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## Background

- Autistic children typically experience barriers when navigating social and emotional contexts, and these experienced barriers can subsequently have notable effects on their mental well-being.<sup>1</sup>
- Mental well-being supports often involve the use of adapted cognitive behaviour therapy (CBT) interventions.<sup>2</sup>
- The Secret Agent Society: Small Group Program (SAS:SG) is a multi-component manualized program for children between 8-12 years of age and their caregivers<sup>2</sup>.



This spy-themed program is designed to teach important life skills: emotion recognition, emotion regulation, problem solving and social navigation. The hierarchical skill building and theoretical framework includes an adapted Cognitive Behaviour Therapy (CBT) approach.

- While previous lab-based research trials demonstrated the program's efficacy<sup>3</sup>, questions remain on whether this intervention is effective in improving the social-emotional skills of autistic children when delivered by a community based multi-disciplinary team under real-world conditions.

## Objectives & Methods

**Objectives:** To evaluate the effectiveness of a single community-based, multidisciplinary team implementation within a broader multisite study of the SAS:SG curriculum of strengthening emotional regulation, dysregulation and reactivity, and social skills of autistic children.

**Methods:** In a single-arm feasibility study, pre- and post-data were analyzed for children participating in the SAS:SG program.

- The program consisted of 10 weekly 1.5-hour sessions where the child participants and their parents met separately with trained therapists for their group session.
- Participants were autistic children between 8-13 years old who were receiving services through CHEO's Neurodevelopmental Health department (CHEO-NDH)
- SAS:SG facilitators consisted of Behaviour Therapists or Child and Youth Counsellors from CHEO-NDH
- Caregiver completed pre- and post- questionnaires about their family and child, using the following tools:

### (1) Emotion Dysregulation Inventory (EDI)<sup>4</sup>

- assesses emotion regulation difficulties in children, and lower scores on this measure reflect improved emotional regulation capabilities

### (2) Emotion Regulation & Social Skills Questionnaire (ERSSQ)<sup>2</sup>

- assesses combined emotion regulation and social skills, and higher scores on this measure indicate increased skills in those areas

### (3) Social Responsiveness Scale – 2<sup>nd</sup> Edition (SRS-2)<sup>5</sup>

- measures social functioning in children by way of their actual social performance (as opposed to social knowledge), and lower post-program scores reflect increased social performance.



10 WEEK Program – Cadet Component



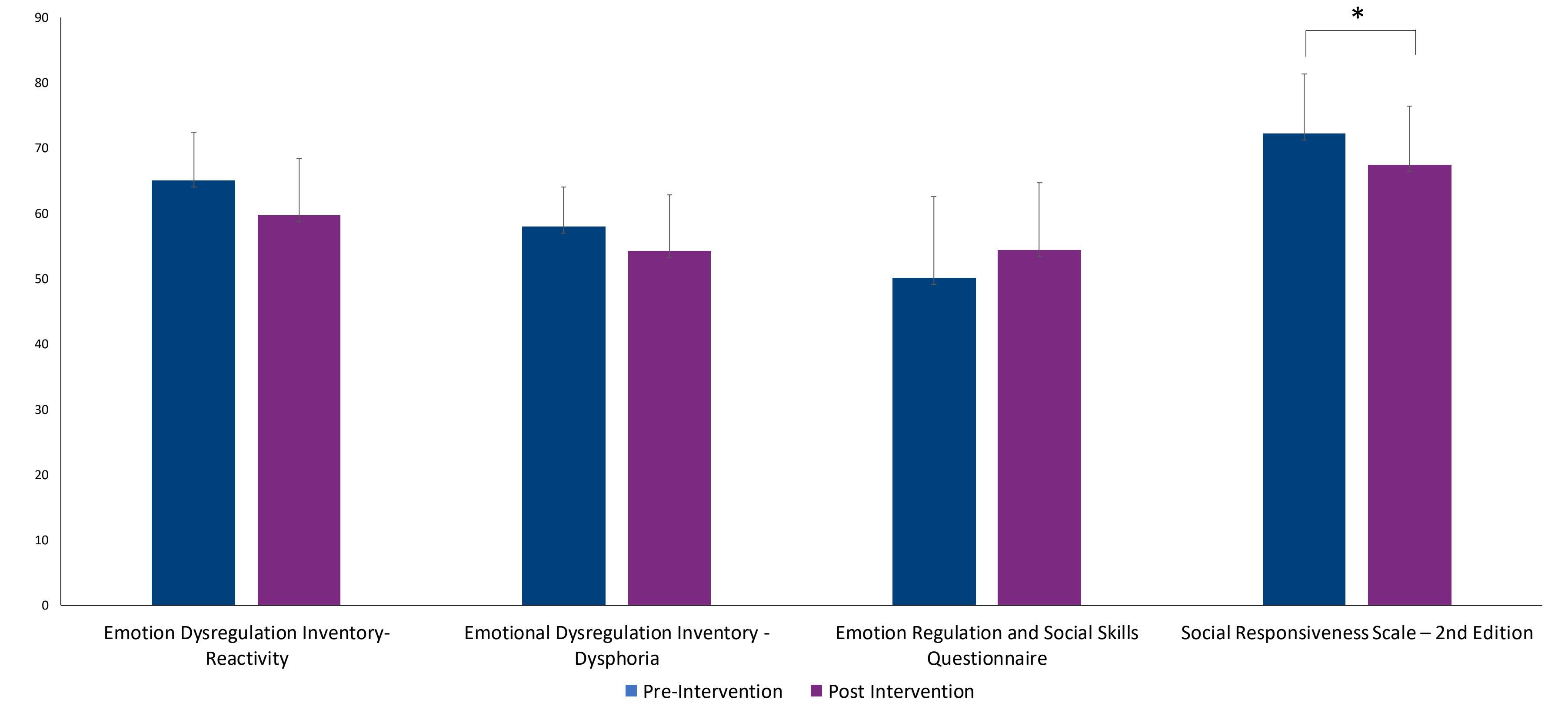
Pre-intervention Surveys

10 WEEK Program – Caregiver Component

Post Intervention Surveys

## Results

Preliminary Analysis of pre- and Post- intervention data from EDI, ERSSQ and SRS-2



- EDI Reactivity post-intervention scores (Mean= 59.75, SD= 8.73) were lower than pre-intervention scores (Mean= 65.05, SD= 7.44),  $p= 0.074$ .
- EDI Dysphoria post-intervention scores (Mean= 54.21, SD= 8.58) were lower than pre-intervention scores (Mean= 57.96, SD= 6.13),  $p= 0.059$ .
- ERSSQ scores post-intervention (Mean= 54.36, SD= 10.34) were higher compared to the pre-intervention scores (Mean= 50.18, SD= 12.34),  $p= 0.095$ .
- SRS-2 scores post-intervention (Mean= 67.45, SD= 8.99) were **significantly lower** compared to pre-intervention scores (Mean= 72.27, SD= 9.06 ),  $p<0.01$ .

## Conclusions

- Investigating the clinical outcomes for autistic children participating in this program is important for predicting success and improved outcomes for autistic children receiving services through CHEO-NDH.
- The results of this single site sample suggest that outcomes are trending towards improvements across all variables for participants delivering the SAS:SG program at CHEO-NDH.
- Future research will aim to assess skill maintenance at 3-month and 6-month follow-up booster sessions.

## References

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