Wechsler Adult Intelligence Scale-IV (WAIS-IV)

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WAIS-IV

- Overview of the test
- Scores obtained
- Application to death penalty cases

Overview

- WAIS-IV = Wechsler Adult Intelligence Scale
- 4th version published in 2008
- Major changes made from WAIS-III
- Practitioners should all be using IV by now
- For ages 16:00 to 90:11

- Is designed to give both broad & detailed looks at intellectual functioning
  - Three levels of scores obtained

Overview

- Test is comprised of a series of shorter subtests
- Total of 15 subtests can be given
- Subtests cover a wide range of abilities

- Prior WAIS reports would have FSIQ, VIQ, PIQ
  - Verbal & Performance IQs are no longer used
  - Been replaced with index scores, which are thought to better reflect different types of abilities; more useful division of intellectual capacities

WAIS-IV Scores

- FSIQ – Full Scale IQ
  - Based on total of scores on the10 core subtests
- Index Scores
  - Verbal Comprehension Index
  - Perceptual Reasoning Index
  - Working Memory Index
  - Processing Speed Index
- Subtest Scores
  - 15 subtests that make up indices & FSIQ scores
- GAI – Global Assessment Index (VCI + PRI)

Test Structure

Verbal Comprehension Scale

Core Subtests
Similarities
Vocabulary
Information

Supplemental Subtests
Comprehension

Perceptual Reasoning Scale

Core Subtests
Block Design
Matrix Reasoning
Visual Puzzles New!

Supplemental Subtests
Picture Completion
Figure Weights (16-69) only New!

FSIQ

Working Memory Scale

Core Subtests
Digit Span
Arithmetic

Supplemental Subtests
Letter-Number Sequencing (16-69 only)

Processing Speed Scale

Core Subtests
Symbol Search
Coding

Supplemental Subtests
Cancellation (16-69 only) New!

Ages 16:0 – 90:11

WAIS-IV Scores

- Raw scores = total # correct on subtests
- Raw scores converted to standardized scores

- FSIQ & Index Scores Mean = 100, SD = 15
  - 95% of scores will fall between 70-130

- Subtest Scores Mean = 10, SD = 3
  - 95% of scores will fall between 4-16

WAIS-IV Scores

- In a report, most common to include FSIQ scores and index scores, if calculated

- Classifications of IQ Scores

IQ Scores	Classification
< 70	Intellectual Disability
70-79	Borderline Intellectual Functioning
80-89	Low Average
90-109	Average
110-119	High Average
120+	Superior Intellectual Functioning

WAIS-IV Sample - Scores

WAIS-IV

WAIS-IV Score Summary

Composite Score Summary

Scale	Sum of Scaled Scores	Composite Score		Percentile Rank	95% Confidence Interval	Qualitative Description
Verbal Comprehension	37	VCI	112	79	106-117	High Average
Perceptual Reasoning	22	PRI	84	14	79-91	Low Average
Working Memory	15	WMI	86	18	80-94	Low Average
Processing Speed	20	PSI	100	50	92-108	Average
Full Scale	94	FSIQ	96	39	92-100	Average
General Ability	59	GAI	99	47	94-104	Average

Confidence Intervals are based on the Overall Average SEMs. Values reported in the SEM column are based on the examinee's age.

The GAI is an optional composite summary score that is less sensitive to the influence of working memory and processing speed. Because working memory and processing speed are vital to a comprehensive evaluation of cognitive ability, it should be noted that the GAI does not have the breadth of construct coverage as the FSIQ.

WAIS-IV Sample – Interpretation

General Intellectual Ability

John performed much better on the verbal than on the nonverbal tasks of the Wechsler Adult Intelligence Scale–Fourth Edition (WAIS–IV). John's motor difficulties may have moderately interfered with his capability to fully express his nonverbal reasoning abilities. Many of the nonverbal tasks require the observation and manipulation of small materials such as blocks. John's general cognitive ability, therefore, is best estimated by his performance on the verbal tasks. His verbal reasoning ability is high average range and above that of approximately 79% of his peers (VCI = 112; 95% confidence interval = 106-117).

What about the Psychometric Properties?

- Excellent across the board!
- Reliability
  - For FSIQ and Index scores > .97
  - For subtests lower
    - But don't make decisions using subtest scores, so ok
- Validity
  - Many, many studies supporting all types of validity
- Standardization
  - 2200 individuals across age groups
  - Equal gender, race/ethnicity, geography, etc.
  - Only concern is really specialized, unique impairments

How do YOU use this info?

- Understanding scores
  - Other IQ tests use the same or very similar scores
- Understanding reports
  - Know what scores mean
  - Understand the conclusions drawn
- Ensuring good tests have been selected by the MH professional
  - Most mainstream IQ tests have strong psychometrics
  - Be wary of group or screening tests!!
- Applying to legal issues

IQ Testing in Death Penalty Cases

- Atkins v Virginia (2002)
  - Obviously made diagnosis of MR* a very important consideration
    - *Mental Retardation = Intellectual Disability

- To diagnose ID must meet 3 criteria
  - Onset before age 18
  - IQ <70 (70-75 when considering CI)
  - Significant deficits in adaptive behavior
    - Day to day functioning in areas like self-care, grooming, dressing, safety, cleaning, food handling, money management, ability to hold a job, etc.

IQ & Death Pentalty

- Three really important things to consider:

- (1) That all three criteria for ID are met
  - Often focus on FSIQ & forget adaptive behavior

- (2) That IQ is properly considered
  - Consider confidence intervals
  - Must consider test given & psychometric properties
  - Must consider person, situation, and possible influences on test results
  - There is no magic number!

IQ & Death Penalty

- (3) IQ Tests & feigning
  - MH professional has the responsibility of considering response style
  - How did the person approach test taking?
    - Full effort? Suboptimal effort? Feigning?
  - WAIS-IV
    - No direct measure of feigning
    - BUT can use – behavioral observations, inconsistency within & across subtests and/or areas of functioning, and known patterns of responding
    - If suspicion, use of other direct measures of feigning should be used

Questions & Practical Concerns?