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Review Article

Veterans' Therapeutic Partnership with Horses: A Review of the Literature

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Abstract

This article summarizes literature review of current research on the use of equine assisted activities and therapies in the veteran population and provides implications for practice and research. Utilizing electronic databases CINHAL, Medline, and PsychInfo, a search was conducted for studies within the last five years. Search terms included: Equine Assisted Activities (EAA), Equine Assisted Learning (EAL), Equine-Assisted Psychotherapy (EAP), EAP, Equine Assisted Therapy and Veterans. On average, each database yielded eleven to fourteen relevant studies on equine assisted activities and/or therapy and psychotherapy, but most were not related to veterans. Common themes were identified and explored with a secondary search such as: Equine Assisted Psychotherapy in Veterans and Equine Assisted Psychotherapy in Post-Traumatic Stress Disorder (PTSD) and Substance Use Disorders (SUD) and Veterans and Horses. The results showed a gap in veteran equine assisted activity and therapy literature and a lack of theoretical frameworks in published studies related to EAP and EAA.

Keywords: Equine; Equine Assisted Activities and Therapies; Equine Assisted Psychotherapy; Horses; Veterans; Military

Introduction

According to the United States (US) [1], there are 18,939,219 veterans in the US with the majority living in California, Texas, and Florida. Veterans demonstrate specific issues particularly in the area of relationships (high divorce rates) and body and mind (acute and chronic health conditions secondary to complex deployments). Approximately 11 to 20% of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans suffer from Post-Traumatic Stress Disorder (PTSD). Approximately 12% of Gulf War (Desert Storm) veterans suffer from PTSD and approximately 30% of Vietnam veterans suffer from PTSD at some point in their lifetime [1].

PTSD is a mental health issue that veterans face as a result of exposure to combat, life threatening situations, witnessing death or life-threatening situations, exposure to natural disasters, and/or assault [2]. Anger is a common response to trauma since it boosts energy to overcome fear and survive [3,4]. Veteran aggression is associated with younger age, less education, higher PTSD severity, higher drinking severity, suicidal ideation, more alcohol and marijuana consumption, and more combat exposure [5]. This information coupled with the fact that the veterans who need treatment most likely display noncompliance, therefore, present an especially vulnerable population [6]. Although anger and aggression are survival mechanisms related to PTSD, outbursts of these extreme emotions can seriously affect veterans' ability to maintain relationship(s), which results in high divorce rates and inability to maintain employment which then result in additional detrimental effects. The purpose of this literature review is to

identify, summarize, stratify, and categorize the literature on the use of equine assisted activities and therapies (EAAT) in the veteran population and provide implications for practice [7].

Methodology

The following electronic databases were utilized: CINHAL, Medline, and PsychInfo. Studies conducted within the last five years were sought, however, given the limited number yielded from the search, a few studies (a bit) older than five years were included. Search criteria inquiries included: Equine Assisted Activities (EAA), "Equine Assisted Learning" (EAL), Equine-Assisted Psychotherapy (EAP), EAP, Equine Assisted Therapy and Veterans. On average, each database yielded eleven to fourteen relevant studies on equine assisted activities and/or therapy and psychotherapy, but most were not related to veterans. Common themes were identified and explored with a secondary search such as: Equine Assisted Psychotherapy in Veterans and Equine Assisted Psychotherapy in Post-Traumatic Stress Disorder (PTSD) and Substance Use Disorders (SUD) and Veterans and Horses. The results of the second search yielded various studies on EAP, but few on veterans in conjunction with EAAT and/or EAP.

Theoretical Framework

The holistic model of nursing considers that mind, body, spiritual, cultural, relationships, and environment are all interconnected. EAAT, including equine assisted psychotherapy (EAP), integrates complimentary and holistic interventions to promote healing from a humanistic perspective.

Equine Assisted Activities and Therapies

EAAT includes a broad array of pursuits whereby equines are incorporated into a healing process. EAAT may include such practices as equine assisted activities, equine assisted therapy, equine assisted learning, equine assisted psychotherapy, hippotherapy, interactive vaulting, therapeutic driving, or therapeutic riding [7]. EAP is a specialized form of equine-assisted therapy that addresses mental health challenges by means of a licensed mental health professional, a certified equine specialist, and equine partnering as co-facilitators [8,9]. EAP is grounded in the natural affinity existing between horses and humans combined with traditional psychotherapy practices [8].

EAAT has been shown to help a range of populations, spanning from adolescents overcoming behavioral issues to patients with moderate stage dementia, as well as both civilians and military veterans [10-12].

Equine Assisted Therapies (EAT) and /or Equine Assisted Psychotherapy (EAP)

First, the study by Romaniuk M, et al. [12], was designed to evaluate the outcomes of EAT on veterans of the Australian Defense Force and their partners in the domains of depression, anxiety, stress, posttraumatic stress, happiness and quality of life, and to compare the effectiveness of individual versus couples programs. The program was an EAT program held over 5 consecutive days. The study was built on relational Gestalt Therapy, mindfulness, grounding techniques, and elements of natural horsemanship. Participants worked with horses and engaged in group discussion, providing them an opportunity to process and reflect on their experiences during each session.

The participants of the study were 25 veterans (individuals) and 22 Couples, composed of a veteran and their partner. Outcome measures included the Depression Anxiety Scale-21 (DASS-21), the PCL-5 checklist, the Oxford Happiness Questionnaire (OHQ), and the Quality of Life, Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF). Samples were recorded at pre-intervention, post-intervention, and 3 months' follow-up. Individual and couples results in this study were compared between each other.

There were no differences between any programs at pre-intervention. At post-intervention, individual participants showed significantly lower scores on DASS-21 and PCL-5 compared to pre-intervention, along with higher OHQ scores, and Q-LES-Q-SF scores. Follow up scores (3 months), however, returned toward pre-intervention levels for OHQ, Q-LES-Q-SF, PCL-5, and DASS-21 sub-scores on Stress and Depression. Thus, the individual improvements did not appear to be long-lasting. Couples' scores at post-intervention showed improvement in DASS-21 (all sub-scores), PCL-5 scores, OHQ scores, and Q-LES-Q-SF scores. At 3 months follow up, all scores except OHQ and Q-LES-Q-SF remained significantly improved compared to pre-intervention measurements. The researchers concluded that EAT may be beneficial for reduction of depression, PTSD, and other symptoms in veterans if their partners participated with them during the therapy.

Next, Steele E, et al. [11], studied the effects of the Warrior Camp (WC) in military service members and veterans. WC is a 7-day intensive therapeutic treatment designed to address the effects of combat trauma. "It incorporates eye movement desensitization and reprocessing (EMDR) therapy, EAP, yoga, and narrative writing in the context of community" (p. 404). The study included 85 participants as a single-group pretest-post-test design to assess PTSD, dissociative experiences, depression, attachment, and moral injury.

Outcome measures included: a) the Mississippi Scale for Combat-related PTSD and the Davidson Trauma Scale for PTSD symptoms; b) the Dissociative Experiences Scale (DES) assessed dissociation symptoms; c) the Patient Health Questionnaire-9 (PHQ-9) assessed for depressive symptoms; d) the Revised Adult Attachment Scale (RAAS) assessed for relational attachment; and e) the Moral Injury Events Scale (MIES) was used to assess participants' experience of moral injury.

WC participants showed statistically significant pre- and post-

treatment differences on all measures ($p < 0.001$). Although this study does not allow for attribution how much the equine component of this treatment contributed to these effects, the authors suggest the possibility that the use of equines is an important alternative therapeutic intervention for PTSD related symptoms. Specifically, the equine element of treatment may help to establish safety and development of trust, self-esteem, and increased self-efficacy.

Also, the study by Malinowski K, et al. [13], was meant to test the hypotheses that 1) participation in EAT would alter physiological markers of stress and well-being, including plasma cortisol, plasma oxytocin, and heart rate variability in horses who serve in EAT, and that 2) that five sessions of EAT would reduce symptoms of PTSD in veterans who had previously been diagnosed with PTSD. The subjects were seven US veterans, six males and one female, ranging in age from 31-68 years old, all with previous diagnoses of PTSD. Three of the seven veterans had prior experience with EAT.

Veterans completed five EAT sessions of one hour each over the course of five consecutive days. Blood samples were taken 30 minutes prior to EAT, at the start of each session, and at 10 and 30 minutes after each EAT session. Measurement of PTSD symptoms and overall psychological distress was conducted prior to the first EAT session on day 1 and immediately after the final session on day 5. Measures were the Brief Symptom Inventory for psychological distress, and the PCL-5 checklist, and 20-item self-report measure from the Diagnostic and Statistical Manual of Mental Disorders-5. Veterans' HR, respiration rate, and blood pressure were measured daily before and after each EAT.

Horses showed no clinically significant differences in plasma cortisol, plasma oxytocin, or HR and heart rate variability by day of study. Veterans showed statistically significant reductions in overall Global Severity Index of the BSI, as well improvements in Somatization, Obsessive Compulsive Disorder, Depression, Anxiety, Hostility, Paranoid ideation, and Psychoticism. They also showed significant improvement in their Composite PTSD Score (PCL-5), as well in their sub-scores on Cluster C Avoidance symptoms and their Cluster E hyperarousal symptoms. No clinically significant changes in veterans' physical measures were detected.

In addition, Burton et al. (2018) compared EAP with standard PTSD therapy. Twenty total U.S. adult male and female veterans with PTSD participated in the study. Ten intervention group participants received Equine Assisted Growth and Learning Association (EAGALA) 1-hour group sessions over the course of six weeks. All participants (both intervention group and control group) received their otherwise usual PTSD standard care per their healthcare providers throughout the duration of the trial.

The PCL-M was used to assess PTSD symptomology. The Connor-Davidson Resilience Scale (CD-RISC) was used to assess resilience. Salivary cortisol was obtained at the beginning of the study and again at week 6 (end of study). PTSD symptoms reduced in both the EAP intervention and the control group over the 6 weeks. Resiliency increased in both groups over the 6 weeks. Salivary cortisol demonstrated only a slight change.

This study was the only prospective, controlled study that looked at any type of biomarker, although the sample was very small. Also, the cortisol measurement fluctuate depending on various physiological factors such as circadian rhythm and measuring several times throughout the day (i.e.: when getting out of bed, 30 minutes after awakening, noon, and at bedtime, defined as 10 hours after awakening) would better indicate a change in cortisol levels [13]. Although the study was not able to demonstrate any statistically significant results, participants did report a calming effect from the outdoor treatment environment and the horses. Participants reported improved patience, trust, relaxation, stress relief, self-esteem, and personal growth. They also reported improved quality of life.

Finally, Ferruolo's [14], pilot study followed eight white male veterans over the course of either a one or two days of equine facilitated mental health (EFMH). Although, EFMH was not found to be an approved term or terminology by any of the certifying equine therapy associations, it appears that EFMH is most closely related to EAT and/or EAP and so this summary was placed under the category EAT/EAP. Ferruolo asked a series of questions regarding the equine activities, facilitators, working in groups, and the farm facility. Themes that emerged from analysis of the open-ended questions were learning about self, spiritual connection, trust, and respect.

Although this study had multiple limitations, the authors concluded that EFMH is efficacious for veterans with mental health issues. The authors determined that the pilot study itself, with maximally 2 days of EFMH retreat, should not be considered true psychotherapy but instead termed it "psychoeducational" since the interactions were limited to the two days and also since there was no continuation of treatment and/or follow up.

Hippotherapy

A case study by Aldridge Rl, et al. [15], compared traditional physical therapy intervention with and without hippotherapy on the motor performance of a 34-year old male veteran. The veteran presented with low back and neck pain. The expectation was that the combination of hippotherapy and traditional physical therapy intervention would yield better outcomes than traditional physical therapy alone. The order of the interventions was selected at random. Treatment A, hippotherapy with traditional physical therapy, was delivered for one hour/once per week. After 15 weeks of treatment A, the subject began receiving just traditional physical therapy twice a week for an hour, for a total of 30 weeks of interventions. The same physical therapist followed the subject throughout the 30 weeks. The outcome measures used the Sheehan Disability scale, the Oswestry Low Back Pain Questionnaire and

the Neck Disability Index. The results on all 3 outcome measures showed that the combination of hippotherapy with traditional physical therapy led to the subject reporting decreased low back and neck pain. This case study is limited by its small sample size.

EAA and/or Therapeutic Riding (TR)/Therapeutic Horseback Riding (THR)

Lanning & Krenek [16], study used a mixed-methods design (qualitative and quantitative data) to test for changes in quality of life indicators and depression symptoms. Data collection occurred over a 24-week period with 13 veterans. TR sessions were conducted once a week for approximately 1-2 hours in length. Quantitative data was collected using the Short Form Health Survey version 2 (SF-36v2) and Beck Depression Inventory-2nd edition (BDI-II) to assess changes in health behaviors and depression symptoms. Post-intervention open-ended questions were used to gather qualitative data and to determine emerging themes regarding the effect of EAA on the participants.

Participants who completed 12 weeks or 24 weeks, reported an increase in life health behaviors and a decrease in depressive symptoms. Qualitative comments indicated increased sociability, reduction in isolation, and an increase in trust of others among study participants. "Although it is unclear whether the TR intervention was responsible for the noted changes in health domains and depression symptoms—due to a lack of control conditions—there is overarching evidence that participating in this type of intervention was beneficial for the veterans" (p. xii).

Next, Lanning BA, et al. [10], examined the effects of a standardized 8-week THR curriculum on PTSD symptoms, quality of life, and functioning for post-9/11 veterans and active duty service members. "The curriculum consisted of eight 90-minute sessions that occurred once a week. The first 4 weeks were dedicated to non-riding exercises that included grooming, leading, working with the horse in a round pen, developing a relationship with the horse; and the last 4 weeks consisted of riding and horsemanship exercises" (p. 264). Fifty-one combat veterans and active duty members participated in the 8-week program. Thirty-nine completed all 8-weeks.

Quantitative data was collected at weeks 0 (baseline), 4, and 8, and at 2 months post-intervention. Qualitative data (using seven semi-structured questions) was collected at week 8. The PCL-M and the PCL-5 were used to measure PTSD symptoms. The SF-36v2 assessed quality of life and the World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) assessed functioning. Participants reported a clinically significant improvement in mental health (i.e. PTSD). There was a lack of change in physical health.

Also, Voelpel P, et al. [17] qualitative study examined veteran student nurses of Stony Brook University who underwent equine therapy (ET). The program was offered to a total of 40 veteran nursing students enrolled from 2014 to 2017. Activities included trust walks, guided visualizations, meditation, and other exercises designed to decrease anxiety and stress. Participants then wrote a narrative about an emotional experience near their horse partners and the horse's behavior was observed. Although the participants agreed that the results could not be used as a definitive assessment of ET therapeutic value, the results of the study showed that most participants stated the therapy has contributed to their sustained enrollment in nursing studies. Eighteen out of 21 respondents reported a decrease in stress levels after participation. Results also demonstrated that 40.9% of respondents think that ET should be required for anyone reporting stress and another 40.9% think that this therapy should be required for all students.

The author offered two hypotheses that may account for why this therapy was effective. The first hypothesis is that the horse serves as a medium for the therapeutic process. Johansen RA, et al. [18], working with horses yielded a "sense of validation of power and control". Empowering may reduce attrition and motivate patients to engage in therapy. The second hypothesis is that the horse is uniquely therapeutic for this therapy. Johansen RA, et al. [18], horses can reflect the internal state around them, essentially mirroring the behavior of the patients. Other studies [19], echo this idea of 'horse mirroring the behavior of the participant' or that they are keen to the patient's body language and can give immediate feedback. This feedback would allow the participant to practice their communication skills. Results of the Voelpel et al. [17], study indicate that ET can reduce stress, can contribute to student veteran retention, can improve communication, and should be required.

In addition, Johnson RA, et al. [20], used the Social Cognitive Theory in this quantitative study that examined the effects of THR on 29 veterans comparing the veteran's demographic information and using four measures: The PTSD Checklist (PCL-M), The Coping Self Efficacy Scale (CSES), The Difficulties in Emotion Regulation Scale (DERS), and the Social and Emotional Loneliness Scale for Adults (SELSA). Of these measures, only the PCL-M showed a statistically significant improvement after the intervention. The intervention consisted of a six-week course of THR with a control group waiting six weeks before their therapy begins. Activities consisted of basic horsemanship, grooming and safety, mounting, warm-ups, riding, and cool down [20]. As the sessions continued, more time was allotted to riding and less time to grooming and safety.

The authors list the validity and reliability of each measure (PCL-M: 0.77-.093 and 0.97; CSES: 0.80-0.91 and 0.40-0.80 respectively). The DERS: tested against Negative Mood Regulation Scale for a validity of -0.69 and has a strong internal consistency of 0.93. The SELSA also has a strong internal consistency (0.87-0.90) and the authors report it has been thoroughly tested against other established measures. Although only the PCL-M was statistically and clinically significant (a 13-point change in score over six weeks of treatment), some of the other measures have shown mild improvement in their scores with the exception of the SELSA, the

results show a non-significant increase in perceived loneliness. This discrepancy may be due to the other measures showing slight improvements through the activities (practicing emotional regulation and self-efficacy through riding). After a few weeks of riding, the participant may ride with less staff available which leads to less human interaction.

The study originally had 29 patients, but the number steadily decreased with attrition at each data collection point. The small sample size limits the power to detect changes in the dependent variable (Johnson et al., 2018). Another aspect to consider is that the data reflects patients who were eligible for the study meaning that it is unknown if the results could be generalized to veterans over the 220-pound limit put in place for the intervention. Participants were recruited through the VA and only those who were able to attend the sessions could participate. Some veterans cited an hour-long drive to each session, which could have led to the attrition rate. Finally, if there are significant changes in the PCL-M score in six weeks, future research should investigate how long those improvements last.

Finally, Gehrke EK, et al. [21], conducted a study to evaluate the effect of horsemanship training with veterans on the autonomic nervous system and self-improvement of quality of life. Three different cohorts of 17 US veterans participated for three hours weekly in an 8 –week equine therapy experience over 2 years period. The researchers were interested to see the evidence of equine therapy in helping to alleviate anxiety and other PTSD symptoms for US veterans. Heart rate variability (HRV) and scores on the positive and negative affect schedule (PANAS) measured the effectiveness of equine therapy. HRV was measured before during, and after each equine therapy session. The PANAS was administered before and after each equine therapy session.

The study results demonstrated that the average positive affect score on the PANAS significantly increased by 14.4 % ($t= 5.78$, $p<0.001$) and in weekly improvement of HRV patterns. Moreover, veterans reported that they felt less anxious after HBR therapy. The researchers concluded that this evidence- based study might bring the positive outcomes for improvement of psychophysiological factors in veterans suffering from anxiety and other related PTSD symptoms after the equine therapy treatment.

Other and/or Combined Methods

Nevins R, et al. [22], describes a case study of a single veteran (male, 52 year old, US veteran medic twice deployed to Operation Iraqi Freedom), who participated in the Connection method offered by Saratoga WarHorse. The subject underwent 4 hours of educational training prior to interacting with the horse and then participated in a short session with a trainer until he completed a single exercise with the horse. He then engaged in 3 four-hour sessions (once daily for 3 days) totaling 12 hours working with the horse and the staff.

The subject was tested for baseline on five different scales: the Beck Depression Inventory-II (BDI-II), the Posttraumatic Stress Disorder Checklist (PCL-C), the Response to Stressful Experiences Scale (RSES), the Quality of Life Inventory (QOLI), and the Modified Social Support Survey (MSSS). Following the intervention, the subject retook the tests immediately after completing the program, and at 2, 4, 6, and 12 weeks post-intervention.

The subject showed an improved score on PCL-C in all post-intervention tests, suggesting improved symptoms of PTSD. Resiliency scores, as measured with RSES, showed improvement in 4 of 5 post-intervention time scales. QOLI scores showed minimal improvements at some time scales. Minor improvements in MSSS score were noted. The subject also claimed an improvement in sleep patterns after the intervention. In the words of the founder, Robert Nevins, Connection "differs from other traditional EAT work by using non-hippotherapy, natural horsemanship principles to help with emotional adjustment of post-deployed veterans. Only the horse and participant are allowed in the round pen, thereby providing the participant complete control of the Connection process."

Next, Asselin G, et al. [23], discusses a 44-year-old African American male veteran with an incomplete spinal cord injury at C3-C4. A certified instructor, horse leader, and two side walkers worked with the veteran during each session. The veteran was assessed prior to starting the program, after one year, and then after 2 years by a therapist. Assessment appointments were made through the Self Improvement through Riding Education (SIRE) program.

Results include the veteran's self-reporting of benefits with the horseback riding program. The veteran stated that he noted an improvement in increased muscle strength and decreased spasms. He also reported an increase in self-motivation to perform stretching and strengthening exercises at home.

Also, Wharton T, et al. [24], quantitative study examined the effects of a manualized equine-facilitated cognitive processing therapy (EF-CPT) on a modified approach to the CPT model developed by Resick, Monson, and Chard. Per Resick, Monson, and Chard's manual, CPT is based on a social theory that people suffering from PTSD are trying to regain mastery and control in their life. The idea is that if equine therapy is effective in promoting mastery and control, a decrease in PTSD scores should occur in veterans.

Twenty-seven participants were diagnosed with PTSD as defined by the PTSD Checklist at baseline with no concurrent treatments. In addition to their PTSD scores being recorded with the Veteran Affairs' gold standard PTSD Checklist-Military version (PCL-M), the participants also responded to the Trauma-Related Guilt Inventory (TRGI), the Working Alliance Inventory-Short Form (WAI-SF), and the Human Animal Bond Scale (HABS). The results of the EF-CPT demonstrated that 84% of participants no longer met the criteria for PTSD as defined by the PCL-M. This suggests that EF-

CPT helps endorse mastery and control that those suffering from PTSD seek and alleviates PTSD symptomology.

Finally, in another mixed method analysis study Gehrke EK, et al. [25], focused on understanding the effects of complementary therapy horsemanship program on the healing experiences of veterans diagnosed with PTSD. A cohort of nine US veterans participated in this study. The positive and negative affect schedule (PANAS) was administered before and after each weekly session during 8-week equine complimentary therapy program. In addition to quantitative PANAS survey, participants wrote weekly journals about their feelings, behavior, and emotions about interactions with horses. Phenomenological inquiry was applied to analysis of qualitative data. The following themes emerged: connection with horses, positive impacts, being present, horse mirroring, translating, trauma, and power dynamics. These themes resulted in reduction of PTSD symptoms and promotion of healing from trauma. Researchers interpreted that the veterans' behavior is mirrored in the horses' behavior, which helped veterans to recognize it in order to form a strong bond with their assigned horse.

The PANAS results demonstrated a significant change in positive affect after the second week of equine complementary therapy program. This change in the PANAS results stayed statistically significant after the second week and for the rest of 8 weeks of complimentary horsemanship program. The researchers concluded that complimentary equine therapy produced a positive behavior change in combat veterans and it might serve as an effective treatment method of PTSD symptoms.

Summary of Theoretical Literature

There were no published studies found that used theoretical frameworks related to EAT and EAA. This review indicates there is a significant gap in the veteran equine activities and therapies literature using theoretical frameworks and significant opportunity and need to study equine activities and therapies within a theoretical framework.

Implications for Practice and Research

Healthcare providers, who deal with patients who are therapy resistant, or who may not be appropriately served by traditional therapies, should be aware of EAAT as options to discuss with patients who may benefit from this alternative therapeutic modality. It is not yet clear whether gains shown by patients who experienced EAAT are sustained over time. There were no longitudinal studies available as Lee AN [26], states, and EAP is expensive and tends to drive most studies to a qualitative approach. Considering the effects of EAP on patients with dementia, there were no studies examining the effects of EAP on psychotic symptoms and their mindfulness. Limitations of many studies are that they focused on either Caucasian or male samples. Although one study conducted by Walsh & Blakeney [27], had an all-female sample, their focus was on nurses, potentially limiting its application to a more general population. There were few studies that had mostly female participants and no study that focused on the effects of EAAT on a sample of minorities. The lack of available data on gender specific benefits, long-term results, and the lack of inclusion of sizable samples of non-Caucasian ethnicities in studies limits the conclusions that can be made about the general applicability of EAAT, thus warranting further research that takes into account these factors.

EAGALA

EAGALA utilizes client experiences with horses to drive change (EAGALA, 2019). EAGALA sessions require a team approach inclusive of a qualified mental health professional, an equine specialist (someone who specializes in horsemanship and equine behavior), and horses. All EAGALA work is done on the ground, with no riding. Horses are not haltered or restrained in any way allowing them to interact with clients in an uninhibited way. Sessions are facilitated by the human mental health professional and equine specialists but ultimately the experience occurs through client interaction with the horse with subsequent processing and reflection about how what they are seeing in the paddock plays out in their lives.

PATH Intl

PATH Intl. is a global authority in accreditation and certification of equine assisted activities and therapies. PATH Intl. (2019) "promotes safety and optimal outcomes in equine-assisted activities and therapies for individuals with special needs." Through various modalities, PATH Intl. advocates for EAAT and provides standards for safe and ethical equine interaction, through education, communication, standards, and research.

Conclusion

Despite the limitations of existing studies, the literature suggests that EAAT is an effective therapy for PTSD, depression, anxiety, attachment issues, and behavioral problems among a variety of populations. Veterans are vulnerable to those conditions and current studies support using EAAT therapy [10]. Some issues, such as attachment, are associated with other issues, such as PTSD symptoms, so treatment for these conditions must address them both. The presentation of more PTSD symptoms may precipitate a higher incidence of drop out from traditional therapies [29]. EAAT can be used as an effective tool to help patients become more mindful, practice communication skills, and get instant feedback. These benefits can help ward off attrition from traditional therapy.

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Conflict of Interest

The authors have no conflict of interest to disclose.

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