

**Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery:
Demographically Adjusted Neuropsychological Norms
for African American and Caucasian Adults**

Developed By

**Robert K. Heaton, PhD, S. Walden Miller, PhD,
Michael J. Taylor, PhD, and Igor Grant, MD**

Client/Testing Information

Client Name : Sample Client
Client ID : SC
Date of Birth : (not specified)
Age : 22
Sex : Female
Education : 15
Ethnicity : -Not Specified-
Date of Examination : 04/19/2023
Normative Sample : Caucasian

Use of this report requires a thorough understanding of the included tests, their interpretation, and clinical applications, as presented in the Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery: Demographically Adjusted Neuropsychological Norms for African American and Caucasian Adults manual (Heaton, Miller, Taylor, & Grant, 2004). This report is intended for use by qualified professionals.

This report reflects standardized administration and scoring of the tests. The normative scores in this program were developed by Heaton et al. (2004) using data from Caucasian and African American adults (ages 20-85 years), who were neurologically normal by history, whose native language was English, and who had received standard educations in the United States. Application of the norms to clients with other ages, ethnicities, or educational/linguistic backgrounds will have uncertain validity and will not allow straightforward interpretation. Any such use should be made with considerable clinical caution and should be accompanied by clear statements about the inherent limitations of the approach: e.g., "this client's test results will be compared with normal expectations for a person with another (specified) age/ethnicity, and the applicability of such normative standards to this client is uncertain."

Results on the tests in this report should be interpreted within the context of a larger clinical assessment, including relevant clinical and historical information about this client. Additionally, use of the current scores for clinical or diagnostic decisions should not be attempted without a good understanding of brain-behavior relationships and the medical and psychological factors that affect them.

**PAR Psychological Assessment Resources, Inc. • 16204 North Florida Ave. • Lutz, FL 33549 • 1.800.331.8378 •
www.parinc.com**

Copyright ©1991, 1992, 2003, 2004 by Psychological Assessment Resources, Inc. All rights reserved. May not be reproduced in whole or in part in any form or by any means without written permission of Psychological Assessment Resources, Inc.

Version: 4

Additional Client/Testing Information

Handedness : (not specified)
Examiner :
Referred by :
Peripheral Injuries :
Working Diagnosis :
Medications :
Version of WAIS : WAIS

Clinical Notes and Comments

A large empty rectangular box with a black border, intended for entering clinical notes and comments. The box is currently blank.

Summary Scores

Measure	Raw scores	Scaled scores	T scores	Descriptive classification
WAIS Full Scale IQ (NE) [WAIS FSIQ]	122		59	Above Average
Average Impairment Rating [AIR]	3.25	2	0	Severe Impairment
Global Deficit Score [GDS]	2.6190		18	Severe Impairment

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

Executive Functions

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
WCST-Perseverative Errors (NE) [WCST]	53		19	Severe Impairment	
Category Test (errors) [CAT ERROR]	149	0	2	Severe Impairment	5
Trail Making Test Part B (secs) [TRAIL B]	232	4	11	Severe Impairment	5
Thurstone Word Fluency (correct) [THUR FLU]	66	12	50	Average	0
Letter Fluency-FAS (total correct) [FAS]	61	15	60	Above Average	
Category Fluency-Animals (total correct) [ANIMALS]	24	12	45	Average	

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

Attention/Working Memory

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
WAIS Digit Span ^(NE) [WAIS DIGIT SPAN]	14	13	56	Above Average	
Paced Auditory Serial Addition Test (total correct) [PASAT]	101	8	41	Below Average	
Digit Vigilance-Errors [DIGIT ERROR]	35	3	21	Moderate to Severe Impairment	4
Seashore Rhythm Test (correct) [SSHOR RHYM]	19	4	23	Moderate to Severe Impairment	4
Speech-Sounds Perception Test (errors) [SPCH PERC]	43	1	7	Severe Impairment	5

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

Speed of Information Processing

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
WAIS Digit Symbol ^(NE) [WAIS DIGIT SYMB]	11	10	36	Mild Impairment	
Trail Making Test Part A (secs) [TRAIL A]	46	6	22	Moderate to Severe Impairment	4
Digit Vigilance-Time (secs) [DIGIT TIME]	532	6	27	Moderate Impairment	3

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

Spatial Skills

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
WAIS Block Design ^(NE) [WAIS BLOCK DESGN]	15	14	61	Above Average	
Tactual Performance Test Total Time (min/blk) [TPT TIME]	3.120	1	7	Severe Impairment	5
Spatial Relations* (rating) [SPAT REL]	3	9	42	Below Average	0

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

*T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

Verbal/Academic Skills

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
WAIS Vocabulary ^(NE) [WAIS VOCAB]	5	3	14	Severe Impairment	
Aphasia Screening Test (errors) [APHAS SCRNI]	66	0	2	Severe Impairment	5
Boston Naming Test (correct) [BSTN NAME]	43	5	28	Moderate Impairment	3
BDAE Complex Ideational Material ^{(NE)*} (correct) [BDAE COMP]	11	9	40	Below Average	
PIAT Reading Recognition (percentile) [PIAT RECOG]	99	17	73	Above Average	
PIAT Reading Comprehension ^(NE) (percentile) [PIAT COMP]	98	17	70	Above Average	
PIAT Spelling ^(NE) (percentile) [PIAT SPELL]	93	12	51	Average	

T scores below 40 appear in bold italic type.

(NE) Score is not adjusted for ethnicity. Interpret T scores cautiously for non-Caucasian examinees.

*T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

Verbal Episodic Memory

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
Story Memory Trial 1 (correct) <i>[STORY-T1]</i>	15.9	11	48	Average	
Story Memory Learning (points/trials) <i>[STORY LEARN]</i>	18.22	11	50	Average	0
Story Memory Delayed Recall (correct) <i>[STORY RECALL]</i>	23.4	16	69	Above Average	0
Story Memory Loss (% loss) <i>[STORY LOSS]</i>	34.95	4	28	Moderate Impairment	
CVLT Trial 1 (correct) <i>[CVLT-1]</i>	12	15	63	Above Average	
CVLT Trial 5 (correct) <i>[CVLT-5]</i>	4	2	5	Severe Impairment	
CVLT Trials 1-5 (correct) <i>[CVLT-TOT]</i>	52	10	36	Mild Impairment	
CVLT Short Delay Free Recall (correct) <i>[CVLT-SDFR]</i>	6	6	22	Moderate to Severe Impairment	
CVLT Long Delay Free Recall (correct) <i>[CVLT-LDFR]</i>	2	3	8	Severe Impairment	

T scores below 40 appear in bold italic type.

Visual Episodic Memory

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
Tactual Performance Test-Memory (correct) [TPT MEM]	7	9	40	Below Average	0
Tactual Performance Test-Location (correct) [TPT LOC]	7	14	56	Above Average	0
Figure Memory Trial 1 (correct) [FIGUR-T1]	21	18	76	Above Average	
Figure Memory Learning (points/trials) [FIGUR LEARN]	16.95	12	50	Average	0
Figure Memory Delayed Recall (correct) [FIGUR RECALL]	11	6	32	Mild to Moderate Impairment	2
Figure Memory Loss* (% loss) [FIGUR LOSS]	32.00	6	33	Mild to Moderate Impairment	

T scores below 40 appear in bold italic type.

*T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

Sensory Perceptual Skills

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
Sensory-Perceptual-Total (errors) [SP TOT]	43.0	2	17	Severe Impairment	5
Tactile Form Recognition–Worst hand (secs) [TFR WH]	15.7	7	42	Below Average	

T scores below 40 appear in bold italic type.

Motor Skills

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
Finger Tapping–Worst hand (taps) [TAP WH]	46.2	8	46	Average	0
Hand Dynamometer–Worst hand (kgs) [GRIP WH]	53.0	14	81	Above Average	
Grooved Pegboard–Worst hand (secs) [PEG WH]	154	2	5	Severe Impairment	5

T scores below 40 appear in bold italic type.

Lateralized Sensorimotor/Psychomotor Comparisons

Measure	Raw scores	Scaled scores	T scores	Descriptive classification	Deficit score
Finger Tapping–Dominant (taps) <i>[TAP DH]</i>	46.2	8	46	Average	
Finger Tapping–Nondominant (taps) <i>[TAP NDH]</i>	51.9	12	64	Above Average	
Hand Dynamometer–Dominant (kgs) <i>[GRIP DH]</i>	71.7	17	97	Above Average	
Hand Dynamometer–Nondominant (kgs) <i>[GRIP NDH]</i>	53.0	14	81	Above Average	
Grooved Pegboard–Dominant (secs) <i>[PEG DH]</i>	154	2	5	Severe Impairment	
Grooved Pegboard–Nondominant (secs) <i>[PEG NDH]</i>	101	6	25	Moderate Impairment	
Tactual Performance Test–Dominant (min/blk) <i>[TPT DH]</i>	5.09	4	19	Severe Impairment	
Tactual Performance Test–Nondominant (min/blk) <i>[TPT NDH]</i>	4.50	4	17	Severe Impairment	
Tactual Performance Test–Both hands (min/blk) <i>[TPT BH]</i>	3.00	4	13	Severe Impairment	
Sensory-Perceptual–Right (errors) <i>[SP R]</i>	51.0	1	8	Severe Impairment	
Sensory-Perceptual–Left* (errors) <i>[SP L]</i>	59.0	1	7	Severe Impairment	
Tactile Form Recognition–Right (secs) <i>[TFR R]</i>	15.7	7	42	Below Average	
Tactile Form Recognition–Left (secs) <i>[TFR L]</i>	4.9	17	77	Above Average	

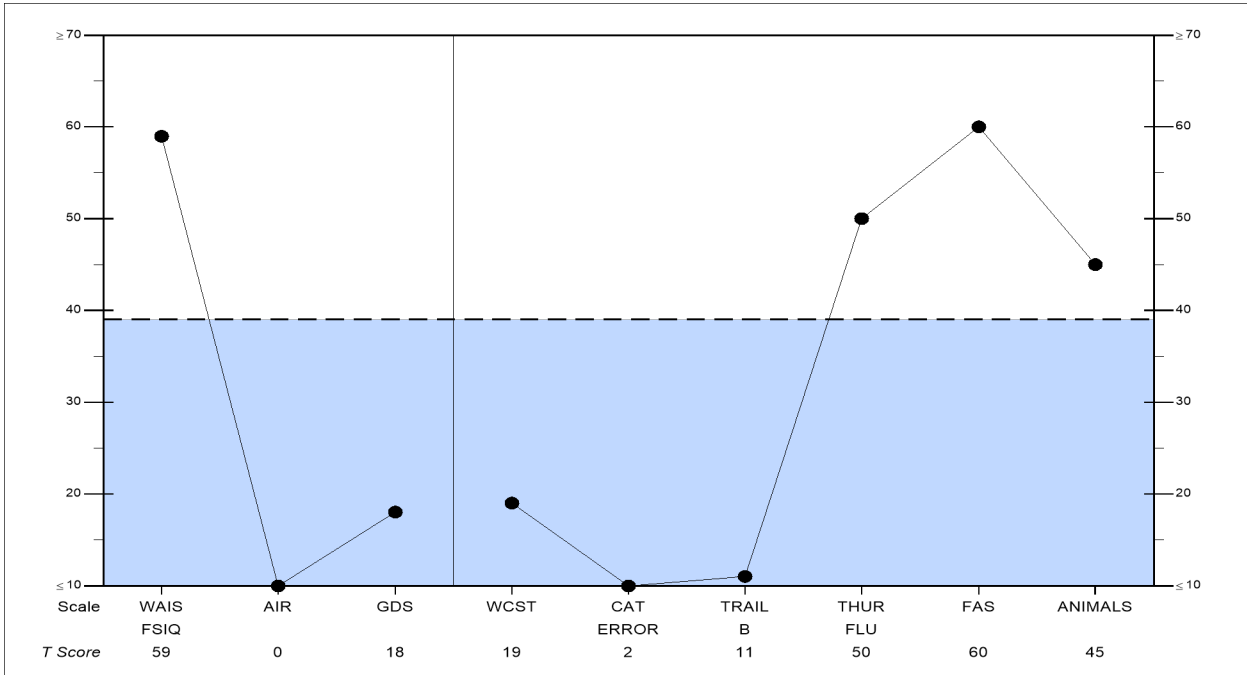
T scores below 40 appear in bold italic type.

*T scores for this variable are not normally distributed, but have satisfactory specificity for T score < 40 cutoff.

L = Right - left difference, with possible lateralizing significance.

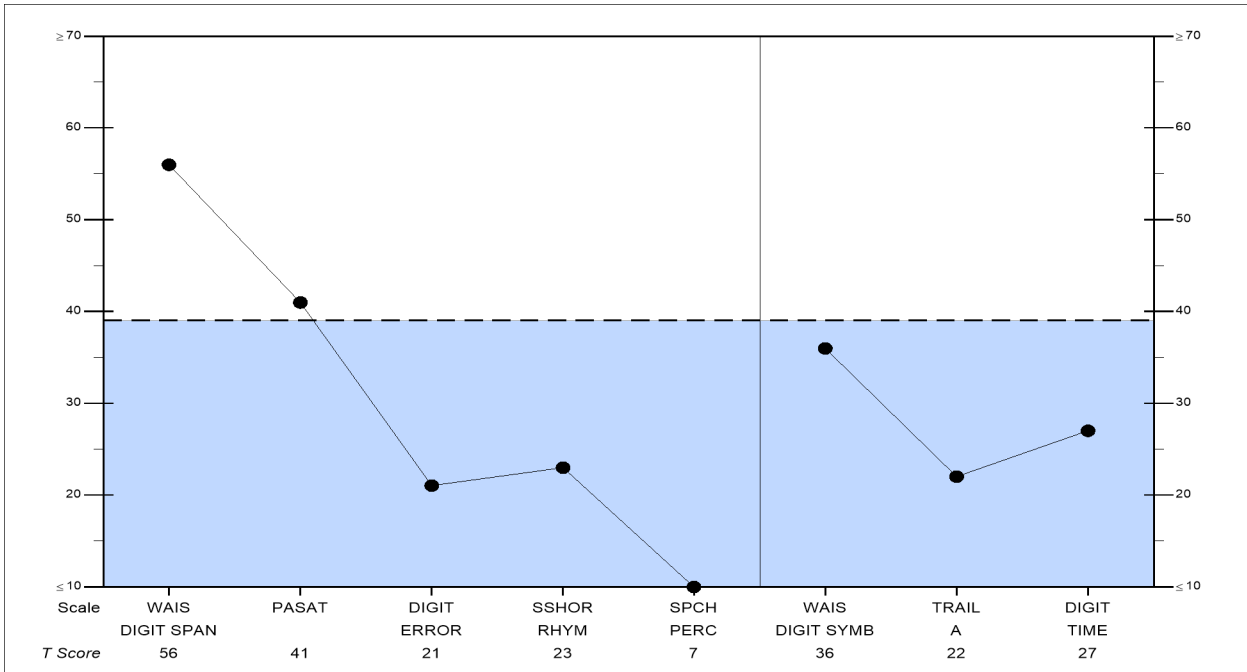
Summary Scores

Executive Functions



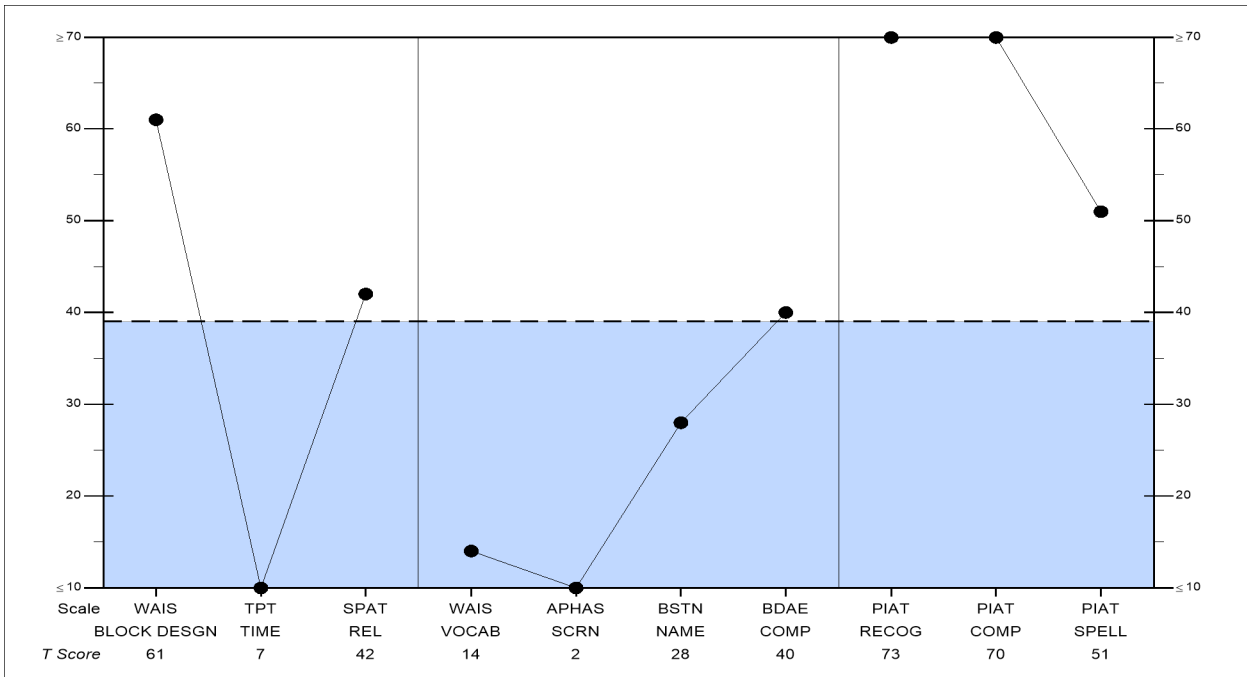
Attention/Working Memory

Speed of Information Processing

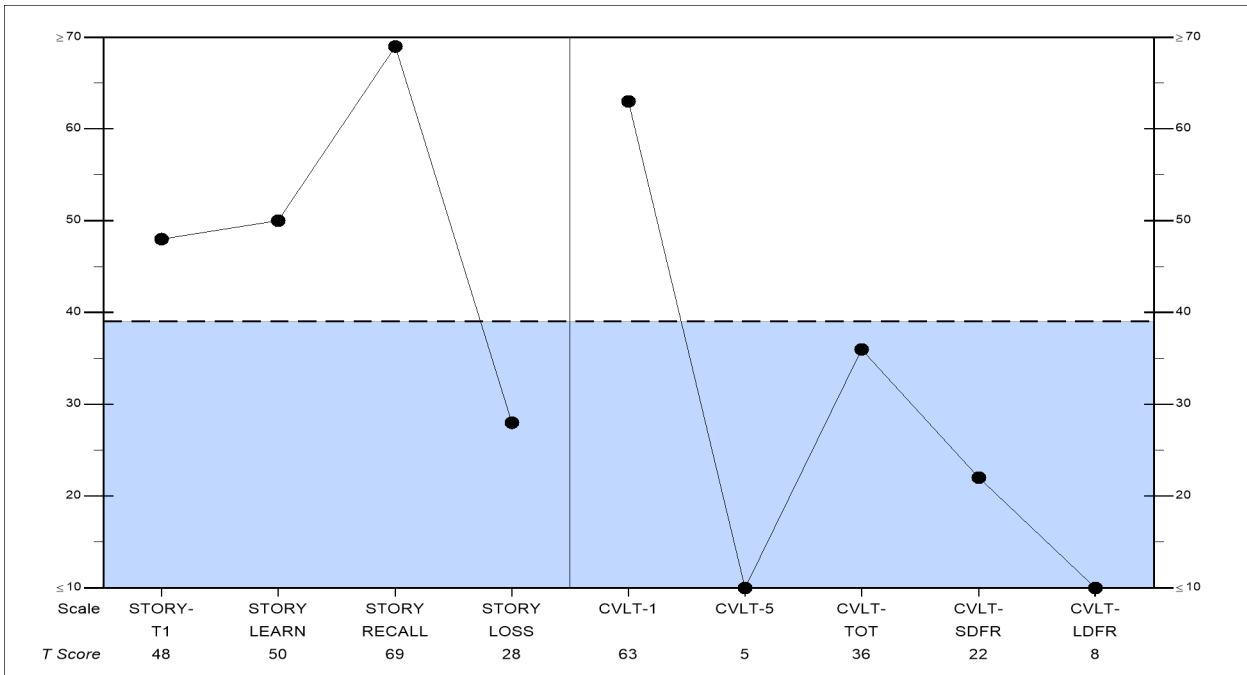


Spatial Skills

Verbal/Academic Skills

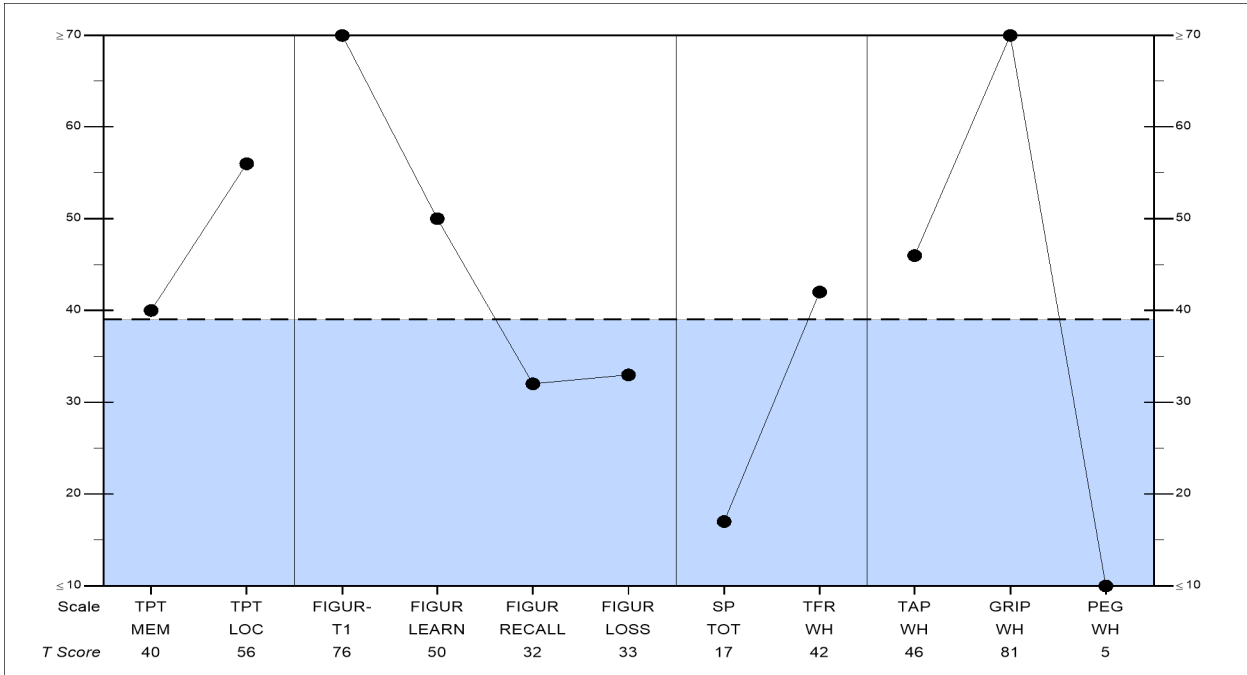


Verbal Episodic Memory



Sensory Perceptual Skills

Visual Episodic Memory Motor Skills



Lateralized Sensorimotor/Psychomotor Comparisons

