

Tourette Obsessive-Compulsive Disorder: Preliminary Clinical Outcomes of an Integrated Exposure and Response Prevention and Habit Reversal Intervention

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No conflicts of interest to disclose.

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Objectives

- [x] Evaluate the feasibility of a hybrid Exposure and Response Prevention (ERP) and Habit Reversal (HbRT) intervention in Tourette Obsessive-Compulsive Disorder (TOCD).
- [x] Examine preliminary symptom and functional outcomes.

Tourette Obsessive-Compulsive Disorder

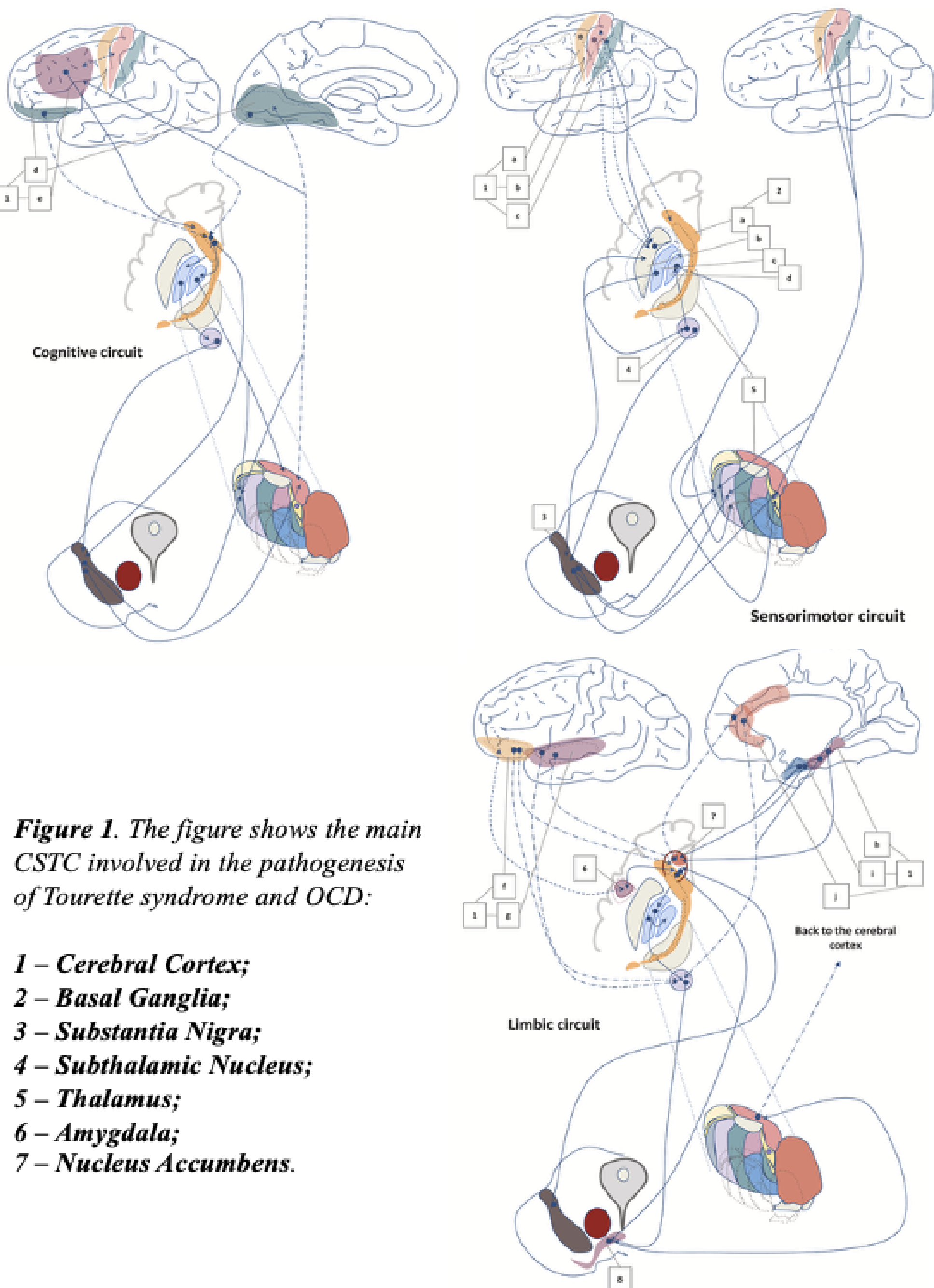


Figure 1. The figure shows the main CSTC involved in the pathogenesis of Tourette syndrome and OCD:

- 1 – Cerebral Cortex;
- 2 – Basal Ganglia;
- 3 – Substantia Nigra;
- 4 – Subthalamic Nucleus;
- 5 – Thalamus;
- 6 – Amygdala;
- 7 – Nucleus Accumbens.

The dotted line indicates the CSTC in which disturbance were registered using neuroimaging methods. The dotted line indicates the CSTC in which disturbance may occur due to morphological changes in the structures that are the sources of these projections, but they still have not been proved. The dotted line also highlights the contours of structures whose size changes (increase/decrease) were detected.

Methods

- [x] **n= 7** adults with TOCD.
- [x] **12-week** individual psychotherapy.
- [x] **ERP** (systematic exposure to obsession-related stimuli with response prevention) and **HbRT** (awareness training and competing response practice) delivered within a unified framework

[x] Outcomes: the Yale Global Tic Severity Scale and the Yale-Brown Obsessive Compulsive Scale.

[x] Pre-post independent clinician-rated assessments.

[x] Analyses performed in SPSS using non-parametric statistics (Wilcoxon; Spearman).

Results

[x] Intervention Effects Across Tic Severity, Tic-Related Impairment, and OCD Symptoms

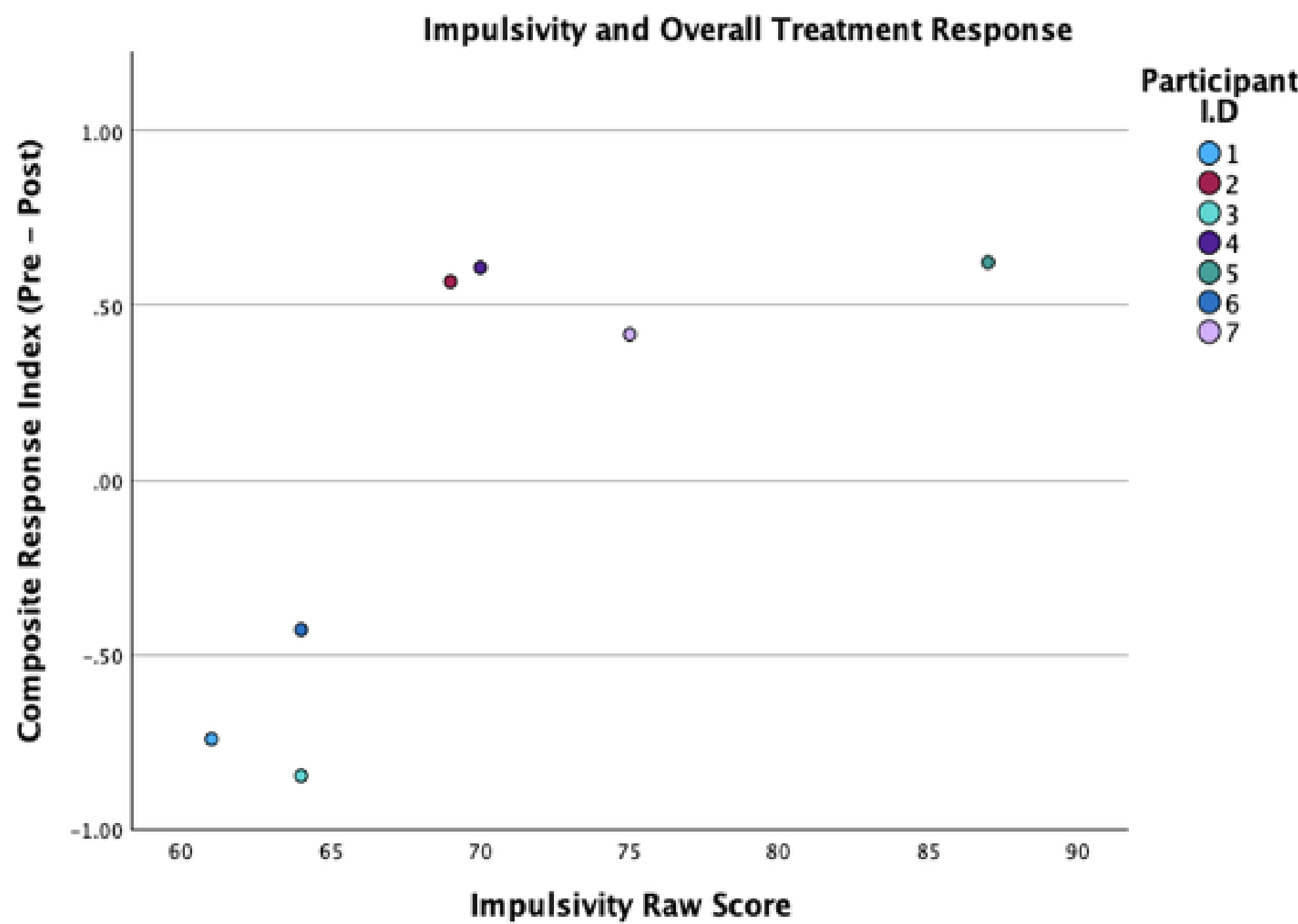
Outcome Measure	n	z	se	p (2-tailed)
YGTSS Total (Severity)	7	-2.384	5.874	.017
YGTSS Total (Impairment)	7	-2.384	5.874	.017
YBOCS Total	6	-2.201	4.770	.028

Change in tic severity was strongly correlated with changes in tic related impairment (Spearman's $\rho = .81$, $p = .028$), indicating concordant symptom and functional improvement. In contrast, OCD symptom change was not strongly associated with tic change, suggesting partial independence of intervention response across domains.

[x] Impulsivity and Clinical Response

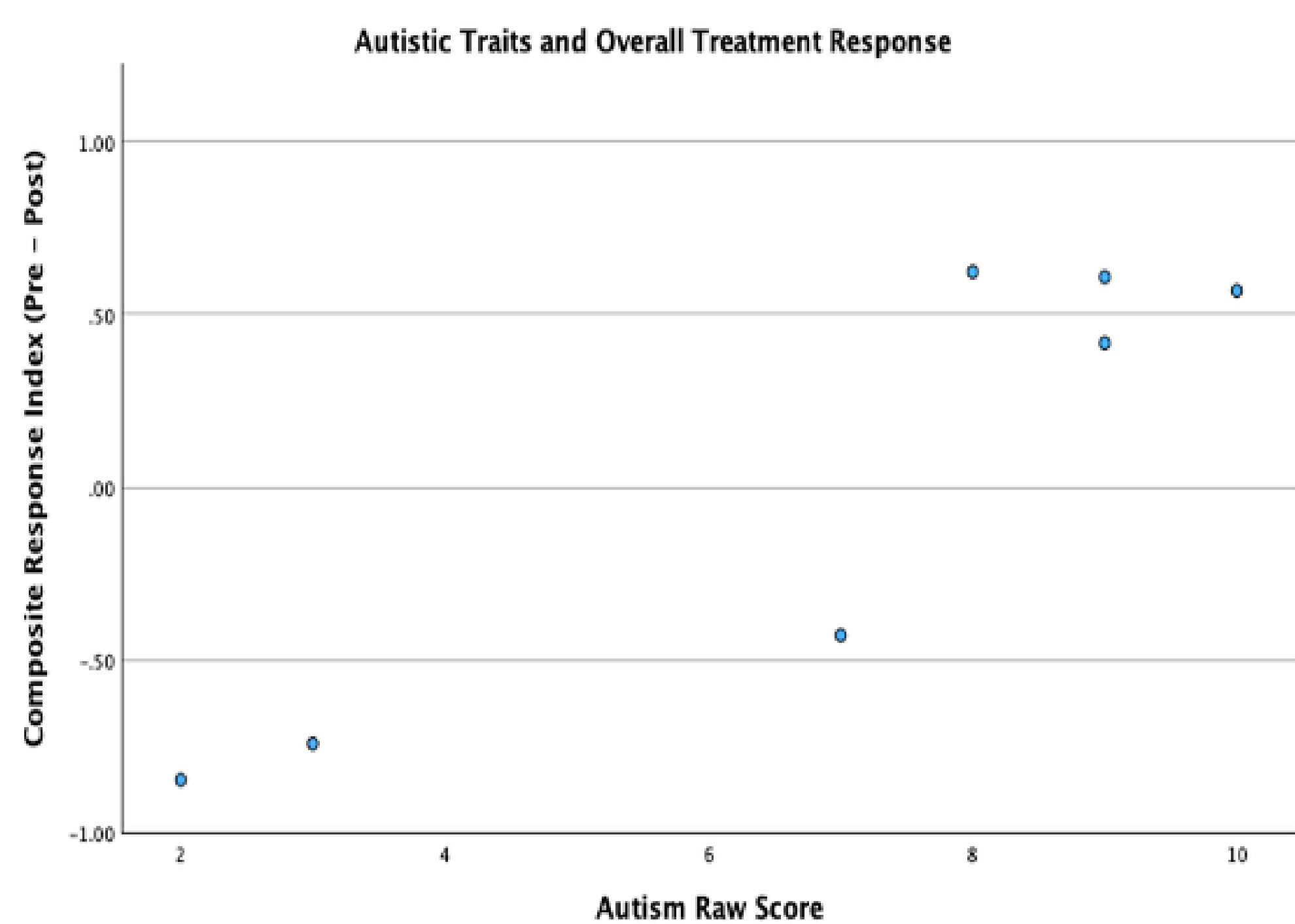
Higher impulsivity (as measured by the Barratt Impulsiveness Scale-11) was associated with poorer overall intervention response.

[x] Strong negative association with composite improvement ($\rho = -0.83$, $p = .021$).



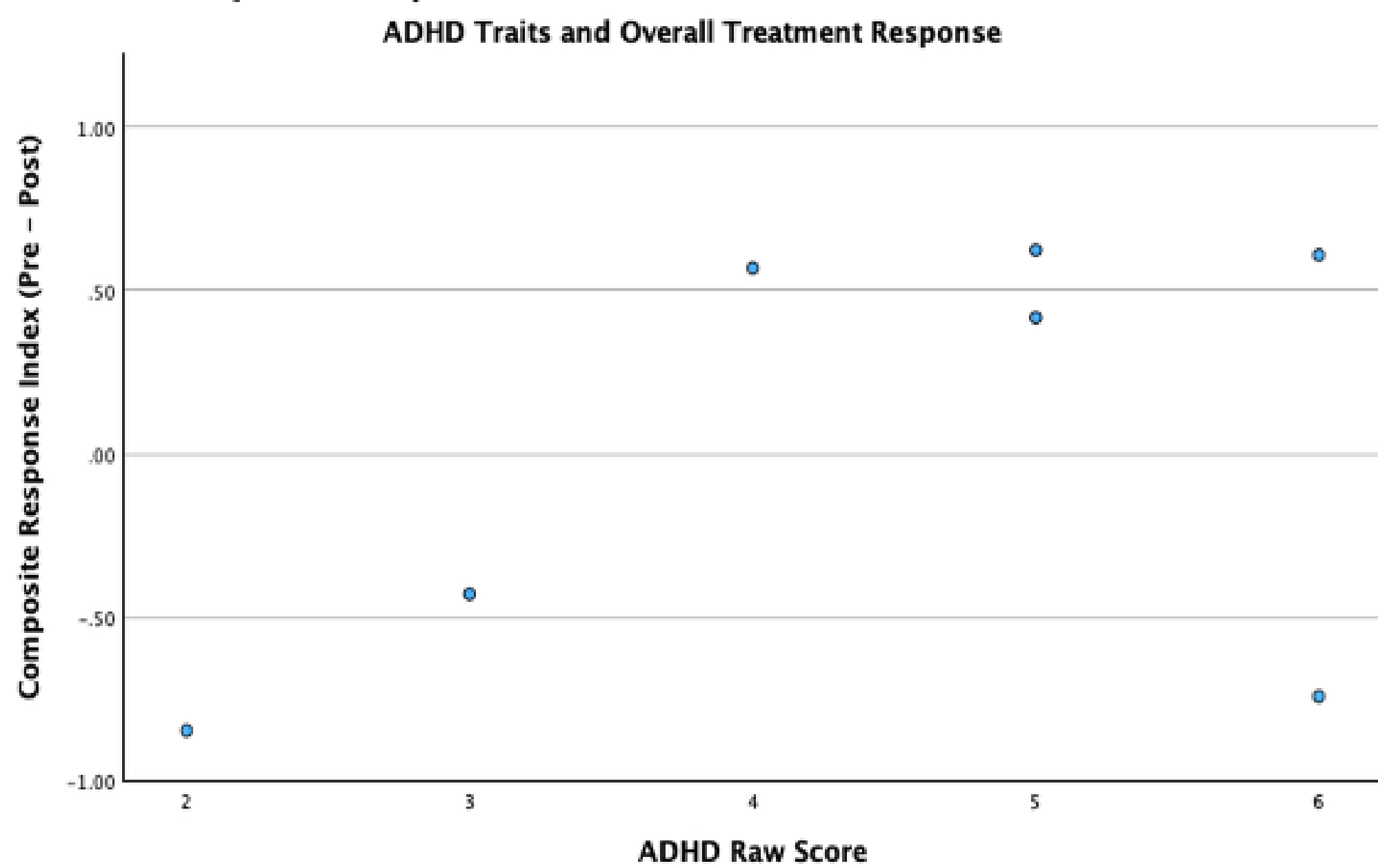
[x] Autistic Traits and Clinical Response

Autistic traits showed a positive, non-significant association with overall improvement ($\rho = .72$, $p = .068$).



[x] Attention-Deficit and Hyperactivity Disorder Traits and Clinical Response

ADHD traits showed a weak and non-significant association with overall treatment response ($\rho = -0.42$, $p = .35$).



Conclusion

[x] A hybrid ERP and HbRT approach is a feasible clinical intervention in TOCD based on pilot data, with preliminary indication of effectiveness regarding clinically meaningful change.

[x] Targeting shared cognitive, sensory, and behavioural mechanisms may better reflect the clinical reality of this patient population.

[x] Individual differences (i.e., impulsivity and autistic traits) may shape response.

[x] Larger controlled studies are warranted to establish efficacy and clarify mechanisms of change.