Current Updates in Psychological Testing & What Makes a Good Referral?

CLARITY HEALTH
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Domains of Psychological Testing

Intelligence	Concentration & Processing	Memory	Personality & Emotional	Malingering
Weschler Adult Intelligence Scale-IV (WAIS-IV)	CNS Vital Signs (CNS)	Weschler Memory Scale-IV (WMS-IV)	Minnesota Multiphasic Personality Inventory-2 (MMPI-2)	Inventory of Problems-9 (IOP-9)
Reynolds Adaptable Intelligence Test (RAIT)	Conner's Continuous Auditory Test of Attention (CATA)	Montreal Cognitive Assessment (MoCA)	Millon Clinical Multiaxial Inventory-IV (MCMI-IV)	Validity Indicator Profile (VIP)
Stanford Binet Intelligence Scales -5 (SB-5)	Conner's Performance Test-3 (CPT-3)			

"I went to the psychologist to treat my big ego. I think it worked; I'm feeling much better than all of you today."

Functions Assessed

- Language/Verbal
- Memory
- Attention & Executive Control
- Impulse Control
- Problem-Solving
- Rule-out Malingering

"If the brain was so simple that we could understand it, then we would be so simple that we couldn't."

-Emerson M. Pugh

Autism Diagnostic Observation Schedule

Second Edition (2021)

Improved Algorithms

- Stronger Predictive Validity

New Toddler Module

- 12-30 Months
- Designed for children who have not developed phrase speech
- Results classified as 'Ranges of Concern

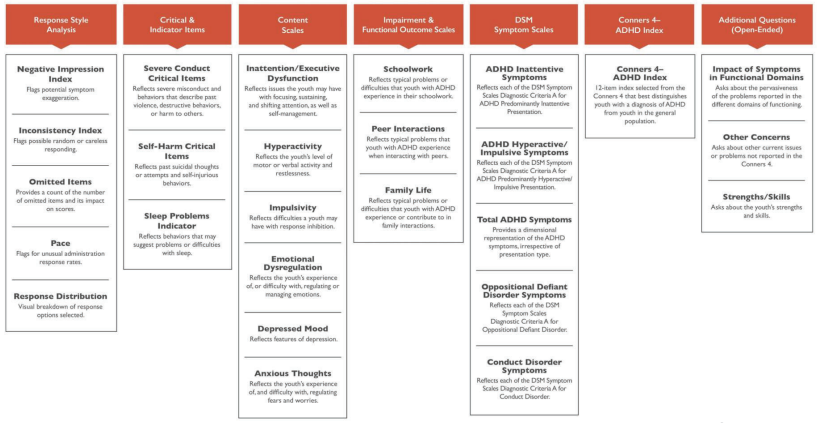
Improved Protocol Booklets

New Comparison Scores

Conners 4th Edition

Questionnaire – Weakness or Strength?

Highly anticipated revision of the world's leading Attention-Deficit/Hyperactivity Disorder (ADHD) assessment.



Performance Based Testing
Conners CPT3 - 2015

Dimension	Score	Description
Inattentiveness	Detectability (d')	Ability to discriminate between targets (non-X) and non-targets (X)
	Omissions	Missed targets
	Commissions	Incorrect responses to non-targets
	Hit Reaction Time (HRT)	Response speed
	HRT Standard Deviation (SD)	Response speed consistency
	Variability	Variability of response speed consistency
Impulsivity	HRT	Response speed
	Commissions	Incorrect responses to non-targets
	Perseverations	Random or anticipatory responses (i.e., HRT < 100ms)
Sustained Attention	HRT Block Change	Change in response speed across blocks of trials
	Omissions by block	Missed targets by block
	Commissions by block	Incorrect responses to non-targets by block
Vigilance	HRT Inter-Stimulus Interval (ISI) Change	Change in response speed at various ISIs
	Omissions by ISI	Missed targets by ISI
	Commissions by ISI	Incorrect responses to non-targets by ISI

THINKING STYLE, PERSONALITY TRAITS, IQ
BERDING ET AL (2018)

2.3 Structural Model

A simplified structural model for this study is shown in Figure 1. It represents the aim of the study which is to investigate whether thinking styles reflected by the four types found by Berding et al. (2018) are located between personality traits and psychometric intelligence on an empirical level.

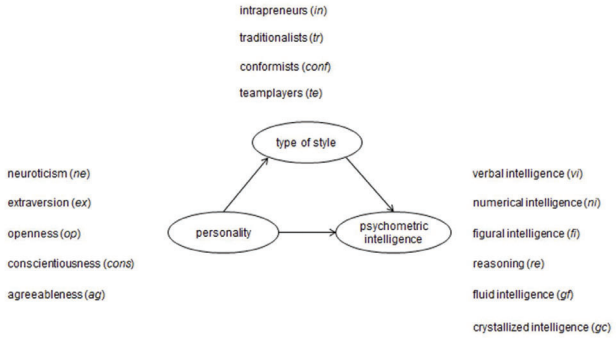


Figure 1. A Simplified Structural Model of Types of Styles Mediating the Personality-intelligence Interface

Personality

The one factor of personality that has most consistently been found to be positively correlated with several cognitive abilities is

OPENNESS TO EXPERIENCE

MMPI3 Updates (2020)

Minnesota Multiphasic Personality Inventory –Third Edition

English Language Norm Updates	New and updated items and scales	Spanish language normative sample	Gender	Comparison Group
Updated nationally representative English language normative sample	Eating Concerns, Compulsivity, Impulsivity, and Self-Importance	Now, includes norms derived from a sample of US Spanish speakers	**Non-Gendered T-Scores**	Allows clinicians to create setting-specific comparison groups
Updated for the first time since the mid 1980's	Includes 72 new and 24 updated items	550 Spanish speakers (275 men and 275 women).	**Optional gender-neutral language for interpretive reports**	Mental health, medical, forensic, and public safety settings
Matches demographic projections for 2020				

IQ Testing

*Assessing the client's ability to **reason and problem solve***

Verbal IQ

- The ability to understand and use words (language) in solving verbal problems and/or thinking about concepts.
- Requires the client to solve word problems and define words & concepts.

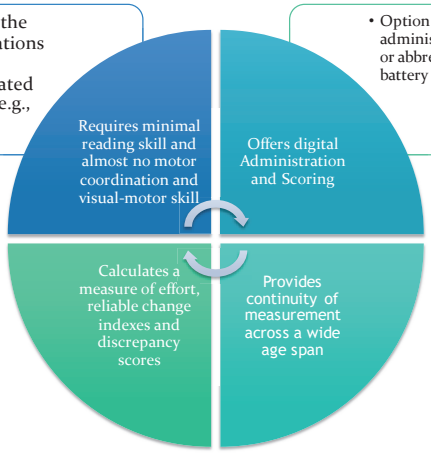
Nonverbal IQ

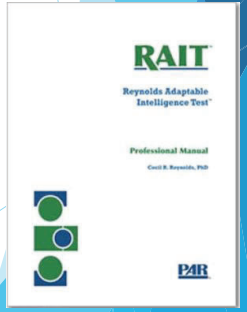
- The ability to understand and analyze visual information.
- Requires the client to solve visual puzzles, complete patterns, and use blocks to recreate.

Reynolds Adaptable Intelligence Test

(2020)

- Reduces the complications from manipulated objects (e.g., blocks)
- Option to administer the full or abbreviated battery





Reynolds Adaptable Intelligence Test - RAIT

RAIT Indexes	
Total Battery Intelligence Index (TBII)	Provides a summary estimate of general intelligence, or *g*, derived from the administration of all seven RAIT subtests.
Total Intelligence Index (TII)	Provides an alternative summary estimate of general intelligence, or *g*, that does not take into account quantitative intelligence.
Crystallized Intelligence Index (CII)	Provides a summary estimate of crystallized intelligence (i.e., the application of knowledge to problem solving) assessed through verbal reasoning tasks and invokes inductive reasoning.
Fluid Intelligence Index (FII)	Provides a summary index of fluid intelligence (i.e., problem solving in the absence of requisite factual knowledge) assessed through nonverbal reasoning tasks and tends to invoke deductive rather than inductive reasoning.
Quantitative Intelligence Index (QII)	Assesses both crystallized and fluid aspects of quantitative reasoning using two subtests: Quantitative Knowledge and Quantitative Reasoning.

Wechsler Intelligence Scale for Children

Fifth Edition (2014)

Most widely used scale of intelligence and adapted over 20 countries.

Three new primary subtests

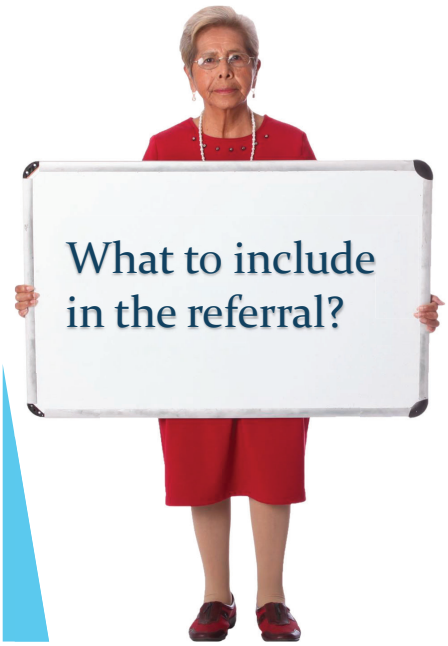
- Visual Puzzles, Figure Weights, and Picture Span
- Measures the ability to analyze and synthesize information, quantitative reasoning and induction, and visual working memory.

Five new subtests of cognitive processes

- Improves assessment of cognitive processes important to academic achievement in reading, math, and writing.

Simplified Instructions

- Reduced vocabulary level
- Shorter discontinue rules
- Refined scoring criteria



Referral Question	• What question do you want answered?
Medical test results	• MRI, TSH levels, etc.
List of all prescribed and OTC medications	• History of patient compliance with prescribed medications
Any relevant medical history	• CVA, TBI, diabetes, thyroid, sleep apnea, Parkinson's disease, etc. • Addiction?

Benefits
of Neuropsych Testing

Diagnostic	Provides insight into the source of cognitive changes
Baseline & Course	Help determine effectiveness of treatment
Areas of Need	Determines which cognitive functions have changed & the severity
Treatment planning	Prioritize the focus and determine sequence of treatment

Neuropsych Consults & Your Practice

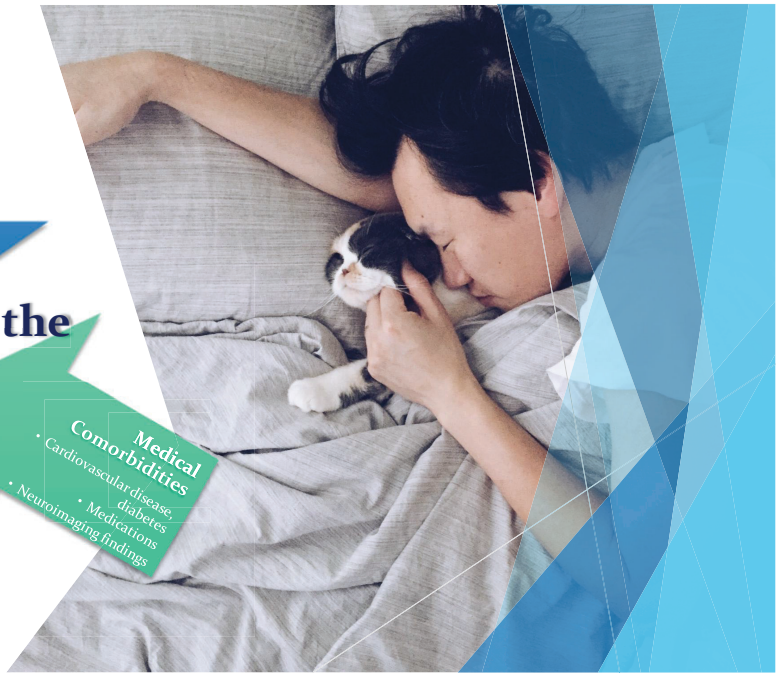
- Conserves time and resources
- Provides a more detailed clinical picture
- Wide range of data points to guide treatment
- Fosters patient's confidence and satisfaction

Integrating the Factors

Mental Health
- Depression
- Anxiety
- Adjustment to medical condition
- Lability
- PTSD

Social & Environmental
- Relationships
- Financial Status
- Living Situation
- Vocational History

Medical Comorbidities
- Cardiovascular disease, diabetes
- Medications
- Neuroimaging findings



Cognitive Testing & Neuro-Imaging

Neuropsych Testing:

Based on ***functional status*** of patient, providing more accurate depiction of patient's typical abilities.

Assesses the day-to-day effects of brain injuries and illnesses on cognition and behavior.

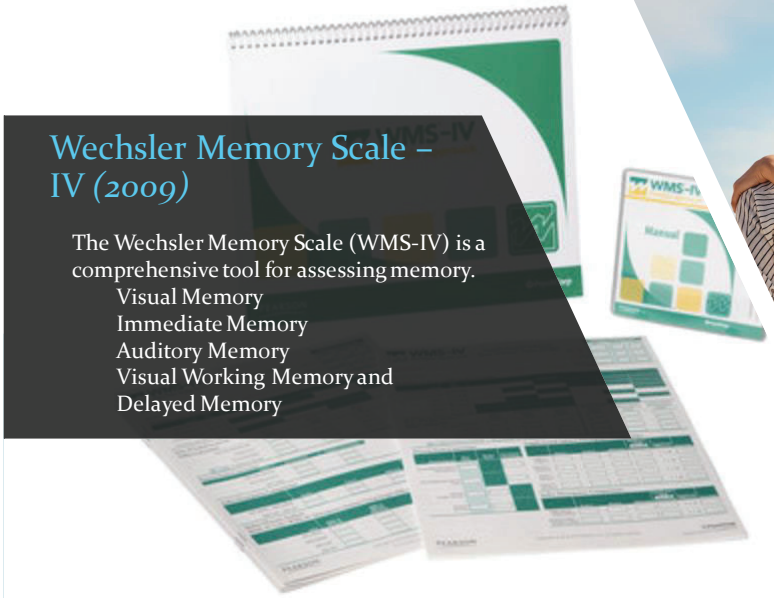
Imaging Alone:

Examiner bases clinical opinion ***on visual representation*** of brain anatomy/metabolic processes.
Imaging is typically more clearly observable for acute injury.
However, as the brain heals, images change, and deficits may remain.

Wechsler Memory Scale – IV *(2009)*

The Wechsler Memory Scale (WMS-IV) is a comprehensive tool for assessing memory.

- Visual Memory
- Immediate Memory
- Auditory Memory
- Visual Working Memory and
- Delayed Memory



Wechsler Memory Scale | Fourth Edition

WMS®-IV Flexible Approach

WMS-IV BATTERIES

WMS-IV Standard Battery	WMS-IV Older Adult / Abbreviated Battery	Logical Memory / Visual Reproduction Battery	Logical Memory / Designs Battery	Visual Reproduction / Logos Battery	Logos / Names Battery

WMS-IV SUBTESTS

	Standard	Older Adult / Abbreviated	Logical Memory / Visual Reproduction	Logical Memory / Designs	Visual Reproduction / Logos	Logos / Names
Logical Memory I	■	■	■	■		
Logical Memory II	■	■	■	■		
Verbal Paired Associates I	■	■				
Verbal Paired Associates II	■	■				
Designs I	■			■		
Designs II	■			■		
Visual Reproduction I	■	■	■		■	
Visual Reproduction II	■	■	■		■	
Spatial Addition	■					
Symbol Span	■	■*				
Logos I					■	■
Logos II					■	■
Names I						■
Names II						■

WMS-IV INDEXES

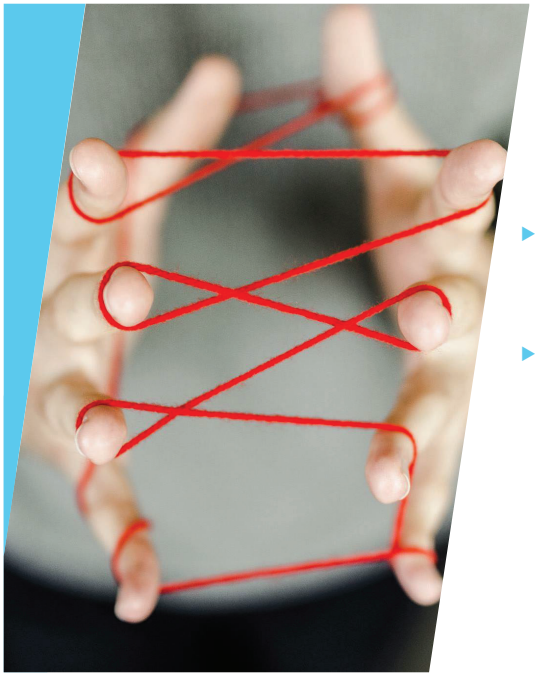
	Standard	Older Adult / Abbreviated	Logical Memory / Visual Reproduction	Logical Memory / Designs	Visual Reproduction / Logos	Logos / Names
Immediate Memory Index	■	■	■	■		
Delayed Memory Index	■	■	■	■		
Auditory Memory Index	■	■	■	■		
Visual Memory Index	■	■	■	■	■	
Visual Working Memory Index	■					
Visual Immediate Memory Index					■	
Visual Delayed Memory Index					■	
Auditory-Visual Memory Index						■
Auditory-Visual Immediate Memory Index						■
Auditory-Visual Delayed Memory Index						■

Verbal and Visual Memory

Memory involves various processes, including the capacity for encoding (mentally processing information so it can be entered into memory), storage (holding that information for a period of time), and retrieval (accessing or recalling stored memories when needed) of the information. Visual memory refers to the capacity to store and process visual stimuli, whereas verbal memory refers to the capacity to store and process verbally presented information.

Processing Speed Measure: How well a subject recognizes and processes information i.e., perceiving, attending/responding to incoming information, motor speed, fine motor coordination, and visual-perceptual ability. Relevance: Ability to recognize and respond/react i.e., fitness-to-drive, occupation issues, possible danger/risk signs or issues with accuracy and detail.

Executive Function Measure: How well a subject recognizes rules, categories, and manages or navigates rapid decision making. Relevance: Ability to sequence tasks and manage multiple tasks simultaneously as well as tracking and responding to a set of instructions.



• Visual-Motor and Fine Motor Coordination

- Visual-motor processing refers to the degree to which individuals can integrate their visual and motor abilities.
- Fine motor skills refer to the coordination of small muscle movements, including an individual's ability to accurately manipulate small objects, such as a pencils, buttons, scissors, etc.

The Inventory of Problems–29

The Inventory of Problems-29 (IOP-29) is a 29-item self-administered symptom validity test (SVT) that assesses the credibility of clinical presentations related to posttraumatic stress disorder, depression/anxiety, psychosis, cognitive impairment and combination thereof.

Reasearch: Twenty-one independent samples were included, with a total sample size of 4,163 participants. The results indicated that the IOP-29 is able to discriminate adequately between instructed simulators and healthy controls/clinical patients.

Using the recommended cutoff (False Disorder Probability Score [FDS], ≥ .50), a sensitivity of 82% was achieved, maintaining specificity at 93% (false positive rate of 7%). The language of the test and the type of comparison group have been identified as possible sources of heterogeneity.

Specificity decreases for the non-English version of the IOP-29, for the FDS ≥ .30, and also decreases for studies using clinical controls, for all three cutoff scores. In general, our findings support the usefulness of the IOP-29 as an SVT; however, most of the included studies use a simulation design and have been coauthored by the test authors.

Likewise, about half of the studies did not include bona fide patient controls but only nonclinical controls. The results obtained are highly promising, but further research, especially that using the criterion group paradigm, is recommended. (PsycInfo Database Record (c) 2023 APA, all rights reserved)

VIP - Malingering

The VIP test uses six primary validity indicators to classify an individual's performance as either valid or invalid.

Each VIP measure captures a different element of the deviations from this expected pattern.

The test helps assess the relationship between the individual's intention and the effort in completing the test.

A graph of results helps explain the results in hearing or court proceedings.

Contains verbal and nonverbal subtests, each of which can be administered independently.

Scoring rules for the VIP test were developed using a sample of more than 1,000 clinical and nonclinical subjects.

"Of course, it is happening inside your head... but why on earth should that mean that it is not real?"
– J.K. Rowling

Thank you

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