

Mental Health Challenges and Emotion Dysregulation: In-Person vs. Online Cognitive Behaviour Therapy for Autistic Youth

Nicole Eddy, Caitlyn Gallant & Jonathan A. Weiss | Department of Psychology, York University

Introduction

- Mental health challenges are common among autistic youth¹
 - Often accompanied by **emotion regulation** difficulties: A child's ability to effectively monitor and modulate their emotional reactions²
- Cognitive behavioural therapy (CBT)** may be an effective way to address emotion regulation difficulties
- With COVID-19 pandemic, rapid shift from in-person to online CBT; yet limited research examining the effectiveness of this adapted format

Objective: To evaluate the benefits of a manualized CBT program—delivered **online** or **in-person**—to address emotion dysregulation in autistic children

Methods

Secret Agent Society: Operation Regulation (SASOR) Program: Autistic children and their parents attended 10 weekly **in-person** individual therapy sessions at York University

- Virtual Secret Agent Society (VSAS) Program:** delivered **remotely** via Zoom

SAS:OR includes planned systematic exposures, mindfulness and acceptance activities, teaching of regulation strategies and used the same activities and content across modalities³

Participants

Table 1. Participant demographic information

	In-Person (SASOR)	Virtual (VSAS)
<i>n</i>	42	20
Mean Age (SD)	9.50 (1.45)	10.15 (1.27)
% Male	78.6%	85%
% White/Caucasian	66.7%	65%

Parent-reported Outcome Measures

- Emotion Regulation and Social Skills Questionnaire (ERSSQ)**⁴: Child competency in the skills/behaviours that are taught in the program (e.g., identifying emotions, use of coping strategies)
- KIDSCREEN-27 (KP-27)**⁵: Child's health-related quality of life across multiple domains (e.g., physical activities and health, psychological wellbeing, parent relations and autonomy, peers, school and learning)
- Behaviour Assessment System for Children—Third Edition (BASC-3)**⁶: Four composite scores: externalizing, internalizing, adaptive skills, and behavioural symptoms index

Results

- 2 (Group: SASOR, VSAS) x 2 (Time: Pre-scores, post-scores) Mixed ANOVAs** were conducted to compare pre- to post-program changes

- For **BASC Ext, Int, and BSI**, **lower post scores** indicate improvements
- For **BASC AS, ERSSQ, and KP-27**, **higher post scores** indicate improvements

Pre- to post-program changes in emotion regulation and mental health symptoms **did not vary with treatment modality**^a

More severe pre-intervention challenges were associated with greater improvements post-program^b

This research provides support for the use of an adapted, online CBT, to address emotion regulation difficulties of autistic youth

Results (cont.)

Figure 1. Group pre- and post-ERSSQ scores

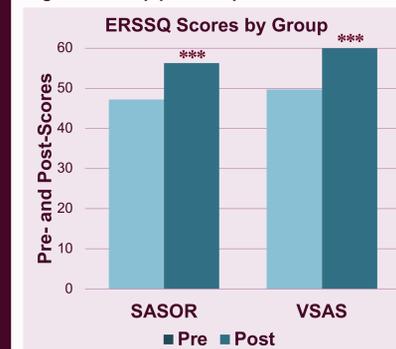


Figure 2. Group pre- and post-KIDSCREEN-27 scores

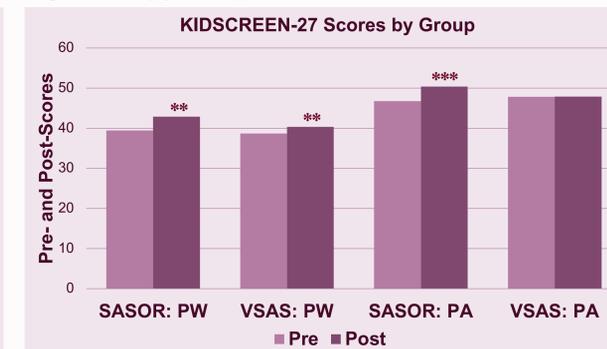


Figure 3. Group pre- and post-BASC-3 scores



*p < .05, **p < .01, ***p < .001.

- Pearson's correlations** were used to examine associations among demographic variables, pre-program scores, and change scores.

Table 3. Significant correlations for change scores with age and pre-intervention scores

	SASOR						VSAS					
	1. KP-27 PA	2. BASC Int	3. BASC AS	4. Age	5. Pre BASC Int	6. Pre BASC AS	1. ERSSQ	2. KP-27 PA	3. KP-27 PW	4. Pre ERSSQ	5. Pre KP-27 PA	6. Pre KP-27 PW
1.	-						-					
2.	-.147	-					.114	-				
3.	-.012	-.287	-				.489*	.263	-			
4.	.311*	-.135	.163	-			.474*	.115	.307	-		
5.	-.010	.439**	-.420**	.089	-		.206	.601**	.088	-.020	-	
6.	.031	-.113	.335*	.059	-.566***	-	.332	.217	.490*	.481*	.466*	-

Acknowledgements

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^aOne exception: Only the SASOR group seen improvement in participants' relationships with their parent and autonomy.

^bSpecific association varied between the two groups