

**Therapeutic Riding and Children with Autism:
There are Real Benefits**

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Dream Catchers at the Cori Sikich Therapeutic Riding Center

Purpose of Study

- Investigated the effects of TR on the Social Responsiveness and Sensory Processing of 26 children with Autism in their school classroom.
- Examined the differential impact of TR riding on these variables compared to participation in activities at the riding center without TR in an effort to differentiate the specific aspects of the TR experience that contribute to positive gains.

Participants

Experimental Group:

- 8 students diagnosed with Autism (7 Male; 1 Female)
- Average age: 8.7 Years
- Self-contained classroom in one public elementary school

Waitlist Control Group:

- 18 students diagnosed with Autism (13 Male; 5 Female)
- Average age: 8.1 Years
- Self-contained classrooms in 2 public elementary schools

There were no significant differences between the experimental and control groups for age. Additionally, the two groups did not differ on the Clinical Assessment of Behavior pre-measure.

Design

Experimental Group

Phase 1	Phase 2	Phase 3
3 weeks at barn with NO horse contact	3 weeks at barn with horse contact but no riding	8 weeks of TR
Measures	Measures	Measures
Prior to Phase 1 Clinical Assessment of Behavior Social Responsiveness Scale Sensory Profile School Companion At end of Phase 1 (week 3) Social Responsiveness Scale Sensory Profile School Companion	At end of Phase 2 (week 6) Social Responsiveness Scale Sensory Profile School Companion	After 4 weeks of riding (week 10) Social Responsiveness Scale Sensory Profile School Companion At end of Phase 3 (week 14) Social Responsiveness Scale Sensory Profile School Companion

Waitlist control group.

Measured on the same variables at three points before the start of their session and then at the same intervals as the experimental group when they started their participation.

Statistical Analysis

Maximum likelihood repeated measures analysis on the SRS and SP measures were examined for changes in participant behavior over time. Specific contrasts that assessed equality of adjoining means were assessed.

Findings

Overall

- * The control group maintained stable ratings over the waiting period.

Social Responsiveness Scale 2

- * Improvement in social skills after 4 weeks of riding compared to baseline and non-riding activities.
- * Trends show significant improvement in communication skills and total score.
- * Pattern was linear downward trend through four weeks of riding
- * Social Awareness and Social Communication and Interaction were contributors to the total effect but not individually significant.

Sensory Profile School Companion

- * No significant trends on the school factors.
 - * A significant increase in avoidance at the introduction to the barn, which continued into the horse contact phase. Avoidance returned to baseline with the introduction of riding.
- There was considerable variability within the younger children that could reflect an issue with the instrument at the younger ages.
- Individual variability correlated significantly with age on Sensory Profile subscales indicating less stability at the younger ages.

Cautions

- Results must be interpreted with caution due to small sample size.
- Improving behaviors followed a linear trend indicating some impact for barn activities and horse contact in addition to riding.
- Behaviors appeared to return to baseline after 8 weeks of riding. This could mean that behavior gains were not maintained over time.

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