

**TABLE S1. Demographic Data of Participants**

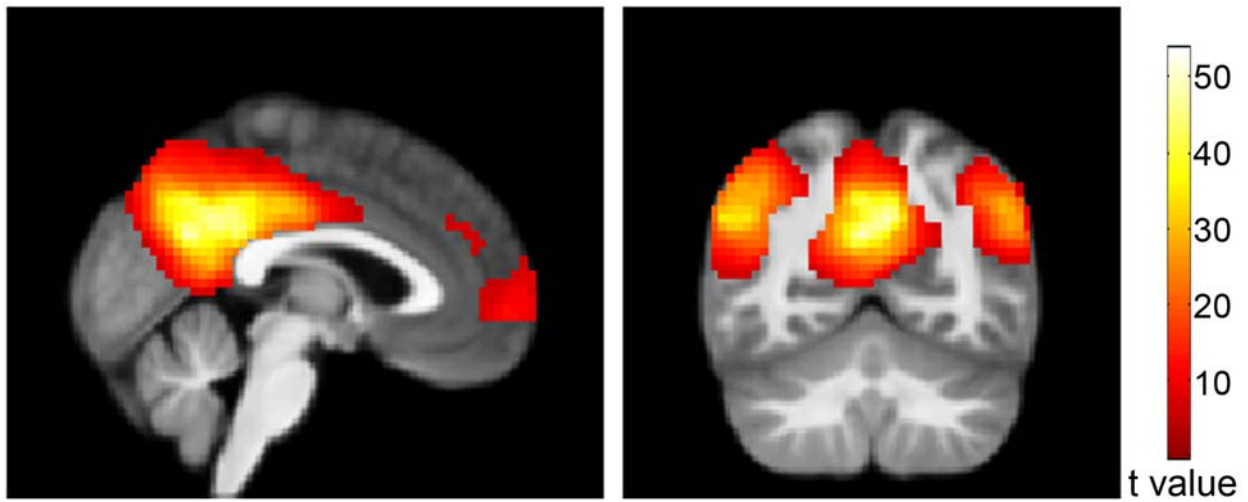
<b>Characteristic</b>	<b>Healthy Comparison Subjects (N=28)</b>	<b>Schizophrenia Patients (N=28)</b>
Age (years)	43 SD 7.5	48 SD 12
Gender (male:female)	17:11	20:8
Treatment (medicated:unmedicated)	n/a	28:0
Antipsychotics (typical:atypical:both)	n/a	1:26:1
Smoking status (smoker:nonsmoker)	3:25	10:18

**TABLE S2. Neurocognitive Performance (Normalized T-Scores) on the MATRICS Consensus Cognitive Battery**

<b>Test</b>	<b>Mean (SD)</b>	<b>Cognitive Domain</b>	<b>Mean (SD)</b>
Trails A (processing speed)	39.3 (12.6)	Processing speed	38.6 (11.0)
BACS-SC (processing speed)	42.4 (11.8)	Attention/vigilance	35.4 (13.5)
HVLT-R (verbal learning/memory)	41.3 (10.1)	Working memory	44.3 (10.0)
WMS-SS (working memory)	47.9 (10.4)	Verbal learning	41.9 (9.8)
LNS (working memory)	42.8 (10.9)	Visual learning	49.6 (9.7)
NAB-M (reasoning and problem solving)	49.0 (9.0)	Reasoning/problem solving	49.1 (9.0)
BVMT-R (visual learning)	49.6 (9.7)	Social cognition	35.9 (10.4)
Category fluency (processing speed)	41.3 (11.3)	Overall composite	36.6 (11.5)
MSCEIT (social cognition)	35.7 (10.3)		
CPT-IP (attention/vigilance)	35.4 (13.5)		

Trails A=Trail Making Test, part A; BACS-SC=Brief Assessment of Cognition in Schizophrenia–Symbol Coding; HVLT-R=Hopkins Verbal Learning Test–Revised; WMS-SS=Wechsler Memory Scale, Spatial Span; LNS=Letter Number Span; NAB-M=Neuropsychological Assessment Battery, Mazes; BVMT-R=Brief Visuospatial Memory Test–Revised; MSCEIT=Mayer-Salovey-Caruso Emotional Intelligence Test, Managing Emotions; CPT–IP=Continuous Performance Test–Identical Pairs version. Average T-score for a healthy person is 50 (SD=10).

**FIGURE S1.** Default Network Activity, Across All Subjects ( $p < 0.05$ , FWE-corrected). Activity is overlaid on a group average anatomical scan for visualization.



## **Description of the MATRICS Consensus Cognitive Battery (MCCB)**

The following brief descriptions of the ten MCCB tests are taken from the *MATRICS Consensus Cognitive Battery Manual* by Nuechterlein and Green (1).

*Trail Making Test, part A.* This is a brief, timed test of visual scanning and visuomotor tracking that is included as an index of Speed of Processing. It involves connecting consecutive numbers that are arranged in irregular locations on a sheet of paper.

*Brief Assessment of Cognition in Schizophrenia: Symbol Coding.* This is a measure of Speed of Processing that involves writing numbers that correspond to nonsense symbols as quickly as possible for a brief period.

*Hopkins Verbal Learning Test–Revised.* This test measures learning of word lists and is an index of Verbal Learning.

*Weschler Memory Scale–Third Edition: Spatial Span.* This test measures nonverbal working memory by testing the respondent's ability to remember the locations of a series of blocks to which the administrator points.

*Letter-Number Span.* This test measures verbal working memory. In the test, the subject mentally reorders orally presented lists of intermixed letters and numbers before repeating them back to the test administrator.

*Neuropsychological Assessment Battery: Mazes.* This test measures executive function, in particular foresight, planning, and impulse control, all of which are aspects of reasoning and problem solving. In the test, the subject is asked to draw a route through a written maze as quickly as possible.

*Brief Visuospatial Memory Test–Revised.* This test assesses visual learning and memory using immediate and delayed recall of six geometric visual designs. The visual designs are reproduced on a blank sheet after being studied for several seconds.

*Category Fluency: Animal Naming (Fluency).* This test, which measures Speed of Processing, involves the speeded spontaneous production of words that either begin with a certain letter or that are in a given category. The MATRICS version uses naming as many animals as possible within a set time limit.

*Mayer-Salovey-Caruso Emotional Intelligence Test: Managing Emotions.* This Social Cognition test measures how well people perform tasks involving emotions and solving emotional problems. The subject is orally presented situations that involve other people and is asked to choose among several possible answers in response to these situations.

*Continuous Performance Test–Identical Pairs Version.* This test measures sustained, focused attention or vigilance. It involves monitoring a series of multiple digits as they appear briefly on a computer monitor and responding with a button press each time that two stimuli in a row are identical.

*MCCB Domains.* The time to completion of the Trail Making Test, part A, the total number correct on the Brief Assessment of Cognition in Schizophrenia Symbol Coding Test, and the total number of animals named in 60 seconds on the Category Fluency Test comprised the Speed of Processing domain. The mean  $d'$  value across 2-, 3-, and 4-digit conditions, where  $d'$  is an index of signal/noise discrimination, on the Continuous Performance Test – Identical Pairs comprised the Attention/Vigilance domain. The total number of words recalled correctly over the three learning trials of the Hopkins Verbal Learning Test-Revised comprised the verbal learning domain. Total recall score for the three learning trials of the Brief Visuospatial Memory Test – Revised Immediate Recall comprised the Visual Learning domain. The sum of scores in the forward and backward conditions of the Wechsler Memory Scale – Third Edition (WMS-III) Spatial Span Test and the total number correct on the Letter-Number Span Test comprised the Working Memory domain. The total score on the Neuropsychological Assessment Battery Mazes Test comprised the Reasoning and Problem Solving domain. The total score on the Mayer Salovey Caruso Emotional Intelligence Test Managing Emotions portion (sections D & H) comprised the Social Cognition domain.

## **Reference**

1. Nuechterlein KH, Green MF: MCCB MATRICS Consensus Cognitive Battery Manual. Los Angeles, MATRICS Assessment, Inc., and the Regents of the University of California, Los Angeles, 2006.