# Benefits of an Online Small Group Cognitive Behaviour Therapy Program for Autistic Children During the Pandemic: Evidence from a Community-based Implementation Study Lee, V.<sup>1</sup>, Vashi, N.<sup>2</sup>, Sellitto, T.<sup>2</sup>, Roudbarani, F.<sup>2</sup>, Tablon Modica, P.<sup>2</sup>, Pouyandeh, A.<sup>2</sup>, Ibrahim, A.<sup>2</sup>, Ameis, S.H.<sup>3</sup>, Elkader, A.<sup>4</sup>,

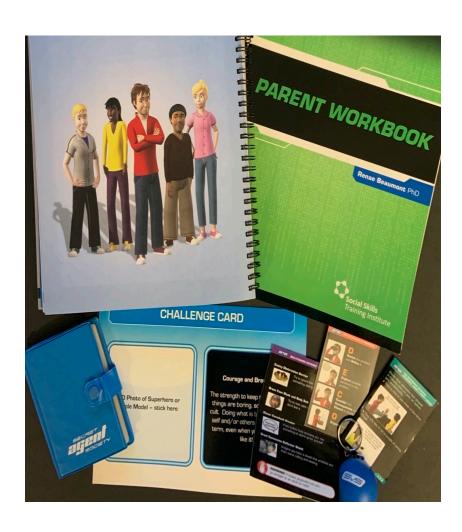
## BACKGROUND

- Emotion regulation and mental health problems frequently impact the wellbeing of autistic children
- Outside of the COVID-19 pandemic, 40-70% of autistic children and youth are estimated to have significant emotional and behavioural challenges, including anxiety, depression, and anger (Simonoff et al., 2008)
- Virtually delivered socio-emotional interventions including The Secret Agent Society: Small Group Program (SAS:SG; Beaumont, 2016) may help with these difficulties in *controlled* settings
- Limited understanding of how effective the SAS:SG program is under real world, ecologically valid conditions, where autistic children and youth receive most of their services

# **OBJECTIVES**

- Evaluate the clinical utility of the SAS:SG program for improving emotion regulation and social skills, and symptoms of mental health challenges
- Explore child-level factors associated with the magnitude of change in intervention outcomes after participating in the program

# **SECRET AGENT SOCIETY: Small Group Program**



## Agencies:

- Seven community-based autism service providers in Ontario
- Each agency provided SAS:SG to 12 families
- SAS:SG included a 10 or 20 week program with a 3-month "booster session"

## **Child Group Sessions:**

- 60-90 minute weekly virtual sessions
- Focused on developing friendships, recognizing emotions, coping with negative feelings

## **Parent Group Sessions:**

- 30-60 minute weekly virtual sessions
- Reviewed concepts and materials from child

sessions ACKNOWLEDGEMENTS: Thank you to all the therapists who provided continued support and our families for participating in this study. This project is funded by the Kids Brain Health Network Implementation Grant Cycle II and the York Research Chair in Autism and

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## PARTICIPANTS

### Inclusion criteria:

- 1. Vocal verbal child/youth 8-13 years of age with autism
- 2. Clinically significant levels of mental health challenges
- 3. Family access to quiet working area, technology (i.e.,
- computer or tablet), and high-speed internet 4. Parents were available to monitor online group sessions with
- therapist

### Family Characteristics (*n* = 77)

	CHILD		
Age	M = 9.9 years (SD = 1.3 years; Range: 8-12 y		
Gender	20% Female		
	CAREGIVER		
Age	<i>M</i> = 42.5 years ( <i>SD</i> = 5.7 years; Range: 29-52		
Gender	95% Female		
Marital status	77% Married		
Education	100% High school and abo		
Ethnicity	36% Ethnically diverse		

# **MAIN OUTCOMES**

Parents reported improvements in children's emotion regulation, social skills, and symptoms related to anxiety and depression. Children with more difficulties in

emotion reactivity preintervention demonstrated the greatest improvements.

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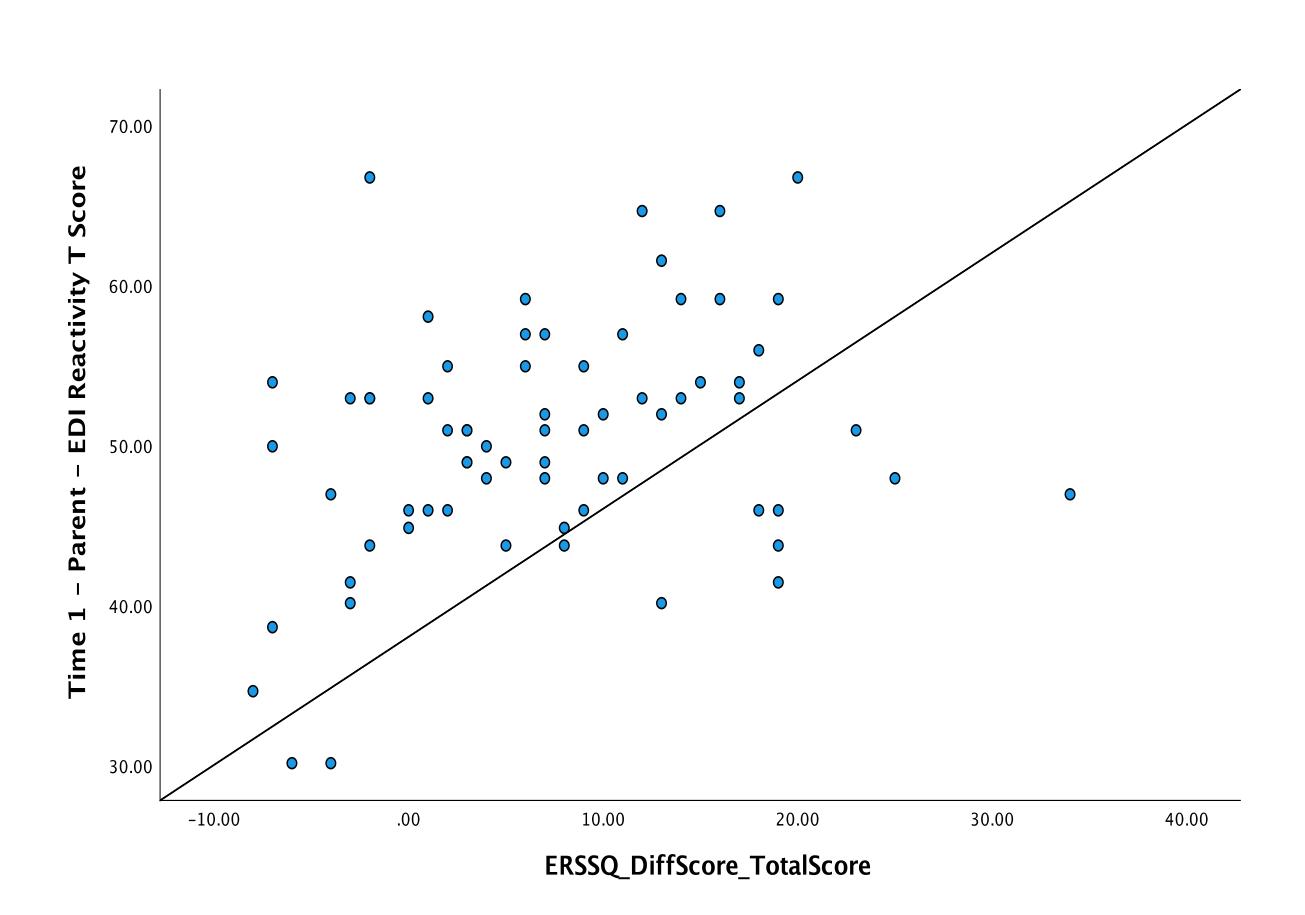
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## RESULTS

*Table 1.* Pre-, Post-, and 3-month parent-reported child outcomes (Means, Standard Deviation)

Variables	Pre- Intervention	Post- Intervention	3-month Booster
ERSSQ	51.0 (10.7)	58.3 (11.1)	39.2 (11.6)**
EDI			
Reactivity	50.2 (6.8)	48.4 (6.8)	46.6 (7.2)**
Dysphoria	48.9 (8.6)	46.6 (8.0)	44.9 (7.6)**
CASI-5			
Separation Anxiety	59.8 (10.3)	58.6 (9.3)	58.5 (9.5)
Social Anxiety	60.6 (9.3)	59.9 (10.5)	58.3 (9.0)
Generalized Anxiety	67.5 (9.3)	64.4 (9.5)	63.6 (9.7)**
Depression	61.0 (11.3)	58.7 (10.6)	57.4 (9.8)**

*Note.* Booster: 3-month post-intervention group session. ERSSQ: Emotion Regulation and Social Skills Questionnaire (Total Score), EDI: Emotion Dysregulation Inventory (Total T-Score), CASI-5: Child and Adolescent Symptom Inventory, 5th Edition (Symptom Severity T-Score), \*\* = p < 0.001



*Figure 1.* Relationship between scores on pre-intervention EDI Reactivity and ERSSQ change score from pre- to post-intervention. Pearson's r = 0.32, p = 0.01





