The wechsler intelligence scale for children

The Wechsler Intelligence Scale for Children (3rd ed) (WISC-III) was designed by David Wechsler (1991) to measure the intellectual ability of a childaged 6 to 16 years 11 months (as cited in Dumont & Willis, 2001). Wechsler developed the WISC-III from the WISC-R which had been the most popular and widely researched children's intelligence test to date (Dumont & Willis, 2001). The test takes approximately 50-75 minutes for the child to complete and yields two subset scores of Verbal (VIQ) and Performance (PIQ) (both of which have their own related subscales), as well as an overall Full Scale IQ score (FSIQ). The WISC-III does not require the child to read or write anything as besides verbal responses, picture completion and arrangement, block design, object assembly, and digit-symbol coding are used (Kaplan & Saccuzzo, 2001). The WISC-III was standardized on a representative sample in North America based on U. S. A. census data for 1988 (N = 2, 200) (Canivez, Neitzel, & Martin, 2005). The sample was stratified across age, gender, ethnicity, geographical region, parental occupation, and urban-rural residency (Kaplan & Saccuzzo, 2001).

A four-factor model of index score is widely supported (i. e., Verbal Comprehension, Perceptual Organization, Freedom from Distractibility, and Processing Speed) (Canivez, Neitzel, & Martin, 2005). The WISC-III has high internal consistency for all three IQ scores and the four factors, ranging from . 80 to . 97 (Canivez, Neitzel, & Martin, 2005; Kaplan & Saccuzzo, 2001). This reflects the 11 subtests (Symbol Search and Coding excluded) reported moderate to excellent internal consistencies, of . 61 to . 92 (Kaplan & Saccuzzo, 2001). Split-half reliabilities for the three IQs in 1991 were found to be . 96 (FSIQ), . 95 (VIQ), and . 91 (PIQ) (Kaplan & Saccuzzo, 2001).

Standard errors of measurement for FISQ, VIQ and PIQ average at 3. 20, 3.

53, and 4. 54 respectively (Kaplan & Saccuzzo, 2001). Test-retest reliability across the three IQs and the four factors ranges from . 82 to . 94. Additionally, three year stability of IQs has been supported consistently (Watkins & Cavinez, 2001 as cited in Canivez, Neitzel, & Martin, 2005). Reported subtest stability coefficients using 353 children across three age groups appear adequate (. 56 to . 89) (Boyd & Dumont, 2001; Kaplan & Saccuzzo, 2001). Inter-rater reliability for the Verbal Scale is excellent (all above . 92).

Concurrent validity for the WISC-III appears to be moderately high when correlations are compared with other tests of children's intellectual ability (Canivez, Neitzel, & Martin, 2005). Across studies, the VIQ tended to correlate higher with verbal measures as compared to non-verbal measures, and the PIQ to correlate higher with non-verbal measures as compared to verbal measures (Canivez, Neitzel, & Martin, 2005). The WISC-III manual states strong correlations with comparable measures from the WPPSI-R, WISC-R, WAIS-R, Otis-Lennon School Ability Test, the Stanford-Binet scale and the Differential Ability Scales, with reported rs of between . 59 to . 92 (Boyd & Dumont, 2001). Most of the individual subtests having coefficients between . 60 to . 70, and the three IQS ranging between . 80 to low . 90s (Kaplan & Saccuzzo, 2001). Kaplan and Saccuzzo (2001) report that the manual indicates the WISC-III correlates well with IQ-achievement, in a range of children (i. e., normal, referred, learning disabled, severely emotionally disturbed, language-speech impaired, and hearing impaired/clinically deaf). It is reported that the manual also states low predictive for the WISC-III across female, male, Anglo-American, African-American and Hispanic children.

In conclusion, the WISC-III has many strengths yet it lacks the multidimensional and index characteristics of the WAIS-III (Wechsler Adult Intelligence Scale). Also the instrument is limited by its selection bias toward particular ethnicities and cultural groups (Kaplan & Saccuzzo, 2001).

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