

2024 HMM PROGRAM EVALUATION REPORT

VETERANS AFFAIRS ADAPTIVE SPORTS GRANT (ASG)



HORSES FOR
MENTAL HEALTH



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SUPPORTING U.S. VETERANS THROUGH HORSES FOR MENTAL HEALTH

The primary goal of the services supported by the Horses for Mental Health (HMH) Veterans Affairs Adaptive Sports Grant (VA ASG) program was to enhance the quality of life and overall well-being for US veterans by fostering resilience, meaning, and hope through equine-assisted interactions.

A total of 14 program sites across 12 states participated, and of those, 11 sites provided completed **pre- and post-program evaluations** conducted by participants. Across all sites, 354 participants were enrolled. However, by the end of the grant timeline, some participants had either discontinued the program (dropouts) or had not completed the assessments, while others were still actively enrolled and had yet to reach the post-program evaluation stage.

The following report is **based on data from 213 participants across 11 equine-assisted program sites**, all of whom completed pre- and post- program evaluation assessments. The grant-funded program provided **16 hours of services to each participant**, delivered either weekly or in a daily retreat-style format.

The aim of collecting program evaluation data was to assess the effectiveness of the services supported by the grant. The intended purpose of the data collection was solely to conduct a program evaluation. All the data provided for statistical analysis was completely de-identified before being submitted by the programs. Aside from the program sites, there were no identifiers shared or included in the data analysis.

MEASURING CHANGE: OUTCOMES FOR 213 VETERANS

This report summarizes **self-reported outcomes** from 213 participants who completed 16 hours of equine-assisted learning services. **Section A** presents findings from a **post-program feedback survey**, highlighting selected participant quotes and key themes derived from qualitative responses. **Section B** details the statistical analysis conducted on the 42-item **Ryff Scale of Psychological Well-Being** (Ryff, 1995), a widely used measure for assessing the impact of well-being interventions (van Dierendonck & Lam, 2023). Paired sample statistics were conducted using SPSS version 30.0 (Field, 2018) to **compare pre- and post-program Ryff scores, both for the total sum and its six subscales**. Additionally, effect sizes were calculated using Cohen's d (Cohen, 1988) to **assess the magnitude of changes in psychological well-being**.

Compiled for Horses for Mental Health (www.horsesformentalhealth.org), December 2024, by Nerds for Herds (www.nerdsforherds.com). Authors: Dr. Anastasia Georgiades, Dr. Angela Sherman, & Lynn Thomas.

A. RESULTS FROM THE POST-PROGRAM FEEDBACK SURVEY



WHAT WERE SOME OF YOUR STRUGGLES WITH MENTAL HEALTH & OVERALL WELL-BEING BEFORE COMING TO THE PROGRAM?

SOME DIRECT QUOTES FROM PARTICIPANTS

"PTSD, anxiety and depression"

"Tend to isolate, self-harm, lack of confidence"

"Struggling with substance use"

"Anything & everything, I was barely a shell of a man when I came here and now I am more confident, clear minded, w/ goals in sight, and this is a 1st in over 2 decades"

"Anxiety, Depression, Anger Issues, Self Doubt"

THEMES DERIVED FROM THE PARTICIPANTS' TEXT REPLIES TO THE QUESTION:



Mental health difficulties: depression, anxiety and post-traumatic stress



Isolation and loneliness: social withdrawal, loneliness



Difficulty with interpersonal relationships: conflict & communication challenges



Identity struggles: low self-esteem, identity, and sense of purpose



Coping: substance use, attempts at seeking help



Difficulties with emotional regulation: anger management & stress management



Life transitions: loss, grief, survivor's guilt, adjusting to change



Challenges with resilience: recognition of progress and learning acceptance of disabilities and patience with oneself



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HAS THE PROGRAM HELPED WITH THOSE STRUGGLES?

93%
OF PARTICIPANTS REPLIED
YES



IF SO, HOW DID THE PROGRAM HELP?

- “Provided insight for alternative ways to think about things.”
- “Practiced managing anxiety in group and feeling comfortable and welcome with horses.”
- “It has given me a safe place to venture out to, where I can have genuine and meaningful connection with other veterans, have a sense of community. Even when I didn't know what I needed, or what to ask, the horses somehow sensed and knew and surrounded me with love, safety, and a herd/family.”
- “Between the horses and the facilitator, I was able to think deeper and process the emotions through spending quiet time with the horses.”
- “Synchronizing with the horses helps me stay in my body and heart. To see them respond to that energy, reinforced it.”
- “Not as depressed or anxious as before PTSD is better controlled, am socializing better, standing up for myself, advocating for myself, interacting with my friends and family again. Suicidal ideation is completely gone. Interested in doing things again.”

THEMES DERIVED FROM THE PARTICIPANTS' TEXT REPLIES TO THE QUESTION:

-  **Emotional healing and growth:** overcoming fear and anxiety, emotional awareness and regulation, building confidence and self-acceptance
-  **Connection with others:** community and support, communication and relationships
-  **Interaction with horses:** therapeutic relationship with animals, grounding and mindfulness
-  **Personal development:** self-discovery and reflection, tools for coping and problem-solving
-  **Positive outlook and hope:** hope and future orientation, transformational experiences such as breakthroughs

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DID THE INTERACTION WITH HORSES BENEFIT YOU DURING THE PROGRAM?

99%
OF PARTICIPANTS REPLIED
YES

**“BEING IN
THEIR
PRESENCE IS
THE GREATEST
PEACE I HAVE
EVER
EXPERIENCED!”**

- “I’ve never felt more calm, grounded or in the present moment more in my life than when I am spending time connecting with these horses and good people.”
- “The horses are a reflection of us, and sometimes you need to see it from a different perspective to believe what you are capable of achieving. The horses provide this ability.”
- “Helped calm me down and concentrate. The horses gave me confidence and I felt I actually belonged in a group/herd.”
- “I found peace within myself while I was spending time with the horses.”
- “They showed me how I was showing up to others, and I did not realize that at first. It was eye-opening, for sure.”
- “I had to learn to match the horse’s level of confidence, and that helped me realize it was inside all along.”
- “The feedback from the horses wasn’t biased. They don’t know my story or my struggles.”
- “Taking the time to empathize and get to know the horses. Then doing the same with family.”

THEMES DERIVED FROM THE PARTICIPANTS’ TEXT REPLIES TO THE QUESTION



Emotional benefits: confidence building, calmness and relaxation, acceptance and love, connection and trust

Social interaction: community and relationships, non-judgmental environment

Self-discovery and self-awareness: insight and reflection, emotional processing

Therapeutic effects: therapeutic experience, reduction of anxiety and stress

Nature and animal connection: connection to nature, communication with animals

Personal growth and development: overcoming fears and life lessons

89%

OF PARTICIPANTS REPLIED "YES"

IF SO, WHAT WAS THE HIGHLIGHT?

"When the horses came to me I felt accepted and elated."

"Being amongst others who were dealing with similar issues."

"When one of the horses began following me without me holding its rope."

"Being able to address issues that I had hidden from and tried to not deal with."



THEMES DERIVED FROM THE PARTICIPANTS' TEXT REPLIES TO THE QUESTION:



Connection and Affection



Emotional Growth and Healing



Trust and Mutual Respect



Personal Transformation



Teamwork and Community



Mindfulness and Reflection



Empowerment



Nature as a Healing Space



5 WHAT WOULD YOU LIKE TO ADD OR CHANGE ABOUT THE PROGRAM?

SOME DIRECT QUOTES FROM PARTICIPANTS



"I want to come forever and I didn't really want to come at first."

"Program is amazing and wish Equine therapy was available throughout the VA."

"I would add more funding for the program so more veterans can use it."

"Longer follow-up program."



THEMES DERIVED FROM THE PARTICIPANTS' TEXT REPLIES TO THE QUESTION:



Requests for Additional Activities or Time



Change Time of Day/Seasons/Weather



Wishes for More Funding for the Program

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DID THIS PROGRAM IMPACT YOUR SENSE OF FLOURISHING, MEANING, AND HOPE?

92%
OF PARTICIPANTS REPLIED
YES

“I WAS HOPELESS BEFORE I ATTENDED AND LEFT BELIEVING THAT I ACTUALLY COULD LIVE AGAIN.”

“I am hopeful of improving my mental health, I found meaning in horses and healing.”

“I’m not nearly as anxious as I was when we started. I feel more at peace and hopeful for the future.”

“New exercise and work to do for better mental health. A new more effective way to see my own story being told.”

“I now have hope for my future.”

“There’s more to life that is available to me, and I shouldn’t limit myself because of negative beliefs.”

“I felt a new energy to take action on changing my life for the better.”

“It gave me hope that I can heal in ways that counseling hasn’t.”

“I have been able to see that there is light at the end of the tunnel since attending I haven’t thought that life isn’t worth living. Actually the exact opposite.”

“I’m living, not just surviving.”

“I never thought I would feel joy again but now I can.”

THEMES DERIVED FROM THE PARTICIPANTS’ TEXT REPLIES TO THE QUESTION:



Understanding and Awareness



Personal Growth and Self Discovery



Mindfulness and Presence



Hope and Positivity



Healing and Support



Creativity and Exploration



Sense of Purpose and Direction



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DID THIS PROGRAM IMPACT YOUR QUALITY OF LIFE AND WELL-BEING?

93%

OF PARTICIPANTS REPLIED "YES"

"Horses brightened my mood and gave me something positive to look forward to."

"It's shown me that I have an amazing quality of life; I just need to stop feeling sorry for myself and enjoy it!"

"I have a new sense of purpose that I have not felt in years."

"Being around horses is grounding, and to be able to do therapeutic activities at the same time... Every bit helps."

"The program gave me clarity and a sense of peace about who I am."

"It gave me the opportunity to step back and evaluate how I feel about what I am doing."

"I don't feel alone anymore; I feel calmer and have people I can rely on."

"It gave me my self-worth back."

"I feel lighter and more free to be myself."



THEMES DERIVED FROM THE PARTICIPANTS' TEXT REPLIES TO THE QUESTION:



Hope and Positivity



Connection and Community



Self-Awareness and Personal Growth



Mental Health and Emotional Regulation



Improved Relationships



Accomplishments and Progress



Resilience and Purpose



Mindfulness and Presence



Empowerment and Rejuvenation



Therapeutic Benefits of Nature and Animals

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WOULD YOU RECOMMEND TO OTHER VETERANS TO PARTICIPATE IN THIS PROGRAM?

97%

OF PARTICIPANTS REPLIED

YES



SOME DIRECT QUOTES FROM PARTICIPANTS



"This program will absolutely change your life for the better, opening your heart to endless possibilities."

"Everyone needs to go regardless of what else you have tried before."

"It was a safe place and welcoming community. You are welcomed and loved and valued and wanted here. There is always a place here for veterans."

"I try to get as many people as I can to go through the program because it's helped me so much."

"Who could ever go wrong with a horse to lean on?!"

PERCENTAGE OF PARTICIPANTS RESPONDING "VERY GOOD" TO THE FOLLOWING QUESTIONS (ON A 5-POINT RATING SCALE RANGING FROM "POOR" TO "VERY GOOD")



93% *How do you rate your program facilitators?*



92% *How do you rate the facilities?*



93% *How do you rate the horses?*



92% *How do you rate your overall experience in the program?*



B. RESULTS FROM THE RYFF SCALE OF PSYCHOLOGICAL WELL-BEING

In addition to the qualitative feedback listed above, participants completed the **42-item Ryff Scale of Psychological Well-Being** before beginning the program and at the end of the program. The scale measures various dimensions of personal growth and well-being across six subscales. The results presented here are based on **213 participants** who completed the program and filled out both the **pre- and post-program questionnaire**. Below is a summary of the results and what they signify.

The results below include a Probability value, or P-value, which helps explain the probability that the results were not due to a fluke or chance. The sample size of 213 participants gives us confidence that the findings are reliable and not just due to randomness in a small group. The level of significance with P-values of <0.001 indicates that the Ryff results presented here are **very statistically significant** and that the change in Ryff scores are extremely unlikely to have happened just by chance.

We also calculated Cohen's d to evaluate the magnitude of the effects for both the full Ryff scale and its subscales. Cohen's d is measured on a scale from 0 to 1, with higher values indicating more significant and meaningful changes. A Cohen's d of 0.2 represents a small effect, 0.5 indicates a medium effect, and 0.8 or higher signifies a large effect. In our analysis of the Ryff scores, all **Cohen's d values ranged from 0.50 to 0.70**, suggesting that the **observed changes in the sum score and all the subscale scores were meaningful and substantial**.



PRE-TO- POST- PROGRAM COMPARISON OF THE RYFF SCALE (TOTAL SCORE)

The total score for the Ryff scale increased significantly from 164.4 ± 33.9 to 187.1 ± 26.5 ($p < .001$). An increased total score on the Ryff Scale suggests an overall **uplift in psychological well-being**, indicating balanced personal development and improved satisfaction with various aspects of life. These results demonstrate that **the program led to positive change and increased participants' resilience, and growth, supporting better mental health and fulfillment.**

RESULTS PRESENTED SEPARATELY FOR EACH OF THE 6 SUBSCALES:

Autonomy

Higher scores on this scale suggest increased independence, self-confidence, and ability to withstand social pressures. The "Autonomy" scale scores increased significantly from 29.5 ± 6.7 to 32.9 ± 5.4 ($p < .001$), which reflects that the participants enhanced their self-reliance and had a stronger sense of self-direction after the program.

Environmental Mastery

Improvements in this area indicate better adaptability and control over one's surroundings. Results showed that "Environmental Mastery" scores increased significantly from 25.0 ± 6.0 to 28.9 ± 4.4 ($p < .001$). This suggests that the participants felt more capable of managing their environment, handling daily challenges, and creating circumstances conducive to well-being.

Personal Growth

Higher scores here denote a heightened drive for personal development and self-improvement. Scores for the "Personal Growth" scale improved significantly from 30.8 ± 6.9 to 34.4 ± 5.0 ($p < .001$). This increase indicates that participants showed renewed openness to experiences, willingness to challenge themselves and a continued focus on growth and expansion of skills and knowledge.

Positive Relations w/ Others

Improved scores in this dimension point to deeper, more satisfying relationships. The scores from this subscale improved significantly from 26.6 ± 6.8 to 30.1 ± 6.1 ($p < .001$), suggesting that participants showed enhanced empathy, trust, and positive engagement with others, fostering healthier and more supportive connections.

Purpose in Life

An improvement here suggests a stronger sense of direction and meaning. The scale "Purpose in Life" increased significantly from 27.2 ± 7.1 to 30.6 ± 5.8 ($p < .001$). This reflects greater clarity in goals and values, as well as a reinforced belief that life has purpose, providing motivation and resilience.

Self-Acceptance

Higher scores in self-acceptance reflect greater self-respect, self-worth, and acceptance of personal strengths and limitations. The scores from the "Self-Acceptance" scale increased significantly from 25.1 ± 8.1 to 30.0 ± 6.8 ($p < .001$). This indicates that the program led to better self-esteem overall.

REFERENCES

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4(4), 99–104. <https://doi.org/10.1111/1467-8721.ep10772395>

van Dierendonck, D., & Lam, H. (2023). Interventions to enhance eudaemonic psychological well-being: A meta-analytic review with Ryff's scales of psychological well-being. *Applied Psychology: Health and Well-Being*, 15(2), 594–610. <https://doi.org/10.1111/aphw.12398>

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THANK YOU



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