



## **Supplementary Material**

**Article Title:** Treatment to Enhance Cognition in Bipolar Disorder (TREC-BD): Efficacy of a Randomized Controlled Trial of Cognitive Remediation Versus Active Control

**Author(s):** Kathryn E. Lewandowski, PhD; Sarah H. Sperry, MA; Bruce M. Cohen, MD, PhD; Lesley A. Norris, BA; Garrett M. Fitzmaurice, PhD; Dost Ongur, MD, PhD; and Matcheri S. Keshavan, MD

**DOI Number:** 10.4088/JCP.17m11476

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SUPPLEMENTARY eTABLE 1. Cognitive Remediation Training Activities

<b>Game</b>	<b>Description</b>	<b>Cognitive Domain</b>
<i>Test Driver</i>	Identify sound “sweeps” as going up or down in frequency; stimuli are presented in decreasing duration	Basic auditory processing
<i>Navigator</i>	Discriminate between the target and a similar phoneme	Auditory discrimination
<i>Audio Mash-Up</i>	Listen to a string of syllables and click on each syllable in the presented order;	Auditory sequencing
<i>Coffee Break</i>	Match pairs of syllables by remembering the location of sounds;	Auditory Processing
<i>Stage-Crew</i>	Listen to a string of commands (in or out of sequence) and click icons in the correct order	Auditory Working Memory
<i>Brain Blog</i>	Listen to “conversations” and answer multiple-choice questions about the details	Auditory Memory
<i>Speed Trap</i>	Two stimuli appear - one in a central area and one in the periphery. Users must identify which stimuli appeared in the center and indicate the region in which the peripheral stimulus appears;	Visual attention and memory
<i>Pet Wrangler</i>	Follow multiple hamsters, avoid distractors, and identify where the hamsters end up	Visual divided attention
<i>Casting Call</i>	Observe an emotion face and match the affect to an array of different faces displaying emotions	Affect recognition
<i>Online Shopper</i>	Note a target category; attend to a stream of visually presented stimuli and indicate whether or not each stimulus belongs to the category	Executive function
<i>Trader Blitz</i>	Observe an auditory and a visual stimulus and respond only if the stimuli match	Executive function
<i>Stock Trader</i>	Attend to two streams of visually presented stimuli in a continuous performance format and respond if the stimulus matches the target	Executive function and sustained attention

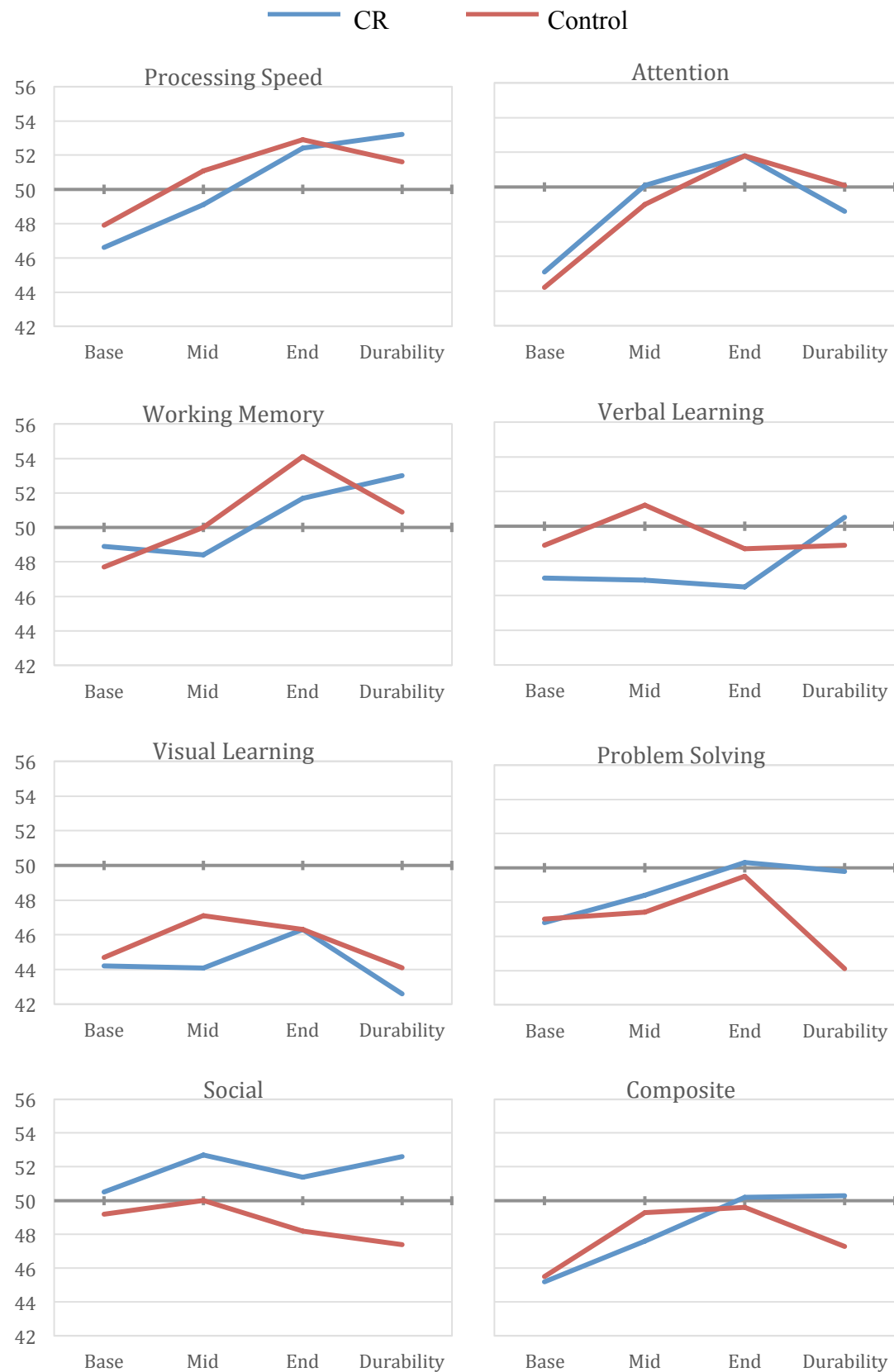
SUPPLEMENTARY eTABLE 2. Feedback Survey Responses by Group

Item <sup>a</sup>	Treatment (n=19) Mean (sd)	Control (n=10) Mean (sd)
1. I had fun doing the computer activities.	3.2 (1.0)	3.6 (0.5) <sup>ns</sup>
2. I felt that the computer activities were too difficult. <sup>b</sup>	3.9 (0.8)	3.4 (0.8) <sup>ns</sup>
3. Compared to other treatment and activities, I enjoyed the computer activities.	3.4 (1.1)	4.0 (0.8) <sup>ns</sup>
4. Compared to other treatment and activities, this program was stressful. <sup>b</sup>	3.9 (0.7)	4.3 (0.7) <sup>ns</sup>
5. Compared to other treatment and activities, I looked forward to attending the sessions.	3.3 (1.0)	4.0 (0.8) <sup>ns</sup>
6. After the sessions, I felt like I had accomplished something.	3.7 (1.2)	4.0 (0.9) <sup>ns</sup>
7. After the sessions, I felt good about myself.	3.8 (1.0)	4.1 (0.9) <sup>ns</sup>
8. After the sessions, I felt anxious or tense. <sup>b</sup>	3.5 (0.7)	3.5 (0.5) <sup>ns</sup>
9. I do not feel that the sessions helped me. <sup>b</sup>	2.8 (1.2)	2.5 (1.0) <sup>ns</sup>
10. I wanted to attend my scheduled sessions.	3.7 (0.9)	4.3 (0.7) <sup>ns</sup>
11. I am glad that I participated in the computer sessions.	4.2 (1.1)	4.6 (0.5) <sup>ns</sup>
12. I would continue to do the computer activities if they were available.	3.3 (1.2)	3.2 (1.0) <sup>ns</sup>
13. I would recommend this treatment to others.	3.9 (1.1)	3.7 (1.1) <sup>ns</sup>
TOTAL	47.1 (8.9)	49.0 (7.3) <sup>ns</sup>

<sup>a</sup> 5=Always; 4=Mostly; 3=Sometimes; 2=Rarely; 1=Never

<sup>b</sup> Items were reversed-scored; higher scores indicate more favorable response (e.g. less stress)

SUPPLEMENTARY eFIGURE 1. MCCB Cognitive Performance Across Time by Group



MCCB cognitive domain scores and composite by treatment condition at baseline, midpoint, post-treatment, and durability. All available data were included at each assessment time.