Getting WISE at High Horses and Measuring the Outcomes: 2013 Pilot Study Results

September 2013 Project Consultant: Cathy Smith Hybels, Ph.D. (chybels@sover.net)

Portable heart rate monitors (HRMs) similar to the one pictured above were introduced to participants in an 8-week program utilizing equine-facilitated activities to teach self-awareness and self-regulation strategies to survivors of sexual and domestic abuse

What is Goal Attainment Scaling (GAS)?

GAS is an outcomes evaluation method that provides a criterion-referenced measure of change. The GAS procedure involves: (1) defining a unique goal(s), (2) specifying a range of expected outcomes for each goal (on a 5-point scale), and (3) using the expected outcomes scale developed before the intervention to rate the performance level achieved following an intervention period.

Typically, a score of "-2" represents the baseline performance level before intervention, "-1" represents performance that is somewhat less than expected for the intervention period, "0" represents the anticipated level of performance following treatment for the given measurement period, a score of "+1" indicates somewhat more progress than expected during the intervention period, and "+2" signifies much better than expected progress occurred during the measurement period.

High Horses Therapeutic Riding Program
P.O. Box 681
Norwich, VT 05055
www.highhorses.org
P: 802-356-3386

High Horses' Mission Statement
To improve the well-being of people with special needs through a therapeutic equine experience

Background

Mental health therapists and certified therapeutic riding (TR) instructors affiliated with the High Horses Therapeutic Riding Program and WISE of the Upper Valley routinely collaborate to provide educational programs for survivors of sexual or domestic abuse. In these programs, the instructors utilize equine-assisted activities for teaching the participants self-awareness, self-regulation, and strategies for coping with stress and anxiety.

In spring 2012, High Horses embarked on a pilot test of Goal Attainment Scaling (GAS) to measure the efficacy of its services at both the individual participant and program levels. GAS, an outcomes evaluation (OE) method widely used in rehabilitation, education, and community mental health services, was determined to offer the greatest potential to meet High Horses' OE requirements (see "*Measuring Outcomes at High Horses: Pilot Study Results"* by Cathy Smith Hybels, July 2012, available on the High Horses website). The 2012 pilot test results presented preliminary evidence that GAS met High Horses' needs as a method for measuring individual-specific functional gains for participants in a short-term TR program. The study suggested additional tests of feasibility, including its potential use in TR programs focused on participant gains in self-awareness and self-regulation.

Purpose of This Study

The current study was undertaken to further assess the method's flexibility, ease-of-use, and utility in measuring outcomes in programs using equine-assisted activities to help educate participants in self-awareness and coping strategies. It builds on the earlier research by investigating whether instructors find it useful for measuring relevant and meaningful program-level outcomes. Although GAS is more commonly used to measure individual goal achievement, a focus on individual goal setting and achievement was inconsistent with the therapeutic approach of the program. Thus, the instructors experimented with the use of GAS as a tool for monitoring progress towards a group goal.

Measuring Outcomes and Getting WISE at High Horses (Continued)

Study Activities and Procedures

The instructors collaborated to identify a goal related to the introduction of biofeedback technology. Their objective was to educate group members about the use of portable heart rate monitors (HRMs) to aid in the awareness and modulation of stress, anxiety, and nervousness that frequently arise among survivors of sexual and domestic abuse. The instructors provided information and demonstrations on how to use HRMs to recognize cardiovascular responses to stress. The devices work by measuring fingertip pulse, calculating heart rate, then processing those data to provide visual and/or auditory heart rate biofeedback. The HRM users practice relaxation techniques and controlled breathing to learn how to reduce their heart rates and enter more balanced states. Group members were offered opportunities to use HRMs without pressure to comply.

It was imperative to the instructors that all HRM data remain confidential and not be tracked. With that proviso, the instructors developed an expected performance outcome scale, shown in Table 1 below.

Table 1: Group Goal Attainment Scale

After being presented with information and demonstrations about the usefulness and function of a portable monitor for measuring heart rate to help identify each person's autonomic system's responses…

none of the group members tried using a monitor any time during any group session. [*Baseline performance/Worse than expected outcome*]
approximately 25% of the group members tried using a monitor at least one time during a group session. [*Less than expected outcome*]
approximately 50% of the group members tried using a monitor at least one time during a group session. [*Expected outcome*]
approximately 75% of the group members tried using a monitor at least one time during a group session. [*Better than expected outcome*]
100% of the group members tried using a monitor at least one time during a group session. [*Much better than expected outcome*]

During the final group meeting, members anonymously completed a short written survey answering: "Did you try using any of the heart rate monitors at least one time during the spring session? Yes or No." The number of affirmative responses divided by the total number of responses yielded the adoption rate of interest.

"I learned how to use the monitor and what my heart rate is and what raises and lowers it."

"It showed me how my body reacted to certain situations even though I may not of been aware."

"It helped me to see if I was becoming stressed out more."

Table 2: Responses to the survey question "How was the heart rate monitor helpful?"

Results

Three of the 4 group members tried using a heart rate monitor at least one time during the 8 lessons. The 75% adoption rate indicates a better than expected group outcome. When asked why he/she did not try a HRM, the one member replied "just wasn't interested." Table 2 above shows the group members' open-ended responses to the question "How was the monitor helpful?"

Discussion

The current study demonstrates the successful application of GAS within an equine-assisted activities program for educating survivors of sexual and domestic abuse about strategies for recognizing and coping with stress. GAS proved effective and easy-to-use for identifying, defining, and measuring desired outcomes at the group level, further demonstrating its flexibility and usefulness within TR programs where individual participant goal-setting is not appropriate, yet measures of program efficacy are desirable. This study contributes to the evidence from two other pilot studies at High Horses that GAS satisfies the organization's stated outcomes evaluation requirements.

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