

Intellectual Disability

Intellectual Disability

“Intellectual disability” (mental retardation) refers to a particular state of functioning that begins prior to age 18, characterized by significant limitations in both ***intellectual functioning*** and **adaptive behavior** (AAMR, 2002).

TABLE 12.1. Classification of Mental Retardation

Level of mental retardation	IQ range	Approximate mental age in adulthood	% of persons with mental retardation at this level
Mild	55–69	8 years, 3 months to 10 years, 9 months	85.0
Moderate	36–51	5 years, 7 months to 8 years, 2 months	10.0
Severe	20–35	3 years, 2 months to 5 years, 6 months	3.5
Profound	<20	<3 years, 2 months	1.5

Note. From Sattler (2002, p. 337). Copyright 2002 by Jerome M. Sattler, Publisher. Adapted by permission.

Multi-factorial approach to etiology

- Biomedical: genetic or nutrition
- Social: family interaction, stimulation...
- Behavioural: potentially causal behaviours such as dangerous activities or maternal substance abuse
- Educational: availability of educational supports that promote motor development and development of adaptive skills

Co-morbidity

- Down syndrome
- Autism
- Global developmental delay

Recommendations



1. Understand the referral question (i.e. questions that need answers at the end of the examination)
2. Use multiple sources of information
3. Use disorder specific knowledge
4. Use appropriate assessment strategies
5. Use multiple assessment approach:

Norm referenced, interviews, observations & informal assessment

- Collaborate with other professionals
- Provide appropriate feedback

<Measuring adaptive functioning >



Vineland Adaptive Behaviour Scales – II

- 0 – 90 years
- Survey interview, expanded survey interview, parent/caregiver rating form, teacher rating form (3 years – 21-11 months)

- Communication domain
- Daily living skills domain
- Socialisation skills domain
- Motor domain
- Maladaptive behaviour

Domains & Index	Subdomain
Communication	Receptive Expressive Written
Daily Living Skills	Personal Domestic Community
Socialization	Interpersonal Relationships Play and Leisure Time Coping Skills
Motor Skills	Fine Gross
Maladaptive Behavior Index (Optional)	Internalizing Externalizing Other

Intellectual assessment

- Weschler Preschool & Primary Scales of Intelligence (WPPSI)
- Weschler Scales for Children (WISC III/ IV)

WISC 3



Replaced
by WISC 4
in 2003.
Currently
no Czech
norms are
available
for WISC 4.

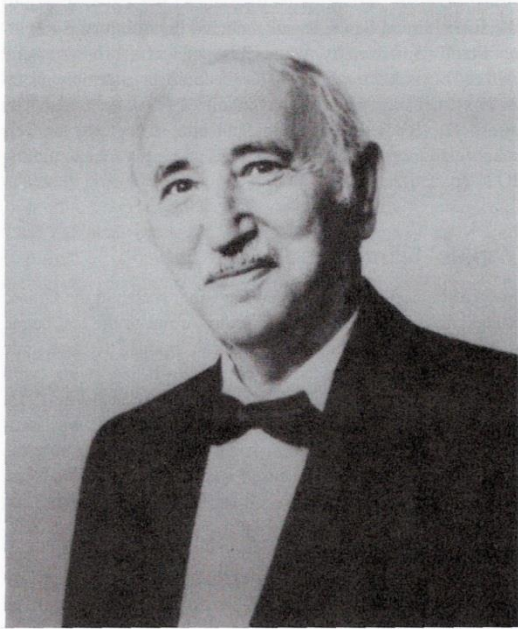


Figure 5-4. David Wechsler. Courtesy of The Psychological Corporation.

WISC 3

- Intended for children ages 6 to 16 and 11 months.
- Composed of VERBAL and PERFORMANCE scale

WISC 3

- Verbal Scale
 - Five Mandatory Subtests
 - Information
 - Similarities
 - Arithmetic
 - Vocabulary
 - Comprehension
 - One Supplementary Test
 - Digit Span
 - This test can be substituted for one of the other tests if and only if the data from a mandatory subtest is missing or invalidated.

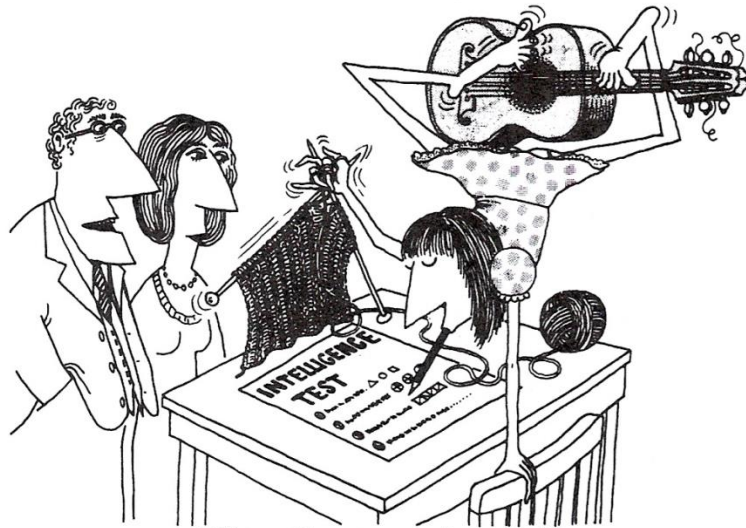
Performance Scale

- Five Mandatory Subtests
 - Picture Completion
 - Picture Arrangement
 - Block Design
 - Object Assembly
 - Coding
- Two Supplementary Subtests
 - Mazes
 - Symbol Search
 - Mazes subtest can be substituted for any of the mandatory subtest if the data is missing or invalidated.
 - Symbol Search can only be substituted for the Coding subtest.

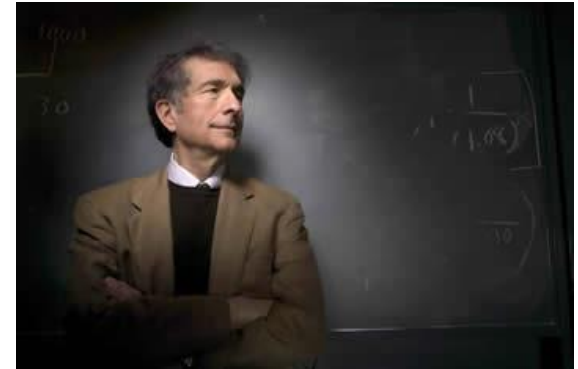


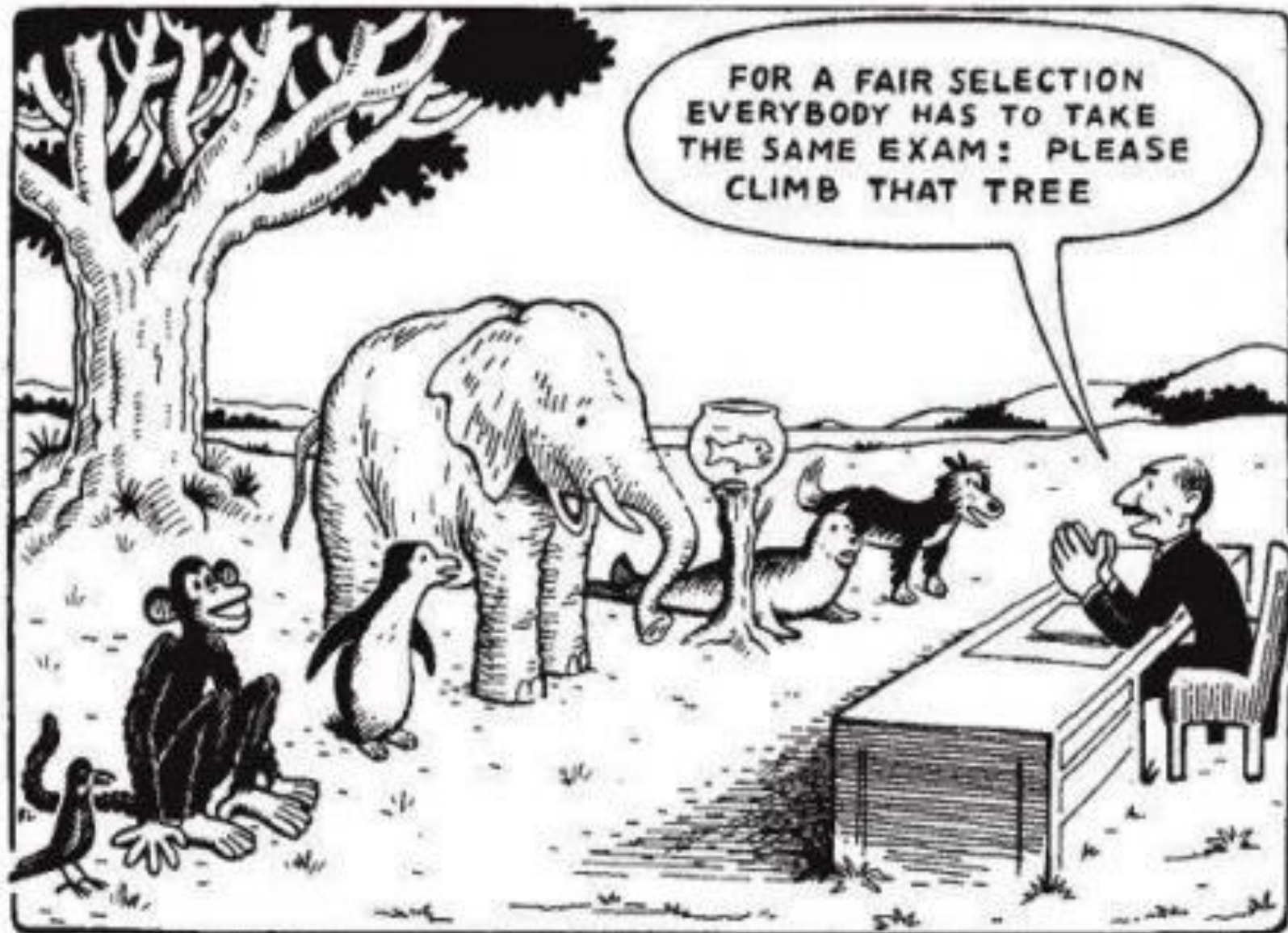
Criticisms of Weschler

- Does not measure other intelligences
 - i.e. Gardner's multiple intelligences



—Pity the test doesn't
measure all her skills.....





WISC 4

WISC 4

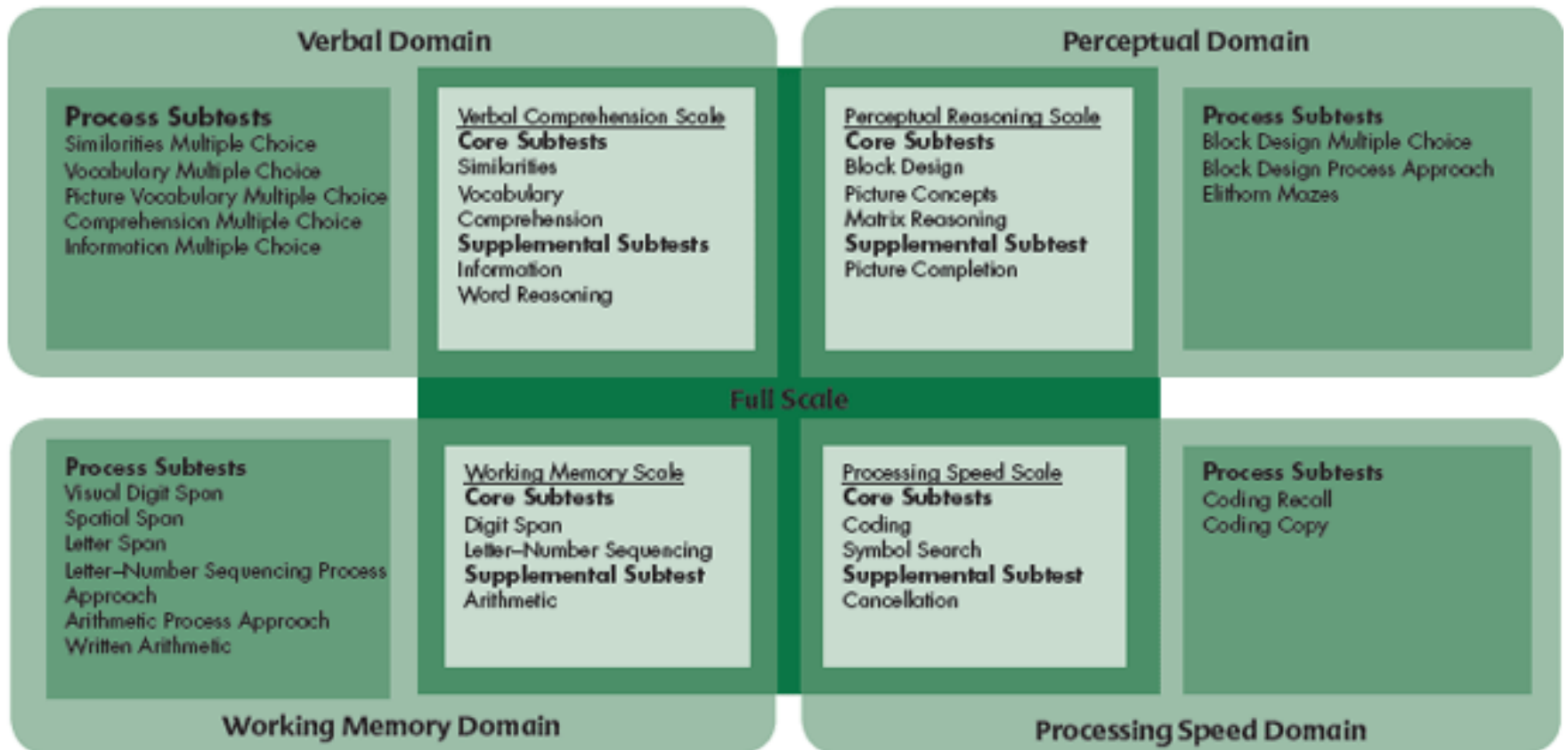


TABLE 13.1. Subtests of the Wechsler Intelligence Scales for Children—4th Edition (WISC-IV)

Organized by Index

Index Subtest

Verbal Comprehension

- Comprehension: The student is required to answer orally presented questions pertaining to social rules or problems.
- Similarities: The student is required to explain the similarities between oral word pairs.
- Vocabulary: The student is required to name pictures or provide definitions for words.
- Information (Supplemental): The student is required to answer factual questions of learned content.
- Word Reasoning (Supplemental): The student is required to identify a common concept based on successive verbal clues.

Perceptual Reasoning

- Block Design: The student is required to rearrange a set of blocks to match visual patterns presented on a card (timed).
- Picture Concepts: The student is required to choose pictures from rows in an array to form a group with common characteristics.
- Matrix Reasoning: The student is required to draw visual analogies and respond to multiple-choice questions.
- Picture Completion (Supplemental): The student is required to identify missing element of picture of common object or setting (timed).

Processing Speed

- Coding: The student is required visually to match numbers with corresponding symbols and record appropriate symbols under numbers (timed).
- Symbol Search: The student is required visually to scan an array and mark target symbols (timed).
- Cancellation (Supplemental): The student is required to scan both a random and a nonrandom arrangement of pictures and mark target pictures (timed).

Working Memory

- Digit Span: The student is required to repeat orally presented numbers forwards and backwards.
- Letter-Number Sequencing: The student is required to recode orally presented letter–number combinations, stating the numbers in ascending order and the letters in alphabetic order.
- Arithmetic (Supplemental): The student is required to solve mentally and express orally the answer to orally presented arithmetic problems.

Non-verbal tests

- Raven's Progressive Matrices
- Leiter International Performance Scale (Leiter-R, Roid & Miller, 1997)

Leiter- R

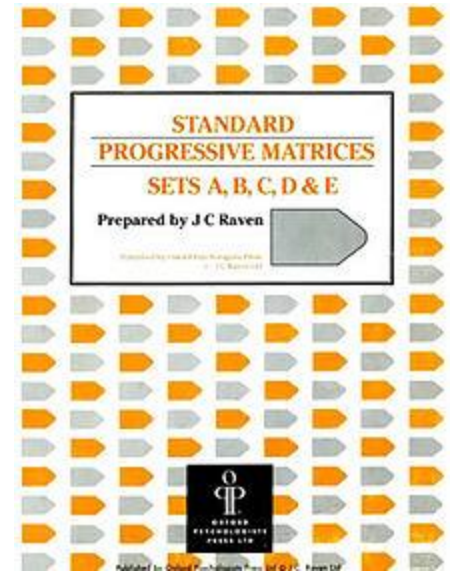
- Visualisation & Reasoning Battery
- Attention & Memory Battery
- For ages 2- 20



Raven's Progressive Matrices

Coloured Progressive Matrices

- 36 items
- For children aged: 5 – 11
- For elderly with dementia
- For those with mental retardation
- Measures fluid intelligence



Measures fluid intelligence (versus crystallised)

Previous studies show a strong correlation between test performance and level of education (Smits et al, 1997), intellectual and visual spatial capacities (Raven, 1984), and dementia (Gainotti, Parlato, Monteleone & Carlomagno, 1992).

