAP, and the factors that were perceived as challenging in EAP. The most important findings consisted of rich and in-depth information about the effects of EAP

interventions as experienced by the participants and the role mindfulness factors played in their experience. The study also illuminated psychological flexibility outcomes of EAP, the influence of the horses, as well as participants' satisfaction with EAP. Limitations and implications for research and clinical practice are discussed.

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CHAPTER 1

Introduction

Equine Assisted Psychotherapy (EAP; Equine Assisted Growth and Learning Association [EAGALA], 2012) is an innovative approach in the field of alternative psychotherapies that has increasingly gained recognition over the last decade (Lee, Dakin, & McLure, 2016). EAP was initially developed in the 1970s due to an emerging interest in alternatives to traditional talk psychotherapy (Cantin & Marshall-Lucette, 2011), and subsequently received increased interest starting in the 1990s (Bachi, 2012). EAP literature has proposed that psychotherapy with horses has the potential to assist clients in unique (and possibly superior) ways as compared to more passive psychotherapy modalities (Trotter, Chandler, Goodwin-Bond, & Casey, 2008). Furthermore, the utilization of horses in psychotherapy is believed to provide a safe and secure environment that nurtures inner healing while also encouraging optimal development (Trotter et al., 2008). Horses are thought to offer a “peak experience, perhaps unmatched by any other, with a totally unique physical experience while in a joyous social environment” (Hart, 2000, p. 92). Nevertheless, the research on specific EAP processes is sparse and the EAP therapeutic processes are currently not well understood.

EAP has shown promise in treatment of military veterans, in particular in the areas of depression, anxiety, and post-traumatic stress disorder (PTSD), as well as in elevating veterans’ self-confidence, self-esteem, self-concept, and overall well-being, and helping with reintegration issues (Ferruolo, 2016; Holmes, Goodwin, Redhead, & Goymour, 2012; Klontz, Bivens, Leinart, & Klontz, 2007; Knapp, 2013; Lefkowitz, Paharia, Prout, Debiak, & Bleiberg, 2005; Schultz, Remick-Barlow, & Robbins, 2007; Smith-Osborne & Selby, 2010; Sollars & Ferruolo, 2013). It is important to note that around 40% of U.S. soldiers

present with a diagnosis of a psychological disorder (Cornish, Thys, Vogel, & Wade, 2014; Ferruolo, 2016; Straits-Tröster et al., 2011). Mental disorders tend to negatively affect psychosocial adjustment and development of veterans, increasing their risk of unemployment, poverty, criminal involvement, domestic violence, homelessness, and suicide (Cornish et al., 2014; Elbogen et al., 2012; Ferruolo, 2016; Hawryluk, Ridley-Kerr, & Henry, 2012; Kaplan, McFarland, Huguet, & Valenstein, 2012; Moore & Penk, 2011; Tanielian & Jaycox, 2008; Teten et al., 2010). Furthermore, veteran population in the U.S. is currently projected at approximately 20.0 million as of 2017 (U.S. Department of Veterans Affairs [VA], 2016). The calls in literature pinpoint the need for psychotherapy approaches that can address the unique needs of the veteran population, as currently available talk therapies appear to require supplementation in addressing veterans' needs (Ferruolo, 2016; Knapp, 2013; Moore & Penk, 2011; Sollars & Ferruolo, 2013). Veterans are exploring alternative therapies that might better assist them with their mental health needs, which increasingly puts pressure on the VA to expand available treatments (Ferruolo, 2016; Phillips & Wang, 2014).

Additionally, literature points to a potential therapeutic synergy between mindfulness and EAP; further research related to this potential synergy is needed (Burgon, 2013). Mindfulness literature has hypothesized that EAP contains elements of mindfulness based-treatments, such as a sense of calmness and being in the present moment and a psychospiritual feeling of freedom, as well as links to theories of emotion regulation and authentic functioning (Chambers, Gullone, & Allen, 2009; Heppner & Kernis, 2007).

The purpose of this study was to use a qualitative approach to explore clients' experiences in a mindfulness-based EAP program. The research question in this study focused on clients' perceptions of their feelings, sensations, and changes in themselves

experienced during and following participation in mindfulness-based EAP. Given the dearth of research on the topic, a qualitative approach was appropriate for this exploratory stage of inquiry. Since the research to date was sparse and little was known in regard to the key phenomena in the EAP field, an in-depth, inductive inquiry that would allow for exploration and uncovering of the relevant phenomena and variables appeared suitable for the topic. The qualitative approach allowed the probing of clients' experiences without predetermining their responses and was suitable for this in-depth, inductive inquiry (Heppner, Wampold, & Kivlighan, 2008; Knox, Hess, Petersen, & Hill, 1997). The qualitative approach utilized in this study was based on Consensual Qualitative Research (CQR) methodology (Hill et al., 2005; Hill, Thompson, & Williams, 1997), which allows for uncovering, through words and text, of meaning and connections in inductively collected, rich, detailed, qualitative data by the means of development and application of a rigorous, systematic, and consensus-based coding system (Hill et al., 2005). Incorporated within CQR (Hill et al., 2005) are elements from phenomenology (Giorgi, 1985), grounded theory (Strauss & Corbin, 1998), and comprehensive process analysis (Elliott, 1989). Following the logic of CQR methodology (Hill et al., 1997; Hill et al., 2005), the researcher used semi-structured inductive interviews and observations to gather rich, detailed information about clients' experiences. This type of data enabled a high degree of construct clarity and trustworthiness, and helped to fulfill the exploratory purpose of the study. A hybridized CQR was utilized in this study, as the dissertation committee was used as part of the CQR team to reach the final consensus. In summary, the CQR methodology was helpful in addressing the dearth of research and present lack of in-depth understanding of EAP.

The central research question explored in the present study was: "What are clients' perceptions of their feelings, sensations, and changes in themselves experienced during and

as a result of participation in a mindfulness-based EAP program?” The question aimed at in-depth exploration of the processes in EAP as experienced by the clients.

CHAPTER 2

Literature Review

Overview of Equine Assisted Psychotherapy

Equine Assisted Psychotherapy (EAP) can be defined as an approach that utilizes horses as a central element of the psychotherapy process for the purpose of creating experiential opportunities for emotional growth and learning (EAGALA, 2012; Masini, 2010). As pinpointed by Bachi (2012), there has been a steady increase in interest in the utilization of EAP since the 1990s, as evidenced by over 700 centers in the U.S. offering some kind of Equine Assisted Therapy, and health insurance companies paying for EAP services provided by mental health professionals. Moreover, the field has two leading internationally recognized organization: EAGALA and the Professional Association of Therapeutic Horsemanship International (PATH Intl.). Both organizations have distinct practice models, provide training and certification requirements, demand mental health licenses from their mental health professionals, and serve thousands of members and clients (EAGALA, 2012; PATH Intl., n.d.). EAGALA is devoted exclusively to the utilization of horses for psychotherapeutic purposes, as opposed to physical rehabilitation or equestrian skills training, and their model guided the following description of EAP and this study.

Experiential Foundation

In EAP, an experiential modality of psychotherapy, the clients' therapeutic process is based on their reactions to the activities with horses, which are then discussed to uncover clients' cognitive, affective, and behavioral patterns (EAGALA, 2012; Masini, 2010). The EAGALA (2012) model is based on principles formulated by the Association for Experiential Education. The principles state that experiential learning takes place when experiences chosen for particular purposes are paired with reflection on those experiences.

Experiences are designed to motivate the clients to initiate action and make decisions. The clients are encouraged to ask questions, conduct experiments, inquire, problem solve, express their creativity, be accountable, and derive meaning. The psychotherapeutic experiences and the way they are processed build a foundation for future experiences and their processing. One of the main goals is focused on establishing and nurturing relationships to oneself, others, and the environment. Further, the focus is on exploration of client's values. The role of the therapist is to design experiences as well as recognize spontaneous opportunities in the setting with natural consequences, posing possible points for processing, establishing the boundaries, ensuring clients' physical and emotional safety, and supporting clients' learning. The therapist should be aware of his or her biases and their influence on clients. Moreover, these basic experiential psychotherapy processes, which could be elicited in a variety of settings with a multitude of tools, are supported in EAP by the utilization of horses. The horses are assumed to enhance the approach, as they are impressionable, dynamic living beings that have a unique ability to amplify the experiential processes. For instance, their large size and powerful appearance, that might be intimidating, provide an opportunity to overcome fear. The completing of a task with a horse under such circumstances may instill confidence and elicit meaningful metaphors for life tasks that are a source of fear and anxiety. Further metaphors are enabled by the fact that horses have varied personalities, and approach situations with variety of moods and attitudes.

According to EAGALA (2012), the discussion of horses' reactions allows the clients to express and process their own feelings and attitudes. Moreover, horses are very energetically demanding. They require mental and physical engagement, whether one cares for them or interacts with them. They are also very sensitive to non-verbal communication

and are assumed to function as biofeedback providers in EAP as they can sense and mirror emotional states of the humans, which may allow the clients to experience their own influence on others (EAGALA, 2012). Finally, a unique feature of the EAP is the fact that the main therapeutic relationship is between the client and the horses. The therapist is a facilitator of this relationship (EAGALA, 2012).

The EAGALA Psychotherapy Model

The EAGALA (2012) model consists of four elements: (1) team approach; (2) focus on the ground; (3) solution orientation; and (4) code of ethics. *Team approach* refers to the collaboration between a licensed mental health professional called a Mental Health specialist (MH), an Equine Specialist (ES), and the horses. An EAGALA psychotherapy session cannot be conducted with, for example, only an MH, or only an ES. All team members, an MH, an ES, and the horses are always required in the session for it to be considered EAGALA psychotherapy. *Focus on the ground* conveys the principle of working with horses exclusively on the ground, as opposed to work when mounted on the horse. *Solution orientation* reflects the assumption that the clients already have resources to generate their own solutions, they just need support to discover them. Finally, the use of a *code of ethics* that aligns with the American Psychological Association's (APA, 2017) code of ethics promotes ethical conduct of the psychotherapy.

The psychotherapist's facilitation of an EAP session consists of observation and processing of the observations. Observations are guided by an observational framework called SPUD'S (EAGALA, 2012). The acronym refers to: S-Shifts, P-Patterns, U-Unique, D-Discrepancy, and 'S-Self-awareness. *Shifts* concern the changes in the behavior of the clients and horses, including spatial relations, such as the distance between horses and clients. *Patterns* relate to occurrences that took place three or more times. *Unique* events are

the moments that clearly differ from other events in the psychotherapy session, and stand out as distinctive moments. *Discrepancy* refers to the occurrence of incongruence between a clients' verbal and non-verbal communication. Finally, *self-awareness* refers to the therapist's understanding of countertransference, biases, preconceptions, and influence on the session.

The premise of the EAGALA model (2012) is that observations should be conducted on the events happening in the present moment and without interpretation. This resonates with the mindful stance of nonjudgmentally and intentionally paying attention to the present experience as it unfolds moment by moment (Kabat-Zinn, 2003). Further, the principle of genuine curiosity instead of judgment by the therapist resembles the mindful attitude of beginner's mind, a stance of interest in and openness to the current situation as a result of the suspension of any preconceptions about the situations (Kabat-Zinn, 2005). For example, a person displaying a beginner's mindset and attitudes might follow directions for a familiar activity but choose not to use previous knowledge and instead experience the activity as presented this time by the person giving instructions. Another example would be a person who treats an everyday event, such as sunset, as if seen for the first time.

The second phase in the EAP session consists of processing the observations with the following categories: (1) Invitation to the client to share their story; (2) Observational statements; (3) Asking questions; (4) Reflective listening and clarification statements; (5) Metaphors; and (6) Closing the session. The invitation should be formulated as an open-ended "what" question, instead of an evaluative "how." The observational statements reference a mindful attitude in their requirement to be nonjudgmental, and free of blame, assessment and therapist-imposed meaning. They should relate to the horses' SPUDs and let the clients give their own interpretation of the events that just occurred and project their

thoughts, beliefs, and meanings into the experience with horses. Further, the question-asking part of the sequence also points to a mindful foundation, as the therapist's questions should come from a place of curiosity and desire for clarity and discernment, and should not be agenda-laden. At the same time, the therapist's questions asked in this mindful manner can be presumed to model the mindful stance to the client. The reflective listening follows, when the therapist reflects back to the client what the client just said. The therapist also asks for clarifications. Finally, according to EAGALA (2012), the clients typically start to project metaphors about their life onto horses, which is assumed to allow the clients to connect with meaningful elements of their lives on a deeper level. The closure of a session can involve some summary of the process, or not. The model assumes that a large part of the learning from the session requires time to fully unfold. Hence, the processing is assumed to continue between sessions. Emphasis is placed on not forcing the client to arrive at a conclusion, or experience a discovery, before they are ready. The model presumes that allowing the client some time alone with the horses at the end of the session invites the client to process the learning from the session unaided. To facilitate this type of closure, the therapist might ask the client to take the horse for a walk or say thank you and goodbye to the horse, if the client feels comfortable doing so.

Research Support

In their meta-analytic review, Cantin and Marshall-Lucette (2011) concluded that EAP appears to be a promising treatment that can lead to an increase in positive outcomes and reduction of symptoms. The following five studies that were part of this meta-analytic review investigated EAP in a variety of settings. For instance, within a residential program requiring 28 hours of EAP in a group psychotherapy format, Klontz et al. (2007) found reductions in overall psychological distress and increases in psychological well-being. A

total of 31 clients took part in the EAP sessions in 8 consecutive groups over an 8-month period, and completed the pre-rest, post-test, and 6-months follow up. The participants were nine men and 22 women. The study utilized the Brief Symptom Inventory (Derogatis, 1993) and the Personal Orientation Inventory (Shostrom, 1974). Particularly interestingly for the present study, the participants reported more orientation to the present moment, a signature mindfulness facet. They also reported less burden resulting from regrets, less anxiety, more independence, and increased ability to support oneself. The high attrition rate constituted a major limitation of the study.

Russell-Martin (2006) compared EAP for couples to Solution-Focused Couples Therapy (SFT). A total of twenty heterosexual couples (40 individuals, aged 21 to 45 years of age) participated in the study, with 10 couples receiving six sessions of EAP and 10 couples receiving six sessions of SFT. The relationship statuses of the participant couples consisted of: committed, faithful, monogamous, married, living together, pre-marital separated, and exclusively dating. The data regarding the following variables were collected: relational experience; relationship length; horse experience; therapy experience; age; income; and years of education. Both EFT and SFT groups were similar in descriptive variable responses. Initially, there was no difference in the scores by first and third week. By the sixth week, the EAP group showed a significantly higher degree of marital satisfaction and relational adjustments as indicated by the Dynamic Adjustment Scale (Spanier, 1967). In terms of limitations, the study had a potential for researcher bias as the researcher was the therapist in the study.

In Schultz's and colleagues' (2007) pilot study in New Mexico, 63 children and adolescents between the ages of four and 16 (37 boys and 26 girls) showed significant improvement in Global Assessment of Functioning (GAF) scores as a result of 19 EAP

sessions. The sample consisted of 51% non-Hispanic white, 46% Hispanic white and 3% black individuals. Twenty-five participants (40%) had a history of inter-parental violence at home; 17 (27%) had experienced abuse or neglect; 12 (20%) had experienced sexual abuse; 10 (32%) had at least one parent with history of substance abuse; 36 (57%) had mood disturbance diagnosis; 10 (16%) had attention-deficit/hyperactivity disorder (ADHD); five (8%) had PTSD; three (5%) had disruptive disorder, and three (5%) had other disorders. All children showed an improvement in GAF scores. Young children showed the greatest improvement and children with a history of intra-family violence and substance abuse tended to show a greater improvement. There was a statistically significant correlation between the improvement in the GAF scores and the number of treatments given. Children with history of physical abuse and neglect had a statistically significant greater GAF improvement score after treatment than those who did not have a history of abuse or neglect. There was no statistically significant difference in scores or improvement in GAF between Hispanic and Non-Hispanic individuals. Limitations of the study included that the sample was self-selected, the 14 children that dropped out were excluded from further analysis, and GAF was the only outcome measure of the study. It is possible that other variables affected the increase in GAF scores. Moreover, it is unclear how age, gender, and environment affected the results.

Trotter et al. (2008) compared EAP with classroom-based counseling for students at risk for academic and social failure due to behavioral, academic, and social adjustment problems. The classroom-based counseling that was utilized as comparison treatment group was *Kids' Connection (For Children Ages 4-12)* (Rainbow Days, Inc., 1998). *Kids' Connection* is an indoor, school-based, in-classroom, group counseling program designed to

address developing healthy and constructive coping skills for wide array of issues (Rainbow Days, Inc., 1998).

From 205 students who volunteered, 164 completed the study (102 boys and 62 girls). The sample consisted of 136 Caucasian, 12 African-American, 11 Hispanic, and 5 other-ethnicity students in grades three through eight. The measures utilized in the study were the Behavioral Assessment System for children (BASC), self-rating scale (SRS), and parent-rating scale (PRS). The PRS was sent home for the parents to complete pre- and post-treatment. The SRS was completed by students prior to the first session and at end of final treatment sessions. The Psychosocial Session Form (PSF; Chandler, 2005) was used to rate client social behaviors at the end of every treatment session. As Trotter and colleagues reported (2008), the PSF was completed by the EAP team who met together after each treatment session to assess each participant's social behavior during the session. While the PSF was developed for use with Animal Assisted Therapy, it is suitable to assess the efficacy of any counseling modality designed to impact human social behavior (Trotter et al., 2008). Students in the EAP group showed on the BASC-SRS a statistically significant reduction in five negative behaviors and increase in two positive ones as compared to reduction in one negative and increase in four positive behaviors in the classroom-based counseling group. The BASC-PRS indicated statistically significant improvement in 12 areas in the EAP group, whereas the classroom-based counseling group showed significant improvement in only one area. The limitations of the study included the fact that the data collection methods potentially limited full details of the participants' experience and improvement as self-report measures were utilized. Self-report measures can be unreliable due to their subjectivity. Moreover, the PSF measure has not been standardized on a large national sample; hence, it was unclear if it was representative for the general population.

Finally, Shultz (2005), utilizing a quasi-experimental design, investigated the effects of EAP on the psychological and social function of at risk adolescents. The study utilized a convenience sample of 29 adolescents between the ages of 12 and 18 years. The 15-participant treatment group was comprised of eight boys and seven girls, with five participants in individual EAP and 10 in group EAP); the control group consisted of 14 participants (nine boys and five girls). There were two types of youth within each group: those who lived in residential basic care facility and those who did not. Different backgrounds included: living below poverty line; victims of crime and violence; abuse or neglect; alcoholic or drug abuser parents; divorced; separated or never married parents; and more than four siblings living at home. The mental health issues the youth presented with included anxiety, depression, fearfulness, hopelessness, self-harm, paranoia, Obsessive-Compulsive Disorder (OCD), hallucinations, delusions, suicidality, mania, and eating disorders. The assignment to groups was non-random. The measures utilized in the study were Youth Outcome Questionnaire (Y-OQ; Wells, Burlingame, & Lambert, 1999) for the parents, and Youth Outcome Questionnaire-Self Report (Y-OQ-SR; Ridge, Warren, Burlingame, Wells, & Tumblin, 2009) for the children. Data collection was completed at six, eight, and 10 weeks of individual or group psychotherapy. Child reports on Y-OQ-SR and parent reports on Y-OQ both indicated that the adolescents in the EAP group showed increased positive psychosocial functioning and decreased intrapersonal distress as compared to control group.

In addition, Masini (2010) pointed to anecdotal evidence of EAP's potential for treating war veterans, based on Lancia's (2008) report of observations from the field and client statements. Furthermore, Bachi (2012), in her discussion on the gap between practice and knowledge in the field of EAP, reported that EAP, based on a review of studies, appears

to serve diverse populations with a variety of symptoms, such as female survivors of abuse (Meinersmann, Bradberry, & Roberts, 2008), trauma victims (Yorke, Adams, & Coady, 2008), or cancer survivors (Cantril & Haylock, 2007).

In the qualitative study conducted by Meinersmann and colleagues (2008), stories of five women who experienced abuse and participated in equine-facilitated psychotherapy (EFP) as part of their recovery were examined. The study was designed to examine the effectiveness of EFP in the treatment of women who have experienced abuse. Selection criteria included age, experience of abuse, participation in EFP, and ability to understand English. Data analysis identified four patterns in the participants' stories: I Can Have Power; Doing It Hands On; Horses as Co-Therapists; and Turned My Life Around. Overall, the participants' stories showed that EFP can be an effective intervention for these women who experienced abuse.

In another qualitative study, Yorke et al. (2008) investigated the therapeutic value of equine-human bonding in recovery from trauma. The six participants recognized that their pre-existing relationships with horses were therapeutic during recovering from trauma, defined as sufficient to have caused significant change in the participant's life. Semi-structured interviews and videotapes of horse-participant interactions were used to describe the nature of the equine-human bond and its contribution to recovery from trauma. The authors concluded that the equine-human bonds described by participants had parallels both with important elements of therapeutic alliances between professionals and clients and with the positive impact of relationship factors on client outcome (Yorke et al., 2008).

Data obtained in a qualitative study by Cantril and Haylock (2007) indicated beneficial outcomes for cancer survivors who participated in a structured equine-assisted program. Narrative inquiry methodology and multimethod data collection (i.e., focus groups,

individual semi-structured interviews, and field notes) were used to explore the benefits of human-equine interactions among cancer survivor population. A convenience sample of six cancer survivors was used. Data collection consisted of focus group discussions and individual interviews that were audio-recorded and transcribed. Data were analyzed using thematic coding. Analysis revealed narrative themes including taking charge, overcoming fear and obstacles, achievement, letting go of cancer, communication enhancement, heightened self-confidence, and joy.

Bachi (2012) concluded that these studies are useful in terms of documenting current EAP applications with different populations and pointing to the need to develop knowledge that is specific to each population. She also pointed out that they highlight the need for developing more in-depth knowledge about EAP and identify useful research directions in the EAP field.

In conclusion, the authors of the original studies described above and the meta-analytic review consistently stated that the current scope of research on EAP was limited and all called for better conceptual and empirical understanding of this psychotherapy modality (Bachi, 2012; Cantin & Marshall-Lucette, 2011; Masini, 2010). As Bachi (2012) noted in her meta-analytic review of the current state of the research of EAP, the field lacks clarity about EAP's effectiveness and theoretical underpinnings and has not developed a unified theory. Consequently, the suggestions in the literature have underscored the need for developing a unified theory that would provide a theoretical basis for practice and research. Bachi (2012) suggested an attachment theory as a representation of human-horse relationship. EAP is typically practiced in the context of the clinician's theoretical orientation, with mindfulness-based approaches having the potential to be very useful as the utilization of horses can potentially support and enhance mindfulness-based strategies (Yetz,

n.d.). For example, horses naturally model focusing on the present, and, due to their imposing presence, encourage paying close attention, both of which are defining features of mindfulness (Earles, Vernon, & Yetz, 2015). The concept of mindfulness will be reviewed in the following chapter to investigate its potential therapeutic synergy with EAP.

Mindfulness

The concept of mindfulness stems from Buddhist tradition, and is most often associated with the practice of mindfulness meditation. Meditation is one type of practice used to achieve a mindful state (Shapiro, Carlson, Astin, & Freedman, 2006). Mindfulness itself, though, is defined as an optimal, nonjudgmental, intentional, present-focused state of awareness (Kabat-Zinn, 2003) and has been shown to have a variety of salutary psychological effects (Brown, Ryan, & Creswell, 2007). The practice of mindfulness aims at achieving lasting happiness and gaining clear and objective views on the true nature of existence (Carmody & Baer, 2009; Holzel et al., 2011). Although it originates from a spiritual tradition of Buddhism, mindfulness has been introduced into entirely non-religious contexts of secular psychotherapy through the foundational work of Kabat-Zinn (2003, 2005, 2006) who created the Mindfulness-Based Stress Reduction (MBSR) program, and Linehan (1993; 2015), who developed Dialectical Behavior Therapy (DBT) for Borderline Personality Disorder, and Marlatt (2002) and colleagues, who developed Mindfulness-Based Relapse Prevention (Bowen, Chawla, & Marlatt, 2010) for substance abuse. Some of the mindfulness-based treatments, specifically MBSR (Kabat-Zinn, 2003) and its derivative Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2012), use meditation to develop mindfulness skills in the clients, while others, such as Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and Linehan's (1993) DBT employ other mindful activities and do not involve the traditional meditation. The non-

meditation-based mindful activities are broadly conceptualized by Siegel (2009) in the interpersonal neurobiology literature as MAPs (Mindful Awareness Practices) that consist of two fundamental processes: awareness of awareness and paying attention to intention. Both mindfulness meditation and MAPs are generally conceptualized in the literature as resulting in the same state of mindfulness with its associated benefits (e.g. Kabat-Zinn, 2003; Segal et al., 2002; Siegel, 2009). Therefore, mindfulness achieved by mindfulness meditation or by MAPs were considered interchangeable in the present study. A number of research studies indicate that the *mindfulness-based psychotherapies*, defined as treatments that encourage participants to nonjudgmentally and intentionally pay attention to the present experience as it unfolds moment by moment (Kabat-Zinn, 2003), can alleviate a variety of psychopathological symptoms associated with, for example, mood (Williams et al., 2008; Williams, & Kuyken, 2012), anxiety (Evans et al., 2008), eating (Baer, Fischer, & Huss, 2005), and personality disorders (Linehan, 1993; Neacsiu, Rizvi, & Linehan, 2010), as well as increase well-being in clinical and non-clinical populations (Carmody, Baer, Lykins, & Olendzki, 2009). The body of research on mindfulness-based therapies has consistently supported their efficacy in enhancing well-being and in symptom reduction.

Mechanisms of Mindfulness

Proposed mechanisms of mindfulness that explain its positive effects include findings from psychotherapy process and outcome studies pointing to the fundamental change in the perception of experiences called re-perceiving, decentering or defusion, as well as change in self-regulation, values clarification, exposure, and cognitive and behavioral flexibility (Carmody et al., 2009; Hayes, Pistorello, & Levin, 2012). Further, findings from analog and neuroscientific studies on mindfulness meditation point to mechanisms such as attention regulation, body awareness, change in perspective on the self, and emotion

regulation comprising of reappraisal, exposure, extinction, and reconsolidation (Holzel et al., 2011). The present review will attempt to explicate the current understanding in the literature on mindfulness' mechanisms of action. The outcomes of mindfulness-based treatments associated with the mediators reviewed here range from increases in well-being to symptom reduction.

Reperceiving. The mechanism of *reperceiving*, also called decentering, distancing, or defusion in the literature (Carmody et al., 2009; Hayes, Levin, Plumb-Villardaga, Villatte, & Pistorello, 2013), is of particular importance because there is evidence supporting its overlaps with the construct of mindfulness itself. Reperceiving is a *metamechanism* (defined by Shapiro et al. [2006] as a mechanism that overarches additional direct mechanisms that lead to change and positive outcome) of change and refers to observing one's thoughts and feelings as events produced by the mind that might or might not be a true reflection of the self (Carmody et al., 2009). For example, a client using reperceiving might think that a friend whom she saw on the other side of the street did not smile to her because the client is bad as a friend, and at the same time recognize that it might or might not be true, as there are other possible reasons for the behavior of the friend, such as the fact the he did not see her. This distanced stance towards thoughts results in clarity and equanimity and facilitates the other mechanisms of action. Carmody et al. (2009) reported that both mindfulness, as measured by scales of the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006) and reperceiving or decentering, as measured by the Experiences Questionnaire (Fresco, Segal, Buis, & Kennedy, 2007) showed significant increase in mindfulness and reperceiving scores from pre- to post-intervention in an MBSR program. The other proposed mediators, namely self-regulation, values clarification, exposure, and cognitive/behavioral/emotional flexibility, also increased significantly over the course of MBSR psychotherapy. Levels of

symptoms and stress in turn were significantly reduced. Nevertheless, evidence for reperiencing as a mediator for the effects of mindfulness treatment was weak. The authors suggested that mindfulness and reperiencing are highly overlapping constructs and that both variables change with participation in an MBSR treatment. To test it, the authors created a composite variable mindfulness/reperiencing (Baer et al., 2006). Interestingly, values clarification and increases in cognitive, emotional, and behavioral flexibility were found to be partial mediators of the relationship between a composite mindfulness/reperiencing variable and symptom alleviation, pointing to the importance of reperiencing as a metamechanism.

Psychological, cognitive and behavioral flexibility. Psychological, cognitive, and behavioral flexibility, defined by Shapiro et al. (2006) as a set of abilities allowing a person to be adaptive and flexible in responding to the environment, were found to be major mediators for outcomes of mindfulness-based treatments (Carmody et al., 2009; Hayes et al., 2012; Hayes et al., 2013; Holzel et al., 2011). In ACT, aspects of *psychological flexibility*, defined as “contacting the present moment as a conscious human being, fully and without defense, as it is and not as what it says it is, and persisting or changing in behavior in the service of chosen values” (Hayes et al., 2012, p. 985), are organized in two categories. The first category, Commitment and Behavior Change Processes, consists of: (1) *Being Present*, defined as “focused, voluntary, and flexible contact with the present moment” (Hayes et al., 2012, p. 983); (2) *Values*, defined as “chosen, verbally constructed, consequences of patterns of activity, for which the predominant reinforcer becomes intrinsic to the behavioral pattern itself” (Hayes et al., 2012, p. 984) and (3) *Committed Action*, defined as “a continuous redirection of behavior so as to produce larger and larger patterns of effective action linked to chosen values” (Hayes et al., 2012, p. 984). The second category entails Mindfulness and

Acceptance Processes and includes: (4) *Acceptance*, defined as “the active and aware embrace of private experiences without unnecessary attempts to change their frequency or form” (Hayes et al., 2012, p. 982); (5) *Cognitive Defusion*, defined as an ability to see one’s thoughts from the distance without attachment to their content (Hayes et al., 2012), and (6) *Noticing/Contextual Self*, defined as a transcendent sense of self which is detached from a self-narrative (Hayes et al., 2012).

As noted by Hayes et al. (2012), ACT attempts to change the social and verbal context in which thoughts and feelings are related to behavior. The social and verbal context of psychological struggles is a particular aspect of the focus of ACT. Rather than trying to change the form of private experience, ACT therapists attempt to change the functions of private experiences by changing in psychotherapy the social and verbal context in which some forms of activity (e.g., thoughts and feelings) are usually related to other forms (e.g., overt actions). For example, an ACT therapist might ask a client to repeat and listen to the sound of a thought, such as “I’m not good”, instead of trying to engage and dispute its content (Hayes et al., 2012). Research on ACT has shown that psychological flexibility, or one of its aspects, are the mediators responsible for the positive effects of mindfulness-based interventions (Hayes, 2002; Hayes et al., 2013; Hayes et al., 2012).

The ACT model is in line with other influential conceptualizations of the actions of mindfulness (Shapiro et al., 2006). In Shapiro et al.’s (2006) Intention-Attention-Attitude model of mindfulness, cognitive, emotional, and behavioral flexibility is a consequence of re-perceiving as it allows for more adaptive and flexible responding to the environmental stimuli, as opposed to a rigid reactivity stemming from overidentification with one’s current experience. This model was based on research in cognitive and social psychology summarized by Borkovec (2002), showing that one’s existing expectations and beliefs can

disrupt the processing of information that becomes newly available in the present situation. Hence, an ability to see clearly without confusing one's preconception and biases with the actual state of reality as a result of accurate processing of new information depends on disidentification and diffusion from established patterns of thinking. The disidentification and diffusion state of mind is an opposite of the maladaptive cognitive fusion, in which one sees the patterns of thinking as the reality itself instead of seeing the patterns for what they actually are — namely, thoughts.

Values clarification. As Hayes et al. (2012) noted, when behavior change is motivated by guilt or compliance, the probability of achieving the goal that this behavior is aimed at is lower than when the motivation is intrinsic and linked to client's values. For instance, ACT attempts to connect client's behavior to their values, defined as "chosen, verbally constructed, consequences of patterns of activity, for which the predominant reinforcer becomes intrinsic to the behavioral pattern itself" (Hayes et al., 2012, p. 984). The mindful quality of values is manifested in the fact that they are lived out, moment to moment. The consequences of importance for behaviors are not situated in the vague distant future. Instead, they are part of the process of engaging in the behavior itself. In this case, re-perceiving can stimulate values clarification because it helps clients recognize what is truly meaningful to them.

Further, evidence suggests that automatic processing might limit consideration of options that would potentially be more congruent with client's needs and values (Brown & Ryan, 2003). Hence, the re-perceiving's quality of offering an open, intentional awareness state can support clients in choosing more congruent values. Providing empirical support, Brown and Ryan (2003) found that if research participants acted mindfully, as indicated by the Mindful Attention and Awareness Scale, they acted more congruently with their values

and interests. These findings suggested that acting congruently with values is a mediator of mindfulness's positive outcomes, such as symptom reduction or increase in subjective well-being.

Self-regulation. As Shapiro et al. (2006) described, self-regulation is a process to maintain stability of functioning and ability to change. For example, self-regulation can manifest as one's capacity to stand back and witness his or her emotional states such as anxiety, and choose a response, instead of following automatic behavioral patterns (Shapiro et al., 2006). Self-regulation was described as having feedback loops between the following elements: intention to practice nonjudgmental attention, which leads to connection, which leads to self-regulation, which then again leads to the ability to be intentional about the nonjudgmental attention, which ultimately results in psychological health and optimal functioning. This chain of events, initiated by the mindful nonjudgmental attention, allows the client to re-perceive their internal states, which results in a positive outcome of less dysregulation. Hence, the consequence of re-perceiving, as a mediator of mindfulness, is less dysregulation.

Re-perceiving also stops the escalation of maladaptive habitual patterns that stem from reactivity. Hayes (2002) stated that in this situation experiential avoidance becomes less automatic and less necessary. Re-perceiving tends to make clear that all mental states, including unpleasant mental states, are impermanent, which allows the clients to build greater tolerance for aversive internal states. Observing this impermanence serves as source of information, allowing the client greater freedom in responding to mental states such as anxiety or sadness. The clients become able to notice their emotions and choose to self-regulate in a way that brings well-being. This process of self-regulation results from conscious, intentional directing of awareness (paying attention) with an attitude of

acceptance to experiences in the present moment, which makes it possible for the client to re-perceive them. The study by Brown and Ryan (2003) lends support to this process, as participants who scored higher on mindfulness measure reported more self-regulated emotions and behaviors. These findings suggested that the self-regulation, as a positive outcome of mindfulness, is mediated by re-perceiving.

Attention regulation. Another regulatory mechanism of action in mindfulness explored in the literature is attention regulation. According to Holzel et al. (2011), components of attention regulation in mindfulness include: sustaining attention on the chosen object; returning attention to the object whenever distracted; and conflict monitoring, which refers to maintaining of the focus of attention on a pursued object while disregarding distractions. For example, a mindfulness meditation practitioner can pay attention to a single chosen stimulus, such as his or her breath, and disregard other stimuli present in the surrounding environment, such as everyday noises.

Attention regulation constitutes an important mechanism that is often developed early in mindfulness practice since a sufficient degree of attention regulation is necessary to stay engaged in meditation, as opposed to drifting off into daydreaming. Importantly, successful attention regulation is regarded as a building block for practitioners to benefit from the other mechanisms of mindfulness practice. According to Holzel et al. (2011), attention regulation was found to enhance performance in the following areas: executive attention, directing and limiting attention to a subset of possible inputs, as well as achieving and maintaining of a vigilant state of preparedness. Clinical applications of this particular mechanism of mindfulness include ADHD and Bipolar Disorder treatments. In conclusion, attention regulation appears to be a foundational mindfulness skill, which allows the clients to benefit from other mechanisms of mindfulness practice.

Body awareness. Mindful focus on an object of internal experience, for instance sensory experiences of breathing, emotions, or other body sensations has been found to increase body awareness (Holzel et al., 2011). Body awareness as a mechanism of action appears to function as a precondition for emotional awareness and regulation, as well as for an empathic response. Findings indicating positive outcomes mediated by body awareness have included increased scores on the FFMQ's Observe subscale, which refers to the clients' ability to observe, notice, and attend to sensations, perceptions, thoughts, and feelings they experience (Baer et al, 2006). Body awareness was also indicated as a mediator that leads to enhanced sensory processing. The enhanced sensory processing is considered to be a representation of increased bottom- up processing of the stimulus, which allows the client to experience the stimulus without preconceptions, and more closely to what the stimulus actually is.

In conclusion, awareness of body sensations is commonly used in mindfulness practice, especially as an anchor of attention in mindfulness meditation. According to self-reports, this practice leads to increased ability to perceive body sensations. This increased body awareness resulting from mindfulness practice might be relevant for regulation of affect and empathic responses, and therefore be of particular interest in mindfulness-based treatments for clients manifesting deficits in those areas (Holzel et al., 2011).

Change in perspective on the self. According to Holzel et al. (2011), meditation practitioners report that they can observe mental processes with increasing clarity and enhanced temporal resolution as a result of greater internal awareness achieved through meditation. In this context, the change in the perspective that one has of one's self, often called in the literature as *perspective on self* (Holzel et al., 2011), is defined as the process of frequently occurring awareness of a sense of self that becomes observable through the

development of meta-awareness. *Meta-awareness* is an executive monitoring function, which allows the meditator to take a perspective towards the contents of conscious experiences that does not involve intellectual conceptualizing of the elements that these conscious experiences consist of. This process is thought to facilitate detachment from identification with a non-dynamic, absolute sense of self, which is replaced by a sense of self that can be experienced as an event (Olendzki, 2006).

Detachment from identification with a static sense of self, as well as re-perceiving or decentering defined in meditation studies as mindful, nonjudgmental observation fostering a detachment from identification with the contents of awareness, are considered in the literature to be indicators of the change in perspective on the self. Changes in the perspective on the self have been found to result in self-reported changes in self-concept as measured by the Tennessee Self-Concept Scale, and the Temperament and Character Inventory. The shift in the perception of the self allows the client to project their sense of self into another perspective and to experience a change in the internal representation of the self. These processes are considered to increase a client's ability to observe their mental processes with clarity, instead of confusion (Holzel et al., 2011).

Emotion regulation. *Emotion regulation*, defined as alteration of ongoing emotional responses through the action of regulatory processes (Ochsner & Gross, 2005), includes the regulatory process of reappraisal, which refers to an ability to approach ongoing emotional reactions in a different way, nonjudgmentally, with acceptance. Mindfulness training tends to increase positive reappraisal, as indicated by the Cognitive Emotion Regulation Questionnaire (Holzel et al., 2011).

Further, the ability to emotionally self-regulate also includes the psychological processes of exposure, extinction, and reconsolidation (Holzel et al., 2011). Exposure,

extinction, and reconsolidation consist of exposing oneself to whatever is present in the field of awareness, letting oneself be affected by it, and refraining from internal reactivity. To emotionally self-regulate, meditation practitioners expose themselves to whatever is present in the field of awareness during mindfulness meditation. They let themselves be affected by the experience, refraining from engaging in internal reactivity toward it, and instead bring acceptance to bodily and affective responses (Hart, 1987). Practitioners are instructed to meet unpleasant emotions, such as fear, sadness, anger, and aversion, by turning towards them, rather than turning away (Santorelli, 2000). Findings have indicated increases in nonreactivity to inner experiences as a result of training in mindfulness meditation, as measured by the FFMQ (Baer et al., 2006). Moreover, healthy novices enrolled in a 7-week mindfulness training program showed a reduction in emotional interference (assessed as the delay in reaction time after being presented with affective versus neutral pictures) compared with those who followed a relaxation meditation protocol and those in a wait-list control group (Ortner, Kilner, & Zelazo, 2007). Self-report data from healthy individuals have shown that mindfulness meditation helped the practitioners to achieve emotionally desirable, regulated states manifesting themselves in decreased negative mood (Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2010), increased positive mood, and reduced distractive and ruminative thoughts and behaviors (Jain et al., 2007).

Finally, physiological studies indicate that mindfulness training leads to decreased emotional reactivity and facilitates a return to emotional baseline after reactivity, which promotes emotional regulation. Experienced mindfulness meditators have shown a faster decrease in skin conductance in response to aversive stimuli (Goleman & Schwartz, 1976), as well as less enhancement of the startle response by aversive stimuli (Zeidler, 2007). An electroencephalogram study found that MBSR training led to increases in left-sided anterior

brain activation after the course compared with a wait-list control group. This pattern of lateralization has previously been associated with the experience of positive emotions (Davidson et al., 2003).

In conclusion, emotion regulation appears to lead to decreased reactivity. The state of decreased reactivity in turn, allows the client to unlearn previous automatic emotional reactions and to choose their response to the situation instead of being bound to habitual ways of expressing their emotions.

Conclusion

In conclusion, the extant research literature points to the need for better understanding of the therapeutic processes in EAP and their theoretical conceptualization. Based on a review of the EAP and mindfulness literature, there is possibly a beneficial therapeutic synergy between EAP and mindfulness that might offer insights into a potential mindfulness-based mechanism of action in EAP. To address these research directions that emerged from literature, the present study sought to investigate clients' perceptions of their feelings, sensations, and changes in themselves experienced during and as a result of participation in a mindfulness-based EAP, in order to identify underlying therapeutic processes and help conceptualize them theoretically. Specifically, the study addressed the following research question: "What are clients' perceptions of their feelings, sensations, and changes in themselves experienced during and as a result of participation in a mindfulness-based EAP program?"

CHAPTER 3

Methods

Participants

Participants were purposefully selected to access the stories of diverse, in terms of gender, age, and ethnic/racial background, military veterans, in order to take into consideration varied perspectives on EAP experiences. The number of participants and criteria for selecting the sample were based on recommendations in CQR literature that suggests obtaining a sample of eight to 15 participants knowledgeable about the phenomenon under study (Hill et al., 1997; Hill et al., 2005), with 12 being reported as typically sufficient to achieve data saturation (Guest, Bunce, & Johnson, 2006; Morrow, 2005). The sampling strategy was a form of purposeful sampling, as the individuals and the site for the study were selected because of their ability to inform an understanding of the research problem, namely clients' experiences in a mindfulness-based EAP program (Creswell, 2013). Consequently, veterans who participated in a mindfulness-based EAP program (see Appendix A; Evans, 2015), funded partially by a VA grant, received a research packet inviting them to participate in the study. The research packets were distributed by the researcher directly to the total of 28 potential participants, with the aim of recruiting 16 at the EAP site, a therapeutic equestrian center in Southern California. Each research packet included a letter to the client (see Appendix B) containing information about the nature of the study and steps taken to assure confidentiality, a consent form (see Appendix C), a demographic form (see Appendix D), the FFMQ quantitative mindfulness measure (Baer et al., 2006) (see Appendix E), and a list of the questions that would be asked in the main interview (see Appendix F). Participants were informed in the letter that the study sought to examine clients' experiences in EAP. The letter also explained that their consent to

participate in the study meant that they were volunteering to participate in two audio-recorded face-to-face interviews, a main interview and a follow-up interview, as well as volunteering to take part in an EAP session observed by the researcher. Further, the letter asked the potential participants to sign the consent form, fill out the demographic form, complete a mindfulness questionnaire, and to return the completed packet to their EAP therapist or directly to the researcher, if they agreed to participate in the study. The participants were contacted by their preferred method, either telephone, email, or face-to-face and scheduled for the interviews. Out of the 28 contacted potential participants, with the goal of recruiting 16, nine were successfully audio recorded and their interviews analyzed for the study. The reasons for loss of potential participants included: returning an incomplete packet; lack of veteran status; lack of response upon being contacted back by the researcher; scheduling conflicts; and audio recording difficulties.

The nine participants were veterans who were connected to the VA and carried a variety of mental health diagnoses. They had a mean age of 56, with ages ranging from 31 to 86. There were eight self-identified Caucasian individuals, and one self-identified African American individual; six participants were female, and three were male.

The participants' knowledge of experiences in EAP was assumed based on the fact that they recently participated in a mindfulness-based EAP program. The participants took part in EAP within the last two years, and the number of sessions they participated in ranged from five to 70, with the median number of session being 15. The EAP modalities they participated in included individual and group EAP.

In order to protect participants' identities, the interviews were de-identified and assigned a case number, and participants were given pseudonyms. The data was coded under

their case numbers and pseudonyms. The pseudonyms were also used in the descriptions of the participants in the present study.

“Bob.” Bob was a 68-year-old Caucasian male veteran. He stated that he previously received psychopharmacological treatment, but no psychotherapy. He started participating in EAP in 2015 and had participated in approximately 50 EAP sessions. He stated that he decided to participate in EAP because he liked what he was able to accomplish with the horses based on his previous experiences as a rider. His FFMQ (Baer et al., 2006) overall mindfulness score was 3.8 out of 5 at the time of interview, with higher scores indicating higher levels of mindfulness.

“Monica.” Monica was a 65-year-old African American female veteran. She participated in psychotherapy at the VA with a psychiatric nurse approximately four years prior to these interviews. She stated that her previous psychotherapy was not “in-depth.” She started participating in EAP in January 2016 and had participated in approximately 12 EAP sessions. She stated that she decided to participate in EAP when she saw a pamphlet at the VA. She reported that she came mostly out of curiosity, and because she had “bottled feelings,” but stayed because she received validation of her feelings and help with coping. Her FFMQ (Baer et al., 2006) overall mindfulness score was 2.6 out of 5 at the time of interview.

“Diana.” Diana was a 31-year-old Caucasian female veteran. Her previous psychotherapy experiences consisted of marriage and family psychotherapy. She started participating in EAP in 2015 and had participated in more than 20 EAP sessions. She stated that she decided to participate in EAP because horses were involved. Her FFMQ (Baer et al., 2006) overall mindfulness score was 2.7 out of 5 at the time of interview.

“Amelia.” Amelia was a 34-year-old Caucasian female veteran. She previously participated in psychotherapy at the VA, as well as in family psychotherapy. She started participating in EAP in June 2016 and had participated in 5 EAP sessions. She took part in the EAP to gain experience and insight into her homeless veteran clients for whom she is an administrative case worker. She reported that EAP helped her address issues related to work as well as issues from her personal and family life. Her FFMQ (Baer et al., 2006) overall mindfulness score was 3.9 out of 5 at the time of interview.

“George.” George was an 86-year-old Caucasian male veteran. He had no previous psychotherapy experiences. He started participating in EAP at the beginning of 2015, and had participated weekly for the last one and a half years, receiving a total of approximately 70 EAP sessions. He stated that he decided to participate in EAP because he wanted to address his gambling addiction and history of problems with law, such as stealing to gamble and spending time in prison, so that he can have a “good feeling” participating in society. His FFMQ (Baer et al., 2006) overall mindfulness score was 3.2 out of 5 at the time of interview.

“Sarah.” Sarah was a 43-year-old Caucasian female veteran. She previously participated in regular talk psychotherapy and Eye Movement Desensitization and Reprocessing (EMDR) psychotherapy. She started participating in EAP in 2014 and had participated in approximately 15 sessions. She decided to participate in EAP because it was different than other psychotherapy modalities she had experienced; she believed that EAP could be very effective for her, as she appreciated the idea of using horses in psychotherapy. Her FFMQ (Baer et al., 2006) overall mindfulness score was 3.5 out of 5 at the time of interview.

“Neil.” Neil was a 56-year-old Caucasian male veteran. He participated in EAP since the beginning of 2016 and had taken part in 12 EAP sessions. He found out about EAP through another psychotherapy program for veterans, where he participated in group psychotherapy. He decided to try EAP as he was attracted to psychotherapy that takes place outside and involves horses, as he enjoys nature and animal companionship. His FFMQ (Baer et al., 2006) overall mindfulness score was 3.1 out of 5 at the time of interview.

“Susan.” Susan was a 68-year-old Caucasian female veteran. She previously participated in regular group talk psychotherapy in the 1980s. She started participating in EAP in October of 2015 and had taken part in approximately 10 sessions. She decided to participate in EAP because she wanted to know more about horses. She also liked the idea of animal-assisted psychotherapy, especially utilizing horses. Her FFMQ (Baer et al., 2006) overall mindfulness score was 3.8 out of 5 at the time of interview.

“Melanie.” Melanie was a 51-year-old Caucasian female veteran. She participated in psychotherapy in September 2013 (when she was an active service member) for anger related problems. She started participating in EAP in April 2016. She had participated in 16 EAP sessions. She decided to participate in EAP because she became “emotionally and mentally closed off from friends and family.” She also stated that regular talking psychotherapy was not “cutting it” for her. She also reported that she was in a “very dark place.” She stated that EAP helped her address these issues and that she currently feels “much better.” Her FFMQ (Baer et al., 2006) overall mindfulness score was 3.4 out of 5 at the time of interview.

Researchers

The primary researcher. The primary researcher was the dissertation author, who was a Ph.D. candidate in Counseling, Clinical, and School Psychology with an emphasis in

Counseling Psychology at the University of California, Santa Barbara (UCSB). The dissertation author, who conducted all the interviews, was a Caucasian female, with a long-standing interest in mindfulness. She has been researching mindfulness-based psychotherapies during her doctoral program, and has completed certifications as yoga teacher as well as an EAP psychotherapist. The dissertation author's theoretical orientation was integrative and included mindfulness-based third wave Cognitive Behavioral Therapy – ACT, DBT, MBCT and MBSR, solution-focused, and positive psychology psychotherapy approaches. The dissertation author has been providing mindfulness-based group and individual psychotherapy as well as EAP in a role of a supervised trainee in her clinical practica. She had been involved with the EAP site at which the study was conducted.

The research team. The research team consisted of a total of four members. The first member was the primary researcher - the dissertation author. The second team member was a Ph.D. candidate in Education at UCSB. The third team member was a graduate student in the Marriage and Family Therapy (MFT) program at Antioch University. The fourth team member was an undergraduate student in Psychology at Ventura College. The second team member, the Ph.D. candidate in Education, served as an internal auditor. He was a Caucasian Navy veteran and participated in a therapeutic horseback-riding program for veterans at the study's site. He was also a qualitative researcher. The MFT graduate student's theoretical orientation was integrative and included psychodynamic, mindfulness-based, DBT, Gestalt, and multicultural psychotherapy approaches. He was a Caucasian man with experience in conducting psychoeducational workshops on the topic of men, masculinity and gender roles in parenting. The undergraduate psychology student, a Caucasian man, also held a European MFA equivalent in dramatic acting. He had experience

with horse riding, and teaching experiential workshops in dramatic acting. The navy veteran was the only team member with military background.

In terms of preconceived ideas, all four researchers reported before the study that they appreciated mindfulness and practiced it in their own lives. Moreover, they all thought that mindfulness was a useful psychotherapy strategy. Furthermore, all researchers had experience with horses, ranging from recreational and therapeutic horseback riding to competing in equestrian sports, such as dressage and show jumping. All four researchers also had horse care experience. The second team member, the Ph.D. Candidate in Education who was a Navy veteran, was the only team member who had military background. He did not experience combat trauma and did not suffer from military related PTSD. Overall, all researchers had mindfulness-focused background, and none of the researchers had background in trauma research.

Measures

Demographic form. The demographic form, created for the purpose of this study, asked for basic demographic information about the participant: age, gender, race/ethnicity, psychotherapy history, and current EAP participation information (when client began EAP, number of EAP sessions to date, and reason client entered EAP). The form also asked for a first name and phone number and/or email address for further contact. This form was included in the research packet provided to participants and filled out prior to interview.

Mindfulness measure. The FFMQ (Baer et al., 2006) is a 39-item measure which assesses five facets of a general tendency to be mindful in daily life: (1) observing; (2) describing; (3) acting with awareness; (4) nonreactivity to inner experience; (5) and nonjudging of inner experience. Items are rated on a 5-point Likert-type scale ranging from 1 (never or very rarely true) to 5 (very often or always true). Sample items from the

questionnaire include: “I pay attention to how my emotions affect my thoughts and behavior,” “I perceive my feelings and emotions without having to react to them,” “I criticize myself for having irrational or inappropriate emotions,” or “I don’t pay attention to what I’m doing because I’m daydreaming, worrying, or otherwise distracted” (Baer et al., 2006; Baer et al., 2008).

This measure was given to the participants in the research packet to assess the participant’s current level of mindfulness and provide contextualization of the qualitative data. The participants filled out the measure prior to the interview. The FFMQ score contributed to the description of participants, and provided information about their level of mindfulness at the time of interview.

Baer et al. (2008) reported that internal consistency of mindfulness facets on the FFMQ is adequate-to-good, with alpha coefficients for all facets in all samples (regular meditators, demographically similar nonmeditators, nonmeditating community sample, and nonmeditating student sample) ranging from .72 to .92, with the exception of the nonreactivity to internal experience facet in the student sample, for which alpha was .67. Furthermore, Goldberg and colleagues (2016) reported that psychometric research on convergent and discriminant construct validity of the FFMQ showed evidence of convergent validity in moderate-sized positive correlations between all FFMQ sub-scales and total score with a measure of psychological well-being. Moreover, in partial support of the measure’s convergent validity, the FFMQ total score and “Nonjudge” subscale have been shown to correlate negatively with a measure of psychological symptoms. However, no evidence was found for the FFMQ’s discriminant validity as assessed by the FFMQ’s sensitivity to specificity of change in one intervention designed to increase mindfulness (MBSR), one

intervention specifically designed to have no effect on this construct, and a control condition (Goldberg et al., 2016).

Main interview. The interview was designed as a semi-structured instrument for this study and allowed for broad exploration of topics, as well as probes for specific topics. The interview schedule consisted of four main areas of questioning: (1) overall experience in EAP; (2) changes participants noticed in themselves as a result of EAP; (3) feelings and sensations experienced during and after EAP; and (4) the role of horses in clients' EAP experiences. These areas were explored through six open-ended questions, followed by prompts to probe and clarify participants' responses. The exploration began with a broad open-ended question about the client's experiences in EAP. This question had a purpose of encouraging the participant to reenter his or her experiences in EAP. A second question asked the participant about changes they noticed in themselves. Further, the participant was asked to describe feelings and sensations encountered during and as a result of EAP. The participants were also asked about their perception of causes and specific examples for their answers. The researcher was careful to probe for whatever emerged in participants' responses and followed participants' lead. Consequently, all participants' comments were probed as part of the interview process. Finally, the researcher gave the participant a chance to make any final comments and scheduled a time for the follow-up interview.

Follow-up interview. The follow-up interview took place one to two weeks after the main interview and did not contain any additional, structured questions. The follow-up interview gave both the researcher and the participant a chance to ask any further questions relating to the material in the main interview, clarify any items needing further exploration, and to adjust, if needed, any previous comments. The questions varied by participant. Participants were generally asked to expand on the themes from the first interview. The

follow-up interview was followed by a short debriefing that reminded the participant of the study's focus on clients' experiences in EAP.

Observations. Field observations of nine EAP sessions, one per each consenting participant, were conducted by the primary researcher, the dissertation author, in the role of an EAP practicum trainee who shadowed the therapist. The participants were informed before the session that the observation would be conducted. The observations focused on clients' affect and behavior, in a form of general observations of the dissertation author and were not specifically coded. Instead, they provided information about the context in which clients' experiences happen. The observations followed CQR's requirement of using the context of the whole case to understand specific parts of the experience (Hill et al., 1997). They helped determine types of clients' experiences by giving context for the events described by the participants in the interview data. Since the interviews are language-based and reflect mostly cognitive experiences, the observation of participants' affect and behavior were deemed useful for enriching the understanding of participants' verbal responses. Further, the observations served the purpose of conducting checks on the emerging grounded theory that are recommended in the grounded theory literature (Dilks, Tasker, & Wren, 2008; Strauss & Corbin, 1998), and are suggested in the form of accessing multiple perspectives on the phenomena under investigation, including examination of psychotherapy sessions, without reporting it as data, but as context.

Procedures

Interviewing and observing. After the study was approved by the Institutional Review Board (IRB), the researcher recruited and subsequently interviewed the nine clients using the interview protocols. At the end of the interview, the researcher made concise field notes indicating how long the interview took, the participant's mood, and the researcher's

ability to develop rapport with the participant, as these three characteristics were indicated as important in CQR guide (Hill et al., 1997) for collecting high quality information. Hence, writing them in the field notes helped record the quality of interview and contribute to the trustworthiness of the data. To determine what needed to be clarified in the follow-up interview, the researcher reviewed the audio recording of the first interview, as well as the contextual field notes from observations, before the follow-up interview, which took place approximately one to two weeks after the first one. The follow-up interviews did not have a standardized protocol, as the questions were specific to each participant and referred to anything needing clarification. The main interviews typically took one hour, and the follow-up interview half hour to one hour. The observations of the EAP sessions were scheduled for the sessions close to the main interview time, and were conducted before the follow up interviews.

Transcripts. The interviews were transcribed verbatim and proofread by the research team. All identifying information was removed from the transcripts, and each participant was assigned a code number and a pseudonym to maintain his or her confidentiality. The transcripts of main interviews and follow-up interviews were both used together in analysis.

Data Analysis

Consensus. According to Hill (2012), the main goal of research based on CQR model is arriving at consensus about the meaning, significance, and categorization of the data. In CQR, consensus is thought to be accomplished through team members' discussing their individual conceptualizations and eventually agreeing together on a final interpretation. Initial disagreement is considered the norm. Power dynamics were discussed openly. The power dynamics were minimized by the fact that the four members of the team were three

graduate students and one psychology undergraduate student with a graduate degree in another field. All members had a friendly relationship and respect for each other. The coding was accomplished in face-to-face meetings. The transcripts were projected on a screen. Discussion included domain and core idea formulation, cross-analysis, and category development; the final consensus versions recorded in the meeting in one consensus document utilizing color-coding (for detailed coding schema, see Appendix G). As previously mentioned, a hybridized CQR was utilized in this study, as dissertation committee was used as part of CQR team in the final stage of the project to reach the final consensus. The committee members performed the role of auditors and suggested greater abstraction of the domains and categories. Their suggestions were incorporated in the final consensus version of domains and categories.

Determination of domains. Domains, also known as topic areas, were initially developed out of the first four cases, and further refined by analyzing the rest of the cases. An inductive method (Hill, 2012) was utilized. To do this, the transcripts were reviewed for the purpose of identifying topic areas that naturally arise from the interview data, while temporarily bracketing out the interview protocol itself. Each team member reviewed the interviews and identified narratives that fall under specific topic areas as well as suggested domain names for those topic areas. Following discussion, consensus was reached on final domain names. The domains were continually modified to fit the emerging data.

Assignment to domains. After all data were collected, all judges met in several meetings and each voiced their idea on assignment of each block of data, comprised of one complete verbally expressed thought related to the same topic, from each case into one or more domains. The judges then discussed the assignment of the blocks to domains until they reached consensus.

Core ideas. Each judge read all the data for a specific case and verbally discussed what he or she considered to be the core idea that expressed the general idea of the domain in a summarized and more abstract form. Judges discussed each core idea until they reached consensus. Each core idea was assigned one of the domain's colors and recorded in the meeting in a color-coded consensus document. Consequently, a consensus version for each case was developed, which consisted of the raw data coded in the colors assigned for each of the domains.

Audit. The internal auditor examined the consensus version of each case and evaluated the accuracy of the domain coding. The judges then discussed the auditor's comments and incorporated them into consensus version. The judges reviewed the consensus version, followed by another audit, and agreed on the final revised consensus version.

Cross-analysis. The purpose of cross-analysis is to compare the core ideas within domains across cases. After identifying core ideas of each domain for each case, the judges examined each domain and searched for similarities in core ideas across cases. They summarized the core ideas into coherent categories attempting to reach a small number of categories within each domain. The judges and the auditor identified categories that most efficiently and precisely reflected the essence of the domain. Each set of color-coded core ideas that represented one identified theme received a category name.

The names of the categories were recorded in the color-coded consensus document. Once the initial set of categories was developed, the judges returned to the consensus version of each case to determine whether the case contains evidence not previously coded for any of the categories. Whenever evidence was identified, the consensus version of the case was altered accordingly to reflect this category. Finally, the auditor reviewed the cross-

analysis along with the revised consensus version for each case. Suggestions made by the auditor were considered by the team of judges and incorporated. Data analysis was performed with the help of Word Microsoft document. No data maintenance software was utilized.

CHAPTER 4

Results

As delineated by Hill et al. (2005), the following steps were taken to describe the results. The final domains and their categories, including their frequency in the data (typical, general, or variant) were described in the text as well as depicted in a chart (see Table 1). The general and typical categories were fully described in the Results section, while all categories in the cross-analysis were included in the graphical chart. Quotes and illustrative core ideas were used to portray the results (see Table 2 in Appendix G). As recommended by Hill (2012), the contextual observations were focused on congruency of participants' descriptions of their affect, behaviors, and activities they engaged in and their actual presentations. No notable discrepancies were observed. Also, case examples were used for illustrating results across domains. The concluding discussion in Chapter 5 summarizes results in a meaningful way.

The researcher sought to investigate clients' experiences in a mindfulness-based EAP program. The investigation focused on clients' perceptions of their feelings, sensations, and changes in themselves experienced during and as a result of participation in a mindfulness-based EAP. Specifically, the study addressed the following research question: "What are clients' perceptions of their feelings, sensations, and changes in themselves experienced during and as a result of participation in a mindfulness-based EAP program?" The results of the study were organized in a way that answers the research question and consequently arranged in four domains and 18 categories outlined below in Table 1. The table also contains frequencies of each category, which is suggested by CQR literature (Hill et al., 1997) as a means of presenting how many participants described similar experiences, and not for generalization purposes. Therefore, if all or all but one (eight or nine) of the

participants described an experience, it was labeled General. If at least half of the participants (five, six, or seven) described an experience, it was labeled Typical. Finally, if less than half but more than one of the participants (two, three, or four) described experiencing a category, it was labeled Variant. Direct quotations from participants were utilized to illustrate the themes that emerged in the analysis. Finally, the description of typical components of EAP session summarized below to contextualize participants' experience were based on the researcher observations of the participants' sessions.

Table 1

Domains and Categories

Domain and Categories	Frequency
Effects of Interventions	
Being Mindful/Present in Current Situations	General
Awareness of One's Values, Actions, and Emotions	General
Enacting Ideas	General
Shift	General
Increased Well-Being	General
Learning from Other Participants' Experiences	Typical
Influence of the Horse	
Horses Mirroring Feelings	General
Horses' Interactions	General
Horses' Presence	General
Horses' Empathy	Typical
Identification with a Horse	Typical
Connecting with Horses	Typical
Horsemanship	Variant
Satisfaction with Treatment	
Recommending EAP to Others	Typical
More Effective than Other Therapy Modalities	Typical
Enhanced Ability to Address Military Experience	Variant
Challenges	
Lack of Horse Experience	Typical
Apprehension	Variant

Note. General = All respondents or all but one (eight or nine); Typical = At least half of the respondents (five, six, or seven); Variant = Less than half of the respondents but more than one (two, three, or four).

Observations of EAP Session Components

Typical EAP session consisted of participants following a therapist's prompt to engage in a therapeutic task. Participants often utilized props to accomplish the task. The term *props*, widely used in the EAP field (EAGALA, 2012) and frequently referenced by the participants in the interviews, refers to objects similar to theatrical property. The participants used props, such as traffic cones, stuffed animals, hula hoops, ropes, cavaletti (bars and their holders used for training horses' gaits), or military paraphernalia, to build scenarios, such as symbolic obstacle courses, that the horse was lead through.

Overall, the props appeared to be used by the participants to express their needs, wishes, and emotions, and to serve as a vehicle of communication between participants and the horses. The fact that the participants could choose a prop that represented their needs and use it in the session seemed to allow the participants to express an important aspect of themselves and the accompanying emotions.

The therapist offered guidance through tasks, props, and horses' actions while directing attention to issues important to the participants. It appeared that it was important to participants to find solutions and make connections on their own, but they seemed to appreciate that the therapist was there to provide direction in their exploration of thoughts and feelings. The therapist appeared to generally take a guiding, facilitating instead of directing stance to assist participants' in their experiential work with props and horses.

Effects of Interventions

The first domain, "Effects of Interventions," refers to participants' experiences they identified as results of the therapeutic tasks in the session. This domain contains seven categories: Being Mindful/Present in Current Moment, Awareness of One's Values, Actions, and Emotions, Enacting Ideas, Shift, Increased Well-Being, and Learning from Other

Participants' Experiences. The categories describe what participants perceived to be the therapeutic interventions' outcomes.

Being mindful/present in current situation. This category was general in frequency and defined as participants' experiences of heightened present moment awareness because of a therapeutic intervention. Participants described themselves as "mindful" or "really present" when they wanted to emphasize that they intentionally paid attention in the present moment and were not distracted by rumination or worry. As Sarah (43) described:

The horse L is the love of my life. He truly is. I love working with L, he is problematic for a lot of people, one that needs a really capable handler for him. He's a little sassy, but he likes a really firm hand, and he responds really well to some discipline. And he is clear, and he expects clear communication, and even verbal praise, he is really receptive to. And if you, in the middle of working with him—I worked with him as a volunteer, and then also I've been a rider on him, and also worked as a patient in EAP, so I worked with him in all the different areas—but if you pet on him if you are working with him, he would lose bearing. It forces you to stay present with him, and I like that. That's something that I struggle with, to stay really present. Not going too far forward, not going too far past, and living in the present. It's probably the biggest struggle I have.

Participants generally mentioned that the EAP's unique features, such as the presence of horses or the fact that it takes place in an arena, outside in nature, contributed to or even "forced" them to become mindful of their surroundings. Another participant, Melanie (51), described her experience of horses bringing her to the present moment:

The one thing about working with horses is you have to leave your shit at the gate. It's the one time in a number of years that I am fully present in the moment, and not

thinking about: Do I need grocery shopping? Did I leave my house clean? I am right there with the horse. It's in the moment. So what I can take away from that is that sometimes horses react from the moment. Not from the shit in the past. They don't have PTSD, because they can leave it. So they don't carry it with you or with them. So what I'm learning is, I can react, and I used to be like that, when I can react out of the moment, and not from something seven years ago that reminds me of this whatever. So what I'm trying to do now is stay in the moment. Sometimes it works, sometimes it doesn't. But the more I'm around horses... like the horse Z is the bomb. And now I'm working with the horse named B. And it takes a little bit.

The experiential quality of interacting with horses appears to be especially effective in helping Melanie to achieve mindful, focused awareness in the present moment as it drew her to the present moment.

Awareness of one's values, actions, and emotions. This category was general in frequency and defined as participants being able to identify their values, actions, and related emotions because of a therapeutic intervention. Diana (31) gave an example how this awareness emerged for her and helped her in her parenting:

I'm having a really tough time right now, starting it with my kids, what not, that's a common thing, but just to say it as an example. To complete the example, you know if I'm struggling with the kids and I go: "God, I don't know what to do right now!", it takes me back to that experience in EAP of "Ok, take a deep breath. You remember what you made your commitment to. Remember that if you just give it that extra mile, it will be worth it." I was able to go through that thought process. So that's how it's helped me with my personal relationships.

Participants generally reported observing their feelings and consciously choosing a response based on the value they committed to. Diana referred to the moment in EAP that helped her practice this conscious way of responding and described the process of developing a narrative about her experience. She mentioned that she was able to observe her feelings without reacting to them and to choose consciously how to respond based on her observations. Another participant, Neil (56) described how EAP helps him be more aware of his emotions in interactions with his son:

Most combat I have is with my 15-year-old son. You know, to take out trash. (...) I get about as much cooperation from my son as I would asking horses to take out the trash. But no... Well, it may help me as far as being patient and being in a better frame of mind and not getting upset like sometimes I would, I do. (...) If I am happier with myself, then of course I'm going to be easier going around the house. I enjoyed myself out here, had a good session with the horses, feel good about it, I'm going to be home in a better mood and I'm not going to let full trash can in the kitchen bother me as much as I might if I had a bad day like yesterday. Yesterday morning I had a quite bad day... I knew I had a problem, and I knew what's going to happen. I shouldn't have even picked the person up but I did. And of course it turned out to be a problem and I didn't get paid. And I got home and I was in a bad mood. Ate my sandwich. I'm sure my wife probably noticed my attitude. I didn't tell her about it. I tried to. Actually, I tried to let it go and not be in a bad mood but I'm sure it affected me. Today, when I get home I'll be in a great mood.

The situations in which the participants generally utilized their emerging awareness of their values, actions, and emotions happened in context of interacting with other people.

For example, Neil reported that EAP made him aware of his influence on others and helped him clarify how he would like to behave in his relationships.

Another participant, Bob (68) described a situation in which he was able to respond in a way he practiced in EAP:

I'll say it's kind of intuitive. You know, it's kind of like being in the ring. The horse does something and you go "Oh!" And you're out in the world and you see something, and all of the sudden it clicks with you, and it's like "Oh, ok!" And it's nothing you're focused on, but it does become a little flash of awareness. And at that time, you don't know what is happening. But it is kind of neat, because it wouldn't happen without that.

The new ways of responding he practiced in EAP helped him develop an awareness of his actions.

Enacting ideas. This category was general in frequency and was defined as creating physical representations to visualize problems and try out solutions because of a therapeutic intervention. For example, Diana shared her experience of creating a physical representation of elements in her life and the way she interacted with them:

I liked the experiential part of it where I was able sort of recreate in my own way... you know, how the specific scenario I was dealing with, played out. And then I got to sort of re-experience them. And also re-experience them with horse, which is a lot more... sort took the edge off of those memories that played back in my head. And I liked the fact that it created this metaphor for my life, or what I was dealing with. And that was an excellent coping mechanism too, because every time I did, like I said, it took the edge off, every time I did. Sort of played back those experiences in my mind. You know I was able to kind of process them a step further, step deeper.

It seems that for Diana, enacting her ideas physically provided her with the experiential opportunity to process memories and ideas that she was often thinking about. Participants generally talked about the opportunity to create and visualize the material that was recurring in their thoughts. In this process participants gained the opportunity to work with metaphors about their life and process experientially the issues, goals, and solutions they were working on in psychotherapy. Melanie described how she was able to create a physical representation of her anger:

L [Therapist] said: ‘Describe your anger.’ So I created this. I want to call this a little fortress, but I keep saying you don’t have any weapons, there’s no guns here. So I created this – I want to call it a barricade – and then I got in the middle of it. Because that’s my anger. They were floored. They didn’t see that coming, me getting in the middle of it. But that’s how I saw my anger. I was in the middle, and I’m throwing stuff... to keep people away, just get away from me. And then I took horse Z, the mustang with me. And he just trampled all over it. (...) It was awesome!

Participants generally found it useful to externalize their therapeutic work onto the feelings and cognitions in the form of scenarios with horses. Melanie described another example illustrating how working with such a scenario in EAP helped her find and try out a solution in the form of “owning” her PTSD-related angry outburst:

It was before I went to vacation to Texas. I had a truck windows’ tinted, and then I got oil change. And I told them: “Please don’t roll down the windows, they can’t be rolled down.” And then some little doofus just walked over, and the sign “Don’t roll down the window” is still in my door. And I flipped, I opened the door and I said “Hey dumbass, what part of don’t roll down that fucking window didn’t you get!?”,

and instantly I was in rage. Instantly! And I walked up to the back, said few more four-letter words to him, and I walked out to back because I was pissed. I called my mom, I said “Jesus Christ, bla bla bla bla...” And then I said: “Look! In my world stupidity like that gets people killed. That’s in my world.” So my PTSD is coming out here, but I owned it. So I brought that in. We did a little scenario on owning, because I owned it, immediately. And I owned the fact... in my world dumb shit gets people killed. Bottom line, I owned it immediately, and then I had a break through, but I didn’t keep it with me for more days after that. So I’m now more aware of when – I wanna call that fight or flight – comes in.

Experientially enacting their ideas also generally helped the participants recognize the elements in their life that needed their attention and required action. Diana’s quote illustrated this:

In one of the sessions I did, the therapist asked us to create a constellation that represented our life. And that constellation I created a bit deeper, and reason for it was scooping life up. (...) Every part of the constellation was a component of my life, a very important one. And then there was the other stuff. But the other stuff wouldn’t stay in it, unless I had the important stuff that surrounded it. So for example the points of the big picture were my children, my health, my spiritual connection, horses, my job, which is my passion – so all of those things were, I felt, so quintessential to me as a person, as an individual. And obviously you need other stuff in-between, but for me, to use that metaphor, it is almost like I’m prioritizing my life, by using this metaphor: “ok, going back, what are my key components here, what makes my big picture? Ok, I have to know these twenty things I have to do at work, but how do they fit into that area? And what are the things that are important to each

component of that? (...) So, if I have things to do in one day, and some of them conflict, I can prioritize them: “Ok, this has to do with my kids. Is it part of my big picture? This has to do with my health. This has to do with my spiritual connection. (...) And then to all in-between I am able to say: “Ok, do I really need to do that? Can that be put off? How does that serve me? How do I serve others?” So it was very helpful to be able to go, again, remove myself emotionally from the situation and compartmentalize.

Diana clearly realized that the therapeutic intervention allowed her to identify the relationship between elements in her life and helped her work on “the big picture.”

To physically enact their ideas, participants generally used props, such as traffic cones, lead ropes, halters, articles of military clothing, and stuffed animals, that represented their needs and emotions. For instance, Sarah described the use of props in her session and what they were supposed to accomplish. The fact that she could choose something that represented her need and depict it with a prop that will be used in the session allowed her to express an important aspect of herself and accompanying emotions. She considered a variety of props that had symbolic value to her, but it was the one that the horse picked for her that was most impactful:

I like the array of things, I liked the military tools, were more symbolic and representing of me, because that’s a huge piece of who I am. Like a stuffed animal represented my child. So that kind of represented the role I play, the mom, or some of my concerns for my child. And one example, M was here, and one of the horses picked up an owl, a symbol between my mom and my son. And so, I think it was horse L that picked that up, walked around, and dropped it. And that was a really powerful thing for me. It’s just amazing how intuitive these creatures are. So, yeah,

beautiful things happen, it is hard to exactly to articulate, but it's amazing. And sometimes it's just... you could set up a prop or some obstacle.... And they might just stand in the middle of the camouflage pants you chose. And that forces you to step back, look at it from a different way.

Overall, the props were generally used by the participants to express their needs, wishes, and emotions, and served as a vehicle of communication between participants and the horses. Similar to Sarah, the other participants generally felt that the horses' reactions to the props were inspiring ideas and activating coping resources in them.

The participants also generally mentioned the role that the therapist played in helping them enact their ideas. The therapist offered the participants guidance through tasks, props, and horses' actions while directing attention to issues important to the participants. For example, Bob described his experience of being guided in the session:

The staff is there to kind of help you open the door. They can show you the door, and they can guide you into "Oh yeah, ok, yeah, that would mean this and that would mean that. Can you open the door yourself?" You know, nobody opens it for you. But they're either to work on the mental thought what's going on, or you're working on the emotional thought of what's going on, depending on who you are talking to.

It appears that it was important to him to find a solution and make a connection on his own, but he recognized that the therapist was there to provide direction in his exploration of thoughts and feelings. The role of the therapist that emerged from participants' reports emphasized the guiding, facilitating instead of directing stance that the therapists tended to take to assist participants' experiential work.

Shift. This category was typical in frequency and defined as the participants' experience of moving forward and feeling released from a perceived lack of progress.

Participants typically described experiencing a sense of movement forward and realizing what can be done, after a period of stagnation or after facing a challenge. For example, George (86) described his struggle with gambling and how EAP helped him overcome this challenge:

I have a gambling thing. And that I can't get out of my mind. It's going to stay there, no matter what you do. Because it's an addiction, gamble addiction. I don't know what caused me to do it, but I have it. It cost me many years in prison. I was just stealing to gamble. That's a bad addiction there. [EAP] helped me get my mind off of whatever... I'd be thinking about gambling when I come here, and when I leave I don't think about gambling at all. So it's helped me somewhat. It's not going to help me all way through, because I'm always going to have that addiction. And I'm always going maybe go back and gamble and do what I did. Other than that this is what this program is for. Help you find a ways to beat your addiction. And that's what I like about it. (...) It helps me, it distracts me from where I am with my thoughts. So, two hours I spend out here, it will help me for three, or four days! I don't even think about gambling. Because I have a good pleasure from being here, so I don't have to think about gambling.

George described the temporal aspect of EAP's effectiveness, the fact that two hours of EAP provides him with three to four days of well-being. His statement also highlighted the importance of maintaining the positive effects by engaging in regular practice of EAP tasks.

Furthermore, in the moments of the mental shift, participants generally experienced feelings of empowerment either from connecting with their inner strength or due to an accomplishment. Participants generally described it as either reconnection to a previously felt power that they lost connection with and rediscovered in EAP, or as a result of

accomplishing something important to them in the EAP session. For example, Diana described a moment in an EAP session when she was able to reconnect to the empowered part of herself that she thought she lost:

In fact, I felt like I finally was able to tap back into that confidence, and that empowered female that I was before, or, I should say, in the Marine Corps. And that was that part of me that I was so proud of. There was nothing that I felt I couldn't do, or that I would be afraid of trying. Like jumping out of helicopters, going to school, maybe Seals. There was nothing that I felt afraid of, or that I couldn't take on. And then, after this experience happened, it was like there was nothing that I thought I could do. So I guess after that EAP session, I felt like that empowered woman again. I was able to tap back into that. And that was a pattern. I would tap back into that, something would kick me back, self-esteem... You know something would happen where I would feel like I failed, or made a mistake, and then that was sending me right back to where I'm that person who was in the Marine Corps, and that's what defines me... And then I would keep on moving forward and then something good would happen and I would go "That's right! I'm this powerful, incredible woman". So it began the, sort of, trend of a feeling. It coincided with my emotions of myself, my self-perception. If I'm really high, that's right, I'm that amazing person that I really love... yep, I am the person I was in Marine Corps. That's the power that I can relate to. And it was, you know, one moment! One experience. I wasn't going to fix me, wasn't going to solve all my problems, but it just definitely opened up the door to start that process...

Participants typically described feelings of confidence, empowerment, and recovered trust in their abilities that accompanied the moments of shift. In the moments of shift, participants also generally experienced surprising, novel realizations allowing them to gain insight into their blind spots. As Bob described his enlightenment in regard to a problem he was working on for several decades:

When I started these sessions, I came up with really not much focus on what was going on. And each time I came I really wasn't looking for anything specific, but I was kind of looking for something to happen. So when I got into this portion, and the horse lifted the cone, that was my first realization – "Ok!" The other moments, they weren't as grandiose as this one. There were several things that didn't come along until I found and got down to the end. I had two horses and I worked with both of them simultaneously. They basically said: "We've got your back". And I was able to feel that it goes: "ok, it's all right." They're telling me "it's ok." So ok, I can do this, I can forgive myself, and I know that I've got help from them. Go back in that ring and work on it again. I felt very, very safe. I felt very, very supported. Actually I felt loved. Just by two horses, but it was just a breakthrough. I peeled down all these things, down to the absolute core. Coming to that last piece was pretty interesting. You know? Just to feel that backup there that I have from both of them saying, "Yeah, it's ok, do it."

Participants generally described such moments of insight, when they were able to see something they could not see before and make sense out of their experiences. The insights generally referred to experiences that represented a struggle for the participants, and, until the shift moment in EAP, seemed to be impossible to deal with.

The shift also manifested itself in participants becoming energized to do things they have to do instead of neglecting them or becoming sidetracked. In the following exemplary quote, Susan (68) described her struggles with de-cluttering and repairing her house, and how EAP helped her accomplish those tasks:

I did have some problems that I was having at the house, originally, during my first sessions. And I was trying to get the house uncluttered in various aspects. I also had some house repairs that needed to be done. So it did help me to stay motivated, to get my areas uncluttered enough to have the electrician come in. And then, when the electrician was in, I had to move the things that I had uncluttered for the plumbing area that got put back into the electrical area. But also what we were doing is moving the clutter, doing the de-cluttering as well, at the same time, combing through the clutter trying to get rid of some things. And in the therapy, in some of the sessions we did some work on those concepts, and it did help me ease through some of my home sessions, without the horses, without the therapists, in my house, trying to get ready for the electricians. I've been out of the therapy for like two months, and boy do I need help with that stuff, I'm just bogged down again.

Another participant, Monica (65), also described her journey to becoming motivated to do things she needed to do, but could not previously find energy and inspiration and sufficiently meaningful reason to do them:

Thinking I have to turn on my thoughts, I have to use my head. M was here at first when I came, and she said "Come on, let's go to the horses!" I could tell, you know, then I realized "Oh my lady, you're on it. You don't hyper, you're on it!" (...) She took me and she told me to choose one of them. And the act itself is calming, I forgot to tell you that. The act of going and choosing the horse. Because it takes you away

from what's happening. And it's calm. And then when I go home and I can do that now, you know. I can look... That's when I look at those dishes and almost took pleasure in doing them. (...) Yes, I have pleasure in doing them. I made it nice in cabinet and spaces, some dishes... That's a big accomplishment for me really. I'm a throw-everything-in-a-cabinet-and-close-the-doors kind of person. (...) It started Monday. It started with "I have like 6 months back newspapers to read" (...) I'm terrible at that – I read almost everything. And I hate to throw it away before reading it. Even when it's old news. Some of that I don't read, the old news, but I read the headlines, I read comic strips – I love comic strips – sometimes I read articles in it, but I have this awful thing about it. If I throw something I don't read, I may lose some knowledge. This is almost like therapy talking to you! (laughs) Yes, yes, this is like therapy, because I am more aware of some things. I want to make my house so pretty, next time you see me, my house is going to be so pretty. Because I'm motivated! (...) I'm on the journey of first decluttering my life. Making my home a nice place to be and my relationships.

Susan and Monica both expressed a realization generally shared by the participants, that the invigorating effect of EAP boosted their energy for difficult or tedious tasks, shifting them from inaction to action.

Increased well-being. This category was typical in frequency and defined as participants indicating global beneficial effects regarding their mood as a result of EAP. For example, Monica summarized the changes she noticed in herself that she attributed to attending EAP sessions:

I can see the change, I can feel the contentment. I sleep better too. I sleep so much better, I enjoy my sleep. I get a good night sleep most of the time. I used to go days without sleeping. I never even told them that.

Monica pointed to the overall improvement in mood lasting over longer periods of times that she attributed to EAP. Participants also generally described the feeling of emotional equilibrium that EAP helped them achieve. For example, Amelia (34) poignantly described achieving in EAP a sense of calmness in the middle of the chaos of her everyday life:

Very, very peaceful... The total opposite of what I deal with. Even with my own family, even with my kids, even with my boyfriend, and you know, people getting sick, or whatever the case may be—here it's peaceful. It's just – I'm here, and the horses are here, and working a process, whatever we think or feel, or whatever the case may be. It's just being out here away from all the chaos.

Monica equated it to prayer:

It's giving me a nice sense of serenity – I love it, love it, love it, love it! It's almost like I guess, praying.

Participants typically described similar experiences of equanimity that emerged for them during the EAP session. For example, George (86) referred to it as an “overall good feeling,” and Sarah described it as “bringing your inside energy down.”

Learning from other participants' experiences. This category was typical in frequency and defined as learning that occurred for participants when they reflected on other participants' EAP experiences. Participants described how they affected each other and what they gained from the fellow EAP participants. Typically, participants were able to see

clearly what would help them when they could learn about other participants' experiences with similar problems. As George put it:

We go to different topics. Whatever it is we go to examples of why we did, this or that. We bring them out here, we bring them in the open here. So everybody else, who listens to our problems, may even help us. So that's what I like about it. (...) I like to listen to other people what their experiences are. Why are they in a program, why they want to do this, what they did in the military. It is an overall good feeling to be here. You learn things about yourself you didn't know before. Listening to other people problems you can relate with them. You got the same problem, you know.

Participants typically brought up the benefits of vicarious learning and appreciated the opportunity to interact and observe other participants. In addition, George brought up the fact that the clients who participate in his group EAP together became his social circle, saying "This is my social backup right here. When I come out here, these are my social backup. These are my backup people that I work with, that I socialize with in this program." George clearly identified the importance of the presence of other participants for his own experience. The other participants made him feel less alone with his problems, provided him with opportunity to learn from their experiences, and became his social circle of friends.

Influence of the Horse

The second domain, "Influence of the Horse," addresses the main element of EAP that differentiates it from most other psychotherapy forms, namely the use of the horse. The participants identified the horse and its influence as a major aspect of their experience in EAP. Their stories contained descriptions of various ways the horses acted in the sessions and how the participants interpreted the horse's behavior. This domain contains seven

categories: Horses Mirroring Feelings, Horses' Empathy, Horses' Interactions, Horses' Presence, Identification with a Horse, Connecting with Horses, and Horsemanship. These descriptions refer to the participants' experiences with horses in the session.

Horses mirroring feelings. This category was general in frequency and was defined as participants' ability to identify their own feelings through the horses' actions. It seems, based on participants' reports, that the horses played an important role in participants' becoming aware of their own feelings and being able to respond to them instead of acting in a reactive manner. Sarah described:

Sometimes the horses in the arena would completely walk away, like they were completely... not repelled, but just my energy wasn't an attractive energy, and the horse is not going to lie, they are not going to be drawn to you if you have a lot of negative energy, either anxiety or stress, anger. Yet, they are able to discern if you are in a place... you don't have to totally abandon those feelings, rid yourself of it, they can sense when you are ready to walk on it, you are really, truly ready to perceive something, to be ready to change some mindsets, open and receive. So then they will show a little bit more interest in what is going on, sharing the space. So I like that, that kind of showed me the barometer, ok, let's go to work, you can deal with your stuff, kind of settling a bit.

Diana described a similar experience of learning about the impact of one's emotional expression:

The cool thing about horses I found they are... obviously they're nonverbal, but if you listen they have a whole lot to say. And they really respond to what you are saying – you know, your voice and your actions. So, if I walked into a session and I was sort of really sad that day, the horses just seem to have this intrinsic

understanding of what I needed at that moment. So I was sad, they'd come up to me and their biofeedback was, you know, remain very peaceful. And they hold their head low and comfort me. And so it was also good for me to see "Oh, so that's how I'm presenting myself", and that's how someone feels that they need to support me, so "Ok, how can I support myself in that manner?!".

Similar to Sarah and Diana, the other participants generally could sense the horses' ability to provide them with a "biofeedback" type of experience, where the participants were able to realize their emotions and their impact, and regulate them appropriately to achieve outcomes aligned with their intentions.

Horses' interactions. This category was general in frequency and was defined as reporting that the horses' behaviors towards props, people, and other horses brought meaning and /or solutions to the participant. For example, Bob described his experience of the horse interacting with one type of props, traffic cones, which gave meaning to Bob's own story he attributed to his arrangement of the traffic cones:

[I] was working on a particular problem that I had had. The Equine Specialist said you just have to peel this back like an onion, in layers. And I created a scenario, which included cones stacked up, and one of the horses came over and picked up the top cone and sat it down, didn't knock it over, just picked it off the top, sat it down, just like he was peeling an onion. Really amazing, I was amazed, it was just really really incredible. (...) And it was a feeling of "I can do this." There was a real gratification, and sense of relaxation, that by working with the horses that this would be the problem that I would eventually conquer, just by going layer by layer, getting down to earth bottom and then dealing with that. That it was, I was pretty happy about it.

Bob experienced the horse's interaction with props as meaningful and helpful in finding a way of dealing with his long-standing problem. In general, participants described similar experiences, mentioning horses' interactions with the props or other horses as meaningful to them in a specific to the participant way. Interestingly, participants generally could use a horse as their agent in trying out the "obstacle course" they had to deal with in their life, which proved very helpful to the participants. The fact that the horse has its own agency and can make its own choices about how to interact with the scenario created by the participants seems to have drawn the participants' attention to their own resources and agency for dealing with the situation they are currently in.

Horses' presence. This category was general in frequency and defined as the horses' physical presence reported as diffusing negative emotions and soothing participant's senses. For example, Bob described his experience of horses' friendly and close presence as comforting during the time of working on difficult topics:

Nothing specific happened, except that the horses didn't shy away. As I walked through things, they were there to support me, they just stayed by me. (...) They just walked with me. I turned right, they went right, I turned left, they went left. It was just a whole hour of being supportive. And that feeling: "I've got your back", and that was the emotional part that just came over me and I said: "Ok, it's ok, it's alright." Would I have felt that without them [horses] having my back? I don't know, probably not. But just working in the program it came up for me – nobody said anything, they [horses] came to watch over me and were like: "Hey, it's ok, we've got your back, it's ok to do it."

Participants generally mentioned horses' friendliness, body language, and demeanor as being comforting and having direct influence on the participants' mood and embodied sensations of emotions.

Horses' empathy. This category was typical in frequency and was defined as participants' perception of horses as attuned, good listener who provide non-judgmental space for the participants. For example, Monica talked about her experiences of being heard by horses:

The horses look very intelligent to me. And when they stop and they pay attention (...) I notice if I have a problem and I'm talking about it, they step right in. It's almost like they're listening. And I think sometimes you just want to be heard. Sometimes you don't need a solution, you just want to be heard. I feel badly and I want somebody to hear that I feel badly, you know.

It seems that horses' reactions allowed Monica to experience empathy and feel validated and deeply seen, without having the impression that somebody is trying to fix her. Participants generally mentioned that the horses seemed "empathic" and could "get them like nobody else can" and that the horses' attention had a nonjudgmental quality; as Diana put it:

It's that intrinsic understanding how they can support somebody. It's a trust. It's nonjudgmental. I think that's one of the biggest things to it – they're not coming with judgment. You know that being said, there are horses that have been abused and do present those symptoms when they feel like they're in risky scenario. Then there might be judgment presented by the horse, but otherwise they are not judging you if you are too angry, too fat – whatever!

It appears that the participants experienced the horses as being nonjudgmental, attuned, and deeply empathic.

Identification with a horse. This category was typical in frequency and defined as the participant projecting herself or himself into the horse and learning about themselves through this process. Diana explained her way of identifying with various horses that represent different aspects of her personality:

So in a group of other horses, in a session with a group of horses, I would always identify certain components to myself with a horse. So, you know there's a horse that's really sort of small, and mighty and just bossy, and I identify with that. And there's another horse that's sort of compassionate, nurturing, and I identify with that. And so I was able to see how they kind of coexisted, and then how I can coexist with these different types of my personality.

At least half of the participants also described moments in the EAP sessions when they would single out a horse and follow the horse's behavior and interactions as if they were the participants' own actions. This process of identification with a horse typically helped them to learn something about themselves and identify their own characteristics. Sometimes it was a variety of characteristics found in different horses that was meaningful. At other times, it was one major feature of the participants' character that they saw expressed in a horse.

At least half of the participants appeared to experience validation of their life choices and see themselves more clearly, once they realize through the horse their own character and how it impacts the world around them. These participants also were able to realize the benefit their way of being brings them, making the participants acknowledge and better understand their own personal resources.

Connecting with horses. This category was typical in frequency and defined as satisfaction from establishing connection with horses. Susan, for example, described a moment in the session when one of the more apprehensive horses chose to connect with her:

There is funny little thing that happened that day. It was really amusing. One of the things they say, if you have anything in your pockets, food or sugars or anything, leave it outside the arena. Well, one day I had something, I think I had something like some peanuts or cashews or something that I forgot to take out of my pocket. And I was paying attention to the other horses. And one of the horses that we have in our sessions is a miniature. And my back was toward him, and he came right up to me and put his nose into my pocket, and his nose was right at the pocket height. That was so funny, he was like: “what you got there honey?” It was really amusing. [I felt] amused and pleased, because this miniature in the group is the most standoffish and free. For the two of us to approach, there has to be a little bit of coaxing on my part. Or maybe the coaxing was there just by the food, and I’ve forgotten about it. It was nice to see that he responded to me, and was so comfortable with me to get that intimate. Or maybe it was just food, that was his motivation. So it was nice, it was fun.

Susan also tried to interpret the horse’s motivation to connect with her. Like at least half of the participants, she expressed satisfaction from being chosen by the horse to connect, regardless of their possible motivation. The moment of being approached and touched by a horse typically appeared to have a positive effect on participants.

Satisfaction with Treatment

The third domain, “Satisfaction with Treatment,” revealed that the participants typically compared their previous psychotherapy experiences to their current experience in

EAP and were typically compelled to recommend EAP to others. “Satisfaction with Treatment” was defined as participants comparing their participation in EAP to other mental health treatments they received and expressing their level of satisfaction with their EAP experience. This domain had three categories: Recommending EAP to Others; More Effective Than Other Therapy Modalities; and Enhanced Ability to Address Military Experiences (the last category had variant frequency and was consequently excluded from Table 2). The emergent categories described reflections participants expressed comparing their various psychotherapy experiences to EAP.

Recommending EAP to others. This category was typical in frequency and defined as participants describing their EAP experiences to other people and encouraging them to participate as well. Monica related her encounter with a person who she perceived would benefit from EAP:

I saw this guy he works in the front desk, and he is 70% disabled... 90%! He is young, he was in the military. So I think he might have seen one war or two. You can see it in his eyes that he's not well. But I didn't know that at first, and he told me. And I say: “You know, you would enjoy a horse therapy.” He says “Really!?” – because people don't know about it and I feel like I'm advocating for it... I told him “You would like to go in there and talk about what has happened, and what is happening. And they have psychologist on board.”

Participants typically mentioned their efforts to encourage other people, often fellow veterans, to participate in EAP, or educating about and advocating for EAP in venues where EAP is not known.

More effective than other therapy modalities. This category was typical in frequency and defined as participants' perception of EAP's greater effectiveness as

compared to other psychotherapy modalities. As Sarah described her overall experience in EAP:

I thought it was very effective, probably the most effective therapy I've ever had. And I've had everything there is. It resolved more issues faster than anything that I've ever done. It's the most powerful form of therapy, and also most enjoyable. I didn't dread it the least and I always walked away from it feeling like I got a lot out of it.

Participants favorably compared EAP to traditional individual talk psychotherapy, family psychotherapy, couple psychotherapy, and the use of medication. They typically juxtaposed the traditional therapeutic experience that is exclusively verbally based with the benefits of experiential elements of EAP. Bob gave a specific example of dealing with guilt related to his experience in the military fifty years ago. He has attempted to resolve this issue through many other psychotherapy modalities without success, and described the relief he was provided through therapeutic work with horses in EAP:

I eventually tore down the guilt from fifty years ago. And I was able to overcome it. I never dismissed being sorry for it, and I never dismissed the memory of it, but I was able to deal with the guilt from it. And that's something that's been weighting on me so so long, for almost fifty years. Seeing other, not psychotherapists, but seeing other counselors, psychologists and so long over the years, I've never been able to get down, and deal with that. And there was nobody that really understood and knew how to help me with that. As far as I can gather. And horses say: "Yeah we can deal with this. Let's do it". I said: "Ok". And I came back, and we, you know eventually, took couple of months, but we went through it. I've been able to get rid of that burden that has been weighting me down for almost fifty years.

He referenced the horses as the main active ingredient that allowed him to make the breakthrough in his psychotherapy.

Challenges

The fourth and final domain, “Challenges”, described challenges that the participants encountered regarding their participation in EAP. Challenges were defined as factors that were perceived as challenging for participants either in EAP sessions or on their path to participating in EAP. This domain had two categories: Lack of Horse Experience and Apprehension. The emerged categories described different types of participants’ experiences that they perceived as challenging, either relating specifically to the notion that they are not familiar with horses and horsemanship, or in relation to some aspects of EAP.

Lack of horse experience. This category was typical in frequency and defined as participants’ experiences related to their lack of previous formal knowledge about horses. For example, Monica thought that EAP would involve riding horses, which she did not know how to do:

I thought I would ride the horses. But I told other people that I’ve never even done that. I’m so content with sitting and talking and interaction, having L [Therapist] and having A [Equine Specialist] there. And I don’t even think about riding anymore.

Monica overcame her initial perceived challenge of not being trained in horse riding, and a degree of disappointment that EAP will not teach her to ride horses; these challenges did not constitute barriers to participating in EAP. Participants typically expressed similar notions of first being insecure about their lack of experience with horses, to find out later that it was not required or necessary to successfully participate in EAP. Interestingly, all six participants who brought up challenges regarding EAP, whether in a form of lack of horse

experience, being afraid of horses, or skepticism, qualified their stories with the fact that they overcame their challenge.

CHAPTER 5

Discussion

The purpose of this study was to explore clients' experiences in a mindfulness-based EAP program. The research questions focused on clients' perceptions of their feelings, sensations, and changes in themselves experienced during and attributed to the participation in a mindfulness-based EAP program. Specifically, the researcher was interested in the potential therapeutic synergy between mindfulness and EAP.

The present study illuminated and documented participants' experiences in EAP sessions, the EAP signature use of the horse, and the effects of EAP interventions. Participants' narratives also revealed their perceptions of EAP as compared to other psychotherapy modalities, the challenges they encountered, and what they learned from other EAP participants.

The most important findings that this investigation yielded consisted of rich and in-depth information about participants' experiences in EAP, the effects of EAP interventions, and how EAP supported development of psychological flexibility in participants, and the role mindfulness factors played in their experience. The study revealed, for the first time in the context of extant literature, the participants' experience of mindfulness in EAP, conditions in which mindfulness played a role in EAP, and sources and effects of mindfulness in EAP.

Effects of Interventions

Psychological flexibility. Generally, participant's statements indicated that they experienced psychological flexibility in EAP. Psychological flexibility was previously defined as "contacting the present moment as a conscious human being, fully and without defense, as it is and not as what it says it is, and persisting or changing in behavior in the

service of chosen values” (Hayes et al., 2012, p. 985). Psychological flexibility is described as a major mechanism of action in mindfulness-based treatments (Hayes et al. 2013; Hayes et al., 2012, Shapiro et al., 2006). Indications of psychological flexibility were revealed as depicted in the following discussion.

Participants generally attributed their feelings and reflections to the tasks they were performing in EAP and were able to describe those tasks’ perceived outcomes (Effects of Interventions). As a result of this meta-awareness, participants reported a range of psychological flexibility outcomes, evidence by their ability to be adaptive and flexible in responding to the environment (Shapiro et al. 2006). In addition, participants typically experienced major shifts in their perception of their situation allowing them for a more flexible approach (Shift). For example, Diana described her shift in perception of her situation when the horse tossed away a prop symbolizing her difficulties. The horse’s action of tossing the prop, representing Diana’s difficult feelings with which she was overidentifying, allowed her to achieve a distance between her feelings and herself. Seeing a representation of her difficult feelings physically moved to the side and “tossed away” allowed Diana to externalize those feelings. This helped her to view the difficult feelings less subjectively, which was a result of maladaptive cognitive fusion (Hayes et al., 2012), but more objectively and for what they really are – “private events” (Hayes et al., 2012, p. 981), or emotions that arise and pass. She also realized that she might choose not to engage in those emotions, evident in her statement “I just don’t need it anymore” and that she can instead just observe them and decide how to respond to them. She discovered that she could learn from those negative emotions and realize that she was not the same person anymore and that she changed in a positive way. Diana’s experience exemplifies Shapiro et al.’s (2006) argument that shift in perspective allows for greater objectivity in regard to ones’

internal and external experiences. Diana's statement indicating that she was able to separate herself and learn from her internal experience of difficult feelings of guilt, anger, and disappointment that began to define her might represent the release from being controlled and defined by one's internal and external experiences, which constitutes a hallmark of psychological flexibility (Shapiro et al., 2006).

The participants also generally experienced insights allowing them to change their perspective on their circumstances (Shift). This process of changing perspective accompanied by insight and empowerment is described in the literature (Hayes, 2002; Shapiro et al., 2006) as one of the mechanisms of action of mindfulness consisting of attending to the information contained in each moment and gaining access to more data, even those data that may have previously been too uncomfortable to examine. According to Hayes (2002), being able to attend to the information that may have previously been too uncomfortable to examine results in experiential avoidance becoming less automatic and less necessary. Through the process of fully attending to information contained in each moment, maladaptive automatic habits are interrupted and dysregulation and subsequent disease can be avoided (Shapiro et al., 2006). As Shapiro et al. (2006) predicted, the participants generally indicated that they became less controlled by particular emotions and thoughts that arose, and in turn less likely to automatically follow them with habitual reactive patterns.

Moreover, participants generally were able to recognize elements in their life that needed their attention and required action (Enacting Ideas). Recognition of issues helped the participants prioritize the most important elements in their life needing work. Prioritizing possibly resulted in clarification of their values (Enacting Ideas). Since the life projects were experientially enacted in the session, the participants were likely able to experience what

Hayes et al. (2012) calls the mindful quality of values. The values' mindful quality is manifested in the fact that they are lived out, moment to moment, and are consciously expressed in the actions that the participants are deciding to engage in. In the research literature these effects were found to be major mediators for outcomes of mindfulness-based treatments (Carmody et al., 2009; Hayes et al., 2013; Hayes et al., 2012; Holzel et al., 2011; Shapiro et al., 2006).

Furthermore, participants also generally reported increased energy to do things they found important even though the tasks might be unpleasant (Shift). The reported motivation might possibly reveal a mindful attitude of committed action, one of the core processes of beneficial psychological flexibility, as opposed to maladaptive experiential avoidance, which constitutes one of the core processes of detrimental psychological rigidity (Hayes et al., 2012). The participants also found that the EAP allowed them to develop a reference system based on their internalized experiences in EAP, manifesting itself in their meta-awareness of their mental states and behavioral flexibility in responding (Enacting Ideas). Meta-awareness and behavioral flexibility constitute major mechanisms of action in mindfulness-based treatments, and were found to lead to a range of beneficial psychological outcomes (Hayes et al. 2012; Shapiro et al., 2006). Participating in EAP and developing the mindfulness skills also typically resulted in participants' overall improvement in mood and global beneficial effects such as feelings of contentment and improved sleep (Increased Well-Being).

In summary, participants' statements presented a story of achieving psychological flexibility. Their statements demonstrated that the participants were consciously in touch with the present moment, engaged non-defensively in actions that were important to them,

and persisted in changing behavior in accordance to their chosen values, all indicators of psychological flexibility (Hayes et al., 2012).

Mindfulness components. Participants took part in a mindfulness-based EAP and mindfulness-based strategies were presented directly in the sessions. Participants generally explicitly described various aspects of mindfulness that they experienced in EAP. They reported experiences of being present and intentionally paying attention to their feelings and sensations as well as their surroundings with openness and acceptance. Participants reported heightened present moment awareness and described themselves as “mindful” and “really present” when they wanted to emphasize that they intentionally paid attention in the present moment and were not distracted or worried (Being Mindful/Present in Current Situation). Participants generally credited the presence of horses or being outside for becoming mindful. It also appears that the benefits from the mindful focus on the present moment achieved in the experiential therapeutic interaction with the horses allowed the participants to reap similar benefits to those conceptualized in humanistic/existential (Rogers, 1961) and Gestalt (Perls, 1973) psychotherapies as a result of immediacy in the present moment leading to client’s experience of full, authentic functioning. This increased ability to stay present and pay attention to the current situation, a signature facet of mindfulness, is consistent with previous findings indicating more orientation to the present moment as a result of EAP (Klontz et al., 2007).

Notably, the participants generally described EAP as a psychotherapeutic structure that supported their ability to develop mindful responses. For example, participants described observing their thoughts and feelings as events produced by the mind that might or might not be a true reflection of the self, which constitutes re-perceiving (Carmody et al.,

2009). Reperceiving appeared to be achieved by participants externalizing their thoughts about themselves and their situation (Enacting Ideas).

Furthermore, the work with scenarios in EAP resembled the mindful process of cognitive diffusion (Hayes et al., 2012), as the participants were seemingly able to separate themselves and observe their emotions and thoughts in the scenario they created, instead of cognitively fusing with them. They physically built scenarios reflecting their experiences using theatrical property-style equipment— “props”— such as traffic cones, stuffed animals, ropes, cavaletti, or military paraphernalia. They observed horses’ interactions with their scenarios and engaged with the horses and the props guided by the therapist helping them develop narrative about their experience (Enacting Ideas). Participants’ choices of props expressed their needs and emotions and helped them see it from a distance, possibly supporting the beneficial cognitive diffusion that might have allowed the participants to see these private events clearly for what they are, thoughts and emotions, and not the reality itself (Hayes et al., 2012).

Furthermore, in the process of becoming mindful, participants reported being able to identify their values, actions, and related emotions as suggested in the literature (Hayes et al., 2012). They were able to observe their feelings and consciously choose a response based on the value they committed to (Awareness of One’s Values, Actions, and Emotions). They also felt more equanimous (Increased Well-being) and described achieving a sense of calmness similar to the signature metaphor frequently used in mindfulness training of being in the “eye of a storm” (Marx, Strauss, Williamson, Karunavira, & Taravanja, 2014, p. 1).

Fellow participants. The following section discusses the findings pertaining to the ways in which the participants were affected by other EAP participants. The participants typically found interacting with fellow EAP participants beneficial. They typically felt that

seeing how horses interact with other participants helped them understand how horses reflect people's energy and are attuned to their needs (Learning from Other Participants' Experiences).

The category "Learning from Other Participants' Experiences" offers insight into EAP's way of utilizing and likely uniquely enhancing the common therapeutic factors of group psychotherapy (Yalom & Leszcz, 2005). The group therapeutic factors as formulated by Yalom and Leszcz (2005) were apparent throughout all the domains and categories that emerged from participant's stories: instillation of hope; universality; altruism; imparting information; the corrective recapitulation of the primary family group; socializing techniques; imitative behavior; interpersonal learning; group cohesiveness; catharsis; and existential factors. Participants typically indicated experiencing encouragement that recovery from their problems was possible, as well as feeling that they have problems similar to others and that they are not alone and are supported by others. The benefits of group EAP appear to rest on effective group psychotherapy principles and display active ingredients such as universality, the feeling of experiencing the same problems as others as well as feelings of belonging to the group and being valued by the group, which constitute important therapeutic effects as formulated by Yalom and Leszcz (2005).

Furthermore, participants typically gained information about their psychological processes, and were able to reflect on their long-standing habits and ways of behaving that were deeply engrained and likely stemmed from their upbringing in the primary family group. For example, the therapist's request for Melanie to represent her anger to other participants allowed Melanie to find a way of describing and identifying it for her in a new, helpful way. The reactions of other participants also provided her with information how others might perceive her anger, and how it might differ from her own perception. Finally,

the expressive act of physically positioning herself in the middle of her anger as represented by the barricade she built with props and eliciting the strong emotional reaction from the fellow EAP participants might have helped Melanie to release her emotional tension, another beneficial therapeutic effect of group therapy according to Yalom and Leszcz (2005).

The Influence of the Horse

The data revealed the horse as a major aspect of participants' experience in EAP and depicted the horse's crucial role in regard to mindfulness factors, which is discussed in this section. Participants generally' stories contained descriptions of various ways the horses acted in the sessions and how the participants interpreted the horses' behavior. Horses were reported as providing the participants an opportunity to examine feelings, which constitutes one of the fundamental facets of mindfulness (Baer et al., 2006). The participants generally reported that the horses facilitated participants' recognition of their own feelings. The horses were reported to provide the participants feedback about their emotions. The emotional feedback from the horses also appeared to help the participants see how their emotional state influences the environment (Horses Mirroring Feelings). Horses mirroring participants' feelings possibly supported the participants' emotional self-regulation, a core mindfulness process (Shapiro et al., 2006). That is, the participants could see their emotional states. They were able to maintain stability of functioning while being able to change at the same time, and achieve self-regulation, a core mindfulness process (Shapiro et al., 2006).

The stability of functioning likely manifested in participants' capacity to stand back and witness their emotional states, such as anxiety, and choose a response instead of following automatic behavioral patterns. For example, Sarah described how she was able to achieve self-regulation. The horses helped her recognize her feelings. The increased

awareness allowed her to accept her feelings in their present state as well as recognize what she needed to change, which might represent the stability of functioning coupled with the ability to change emphasized as mindfulness core process by Shapiro et al. (2006).

Further, the nonjudgmental attention participants typically received in interaction with horses (Horses' Empathy), and generally horse's willingness to connect with the participant (Connecting with Horses) might have contributed to participants' ability to see their circumstances with curiosity instead of judgment, thereby contributing to their psychological flexibility (Hayes et al., 2012). Psychological flexibility allows for more adaptive and flexible responding to the environmental stimuli, as opposed to a rigid reactivity stemming from overidentification with one's current experience (Hayes et al., 2012; Shapiro et al., 2006). For example, Sarah was able to distance herself from her current experience of negative emotions and see it as maladaptive energy that she could observe, work with, and influence, instead of rigidly identifying with this negative energy and behaving in a reactive manner. According to Shapiro et al. (2006), this ability to see clearly, without confusing one's preconception and biases with the actual state of reality, as a result of accurate processing of new information, depends on disidentification and diffusion from established patterns of thinking. Consequently, as apparent in Sarah's experience, the disidentification and diffusion state of mind is an opposite of the maladaptive cognitive fusion, in which one sees the patterns of thinking as the reality itself instead of seeing the patterns for what they actually are, thoughts or emotions (Hayes et al., 2012; Shapiro et al., 2006). Aided by the horses giving her feedback about her energy with their behavior, Sarah could discern and describe her emotions clearly, instead of overidentifying with them. She also indicated that she was able to form a psychologically flexible response by being ready to change her mindset.

The physical presence of the horses also generally contributed to participants' experiences of mindfulness (Horses' Presence). The horses' imposing size and sensitivity to the stimuli in the environment possibly encouraged participants to stay in the present moment and pay careful attention. The horses' demeanor was generally experienced by the participant as grounding, calming, and comforting. The experience of achieving calm equilibrium might have allowed the participants to attain increased emotional regulation expressed by their ability to alter their ongoing emotional responses through the action of regulatory processes (Ochsner & Gross, 2005). Participants' increased emotion regulation included the regulatory process of reappraisal, evidenced by participants' ability to approach ongoing emotional reactions in a different way, nonjudgmentally, with acceptance, resulting in equanimity even in face of processing difficult emotions. Participants generally reported that the presence of the horse diffused the negative emotionality and allowed them to face their difficult emotions with a sense of calmness, acceptance, and increased confidence that they can effectively deal with their emotional states. The general experiences of participants of an increased ability to cope with everyday activities, as well as increased emotional well-being, were outcomes of EAP previously reported in the literature for students at risk for academic and social failure (Trotter et al., 2008), adolescents with variety of mental health problems, such as mood difficulties and psychotic symptoms (Shultz, 2005), and children and adolescents who experienced abuse, neglect and violence between parents (Shultz et al., 2007).

Participants' observations of horses' behaviors towards props and other people in session (Horses' Interactions), as well as their projections into a chosen horse and learning about themselves through this process (Identification with a Horse), typically brought meaning and/or solutions that might have allowed a changed perspective of the self. This

mindful process of developing meta-awareness of one's experiences is thought to facilitate detachment from identification with a non-dynamic, absolute sense of self, which is replaced by a sense of self that can be experienced as an event (Holzel et al., 2011; Olendzki, 2006). Moreover, in the process of developing meta-awareness, participants were able to realize the benefit that their behaviors bring them, thereby facilitating acknowledgement and a better understanding of their own personal resources. Consistent with solution-focused ideals (De Jong & Kim Berg, 1998), EAP was generally described by participants as an interesting experiential way of discovering and using resources more consciously and applying them in new ways they have not thought about before.

Satisfaction with Treatment

The following section discusses the finding that participants typically reported EAP as very satisfying to the extent that they were encouraging other people to participate in EAP, educating others about EAP, and advocating for EAP in venues where EAP was not known (Recommending EAP to Others). The participants generally appreciated the therapist's guidance through the therapeutic tasks, props, and horses' actions. They felt that the therapist directed the attention to important issues and provided direction in their exploration of thoughts and feelings.

The results also revealed that the participants compared their previous psychotherapy experiences to EAP. Participants typically reported experiencing EAP as more effective than any other therapeutic modality, such as traditional individual and group psychotherapy, family psychotherapy, couple psychotherapy, or medication (More Effective than Other Therapy Modalities).

Interestingly, participants mentioned with variant (two to four respondents) frequency that it was easier for them to talk about their difficult experiences during their

military service in EAP than in other psychotherapies, which might give support to EAP's suitability for war veterans suggested previously in literature (Lancia, 2008; Masini, 2010). Participants also stated that in EAP, they were able to resolve or significantly improve the issues that stemmed from their military times, which they were not able to do to such an extent in other psychotherapy modalities, which was summarized in the variant (two to four respondents) category "Enhanced Ability to Address Military Experiences." These findings are consistent with the indication in extant literature of EAP's suitability for addressing veterans' unique needs, such as PTSD and civilian life re-integration issues (Ferruolo, 2016; Holmes et al., 2012; Klontz et al., 2007; Knapp, 2013; Lefkowitz et al., 2005; Schultz et al., 2007; Smith-Osborne & Selby, 2010; Sollars & Ferruolo, 2013).

Participants typically mentioned the positive quality of EAP and the horses manifested in the fact that participants' strengths, interests, and resources were emphasized as agents of change. These findings suggested the EAP's potential as a positive psychology intervention. EAP fulfills modern call in field of psychotherapy for increasing clients' positive emotional and conceptual expression of self, instead of singular emphasis on simply decreasing pathological symptomatology (Yalom & Leszcz, 2005). Moreover, EAP's use of horses, who have an established positive presence in culture, might be contributing to EAP's effectiveness achieved through its positive focus on an interest, curiosity, and creativity-inspiring stimulus (i.e., the horse and horse culture), as opposed to a pathologizing problem-focus present in many traditional forms of psychotherapy (McWhirter, Nelson, & Waldo, 2014; Seligman & Marshak, 2004). Moreover, participants' general reflections on the influence of the horse and its unique power in eliciting beneficial therapeutic effects speak to the viability of using horses in particular, and perhaps other animals as well, in the facilitation of the therapeutic processes.

Finally, the participants described relatively few difficulties regarding EAP. Participants typically mentioned that they did not know horses, had no experience with horse care and training, and were not sure how it would impact their ability to participate in an activity that involved horses (Lack of Horse Experience). Other participants noted they were initially either skeptical of EAP, or afraid of the horses, which was summarized in the variant (2-4 respondents) category “Apprehension”. In either case, typically participants who expressed encountering challenges, reported that they overcame these challenges and benefitted from participating in EAP afterwards. They typically appreciated the fact that they made the decision to participate in EAP and overcame their initial apprehension.

Clinical Implications

Findings of this study offered insights into the participants’ experiences in EAP, providing an indication of EAP’s suitability for different therapeutic targets. This study illuminated a mindfulness component of EAP; consequently, the EAP approach researched in this study is possibly suitable for the range of clinical issues and therapeutic goals that other mindfulness-based treatments target. In particular, mindfulness-based treatments have been successful with issues related to stress, anxiety, mood and personality disorders, as well as trauma and substance abuse issues (Bowen et al., 2010; Hayes et al., 2012; Kabat-Zinn, 2003; Linehan, 1993, 2015; Segal, et al., 2012).

This investigation also revealed that EAP might offer benefits to military veterans. Participants generally indicated that they would recommend EAP to others, including fellow veterans. Most of the participants also reported that EAP was more effective for them than other mental health treatments; some of the participants specifically indicated that EAP was particularly helpful regarding past military trauma-related problems that they had not been able to resolve and comfortably process in other previously-experienced types of

psychotherapy. These findings are consistent with previously reported veterans' own initiatives of seeking alternative psychotherapy modalities, such as equine assisted mental health and yoga-based treatments (Ferruolo, 2016; Phillips & Wang, 2014), and lend support to the VA's attempts to respond to veterans' interests through funding EAP programs such as the one investigated in the present study.

In particular, the findings can be used by psychologists and other mental health providers to inform psychotherapy practice. For instance, participants' reports about the role of the horse in EAP indicate that horses served as effective mindfulness catalysts. This insight can be used when considering various ways of presenting and teaching mindfulness principles to clients in psychotherapy. As apparent from participants' stories, EAP can convey mindfulness principles in experiential and powerful way, which may allow clients to internalize mindfulness principles quickly and effectively.

Finally, the results of this study suggested the importance of incorporating mind-body connection into psychotherapy. Participants typically juxtaposed EAP with traditional talk therapies. While the language-based reflection and cognitive mediation still played a major role in their therapeutic experience, the participants emphasized the benefit of incorporating non-verbal ways of processing. Examples of non-verbal processing were building symbolic scenarios with physical props, involving movement of their body, responding with body language to horses, as well as being outside in nature. Psychologists and other mental health providers may be very helpful to their clients by incorporating such experiential elements into their practice. They could address the embodied aspects of emotions, and target the emotions directly in the body. Embodied aspects of emotions could be addressed with mindfulness techniques that focus on alleviating stress stored in the body,

such as body scan, breathing work, mindful walking, or yoga-based mindful movement (Kabat-Zinn, 2006; Segal et al., 2012).

Limitations

The present study had several limitations that should be noted. As is standard for qualitative inquiry, the purpose of the study was not to produce findings that would be generalizable to a population. However, a more diverse sample would allow for increased richness of data, especially as related to EAP's suitability for diverse populations. Despite attempts to recruit diverse clients, the sample demonstrated relatively little gender and ethnic/racial diversity, as participants consisted mostly of Caucasian, middle-aged women. Nevertheless, the sample contained diversity of age, with participants ranging from 31 to 86 years. Limited sample diversity could possibly be related to the concentration of recruitment efforts on only one EAP site. Future studies should increase efforts to recruit more diverse participants from a variety of EAP sites to learn about their unique experiences and help make EAP more accessible and suitable for more diverse clients.

An additional limitation of the present study was its utilization of an internal auditor. This limitation was partially addressed by utilization of dissertation committee members in the role of auditors in the final stage of the study. Nevertheless, use of an external auditor in the earlier stages of the study would have been more effective in preventing potential group-think effects.

A final limitation might have been the fact that the researcher was connected in multiple ways to the community that was studied. The researcher was a psychology trainee in the EAP program that the participants took part in. Further, the researcher was trained in EAGALA model (EAGALA, 2012) of EAP as a Mental Health provider as well as an Equine Specialist. The researcher also had life-long experience with horses and was

embedded in the local equestrian community. Finally, the researcher studied mindfulness as a main construct of interest during her graduate program and was trained as a yoga teacher. Being part of the in-group in several aspects might help to better understand the culture and to contextualize and comprehend the data more deeply. Nevertheless, it might also serve as a source of preconceptions and assumptions about participants' experiences. To address these issues, a thorough review of literature on the studied phenomenon was utilized to gain varied perspective on the participants' experiences. Moreover, research team members had different levels of connection to the community being studied, and the potential biases were disclosed and discussed.

Future Directions

The present study was exploratory in nature. A variety of important characteristics of EAP and the associated mindfulness components were uncovered, which warrant further investigation. Several possible directions can be suggested.

Further investigation of EAP and its mindfulness components in a quantitative design could provide a greater understanding of each of the identified components. Each of the components of EAP that were identified by the participants as important for their experience and perceived improvement, could be investigated with corresponding quantitative measures (e.g., mood scales, well-being rating scales, mindfulness questionnaires, etc.) to assess pre-test and post-test changes in participants' symptoms and well-being, as well as uncover causality pathways and mediating and moderating conditions for the changes. Further qualitative investigation could be accomplished with a different type of qualitative methodology, as well as a different sample, allowing for uncovering different in-depth aspects of EAP and its mindfulness features. A combination of qualitative and quantitative methods in a mixed-methods design would provide an opportunity to

investigate the deeper, contextual meaning of the quantitatively expressed changes and their conditions.

Further investigation is also warranted in regard to particular populations. The present study did not attempt to compare experiences of different groups of participants. Nevertheless, the significant presence of military veterans in the sample, constituting the sample's majority, allowed for the emergence of the theme of potential suitability of EAP for work with PTSD presentations. Future studies could focus on the application of EAP for military veteran populations and on EAP's efficacy for this populations' specific needs.

Finally, a variety of interesting EAP constructs emerged in the current investigation that could be further explored in greater depth and detail. For example, the nature of the therapeutic relationship between horse and human with the horse serving as a mindfulness model and mindfulness activating agent warrants further examination. Further investigation of this construct might have useful implications for the field of Animal Assisted Therapy (Fine, 2015), as well as for research on mindfulness-based psychotherapies.

Conclusion

This study investigated therapeutic processes in EAP. Four domains summarizing participants' experiences in EAP emerged from the data: Effects of Interventions, Role of the Horse, Satisfaction with Treatment, and Challenges. The domains revealed participants' experiences they identified as results of the therapeutic tasks in the session, as well as the horses' actions in the sessions and how the participants interpreted horses' behavior. Furthermore, the domains also revealed participants' level of satisfaction with their EAP experience and how they compared their participation in EAP to other mental health treatments, as well as the factors that were perceived as challenging for participants regarding EAP.

The most important findings consisted of rich and in-depth information about the effects of EAP interventions as experienced by the participants and the role mindfulness factors played in their experience. Furthermore, the study illuminated psychological flexibility outcomes of EAP, the role of the horses, as well as participants' satisfaction with EAP. EAP appears to support the development of psychological flexibility in participants and to have strong mindfulness component. The horses supported participants' focus on the present moment and served as catalyst for learning and practicing mindful responses. Participants also emphasized the importance of the fellow participants in their EAP experience. Finally, EAP was perceived by the participants as an effective treatment. These findings supported EAP's viability as a mindfulness-based treatment and an effective psychotherapy, as well as its applicability to the specific and unique needs of the veteran population..

References

- American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- Bachi, K. (2012). Equine-facilitated psychotherapy: The gap between practice and knowledge. *Society & Animals: Journal of Human-Animal Studies*, *20*(4), 364-380. doi:10.1163/15685306-12341242
- Baer, R. A., Fischer, S., & Huss, D. B. (2005). Mindfulness and acceptance in the treatment of disordered eating. *Journal of Rational-Emotive & Cognitive Behavior Therapy*, *23*(4), 281-300. doi:10.1007/s10942-005-0015-9
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27–45. doi:10.1177/1073191105283504
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., . . . Williams, J. G. (2008). Construct validity of the Five Facet Mindfulness Questionnaire in meditating and nonmeditating samples. *Assessment*, *15*(3), 329-342. doi:10.1177/1073191107313003
- Borkovec, T. D. (2002). Life in the future versus life in the present. *Clinical Psychology: Science and Practice*, *9*(1), 76–80. doi:10.1093/clipsy.9.1.76
- Bowen, S., Chawla, N., & Marlatt, G. A. (2010). *Mindfulness-based relapse prevention for addictive behaviors: A clinician's guide*. New York, NY: Guilford.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848. doi:10.1037/0022-3514.84.4.822

- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry, 18*(4), 211-237.
doi:10.1080/10478400701598298
- Burgon, H. L. (2013). Horses, mindfulness, and the natural environment: Observations from a qualitative study with at-risk young people participating in therapeutic horsemanship. *International Journal of Psychosocial Rehabilitation, 17*(2), 51-67.
Retrieved from http://www.psychosocial.com/IJPR_17/Horses_and_Mindfulness_Burgon.html
- Cantin, A., & Marshall-Lucette, S. (2011). Examining the literature on the efficacy of Equine Assisted Therapy for people with mental health and behavioural disorders. *Mental Health and Learning Disabilities Research and Practice, 8*(1), 51-61.
doi:10.5920/mhldrp.2011.8151
- Cantril, C., & Haylock, P. (2007). Horses as healers: Outcomes of a structured horsemanship program for cancer survivors. *Journal of the Society for Integrative Oncology, 5*(4), 185-185. Retrieved from <https://integrativeonc.org/researchers/oncology-journal>
- Carmody, J., & Baer, R.A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine, 31*(1), 23–33.
doi:10.1007/s10865-007-9130-7
- Carmody, J., Baer, R. A., Lykins, E. L. B., & Olendzki, N. (2009). An empirical study of the mechanisms of mindfulness in a mindfulness-based stress reduction program. *Journal of Clinical Psychology, 65*(6), 613-626. doi:10.1002/jclp.20579

- Chambers, R., Gullone, & Allen, N. (2009). Mindful emotion regulation: An integrative review. *Clinical Psychology Review, 29*(6), 560-572. doi:10.1016/j.cpr.2009.06.005
- Chandler, C. K. (2005). *Animal assisted therapy in counseling*. New York, NY: Routledge.
- Cornish, M. A., Thys, A., Vogel, D. L., & Wade, N. G. (2014). Post-deployment difficulties and help seeking barriers among military veterans: Insights and intervention strategies. *Professional Psychology: Research and Practice, 45*(6), 405–409. doi:10.1037/a0037986
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: SAGE.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., . . . Sheridan, J. F. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine, 65*(4), 564–570. doi:10.1097/01.PSY.0000077505.67574.E3
- De Jong, P. & Kim Berg, I. (1998). *Interviewing for solutions*. Pacific Grove, CA: Brooks/Cole.
- Derogatis, L. R. (1993). *Brief symptom inventory (BSI): Administration, scoring and procedures manual*. Minneapolis: NCS Person.
- Dilks, S., Tasker, F., & Wren, B. (2008). Building bridges to observational perspectives: A grounded theory of therapy processes in psychosis. *Psychology & Psychotherapy: Theory, Research, and Practice, 81*(Pt 2), 209-229. doi: 10.1348/147608308X288780
- Earles, J. L., Vernon, L. L., & Yetz, J. P. (2015). Equine-assisted therapy for anxiety and posttraumatic stress symptoms. *Journal of Traumatic Stress, 28*(2), 149-152. doi:10.1002/jts.21990

- Elbogen, E. B., Johnson, S. C., Newton, V. M., Straits- Tröster, K., Vasterling, J. J., Wagner, H. R., & Beckham, J. C. (2012). Criminal justice involvement, trauma, and negative affect in Iraq and Afghanistan war era veterans. *Journal of Consulting and Clinical Psychology, 80*(6), 1097–1102. doi:10.1037/a0029967
- Elliott, R. (1989). Comprehensive process analysis: Understanding the change process in significant therapy events. In M. J. Packer & R. B. Addison (Eds.), *Entering the circle: Hermeneutic investigations in psychology* (pp. 165–184). Albany, NY: SUNY.
- Equine Assisted Growth and Learning Association. (2012). *Fundamentals of EAGALA model practice: Equine assisted psychotherapy certification program* (7th ed.). Santaquin, UT: Author.
- Evans, M. A. (2015). How does it work? Retrieved from <http://www.mindfulhorsetherapy.com/how-does-it-work>
- Evans, S., Ferrando, S., Findler, M., Stowell, C., Smart, C., & Haglin, D. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder. *Journal of Anxiety Disorders, 22*(4), 716-721. doi:10.1016/j.janxdis.2007.07.005
- Ferruolo, D., (2016). Psychosocial equine program for veterans. *Social Work, 61*(1), 53–60. doi:10.1093/sw/swv054
- Fine, A. H. (Ed.). (2015). *Handbook on animal-assisted therapy: Foundations and guidelines for animal-assisted interventions* (4th ed.). Waltham, MA: Academic.
- Fresco, D., Segal, Z., Buis, T., & Kennedy, S. (2007). Relationship of posttreatment decentering and cognitive reactivity to relapse in major depression. *Journal of Consulting and Clinical Psychology, 75*(3), 447–455. doi:10.1037/0022-006X.75.3.447

- Giorgi, A. (1985). Sketch of a psychological phenomenological method. In A. Girogi (Ed.), *Phenomenology and psychological research* (pp. 8–22). Pittsburgh, PA: Duquesne University.
- Goldberg, S. B., Wielgosz, J., Dahl, C., Schuyler, B., MacCoon, D. S., Rosenkranz, M., . . . Davidson, R. J. (2016). Does the Five Facet Mindfulness Questionnaire measure what we think it does? Construct validity evidence from an active controlled randomized clinical trial. *Psychological Assessment, 28*(8), 1009-1014.
doi:10.1037/pas0000233
- Goleman, D. J., & Schwartz, G. E. (1976). Meditation as an intervention in stress reactivity. *Journal of Consulting and Clinical Psychology, 44*(3), 456–466. doi:10.1037/0022-006X.44.3.456
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82. doi: 10.1177/1525822X05279903
- Hart, L. A. (2000). Understanding animal behavior, species, and temperament as applied to interactions with specific populations. In A. Fine (Ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines* (pp. 81–114). San Diego, CA: Academic.
- Hart, W. (1987). *The art of living: Vipassana meditation: As taught by S.N. Goenka*. San Francisco, CA: HarperOne.
- Hawryluk, K., Ridley-Kerr, A., & Henry, P. (2012, March 6). Veteran poverty by the numbers. Retrieved from the Center for American Progress website:
<http://www.americanprogress.org/issues/military/news/2012/03/06/11201/veteran-poverty-by-thenumbers>.

- Hayes, S. C. (2002). Acceptance, mindfulness and science. *Clinical Psychology: Science and Practice*, 9(1), 101–106. doi:10.1093/clipsy.9.1.101
- Hayes, S. C., Levin, M. E., Plumb-Villardaga, J., Villatte, J. L., & Pistorello, J. (2013). Acceptance and commitment therapy and contextual behavioral science: Examining the progress of a distinctive model of behavioral and cognitive therapy. *Behavior Therapy*, 44(2), 180-198. doi:10.1016/j.beth.2009.08.002
- Hayes, S. C., Pistorello, J., & Levin, M. E. (2012). Acceptance and commitment therapy as a unified model of behavior change. *The Counseling Psychologist*, 40(7), 976-1002. doi:10.1177/0011000012460836
- Heppner, P., Wampold, B., & Kivlighan, D. (2008). *Research design in counseling* (3rd ed). Pacific Grove, CA: Thompson Brooks/Cole
- Heppner, W. L., & Kernis, M. (2007). “Quiet ego” functioning: The complementary roles of mindfulness, authenticity, and secure high self-esteem. *Psychological Inquiry*, 18(4), 248-251. doi:10.1080/10478400701598330
- Hill, C. E. (2012). *Consensual qualitative research: A practical resource for investigating social science phenomena*. Washington, DC: American Psychological Association
- Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, 52(2), 196-205. doi:10.1037/0022-0167.52.2.196
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist*, 25(4), 517-572. doi:10.1177/0011000097254001

- Holmes, C., Goodwin, D., Redhead, E., & Goymour, K. (2012). The benefits of equine-assisted activities: An exploratory study. *Child Adolescent Social Work Journal*, 29(2), 111–122. doi:10.1007/s10560-011-0251-z
- Holzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537-559. doi:10.1177/1745691611419671
- Jain, S., Shapiro, S. L., Swanick, S., Roesch, S. C., Mills, P. J., Bell, I., & Schwartz, G. E. (2007). A randomized controlled trial of mindfulness meditation versus relaxation training: Effects on distress, positive states of mind, rumination, and distraction. *Annals of Behavioral Medicine*, 33(1), 11–21. doi:10.1207/s15324796abm3301_2
- Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion*, 10(1), 54–64. doi:10.1037/a0018438
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156.
doi:10.1093/clipsy/bpg016
- Kabat-Zinn, J. (2005). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness* (15th anniversary ed.). New York, NY: Delta Trade Paperback/Bantam Dell.
- Kabat-Zinn, J. (2006). *Coming to our senses: Healing ourselves and the world through mindfulness*. New York, NY: Hachette.

- Kaplan, M. S., McFarland, B. H., Huguet, N., & Valenstein, M. (2012). Suicide risk and precipitating circumstances among young, middle-aged, and older male veterans. *American Journal of Public Health, 102*(S1), S131–S137.
doi:10.2105/AJPH.2011.300445
- Klontz, B., Bivens, A., Leinart, D., & Klontz, T. (2007). The effectiveness of equine assisted experimental therapy: Results of an open clinical trial. *Society and Animals, 15*(2007), 257-267. doi:10.1163/156853007X217195
- Knapp, S. (2013). *More than a mirror: Horses, humans & therapeutic practices*. Marshall, NC: Horse Sense of the Carolinas.
- Knox, S., Hess, S. A., Petersen, D. A., & Hill, C. E. (1997). A qualitative analysis of client perceptions of the effects of helpful therapist self-disclosure in long-term therapy. *Journal of Counseling Psychology, 44*(3), 274-283. doi:10.1037/0022-0167.44.3.274
- Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R. S., Byford, S., . . . Linehan, M. M. (1993). *Skills training manual for treating borderline personality disorder*. New York, NY: Guilford.
- Lancia, J. (2008, Spring). Ascent from hell: EAP in the treatment of war veterans. *EAGALA in Practice, 2*, 9-12. Retrieved from <http://community.eagala.org/>
- Lee, P., Dakin, E., & McLure, M. (2016). Narrative synthesis of equineassisted psychotherapy literature: Current knowledge and future research directions. *Health & Social Care in The Community, 24*(3), 225-246. doi:10.1111/hsc.12201
- Lefkowitz, C., Paharia, I., Prout, M., Debiak, D., & Bleiberg, J. (2005). Animal-assisted prolonged exposure: A treatment for survivors of sexual assault suffering posttraumatic stress disorder. *Society and Animals, 13*(4), 275–295.
doi:10.1163/156853005774653654

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*.
New York, NY: Guilford.

Linehan, M. M. (2015). *DBT® skills training manual* (2nd ed.). New York, NY: Guilford.

Marlatt, G.A. (2002). Buddhist philosophy and the treatment of addictive behavior.
Cognitive and Behavioral Practice, 9(1), 44-49, doi:10.1016/s1077-7229(02)80039-
6

Marx, R., Strauss, C., Williamson, C., Karunavira, & Taravanja (2014). The eye of the
storm: A feasibility study of an adapted Mindfulness-based Cognitive Therapy
(MBCT) group intervention to manage NHS staff stress. *The Cognitive Behaviour
Therapist*, 7(18), 1-17. doi:10.1017/S1754470X14000300

Masini, A. (2010). Equine-assisted psychotherapy in clinical practice. *Journal of
Psychosocial Nursing and Mental Health Services*, 48(10), 30-34.
doi:10.3928/02793695-20100831-08

McWhirter, P., Nelson, J., & Waldo, M. (2014). Positive psychology and curative
community groups: Life satisfaction, depression, and group therapeutic factors.
Journal for Specialists in Group Work, 39(4), 366-380.
doi:10.1080/01933922.2014.955384

Meinersmann, K. M., Bradberry, J., & Roberts, F. B. (2008). Equine-facilitated
psychotherapy with adult female survivors of abuse. *Journal of Psychosocial
Nursing & Mental Health Services*, 46(12), 36-42. doi:10.3928/02793695-20081201-
08

Moore, B. A., & Penk, W. E. (Eds.). (2011). *Treating PTSD in military personnel: A clinical
handbook*. New York, NY: Guilford .

- Morrow, S. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 250-260. doi:10.1037/0022-0167.52.2.250
- Neacsiu, A. D., Rizvi, S. L., & Linehan, M. M. (2010). Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy, 48*(9), 832-839. doi:10.1016/j.brat.2010.05.017
- Ochsner, K. N., & Gross, J. J. (2005). The cognitive control of emotion. *Trends in Cognitive Sciences, 9*(5), 242–249. doi:10.1016/j.tics.2005.03.010
- Olendzki, A. (2006). The transformative impact of non-self. In D. K. Nauriyal, M. S. Drummond, & Y. B. Lal (Eds.), *Buddhist thought and applied psychological research: Transcending the boundaries* (pp. 250–261). New York, NY: Taylor & Francis/Routledge.
- Ortner, C. N. M., Kilner, S. J., & Zelazo, P. D. (2007). Mindfulness meditation and reduced emotional interference on a cognitive task. *Motivation and Emotion, 31*(4), 271–283. doi:10.1007/s11031-007-9076-7
- Perls, F. (1973). *The gestalt approach and eye witness to therapy*. New York, NY: Bantam.
- Phillips, M. M., & Wang, S. S. (2014, September 12). War veterans try yoga, hiking, horseback riding to treat PTSD. *Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/war-veterans-try-yoga-hiking-horseback-riding-to-treat-ptsd-1410537293>
- Professional Association of Therapeutic Horsemanship International. (n.d.). About PATH INTL. Retrieved from <https://www.pathintl.org/about-path-intl/about-path-intl>
- Rainbow Days, Inc. (1998). *Kids' connection: A support group curriculum for children, ages 4–12*. Dallas, TX: Author.

- Ridge, N. W., Warren, J. S., Burlingame, G. M., Wells, M. G., & Tumblin, K. M. (2009). Reliability and validity of the youth outcome questionnaire self-report. *Journal of Clinical Psychology, 65*(10), 1115-1126. doi:10.1002/jclp.20620
- Rogers, C. R. (1961). *On becoming a person*. Boston, MA: Houghton-Mifflin.
- Russell-Martin, L. A. (2006). *Equine facilitated couples therapy and solution focused couples therapy: A comparative study* (Doctoral dissertation). Retrieved from ProQuest Theses & Dissertations database. (UMI No. 3234094)
- Santorelli, S. (2000). *Heal thy self: Lessons on mindfulness in medicine*. New York, NY: Three Rivers.
- Schultz, P. N., Remick-Barlow, G. A., & Robbins, L. (2007). Equine-assisted psychotherapy: A mental health promotion/intervention modality for children who have experienced intra-family violence. *Health & Social Care in the Community, 15*(3), 265–271. doi:10.1111/j.1365-2524.2006.00684.x
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2012). *Mindfulness-based cognitive therapy for depression* (2nd ed.). New York, NY: Guilford.
- Seligman, M., & Marshak, L. (2004). Group approaches for persons with disabilities. In J. DeLucia-Waack & D. Gerrity (Eds.), *Handbook of group counseling and psychotherapy* (pp. 239–252). Thousand Oaks, CA: Sage.
- Shapiro, S.L., Carlson, L.E., Astin, J.A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*(3), 373–386.
doi:10.1002/jclp.20237
- Shostrom, E. L. (1974). *Personal orientation inventory manual: An inventory for the measurement of self-actualization*. San Diego, CA: Educational and Industrial Testing Service.

- Shultz, B. (2005). *The effects of Equine-Assisted Psychotherapy on the psychosocial functioning of at-risk adolescents ages 12-18* (Unpublished Master's thesis). Denver Seminary, Denver, CO.
- Siegel, D. J. (2009). Mindful awareness, mindsight, and neural integration. *The Humanistic Psychologist*, 37(2), 137-158. doi:10.1080/08873260902892220
- Smith-Osborne, A., & Selby, A. (2010). Implications of the literature on equine-assisted activities for use as a complementary intervention in social work practice with children and adolescents. *Child & Adolescent Social Work Journal*, 27(4), 291–307. doi:10.1007/s10560-010-0201-1
- Sollars, D., & Ferruolo, D. (2013). Horses bring peace to a soldier's heart. *Combat Stress*, 2(1), 11–20. Retrieved from http://www.stress.org/wp-content/uploads/Newsletter/October_Combat_Stress_2013/
- Spanier, G.B. (1967). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38(1), 15-28. doi:10.2307/350547
- Straits-Tröster, K. A., Brancu, B., Goodale, B., Parcelli, S., Wilmer, C., Simmons, E. M., & Kudler, H. (2011). Developing community capacity to treat postdeployment mental health problems: A public health initiative. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3(3), 283–291. doi:10.1037/a0024645
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: SAGE.
- Tanielian, T., & Jaycox, L. (2008). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: RAND.

- Teten, A. L., Schumacher, J. A., Taft, C. T., Stanley, M. A., Kent, T. A., . . . White, D. L. (2010). Intimate partner aggression perpetrated and sustained by male Afghanistan, Iraq, and Vietnam veterans with and without posttraumatic stress disorder. *Journal of Interpersonal Violence, 25*(9), 1612–1630. doi:10.1177/0886260509354583
- Trotter, K., Chandler, C., Goodwin-Bond, D., & Casey, J. (2008). A comparative study of the efficacy of Group Equine Assisted Counseling with at-risk children and adolescents. *Journal of Creativity in Mental Health, 3*(3), 254-284.
doi:10.1080/15401380802356880
- U.S. Department of Veterans Affairs, National Center for Veterans Analysis and Statistics. (2016). *Veteran population projections 2017-2037* [Infographic]. Retrieved from https://www.va.gov/vetdata/docs/Demographics/New_Vetpop_Model/Vetpop_Infographic_Final31.pdf
- Wampold, B. E. (2001). *The great psychotherapy debate: Models, methods, and findings*. Mahwah, NJ: Lawrence Erlbaum.
- Wells, M. G., Burlingame, G. M., & Lambert, M. J. (1999). Youth Outcome Questionnaire. In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcome assessment* (2nd ed., pp. 497-453). Mahwah, NJ: Lawrence Erlbaum.
- Williams, J. M. G., Alatiq, Y., Crane, C., Barnhofer, T., Fennell, M. J. V., Duggan, D. S., . . . Goodwin, G. M. (2008). Mindfulness-based cognitive therapy (MBCT) in bipolar disorder: Preliminary evaluation of immediate effects on between-episode functioning. *Journal of Affective Disorders, 107*(1-3), 275-279.
doi:10.1016/j.jad.2007.08.022

- Williams, J. G., & Kuyken, W. (2012). Mindfulness-based cognitive therapy: A promising new approach to preventing depressive relapse. *The British Journal of Psychiatry*, *200*(5), 359-360. doi:10.1192/bjp.bp.111.104745
- Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5th ed.). New York, NY: Basic.
- Yetz, J. P. (n.d.). Mindful recovery program. Retrieved from <http://www.equinepartneringnaturally.com>.
- Yorke, J., Adams, C., & Coady, N. (2008). Therapeutic value of equine-human bonding in recovery from trauma. *Anthrozoös*, *21*(1), 17-30. doi:10.2752/089279308X274038
- Zeidler, W. (2007). *Achtsamkeit und ihr Einfluss auf die Emotions- verarbeitung: Eine experimentelle Untersuchung der Wirkmechanismen* [Mindfulness and its influence on emotion processing: An experimental investigation of mechanisms]. Saarbrücken, Germany: VDM Verlag Dr. Mueller.

Appendix A.

**MINDFULNESS-BASED EQUINE ASSISTED PSYCHOTHERAPY SESSION
MANUAL**

Horse Wisdom for the Soul

By Mary Ann Evans, Ph.D.

Your Power Source

General goals:

- Observe the effects of loss of personal power
- Identify obstacles to success in self
- Observe own areas of fears and doubts
- Understand how awareness can be translated into action
- Identify sources of personal power and support
- Develop effective communication skills
- Awareness of the impact of nonverbal behavior
- Becoming aware of the power and peace of the present moment

Opening:

Introductions:

- Give names and intention for the day

Inner and outer safety:

- Equine Specialist (ES) explains how a horse's number one priority is safety; example of self-care. Ask participants how they can take care of themselves if they feel unsafe any time, including the concept of calling "time out".
- Mental Health Specialist (MS) discusses emotional safety and the importance of confidentiality.

1. WHOLE GROUP ACTIVITY

Reflective Arena-Mindful Observation

Function:

- Evaluate how clients perceive others and self.
- Develop mindful awareness
- Observe how herd behavior parallels human relationships

Setup:

- Activity takes place in the arena with up to 5 loose horses.
- Clients remain outside enclosure and observe. (Paper and pencils optional)

Rules:

- Spend 10 minutes observing the horses and herd behavior with no talking.
- Notice how your body feels when observing the horses move and interact
- Decide which horse is favorite, least favorite, most like them, least like them, which horse is leader and why.

Discussion:

- Take turns sharing experiences and observations of the herd
- Share what learned from the behavior of the horses.
- Share how they felt when watching the horses, what sensations, thoughts and/or

emotions came up.

2. SMALL GROUP OR INDIVIDUAL ACTIVITIES

A. Catch and Halter Activity (optional for longer sessions)

- Use with group, individual or family

Function:

- To evaluate problem solving style
- Frustration tolerance
- Perseverance
- Notice how body language impacts ability to catch horse

Setup:

- Activity takes place in the arena with 3-5 horses
- Teams of 2-3 clients per horse or one client per horse,
- Clients enter the enclosure with halter and lead rope.

Rules:

- Designate teams and have each team identify horse to halter or alternately go one at a time and catch horse.
- Time limit of 10 minutes for each team.
- Have halters and ropes available to choose
- No talking by anyone.
- (Halters may be left on for next activity)

Discussion and questions:

- Share experience with whole group
 - How did each client/team decide which horse to catch?

- How did each team interpret how to use the halter?
- Who became frustrated?
- Who wanted to quit?
- Who tried to be perfect?
- Who looked to others for help?
- What role did each person play on team?
- Was each person focused more on the task, relationship with the horse or each other?
- How did leadership play out?
- How does this activity relate to how they solve problems in their lives?

B. Power Source and Mindfulness Awareness:

Function:

- To become aware that each individual has unacknowledged sources of strength within
- To identify sources of support around individual
- To problem solve more than one way to overcome or face obstacles
- To face difficult challenge with calm acceptance
- To practice mindfulness awareness and acceptance of “what is.”

Setup:

- Activity within arena.
- Team of 1-2 people.
- Three or more horses loose in the arena
- Build pathway using cones or poles to a chair (for each client) placed at end to

represent “occupying the present moment”

- Ask teach client to identify their biggest obstacle/fear and build objects to represent this

somewhere on the pathway for each one.

- Spend 5 minutes observing herd and selecting which horse one will use as source of power.

- The halter activity may be included at this point to catch each “power source”.

Rules/Directions:

- The clients must move horse through pathway as an individual (or team)

- Client will sit in “occupying peaceful chair” at the end of pathway while still connected to the horse for as long as comfortable, while practicing mindful attention

Discussion:

- How did clients communicate with each other/ horse?

- How did they work together as a team? How did leadership show up? (if teams)

- When did the activity flow? When was it challenging?

- What was the response of the horse to the client? Where were the clients in relation to the horse?

- How did the clients use their power source horse? How did they deal with frustrations?

- How did the clients perceive the pathway and obstacle on it?

- How did the client experience sitting in the “peaceful chair”?

- Is the client able to release the “object” a as source of fear/or obstacle to any degree?

- How does the obstacle/fear object feel now?

Closing:

- Each client share with group one thing she/he learned about self during the session to apply to life's challenges.
- If agreed upon, share a photo of client with the horse while sitting in the "occupy the peaceful moment" chair as a touchstone to take home and remember the sensations of peace.

Appendix B.

LETTER TO PARTICIPANTS

Dear Potential Participant,

Thank you for considering participation in the Equine Assisted Psychotherapy (EAP) study!

The study will examine clients' experiences in EAP. Your participation would be very much appreciated and help to understand what EAP participants experience, how EAP works, and how it potentially could be improved.

If you decide to participate, we will ask you to part take in two interviews that will inquire about your experiences in EAP, as well as to fill out a demographic form and a short questionnaire about your current experiences. The researcher will also observe an EAP session in which you participate. The estimated time for the first interview is 1 to 3 hours, and for the follow-up interview half hour to 1 hour. The filling out of the form and the questionnaire will take approximately 15 minutes. We will either ask you to come for the interviews to the campus of University of California Santa Barbara (UCSB) or schedule interviews at the site where you participate in EAP. The interviews will be audio recorded. The audio recordings of the interviews will be transcribed into text. The text will be coded for research analysis. After the analysis is completed, the audio recordings will be permanently deleted. The form and the questionnaire you will fill out before the interviews and return to us by the time of the first interview. There will be approximately 15 other subjects who will participate in the study. The interviews will be conducted and analyzed during the summer and fall 2016.

Participation in the study is entirely confidential. All information will be presented as a summary and no individual persons will be identified. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena.

If you decide to volunteer for the study, please read and sign the consent, fill out the demographic form, complete the mindfulness questionnaire, read the interview questions for your reference, and return the completed packet to your EAP therapist. All documents are included in this research packet. The researcher will contact you when you return the packet with your contact information. You can also contact the researcher directly at:

Anna Nina Lee, M.A.

Ph.D. Candidate

Department of Counseling, Clinical, and School Psychology

University of California, Santa Barbara (UCSB)

annanlee@umail.ucsb.edu

Phone: 805-312-2583

Thank you again for your consideration. Your participation would be very valuable and help build the knowledge about the Equine Assisted Psychotherapy (EAP).

Sincerely,

Anna Nina Lee, M.A.

Appendix C.

CONSENT FORM

CONSENT PURPOSE:

You are being asked to participate in a research study. The purpose of the study is to learn about your experiences in the Equine Assisted Psychotherapy (EAP).

PROCEDURES:

If you decide to participate, we will ask you to part take in two interviews that will inquire about your experiences in EAP, as well as fill out a demographic form and a short questionnaire about your current experiences. The researcher will also observe an EAP session in which you participate. The estimated time for the first interview is 1 to 3 hours, and for the follow-up interview half hour to 1 hour. The filling out of the form and the questionnaire will take approximately 15 minutes.

We will either ask you to come for the interviews to the campus of University of California Santa Barbara (UCSB) or schedule interviews at the site where you participate in EAP. The interviews will be audio recorded. The audio recordings will be transcribed into text. The text will be coded for research analysis. After the analysis is completed, the audio recordings will be permanently deleted. The form and the questionnaire you will fill out at home before the interviews and return to us at the time of the first interview. There will be approximately 15 other subjects who will participate in the study. The interviews will be conducted and analyzed during the summer and fall 2016.

RISKS:

The risks and discomforts that you might experience during the study are not greater than what you usually experience during a typical day.

BENEFITS:

The participation in this study might help you better understand the benefits that EAP brought into your life. This study might also provide information how to improve EAP in the future.

CONFIDENTIALITY:

The information from the study will be analyzed, summarized, and described in a form of a doctoral dissertation. The information will be presented to the students and faculty of the Counseling, Clinical, and School Psychology Department at UCSB. It is also possible that the study will be presented at professional conferences and published in a scholarly journal. All information will be presented as a summary and no individual persons will be identified. The information will be kept confidential. Absolute confidentiality cannot be guaranteed, since research documents are not protected from subpoena.

RIGHT TO REFUSE OR WITHDRAW:

You may refuse to participate and still receive any benefits you would receive if you were not in the study. You may change your mind about being in the study and quit after the study has started.

QUESTIONS:

If you have any questions about this research project or if you think you may have been injured as a result of your participation, please contact:

Professor Collie Conoley, Ph.D.

Department of Counseling, Clinical, and School Psychology

Gevirtz Graduate School of Education

University of California Santa Barbara

Santa Barbara, CA 93106-9490

Email: cconoley@education.ucsb.edu

Phone: (805) 893-5495

If you have any questions regarding your rights and participation as a research subject, please contact the Human Subjects Committee at (805) 893-3807 or hsc@research.ucsb.edu, or write to the University of California, Human Subjects Committee, Office of Research, Santa Barbara, CA 93106.

PARTICIPATION IN RESEARCH IS VOLUNTARY. YOUR SIGNATURE BELOW WILL INDICATE THAT YOU HAVE DECIDED TO PARTICIPATE AS A RESEARCH SUBJECT IN THE STUDY DESCRIBED ABOVE. YOU WILL BE GIVEN A SIGNED AND DATED COPY OF THIS FORM TO KEEP.

Signature of Participant or Legal Representative: _____

Date: _____

Appendix D.

DEMOGRAPHIC FORM

Demographic Form

Please answer the following questions the best you can.

1. Your Age:

.....

2. Your Gender:

.....

3. Your Race/Ethnicity:

.....

4. Did you receive any psychotherapy before Equine Assisted Psychotherapy?

.....

5. If yes, when and what kind?

(Continue on the back of the page if more space needed)

.....

.....

.....

.....

.....

6. When did you begin Equine Assisted Psychotherapy?

.....

7. How many sessions of Equine Assisted Psychotherapy have you had?

.....

8. Why did you decide to participate in Equine Assisted Psychotherapy?

(Continue on the back of the page if more space needed)

.....
.....
.....
.....
.....

9. Your first name?

.....

10. May we contact you for any follow up questions that arise?

.....

11. If yes, what is your preferred way of contact? Please check all boxes that apply and provide contact information:

Phone:

.....

Email:

.....

FIVE FACETS MINDFULNESS QUESTIONNAIRE (FFMQ; Baer et al., 2006)

Five Facet Mindfulness Questionnaire

Description:

This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. More information is available in:

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
never or very rarely true	rarely true	sometimes true	often true	very often or always true

- _____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
- _____ 2. I'm good at finding words to describe my feelings.
- _____ 3. I criticize myself for having irrational or inappropriate emotions.
- _____ 4. I perceive my feelings and emotions without having to react to them.
- _____ 5. When I do things, my mind wanders off and I'm easily distracted.
- _____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
- _____ 7. I can easily put my beliefs, opinions, and expectations into words.
- _____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
- _____ 9. I watch my feelings without getting lost in them.
- _____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
- _____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
- _____ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.

- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _____ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- _____ 21. In difficult situations, I can pause without immediately reacting.
- _____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- _____ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I'm doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

Scoring Information:Observe items:

1, 6, 11, 15, 20, 26, 31, 36

Describe items:

2, 7, 12R, 16R, 22R, 27, 32, 37

Act with Awareness items:

5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Nonjudge items:

3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Nonreact items:

4, 9, 19, 21, 24, 29, 33

Reference:

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*, 27-45.

Appendix F.

INTERVIEW QUESTIONS

1. Tell me about your overall experience of participating in Equine Assisted Psychotherapy (EAP).
2. Tell me about any changes in yourself as a result of EAP.
 - a. What do you think caused it?
 - b. Could you give me some examples?
3. Tell me about any particular feelings, pleasant, neutral, or unpleasant, that you experienced during EAP.
 - a. What do you think caused it?
 - b. Could you give me some examples?
4. Tell me about any particular feelings, pleasant, neutral, or unpleasant, that you experienced in your life as a result of EAP.
 - a. What do you think caused it?
 - b. Could you give me some examples?
5. Tell me about your experiences with the horses in EAP.
 - a. Could you give me some examples?
6. Is there anything else you would like to tell me about your experiences in EAP?

Appendix G.

CODING SCHEMA

Table 2

Coding Schema

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
Effects of Interventions		Participants' experiences they identify as results of the therapeutic tasks in the session.	
Being Mindful/ Present in Current Situation	General	Participants' experiences of heightened present moment awareness.	<p>“The horse L is the love of my life. He truly is. I love working with L, he is problematic for a lot of people, one that needs a really capable handler for him. He’s a little sassy, but he likes a really firm hand, and he responds really well to some discipline. And he is clear, and he expects clear communication, and even verbal prize, he is really receptive to. And if you, in the middle of working with him—I worked with him as a volunteer, and then also I’ve been a rider on him, and also worked as a patient in EAP, so I worked with him in all the different areas—but if you pet on him if you are working with him, he would lose bearing. It forces you to stay present with him, and I like that. That’s something that I struggle with, to stay really present. Not going to far forward, not going too far past, and living in the present. It’s probably the biggest struggle I have.”</p>
Awareness of One’s Values, Actions, and Emotions	General	Participants being able to identify their values, actions, and related emotions.	<p>“I’m having a really tough time right now, starting it with my kids, what not, that’s a common thing, but just to say it as an example. To complete the example, you know if I’m struggling with the kids and I go: “God, I don’t know what to do right now!”, it takes me back to that experience in EAP of “Ok, take a</p>

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
			<i>(cont.)</i> deep breath. You remember what you made your commitment to. Remember that if you just give it that extra mile, it will be worth it.” I was able to go through that thought process. So that’s how it’s helped me with my personal relationships.”
Enacting Ideas	General	Creating physical representations to visualize problems and try out solutions because of a therapeutic intervention.	<p>“And I also liked the experiential part of it where I was able sort of recreate in my own way... you know, how the specific scenario I was dealing with, played out. And then I got to sort of re-experience them. And also re-experience them with horse, which is a lot more... took the edge off of those memories that played back in my head. And I liked the fact that it created this metaphor for my life, or what I was dealing with. And that was an excellent coping mechanism too, because every time I did, like I said, it took the edge off, every time I did. Sort of played back those experiences in my mind. You know I was able to kind of process them a step further, step deeper.”</p>
Shift	General	Participant experiencing a movement forward and release from a perceived lack of progress.	<p>“I felt like I finally was able to tap back into that confidence, and that empowered female that I was before, or, I should say, in the Marine Corps. And that was that part of me that I was so proud of. There was nothing that I felt I couldn’t do, or that I would be afraid of trying. Like jumping out of helicopters, going to school, maybe Seals. There was nothing that I felt afraid of, or that I couldn’t take on. And then after this experience happened, it was like there was nothing that I thought I could do. So I guess after that EAP session, I felt like that empowered woman again. I was able to tap back into that.”</p>
Increased Well-Being	General	Participants indicating global beneficial effects in.	“I can see the change, I can feel the contentment. I sleep better too. I sleep so much better, I enjoy my

Domain and Categories	Frequency	Illustrative Core Idea <i>(cont.)</i> regard to their mood as a result of EAP	Sample Quote <i>(cont.)</i> sleep. I get a good night sleep most of the time. I used to go days without sleeping. I never even told them that.”
Learning from Other Participants’ Experience	Typical	Learning that occurred for participants when they reflected on other participants’ EAP experiences.	<p>“We go to different topics. Whatever it is we go to examples of why we did, this or that. We bring them out here, we bring them in the open here. So everybody else, who listens to our problems, may even help us. So that’s what I like about it. (...) I like to listen to other people what their experiences are. Why are they in a program, why they want to do this, what they did in the military. It is an overall good feeling to be here. You learn things about yourself you didn’t know before. Listening to other people problems you can relate with them. You got the same problem, you know.”</p>
Influence of the Horse		Horses’ actions in the sessions and how the participants interpreted horses’ behavior and its role.	
Horses Mirroring Feelings	General	Participants’ ability to identify their own feelings through the horses’ actions.	<p>“Sometimes the horses in the arena would completely walk away, like they were completely... not repelled, but just my energy wasn’t an attractive energy, and the horse is not going to lie, they are not going to be drawn to you if you have a lot of negative energy, either anxiety or stress, anger. Yet, they are able to discern if you are in a place... you don’t have to totally abandon those feelings, rid yourself of it, they can sense when you are ready to walk on it, you are really, truly ready to perceive something, to be ready to change some mindsets, open and receive. So then they will show a little bit more interest in what is going on, sharing the space. So I like that, that kind of showed me the barometer, ok, let’s go to work, you</p>

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
Horses' Interactions	General	Horses' behaviors towards props, people, and other horses that bring meaning and solutions to the participant.	<p>(cont.) can deal with your stuff, kind of settling a bit.”</p> <p>“I think one of them was working on a particular problem that I had had. The Equine Specialist said you just have to peel this back like an onion, in layers. And I created a scenario, which included cones stacked up, and one of the horses came over and picked up the top cone and sat it down, didn't knock it over, just picked it off the top, sat it down, just like he was peeling an onion. Really amazing, I was amazed, it was just really really incredible. (...) And it was a feeling of 'I can do this.' There was a real gratification, and sense of relaxation, that by working with the horses that this would be the problem that I would eventually conquer, just by going layer by layer, getting down to earth bottom and then dealing with that. I was pretty happy about it.”</p>
Horse's Presence	General	Horse's physical presence being able to diffuse negative emotions and soothe participant's senses.	<p>“Nothing specific happened, except that the horses didn't shy away. As I walked through things, they were there to support me, they just stayed by me. (...) They just walked with me. I turned right, they went right, I turned left, they went left. It was just a whole hour of being supportive. And that feeling: 'I've got your back', and that was the emotional part that just came over me and I said: 'Ok, it's ok, it's alright.' Would I have felt that without them [horses] having my back? I don't know, probably not. But just working in the program it came up for me – nobody said anything, they [horses] came to watch over me and were like: 'Hey, it's ok, we've got your back, it's ok to do it.”</p>

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
Horses' Empathy	Typical	Perception of horses as attuned, good listener who provide non-judgmental space for the participants.	"The horses look very intelligent to me. And when they stop and they pay attention... (...) I notice if I have a problem and I'm talking about it, they step right in. It's almost like they're listening. And I think sometimes you just want to be heard. Sometimes you don't need a solution, you just want to be heard. I feel badly and I want somebody to hear that I feel badly, you know."
Identification with a Horse	Typical	Participant projecting herself or himself into the horse and learning about themselves through this process.	"So in a group of other horses, in a session with a group of horses, I would always identify certain components to myself with a horse. So, you know there's a horse that's really sort of small, and mighty and just bossy, and I identify with that. And there's another horse that's sort of compassionate, nurturing, and I identify with that. And so I was able to see how they kind of coexisted, and then how I can coexist with these different types of my personality."
Connecting with Horses	Typical	Satisfaction from establishing connection with horses.	"There is funny little thing that happened that day, it was really amusing. One of the thing they say, if you have anything in your pockets, food or sugars or anything, leave it outside the arena. Well, one day I had something, I think I had something like some peanuts or cashews or something that I forgot to take out of my pocket. And I was paying attention to the other horses. And one of the horses that we have in our sessions is a miniature. And my back was toward him, and he came right up to me and put his nose into my pocket, and his nose was right at the pocket height. That was so funny, he was like: "what you got there honey?" It was really amusing. [I felt] amused and pleased, because this miniature in the group is the most standoffish and free. For the two of us to approach, there has to be a little bit

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
Horsemanship	Variant	Role of previous experiences with horses	<p><i>(cont.)</i> of coaxing on my part. Or maybe the coaxing was there just by the food, and I've forgotten about it. It was nice to see that he responded to me, and was so comfortable with me to get that intimate. Or maybe it was just food, that was his motivation. So it was nice, it was fun.”</p> <p>“As a horse person, being around horses literally from the time that I was like a 1 year old. Now I'm 31, so thirty years of horse experience and you have this level of that expectation of yourself and your skills. It's kinda the way I treated the Marine Corps when I went in – there's nothing that I think that I can't do. I always know that there's something for me to learn. I'll never be narcissistic to the point where I think there's nothing more for me to learn. But knowing those two things, I know that there's nothing that I can't take on a horse.”</p>
Satisfaction with Treatment		Participants comparing their participation in EAP to other mental health treatments they received and expressing their level of satisfaction with their EAP experience.	
Recommending EAP to Others	Typical	Participants describing their EAP experiences to other people and encouraging them to participate as well.	<p>“I saw this guy he works in the front desk, and he is 70% disabled... 90%! He is young, he was in the military. So I think he might have seen one war or two. You can see it in his eyes that he's not well. But I didn't know that at first, and he told me. And I say: 'You know, you would enjoy a horse therapy.' He says: 'Really!?' – because people don't know about it and I feel like I'm advocating for it... I told him 'You would like to go in there and</p>

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
More Effective than Other Therapy Modalities	Typical	Participants' perception of EAP's enhanced effectiveness as compared to other therapy modalities.	<i>(cont.)</i> talk about what has happened, and what is happening. And they have psychologist on board.” “I thought I was very effective, probably the most effective therapy I've ever had. And I've had everything there is. It resolved more issues faster than anything that I've ever done. It's the most powerful form of therapy, and also most enjoyable. I didn't dread it the least and I always walked away from it feeling like I got a lot out of it.”
Enhanced Ability to Address Military Experiences	Variant	Participants' experience of being able to talk about their military experiences more easily in EAP than in other types of therapy.	“It was probably the third or fourth session that I ever had, and it was a good session, with another female, Marine. And the therapist said I want you to build out . . . , want you to recreate past, present and future of your time in the military, and sort of identify that pinnacle point that was really difficult for me . . . I laid a bunch of camouflage utilities, uniforms I never really discussed with people what it was that had affected me in military. So it was my first experience of talking about it out loud and actually addressing it. So it was really powerful and full of emotions for me. So as I'm lying all of this stuff that's symbolic of past, present, future and that really difficult time . . . the horses are all over in the far corner of the arena – opposite side of the arena – not paying attention to anything that I'm doing, and just in fact eating grass on other side of the fence. And then when it came time to me actually discussing, therapist said “Ok, what does this mean?” and I basically discussed a little bit about it, as I got started horses were still over there in that corner – and the second I started talking about that pinnacle moment, which was directed towards the utilities, like utilities represented

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
Challenges		Factors that were perceived as challenging for participants either in EAP sessions or on their path to participating in EAP.	<i>(cont.)</i> that pinnacle moment, and it was utilities and I put like a bear face down in a puddle of mud – and this one horse he just came over . . . from probably a hundred feet away, and he just walked straight over, didn't say hi to us, didn't do anything, but first thing he did was grabbed the bear and the utilities, and just he picked up it in his mouth and tossed it to the side! And then walked up to me. And it was . . . a whole lot of coincidence to be not a coincidence. And so it just happened to be at that very moment that I talked about that very object, and it was just rooting with emotions, and anchoring fear, whatever – they came over. So that's been my experience of them. They're having the understanding.”
Lack of Horse Experience	Typical	Participants' experiences related to their lack of previous formal knowledge about horses and horsemanship	“I thought I would ride the horses. But I told other people that I've never even done that. I'm so content with sitting and talking and interaction, having L (therapist) and having A (Equine Specialist) there. And I don't even think about riding anymore.”
Apprehension	Variant	Participant's uncertainty about some aspect of EAP.	“Well, the props, the stuffed animals... Seeing how the horse would react to the props. I don't really think the horses reacted that much. They were just walking around. And weren't really aware of the props... the emotions we were trying to express. I think the main benefit was that we tried to express our emotions with props. (...) I remember feeling the emotions,

Domain and Categories	Frequency	Illustrative Core Idea	Sample Quote
			<p><i>(cont)</i>. something that was funny, but I don't remember what it was that was so funny. But I remember just being entertained by some little things that we were doing. Or maybe not entertained, but it just felt silly. But it wasn't so silly that I didn't want to participate. It was fun."</p>