A Non-Psychologist's Guide to Psychology: The WAIS-IV

- What is the WAIS-IV?
 - The Wechsler Adult Intelligence Scale Forth Edition (WAIS-IV) is the most recent edition of the Wechsler line of adult intelligence measures. It is based on new revisions to the Wechsler theory of intelligence.
- What is the Wechsler theory of intelligence?
 - O David Wechsler, clinical psychologist, first defined intelligence as "the aggregate and global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his [or her] environment." (Wechsler, 1939)
- What is meant by Wechsler when he says that intelligence is "aggregate" or "global?"
 - During Wechsler's development of his first intelligence test, the Wechsler-Bellevue Intelligence Scale Form One (WB-1), there were two main competing theories of intelligence:
 - Spearman's general intelligence factor the belief that there is a general
 intelligence factor 'g' that determines an individual's ability to complete
 any cognitive task, and;
 - Thorndike's kinds of intelligence the belief that there are multiple kinds of intelligences, including abstract, social, and practical.

Wechsler incorporated both theories into his own intelligence measure. He believed that intelligence was 'global', and could be measured by using a summary score (the Full-Scale IQ [FSIQ]). He also believed that the summary-score is comprised of one's ability to perform different cognitive tasks, hence his belief in 'aggregated' intelligence.

- Why is Wechsler's intelligence theory still used to build modern intelligence tests like the WAIS-IV? This theory is over seventy-five years old; surely, it's out of date?
 - Wechsler's definition of intelligence as both global and aggregated has made it extremely resilient. Factor-analysis, cross-cultural studies, and research on the predictive validity of WAIS tests all support his belief that there is a general intelligence factor that is composed of a set of related, but distinguishable subfeatures (Carroll, 1993, 1997; Georgas et. al, 2003; Deary, 2009).

- How is the WAIS-IV structured?
 - The WAIS-IV is made up of (at most) fifteen subtests, measuring four different cognitive domains:
 - Verbal Comprehension;
 - Perceptual Reasoning;
 - Working Memory, and;
 - Processing Speed.

There are core subtests for each domain, and supplemental subtests that can be used to provide additional information if needed. Click here for a breakdown of the subtests per domain.

- How is the WAIS-IV scored?
 - Each subtest is scaled to a metric with a mean of ten, and a standard deviation of three.
 - The core subtests of their categories are summed to derive index scores.
 - Complimentary scores can be used to supplement these index scores:
 - the Verbal Comprehension Index (VCI);
 - the Perceptual Reasoning Index (PRI);
 - the Working Memory Index (WMI), and;
 - the Processing Speed Index (PSI).
 - All index scores are then scaled to a metric with a mean of 100, and a standard deviation of fifteen.
 - The scaled index scores are then summed together, and scaled again to the same metric to produce the following:
 - Full Scale IQ (FSIQ): Sum of all four indexes.
 - General Ability Index (GAI): Sum of the VCI and the PRI.

The information found in this guide is from:

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