

Riding Free™ Pilot Study, an Equine Therapy Program for Children Diagnosed with Post-Traumatic Stress Disorder: Analysis of the PedsQL and Parent Report of Post-traumatic Symptoms (PROPS)



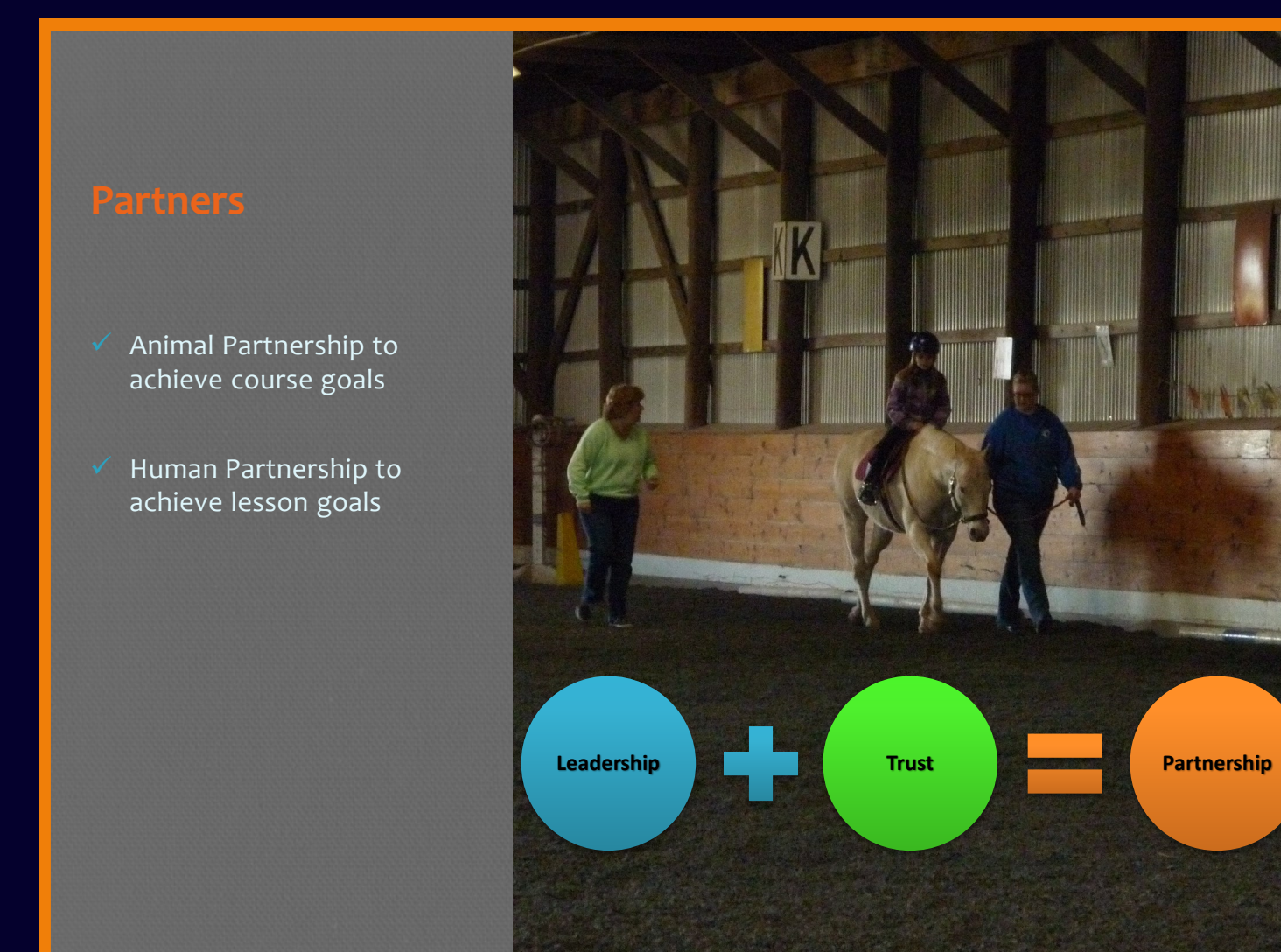
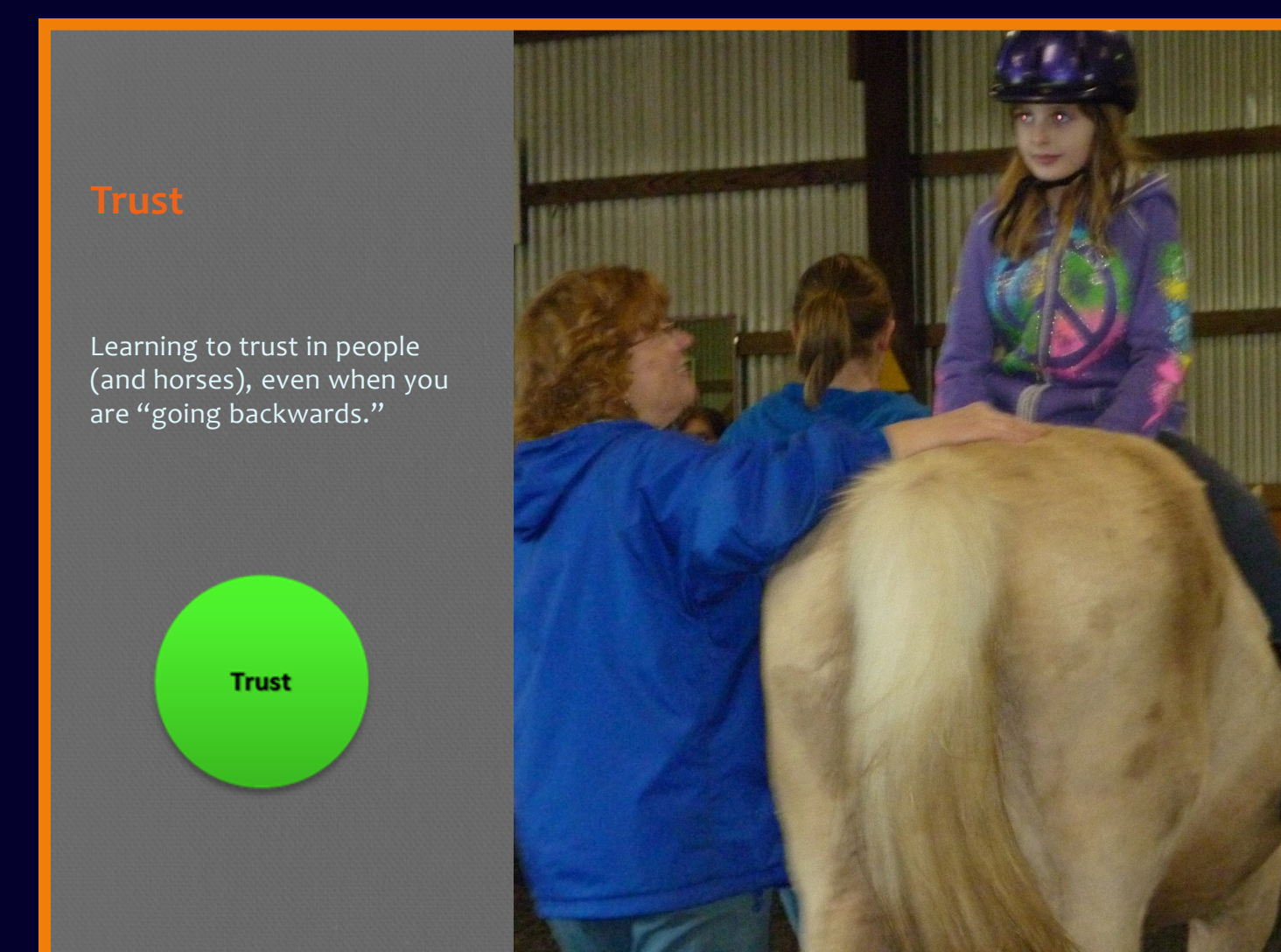
Dené Mitchell, M.P.H. , C.C.R.P.
Andrea Crivelli-Kovach, Ph.D., M.A., M.C.H.E.S

Sebastian Riding Associates

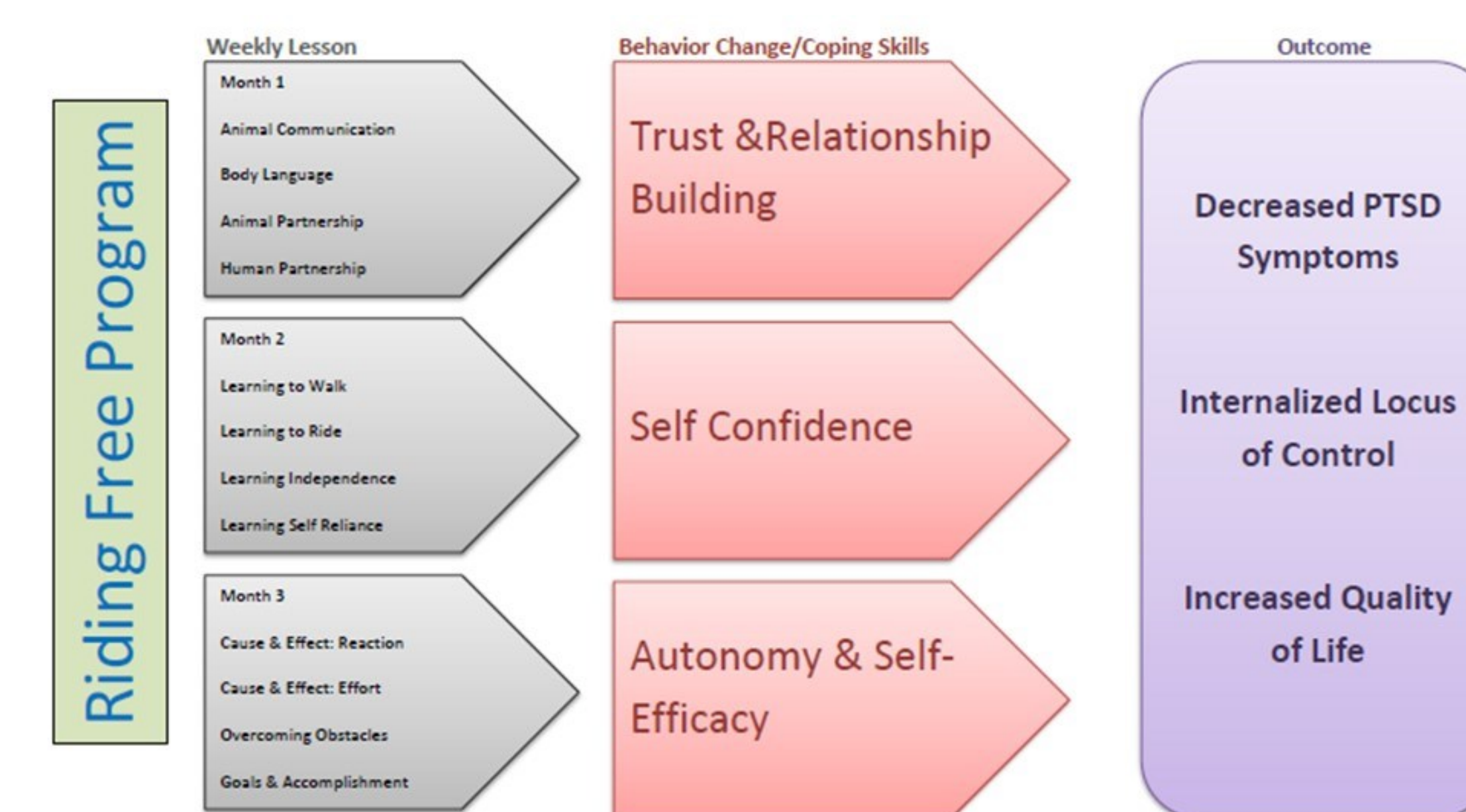


Background

Research shows animal assisted therapy and equine therapy are beneficial when used with children exhibiting behavioral and anxiety disorders, including post-traumatic stress disorder (PTSD). However, there remains a gap in empirical research that uses precise measures with prevalidated scales to quantify program outcomes.



Theory of Implementation



Results

1. PTSD symptoms in the children decreased on average by **32%**, as shown in the mean PROPS scores.
2. Quality of life increased on average by **2%** in the mean PedsQL scores.

Implications

Data supported that completion of the Riding Free™ program lead to an increased quality of life and a decrease in PTSD symptoms.

Research goals were met and the study adds to empirical research in equine therapy, using precise outcome measures and prevalidated scales.

Studies using a larger sample size to allow for inferential statistical methods, in order to assess significance, are needed to further support the program.

Acknowledgments

This research was made possible by Christine Hanebury and Sebastian Riding Associates.



Purpose

The research program, Riding Free™, was developed by the author for individuals diagnosed with PTSD. The research goals were to improve quality of life and lower PTSD symptoms in children who completed the program. Arcadia University was the IRB of record.

The purpose of this study was to assess interim program outcomes and fill research gaps.

Research Goals

- Improve quality of life
- Lower PTSD symptoms

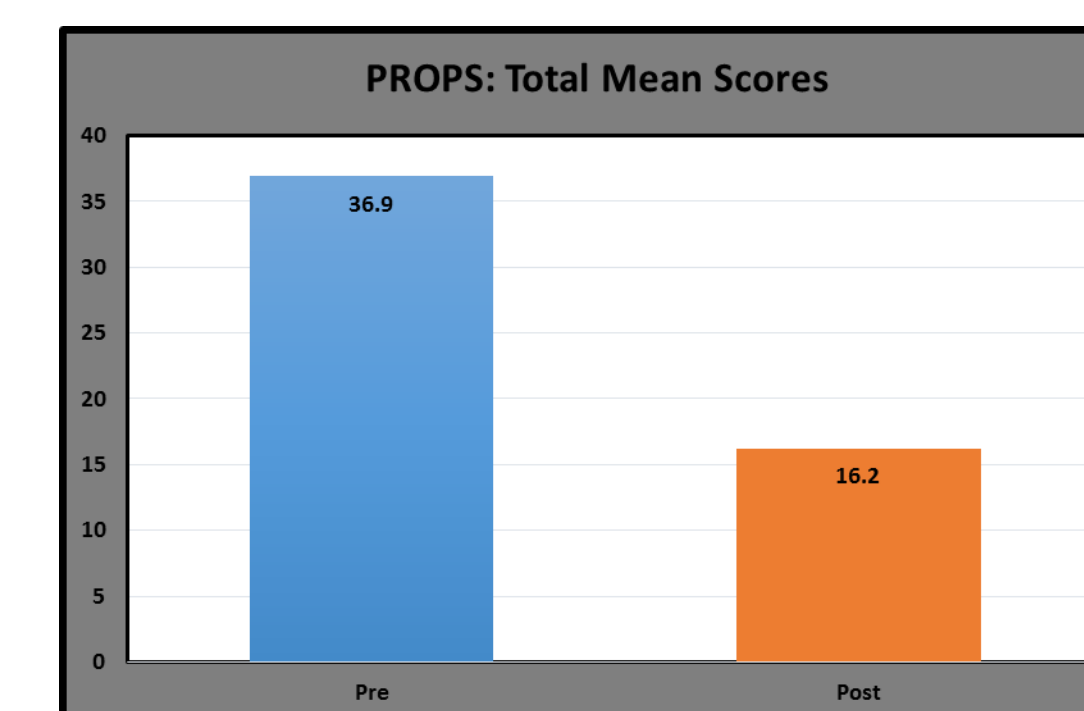


Figure 1: Raw data, mean PTSD symptoms scores—pre-test and post-test.

Methods

The program consisted of twelve, objective-driven, sessions to improve:

1. social skills and relationship building
2. self-confidence
3. self-efficacy

Pre-validated questionnaires were used to assess the following measures:

1. Quality of life (PedsQL)
2. PTSD symptoms (Parent Report of Post-traumatic Symptoms (PROPS))

Data was used from the first 10 (out of 20) children to complete the program.

Pre-test and post-test averages were evaluated, using descriptive statistical methods to identify trends.

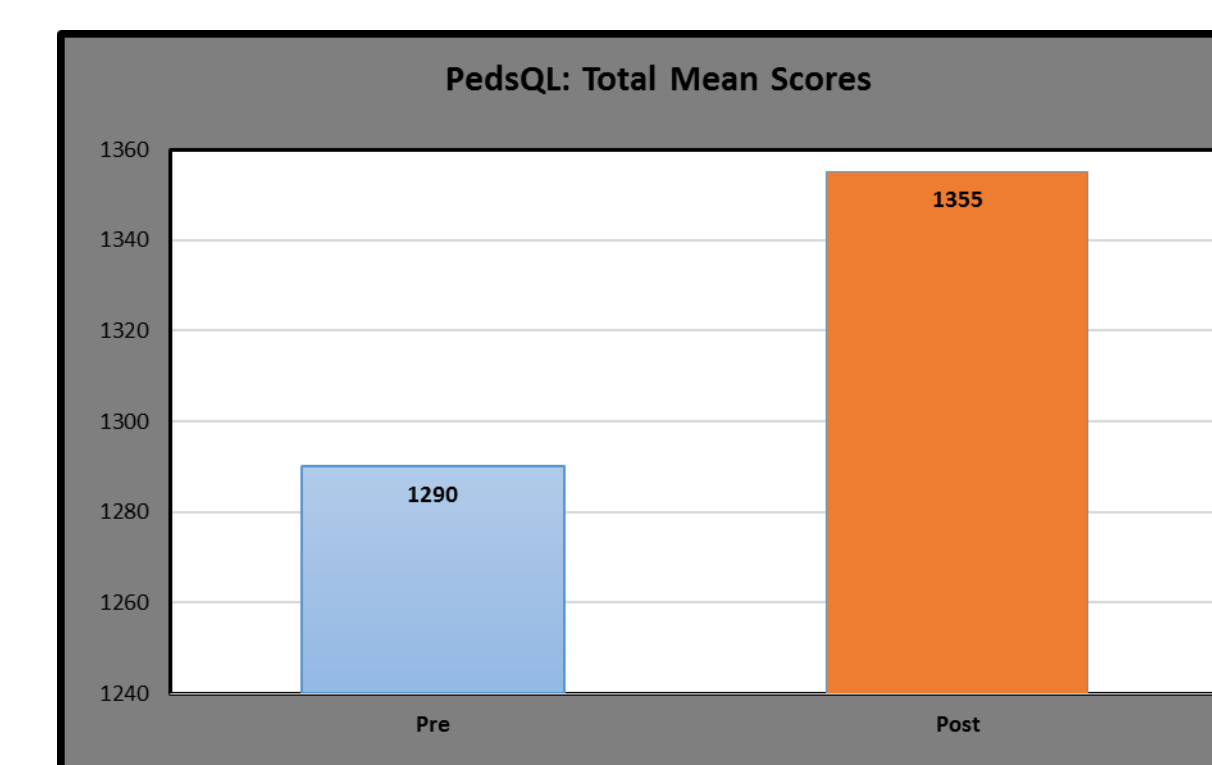


Figure 1: Raw data, mean quality of life scores—pre-test and post-test.

Riding Free™ Program Mission

To increase the quality of life and reduce PTSD symptoms in children diagnosed with PTSD.

Recommendations

- ➔ Lengthen duration of program to 24 weeks
- ➔ Add follow up tests to the study design
- ➔ Acquire funding to sustain the program



Equine Therapy for Individuals with Post-traumatic Stress Disorder



Dené Mitchell; MPH, CCRP

Dené graduated from Arcadia University with her Master of Public Health degree in 2013, where she also earned her Bachelor of Arts degree in Psycho-Biology. During her time at Arcadia, she developed Riding Free™, an equine therapy program for individuals suffering from post-traumatic stress disorder (PTSD). Dr. Andrea Crivelli-Kovach began working with Dené as her academic advisor while she implemented the program as her thesis. Dr. Kovach continues her work with Dené post-graduation, and is currently a co-investigator on their ongoing research of the program. While volunteering at Sebastian Riding Associates (SRA), Dené was inspired to create a program based in mental health, which was determined to be a great need in their community. She now serves as a volunteer research director and principal investigator for the program at SRA. It is Dené's hope that the program grow large enough to sustain the need in their community. Dené's career involves many years of research experience; she currently holds a position at a large non-profit organization as an oncology research study associate. Contact Dené at dmitchell@arcadia.edu.



Andrea Crivelli-Kovach; Ph.D., MA, MCHES

Professor and Chair of Community & Global Public Health at Arcadia University, Dr. Andrea Crivelli-Kovach, earned her BA in Biology/Biochemistry ; an MA in Nutrition from Immaculata University; and completed her PhD in Community Public Health with a focus in Women's Health/Maternal & Child Health at Temple University. Her areas of research include: (a) US and international hospital breastfeeding policies and practices; (b) mother's experience with breastfeeding in a hospital setting and (c) the effect of community health workers on empowerment in low-income pregnant women and mothers of young children. In 1994, she developed an instrument to evaluate implementation of the Global Policy: The Baby-Friendly Hospital Initiative's Ten Steps to Successful Breastfeeding, which was later used throughout the U.S. and internationally to measure hospital policies and practices related to the Ten Steps. Dr. Kovach serves as an academic advisor and co-investigator for the Riding Free™ research.



Christine Hanebury; PATH

Chris has been involved with the Sebastian Riding Associates (SRA) since 1986 when her daughter, Lindsey, began hippotherapy at the age of 2 to aid her low muscle tone characteristic of Down Syndrome. Over the next 17 years, her role changed from parent to volunteer to instructor and to board member, but always an advocate for the program, having witnessed first-hand the benefits riding had provided for her daughter. In 2004, tragically Lindsey passed away from leukemia after only a month-long battle; she was 10 days shy of her 20th birthday. Horses not only aided Lindsey's health but Chris also credits Twizzle with helping the family with their grief from their loss. Chris is the Montgomery County Special Olympics Equestrian Team Head Coach; holds the Professional Association on Therapeutic Horsemanship (PATH) certification in Equine Specialist in Mental Health Learning; and is passionately dedicated as the lead instructor for the Riding Free™ program.