

<b>CNS Vital Signs Report</b>	<b>Test Date: January 25, 2014 11:16:54</b>
Subject Reference/ID: corbinwaugh	Administrator: Mark Squibb
Age: 25	Language: English (United States)
Total Test Time: 46:53 (min:secs)	Online Version 1.0

Patient Profile	Percentile Range				> 74	25 - 74	9 - 24	2 - 8	< 2
	Standard Score Range				> 109	90 - 109	80 - 89	70 - 79	< 70
Domain Scores	Subject Score	Standard Score	Percentile	Valid Score**	Above	Average	Low Average	Low	Very Low
Neurocognitive Index (NCI)	NA	84	14	Yes			X		
Composite Memory	93	86	18	Yes			X		
Verbal Memory	48	82	12	Yes			X		
Visual Memory	45	93	32	Yes		X			
Psychomotor Speed	176	94	34	Yes		X			
Reaction Time*	663	88	21	Yes			X		
Complex Attention*	13	80	9	Yes			X		
Cognitive Flexibility	31	71	3	Yes				X	
Processing Speed	56	89	23	Yes			X		
Executive Function	33	73	4	Yes				X	
Social Acuity	12	121	92	Yes	X				
Reasoning	7	98	45	Yes		X			
Sustained Attention	33	106	66	Yes		X			
Working Memory	11	102	55	Yes		X			
Simple Attention	38	85	16	Yes			X		
Motor Speed	118	100	50	Yes		X			

Domain Dashboard: Above average domain scores indicate a standard score (SS) greater than 109 or a Percentile Rank (PR) greater than 74, indicating a high functioning test subject. Average is a SS 90-109 or PR 25-74, indicating normal function. Low Average is a SS 80-89 or PR 9-24 indicating a slight deficit or impairment. Below Average is a SS 70-79 or PR 2-8, indicating a moderate level of deficit or impairment. Very Low is a SS less than 70 or a PR less than 2, indicating a deficit and impairment. Reaction times are in milliseconds. An \* denotes that "lower is better", otherwise higher scores are better. Subject Scores are raw scores calculations generated from data values of the individual subtests.

VI\*\* - Validity Indicator: Denotes a guideline for representing the possibility of an invalid test or domain score. "No" means a clinician should evaluate whether or not the test subject understood the test, put forth their best effort, or has a clinical condition requiring further evaluation.

Verbal Memory Test (VBM)	Score	Standard	Percentile	
Correct Hits - Immediate	11	86	18	Verbal Memory test: Subjects have to remember 15 words and recognize them in a field of 15 distractors. The test is repeated at the end of the battery. The VBM test measures how well a subject can recognize, remember, and retrieve words e.g. exploit or attend literal representations or attribute. "Correct Hits" refers to the number of target words recognized. Low scores indicate verbal memory impairment.
Correct Passes - Immediate	14	95	37	
Correct Hits - Delay	14	115	84	
Correct Passes - Delay	9	24	1	
Visual Memory Test (VSM)	Score	Standard	Percentile	
Correct Hits - Immediate	10	81	10	Visual Memory test: Subjects have to remember 15 geometric figures, and recognize them in a field of 15 distractors. The test is repeated at the end of the battery. The VIM test measures how well a subject can recognize, remember, and retrieve geometric figures e.g. exploit or attend symbolic or spatial representations. "Correct Hits" refers to the number of target figures recognized. Low scores indicate visual memory impairment.
Correct Passes - Immediate	13	109	73	
Correct Hits - Delay	12	105	63	
Correct Passes - Delay	10	87	19	
Finger Tapping Test (FTT)	Score	Standard	Percentile	
Right Taps Average	58	94	34	The FTT is a test of motor speed and fine motor control ability. There are three rounds of tapping with each hand. The FTT test measures the speed and the number of finger-taps with each hand. Low scores indicate motor slowing. Speed of manual motor activity varies with handedness. Most people are faster with their preferred hand but not always.
Left Taps Average	60	104	61	

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<b>Symbol Digit Coding (SDC)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Correct Responses	58	90	25	The SDC test measures speed of processing and draw upon several cognitive processes simultaneously, such as visual scanning, visual perception, visual memory, and motor functions. Errors may be due to impulsive responding, misperception, or confusion.
Errors*	2	92	30	
<b>Stroop Test (ST)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Simple Reaction Time*	357	80	9	The ST measures simple and complex reaction time, inhibition / disinhibition, mental flexibility or directed attention. The ST helps assess how well a subject is able to adapt to rapidly changing and increasingly complex set of directions. Prolonged reaction times indicate cognitive slowing / impairment. Errors may be due to impulsive responding, misperception, or confusion.
Complex Reaction Time Correct*	611	89	23	
Stroop Reaction Time Correct*	714	90	25	
Stroop Commission Errors*	2	83	13	
<b>Shifting Attention Test (SAT)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Correct Responses	42	71	3	The SAT measures executive function or how well a subject recognizes set shifting (mental flexibility) and abstraction (rules, categories) and manages multiple tasks simultaneously. Subjects have to adjust their responses to randomly changing rules. The best scores are high correct responses, few errors and a short reaction time. Normal subjects may be slow but accurate, or fast but not so accurate. Attention deficit may be apparent.
Errors*	9	88	21	
Correct Reaction Time*	1141	84	14	
<b>Continuous Performance Test (CPT)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Correct Responses	39	84	14	The CPT measures sustained attention or vigilance and choice reaction time. Most normal subjects obtain near-perfect scores on this test. A long response time may suggest cognitive slowing and/or impairment. More than 2 errors (total) may be clinically significant. More than 4 errors (total) indicate attentional dysfunction.
Omission Errors*	1	84	14	
Commission Errors*	1	91	27	
Choice Reaction Time Correct*	468	79	8	
<b>Perception Of Emotions Test (POET)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Correct Responses	12	114	82	The POET measures how well a subject can perceive and identify specific emotions. The POET is an identification test of the positive emotions "happy" and "calm" and the negative emotions "angry" and "sad". "Social cognition" or "emotional acuity" has been defined as "the way in which people make sense of other people and themselves". It is the ability to perceive and understand social information. The reaction times in POET are much longer than in the other tests, indicating the complexity of central processes governing emotional acuity.
Average Correct Reaction Time*	1163	85	16	
Omission Errors*	0	114	82	
Commission Errors*	0	117	87	
<b>Positive Emotions</b>				
Correct Hits	6	109	73	
Reaction Time*	1079	88	21	
<b>Negative Emotions</b>				
Correct Hits	6	110	75	
Reaction Time*	1247	87	19	
<b>Reasoning Test (RT)</b>	<b>Score</b>	<b>Standard</b>	<b>Percentile</b>	
Correct Responses	11	101	53	The NVRT measures how well a subject can perceive and understand the meaning of visual or abstract information and recognizing relationships between visual-abstract concepts. The NVRT is comprised of 15 matrices, or visual analogies. The matrices are progressively more difficult. Each is presented for 14.5 seconds. Non-verbal or visual-abstract reasoning is the process of perceiving issues and reaching conclusions through the use of symbols or generalizations rather than concrete factual information.
Average Correct Reaction Time*	3916	112	79	
Commission Errors*	4	96	40	
Omission Errors*	0	115	84	

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Four Part Continuous Performance Test	Score	Standard	Percentile	
<b>Part 1</b>				The FPCPT test is a four part test that measures a subject's working memory and sustained attention. The FPCPT is a four part test: PART ONE - is a simple reaction time test, the subject must press the space bar when any stimulus is presented; PART TWO - is a variant of the continuous performance test, the subject is asked to respond to one stimulus, but not to any others. Discrimination is required, so the reaction times that are generated are "choice reaction times". PART THREE - is a "one back" CPT. The subject has to respond to a figure only if the figure immediately preceding was the same. PART FOUR - is a "two-back" CPT. It is a difficult task and is used to measure working memory. Parts two, three, and four of the tests are used to calculate sustained attention domain.
Average Correct Response Time*	331	98	45	
<b>Part 2</b>				
Correct Responses	6	103	58	
Average Correct Response Time*	430	93	32	
Incorrect Responses*	0	104	61	
Average Incorrect Response Time*	0			
Omission Errors*	0	103	58	
<b>Part 3</b>				
Correct Responses	16	112	79	
Average Correct Response Time*	508	97	42	
Incorrect Responses*	0	104	61	
Average Incorrect Response Time*	0			
Omission Errors*	0	112	79	
<b>Part 4</b>				
Correct Responses	15	113	81	
Average Correct Response Time*	620	99	47	
Incorrect Responses*	4	80	9	
Average Incorrect Response Time*	888	89	23	
Omission Errors*	1	113	81	