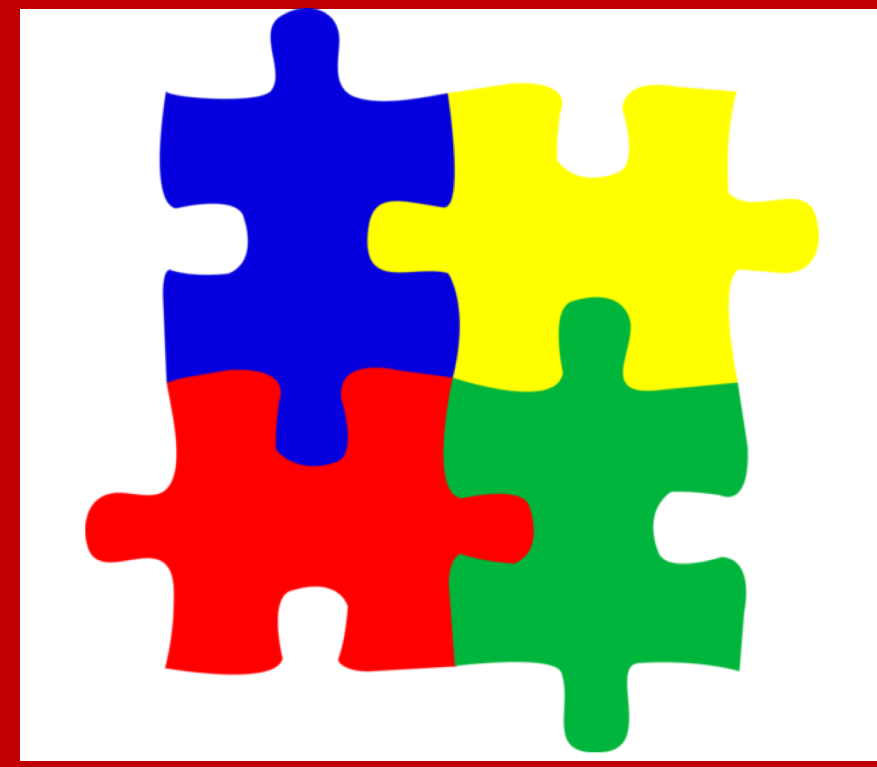


Adults with ASD: Therapeutic Riding and Observed Social Behaviors and Stress Levels



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Introduction

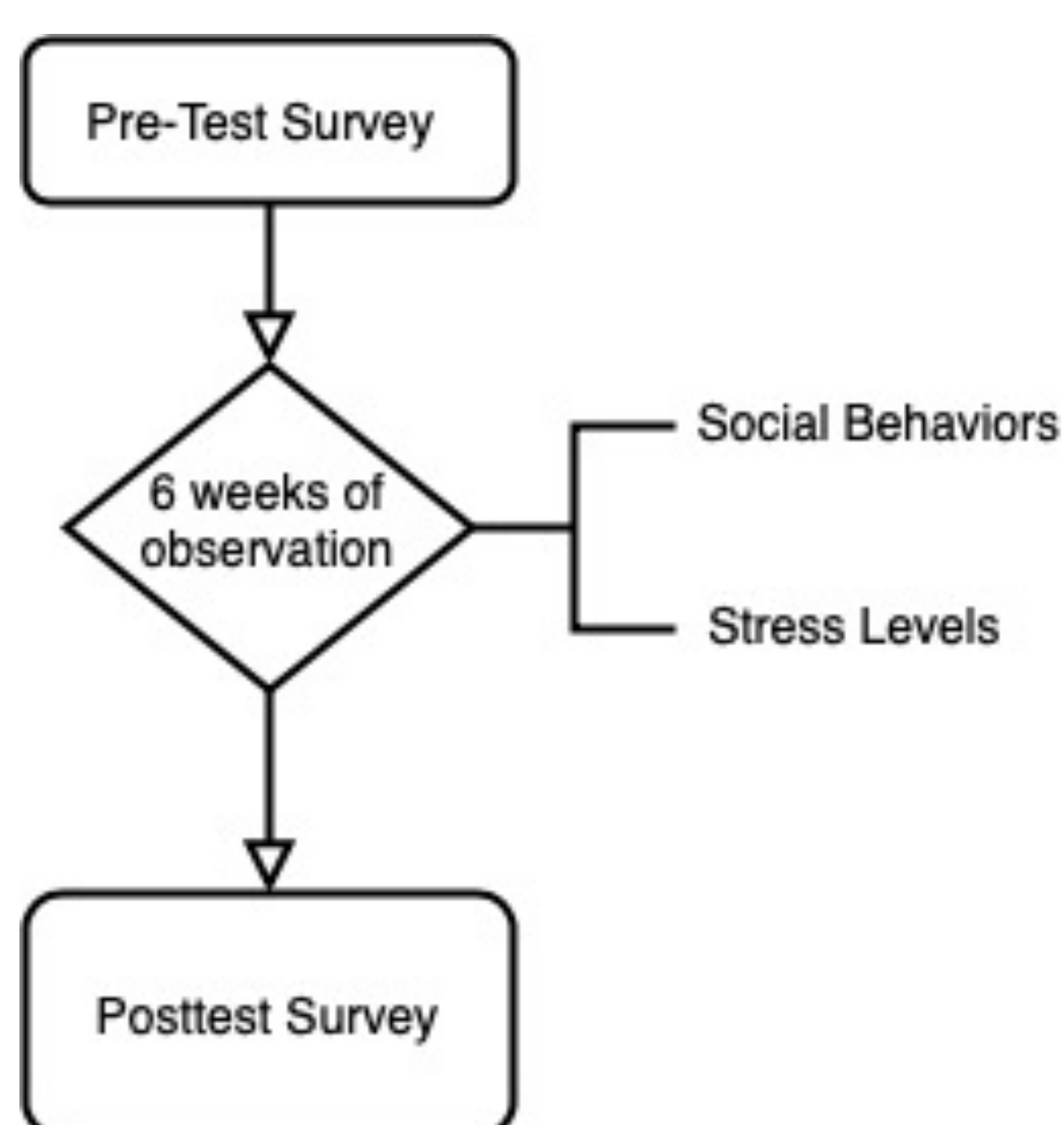
- **Autism Spectrum Disorder (ASD)** is a lifelong neurodevelopmental disorder that effects **1% of the child and adult population** (Murphy et al., 2016).
- **Adults** with ASD have demonstrated significantly **higher levels of perceived stress** than adults without ASD, which is also commonly contributed to **social functioning impairments** (Bishop-Fitzpatrick, Mazefsky, Minshew, & Eack, 2015).
- **Animal-assisted therapy using horses** has demonstrated **improvements** in areas of physical, psychological, social, and educational functioning of children with disabilities (Grandos & Agís, 2011).
- **The purpose of this study** is to examine the effects of **equine-assisted therapy** on **observed social and stress behaviors** in **adults** with ASD.

Hypotheses

After 6 weeks of therapeutic riding instruction, adults (18 years old and older) diagnosed with ASD will experience:

- **Higher levels of observed social responsiveness**
- **Lower levels of observed stress levels**

Methodology



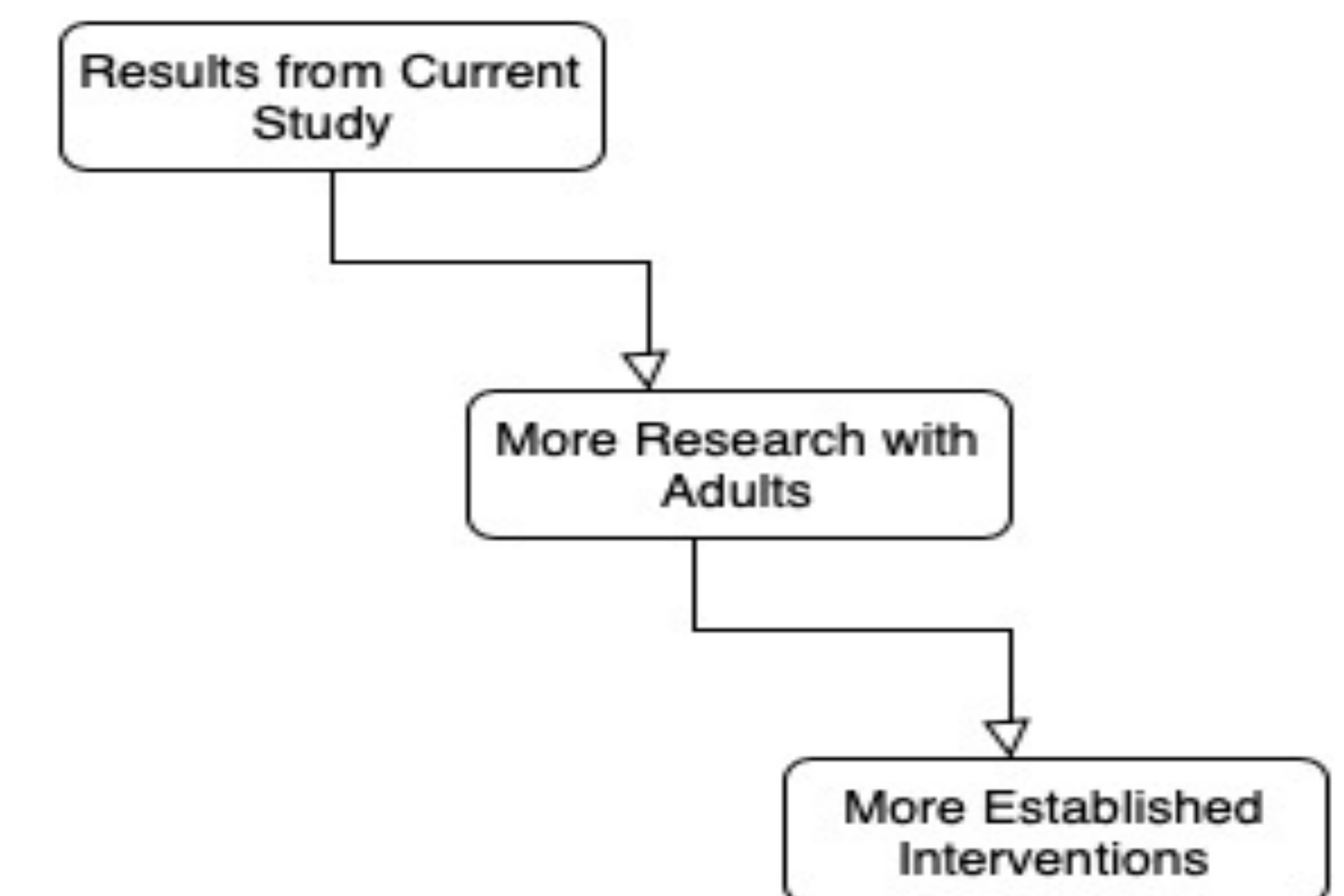
- The surveys were completed by 8 therapeutic riding instructors who worked with these adults, **2 of which completed both pre-and post surveys**.
- Demographics:
 - Mean age: 45.7 years
 - 7 participants reported race as white, 1 reported being of a Spanish origin

Measures

- **Adult Social Behavior Scale** measured the social behaviors the instructors observed in their riders using only the social and communication domains of the scale.
 - *“Have little or no interest in socializing with others”*
 - *“Seek contact with anyone and everyone; show no reserve”*
- **Perceived Stress Scale** measured the levels of stress in the riders as observed by their instructor. This measure was adapted to suit an “Other Report” style questionnaire.
 - *“In the last six weeks, how often have they been upset of something that happened unexpectedly?”*
 - *“In the last six weeks, how often have they felt nervous and “stressed?”*

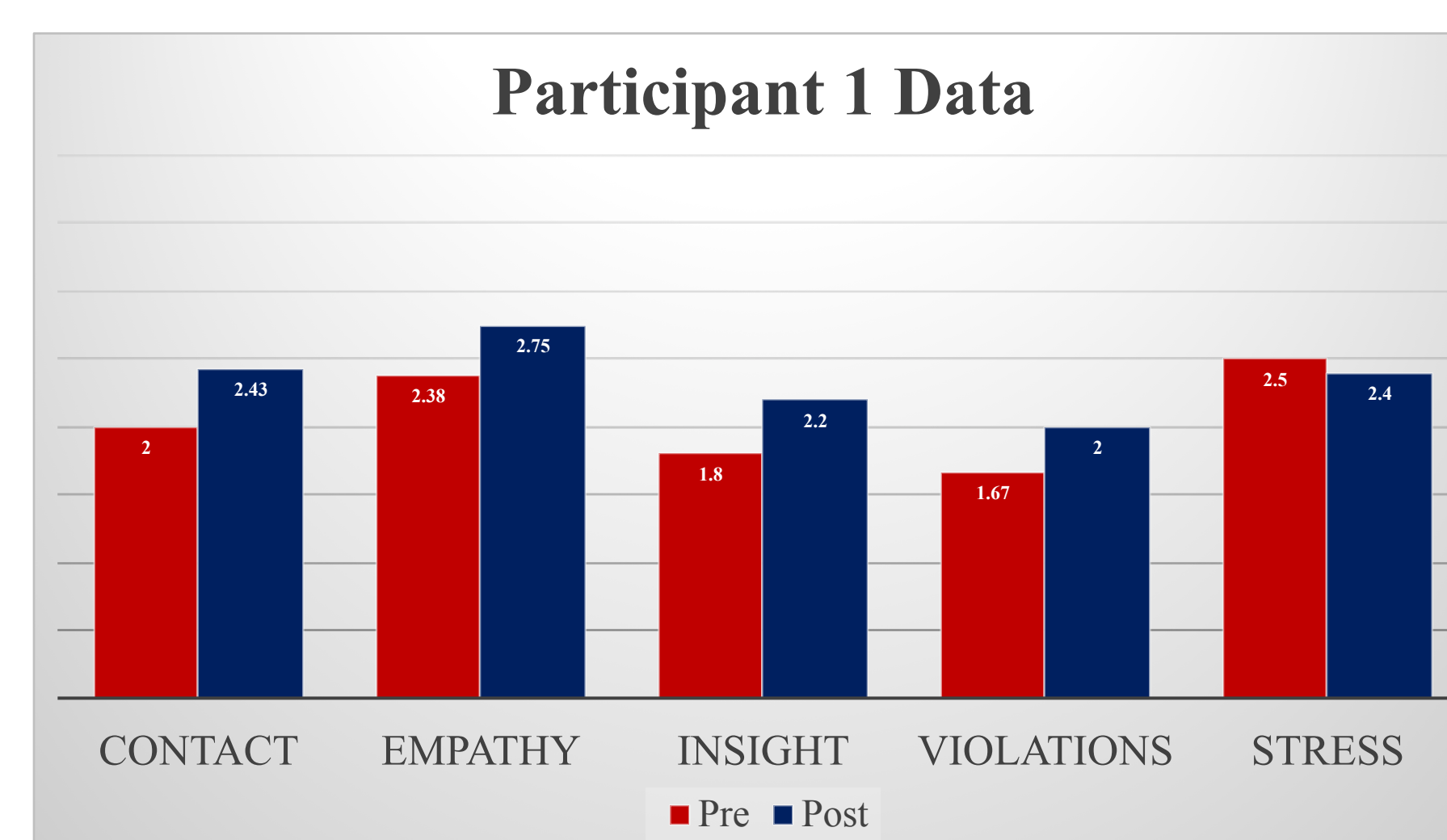
Discussion

- This study utilized a very small sample size, thus this study is unable to make any meaningful observations.
- The results show overall not much change in social responsiveness or perceived stress levels among their adult rides diagnosed with ASD.
- It is important to continue this research as there is **almost no research on TR and adults with Autism**.
- **More research needs to be conducted** in this field to help establish this as an intervention for adults with Autism, a severely limited field to begin with.



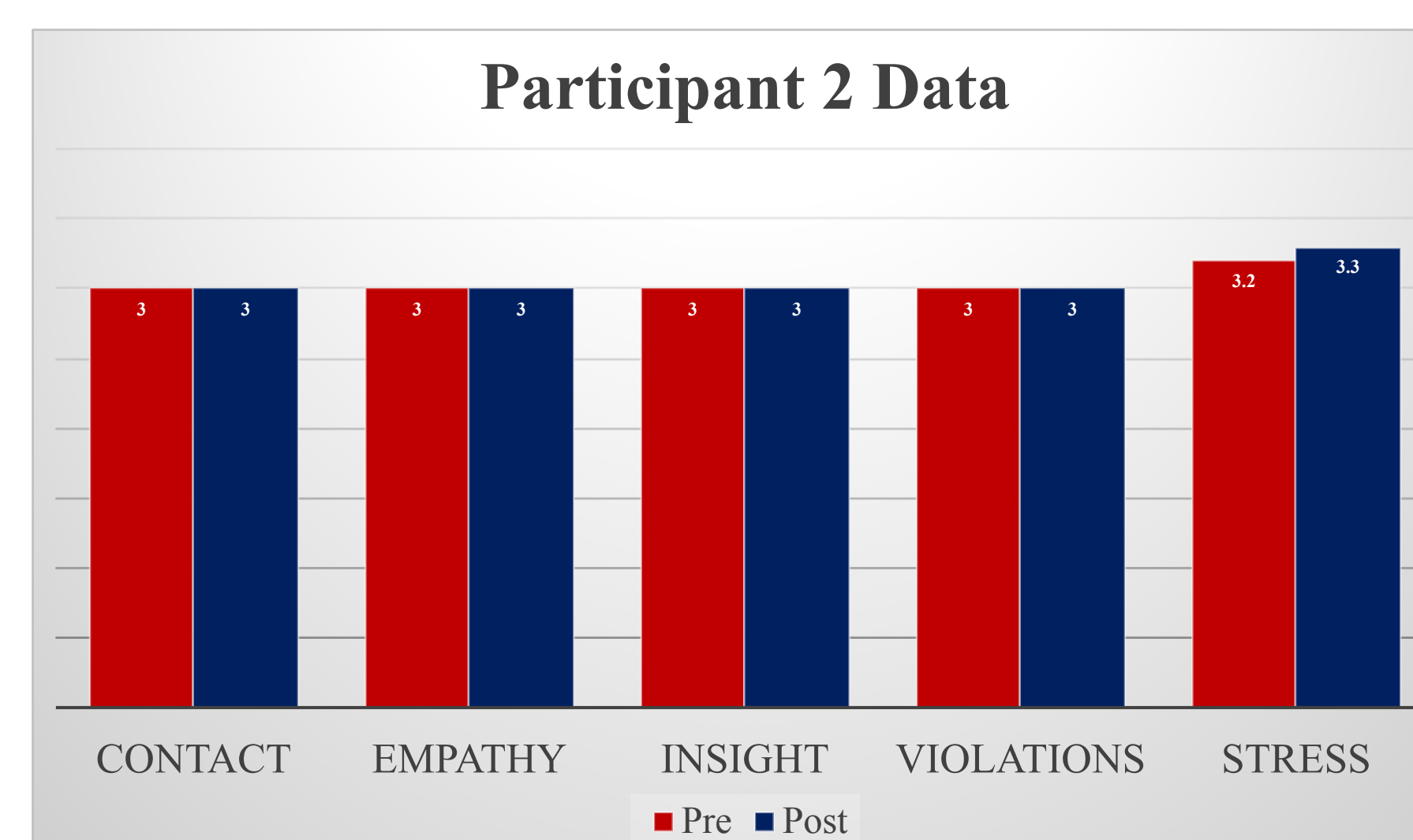
Results

No significant results in social responsiveness or perceived stress



Participant 1 Results

- Increase maladaptive behaviors in all social behavior categories
- A slight decrease in perceived stress



Participant 2 Results

- No change in all social behaviors
- A slight increase in perceived stress

Contact: $t(1) = -1.0, p > 0.05$; Empathy: $t(1) = -1.0, p > 0.05$; Insight: $t(1) = -1.0, p > 0.05$; Violations: $t(1) = -1.0, p > 0.05$; Stress: $t(1) = 0, p > 0.05$

Future Direction

- More research in this field must be conducted
 - Larger sample sizes
 - Increase intervention length
 - Examine riders as individuals rather than groups
- Apply current knowledge of TR with children to adults
 - Understanding that effectiveness in children may also be revealed in studies with adults
- Adults need help, too
 - Study alternative interventions that could decrease maladaptive behaviors in adults with ASD