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## Long-Term Outcomes of Equine-Assisted Therapy for Veterans with PTSD.

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# Long-Term Outcomes of Equine-Assisted Therapy (EAT) for Veterans with PTSD.

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Figure 1. Logo, Horses & Heroes. (n.d.) [Photograph]. <https://www.horsesandheroes.org/>



Figure 2. Logo, Horses & Heroes. (n.d.) [Photograph]. <https://www.horsesandheroes.org/>

## Introduction

- The U.S. Department of Veteran Affairs reported that 11-20% of veterans that served in Operations Iraqi Freedom and the Gulf War are diagnosed with posttraumatic stress disorder (PTSD) every year.
- PTSD can contribute to functional impairments, psychiatric comorbidity, suicidality, substance use, chronic pain, poor physical health, and delayed treatment seeking.
- Typical treatment of PTSD includes cognitive processing therapy, prolonged exposure, and written exposure therapy as well as certain medications.
- Equine-assisted therapy (EAT) is an alternative treatment approach which integrates horses into intervention techniques to promote the ability to recognize feelings, regulate emotions, regain trust, and better communicate.
- EAT promotes gains in global psychological functioning, emotional regulation, self-esteem, and self-efficacy.

## Site Description

- Horses & Heroes: Leavenworth, KS
- Non-profit organization that provides equine-assisted psychotherapy for veterans and first responders living with PTSD in Leavenworth, KS.
- Mission Statement: Provide the healing and learning benefits of equine-assisted & alternative therapies to military, first responders, & their families.
- Services Provided:
  - Equine-Assisted Psychotherapy
  - Equine-Assisted EMDR
  - Therapeutic Massage
  - Pulsed Magnetic Field Therapy (PEMF)

## Summary of Needs Assessment

### Identified Needs of Site

- The longevity of outcomes of EAT are unknown or unclear.
- Lack of opportunity for social interaction opportunities with like-minded individuals.
- There is no occupational therapist on site, so there is a lack of use meaningful occupations.
- There is little opportunity to continue exposure to therapeutic environment post treatment.

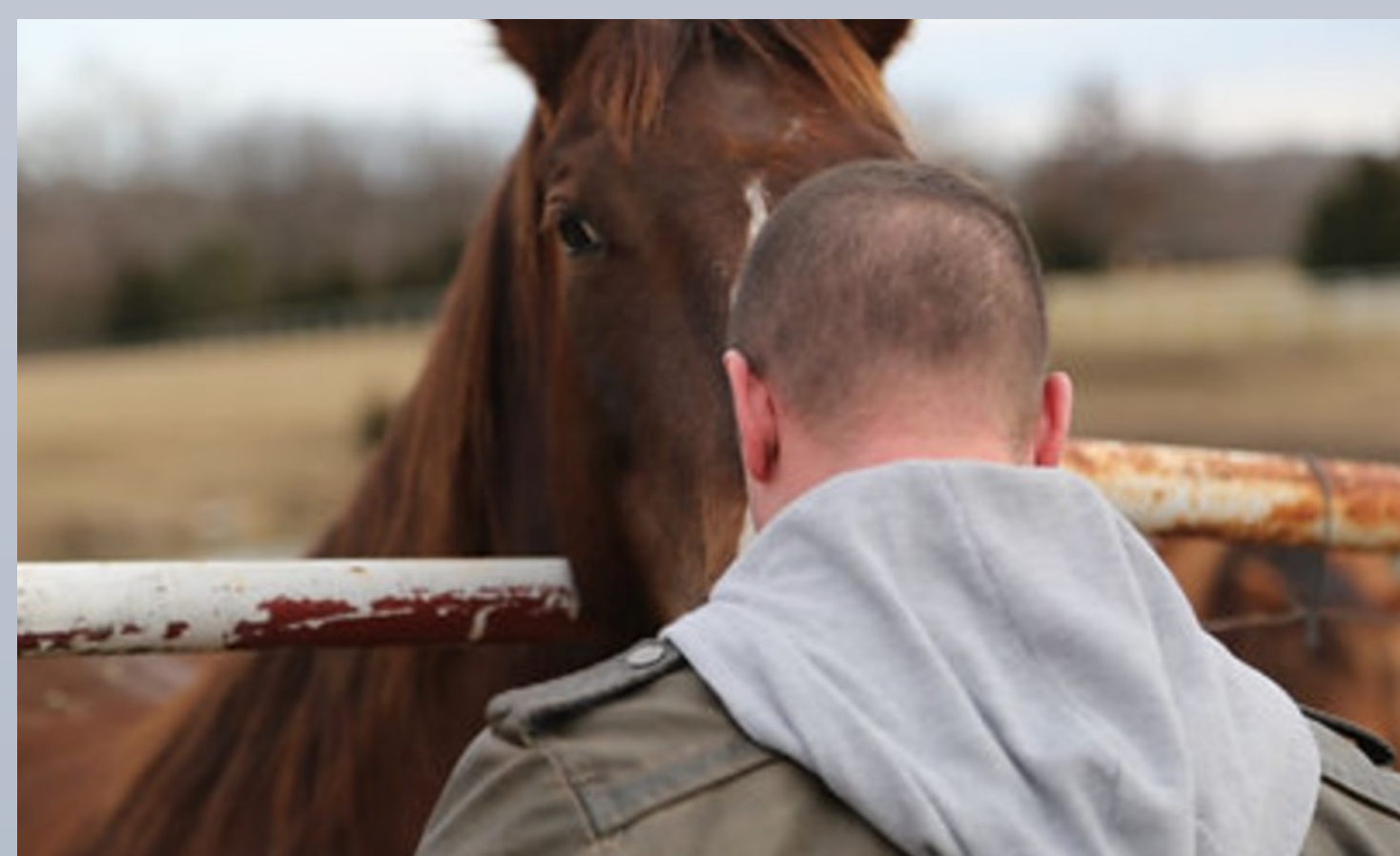


Figure 3. Veteran with a Horse. Horses & Heroes. (n.d.) [Photograph]. <https://www.horsesandheroes.org/>

## Literature Review Summary

- Current evidence supports the use of EAT as an alternative, supplemental treatment option (Arnon et al., 2020).
- Evidence supports the idea that veterans have actively sought out alternative therapies including EAT to meet their needs (Taylor et al., 2019).
- Johnson et al. (2018) determined that participants had an 81.8% likelihood of improvement in PTSD levels after participating in EAT.
- The context of the barn, feelings of meaningfulness, feeling happy/content were found to be overarching themes in EAT for PTSD (Bloch et al., 2019).
- Improvements in the ability to utilize conflict resolution strategies, better regulate emotions, and use of more effective communication after participating in EAT was found (Vasher et al., 2020), as well as improved confidence, trust, acceptance of self and peers, and gratitude (Lanning et al. 2017).
- A short-term decrease in PTSD levels and symptoms were found in all studies.
- The context and environment of the barn and outdoor exposure promote sense of social function and psychological wellbeing for veterans with PTSD (Wheeler et al., 2020).
- Long-term outcomes in all studies were unknown or negative.
- Researchers suggested the reason for limited long-term progress may be due to other resources not being available post treatment, which resulted in symptom rebound along with the idea that PTSD may require repeated processing of trauma memories (Arnon et al., 2020).

## Capstone Project Description

A peer-led group program that utilizes meaningful occupation-based activity, equine-assisted therapy environment, and opportunity for social participation to promote long-term outcomes after completing initial 8 –week EAT sessions. Meet once a month to complete a group occupation-based activity, spend time with horses, and engage in social activities.

### Program Goals

- Exposure to therapeutic environment over a longer time period.
- Further opportunity to develop horse-human bond.
- Enable social interaction.
- Use of meaningful activity to promote self-efficacy, motivation, and mindfulness.
- Create community of individuals that have gone through similar experiences.

Group Session Outline		
Introduction	<ul style="list-style-type: none"><li>Meet others in session.</li><li>Pair with partner.</li><li>Complete introduction activity.</li></ul>	15 minutes
Complete Activity	<ul style="list-style-type: none"><li>Follow instructions for meaningful activity for the session.</li><li>Mingle with horses and spend time in therapeutic environment.</li></ul>	25 minutes.
Summary/Generalization	<ul style="list-style-type: none"><li>Share how session/activity went for them and interpretation.</li><li>How is it applicable to daily life?</li></ul>	15 minutes

Figure 4. Group Session Overview.

Alumni Group Program Survey

- Are you satisfied with your current level of social participation?  
a. Yes  
b. Somewhat  
c. No  
d. Other:
- Are you satisfied with your current level of community participation?  
a. Yes  
b. Somewhat  
c. No  
d. Other:
- Are you satisfied with your current participation in daily activities (work, family, self-care, etc.)  
a. Yes  
b. Somewhat  
c. No  
d. Other

Figure 5. Entry Survey Questions



Figure 7: B.A.S.E. CAMP Logo: Bold Alumni Supporting Each Other (B.A.S.E.)

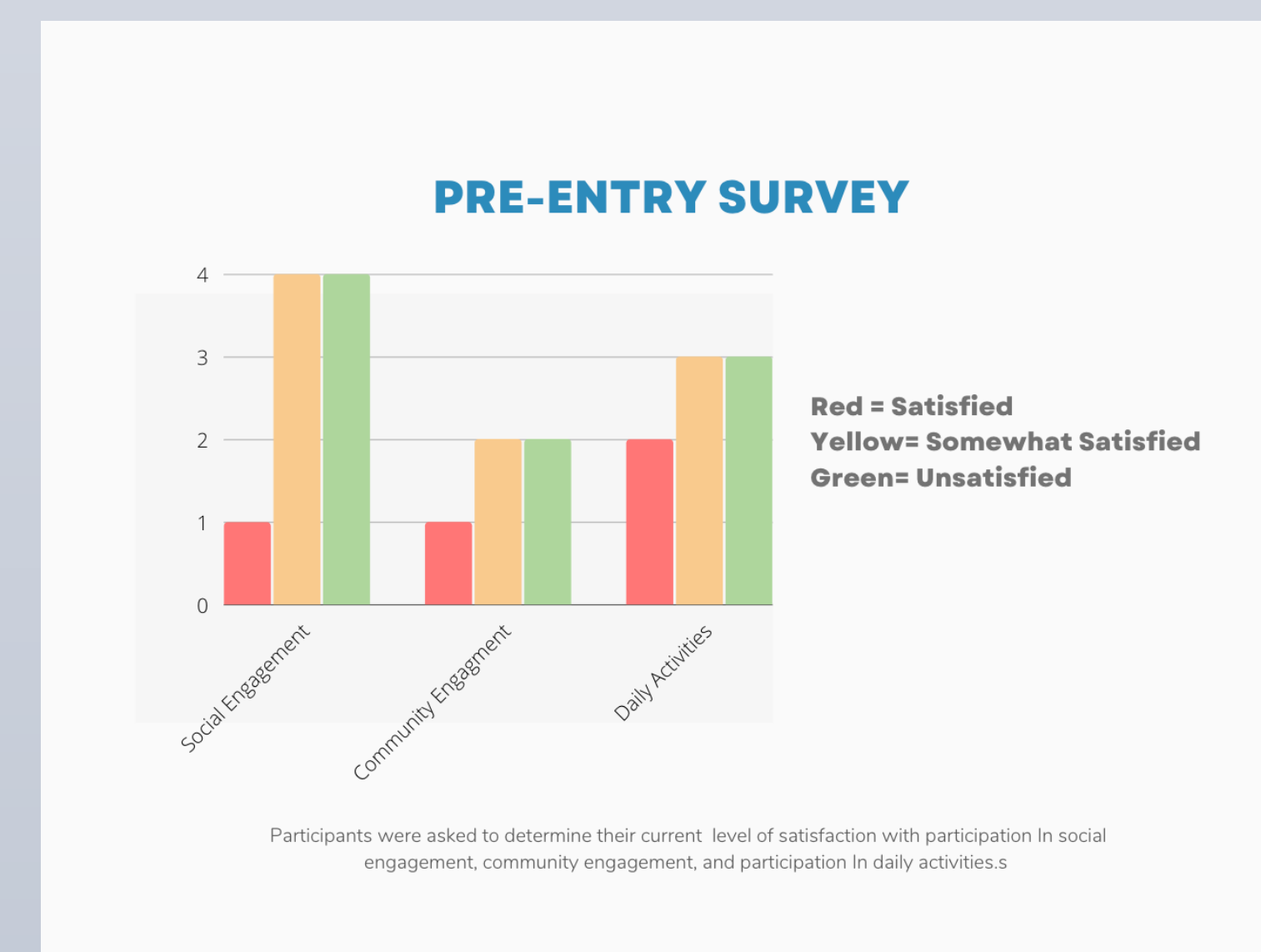


Figure 6. Entry Survey Results

## Learning Objectives Achieved

- Design and implement a long-term group program for veterans with PTSD to promote social engagement and self-efficacy.
- Demonstrate appropriate skills to effectively work in a mental health setting with the veteran population.
- Effectively incorporate occupation-based activities into the group program.

### Evidence supporting social participation and veterans.

- Meaningful activity and social support explain the relationship between participation in daily activities and subjective well-being.
- Veterans' engagement in activities of greater personal interest and activities that promote social connections is more likely to lead to a meaningful and satisfying life. Occupational therapy practitioners fulfill a distinct role in promoting veterans' well-being by facilitating sustained engagement in meaningful and shared activities.
- Kinney, A. R., Graham, J. E., & Eakman, A.M. (2020). Participation is associated with well-being among community-based veterans: An investigation of coping ability, meaningful activity, and social support as mediating mechanisms. *The American Journal of Occupational Therapy*, 74 (5). <https://doi.org/10.5014/ajot.2020.037119>

### B.A.S.E. CAMP Program

- Utilize the context and environment of the barn, being around horses, and being outside.
- Connect individuals that share similar experiences.
- Utilize meaningful activity in group sessions to support participation and social engagement to support wellbeing and quality of life long-term.

Figure 8. Program Purpose

## Implications for OT Practice

Implementation of group-long term programs in equine-assisted therapy promoted increased social engagement, peer support, confidence, and quality of life for veterans living with PTSD.

- Veterans benefit from developing relationships with peers that have gone through similar experiences.
- Use of occupation-based activities to promote mindfulness, social skills, and transfer of skills to daily life, which will facilitate the need for occupational therapists' role in equine-assisted psychotherapy.
- Continuous exposure to therapeutic environment to promote longevity of outcomes.
- Further examination of the benefits of a long-term group program in EAT should be completed with a larger number of participants and over a longer time period to determine sustainability of results.
- Implementation of a formal follow up survey should be completed over a longer time period to determine the impact on social participation, community participation, and participation in daily activities.

## References & Acknowledgements

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