

## INTELLIGENCE TESTS

### I. USE OF IQ TESTS

#### A. Historically

- 1905 - created to identify kids needing remediation
- 1940s & 50s - widely given to categorize kids
- 1960s - awareness of abuses

#### B. Currently

1. to diagnose problems
2. to rule out IQ problems
3. to identify ways to help

NOT to simply place children in classrooms

#### To diagnose a learning disability

1. normal intelligence (IQ)
2. performing below expected level in 1+ subject(s)
  - achievement test

#### To diagnose mental retardation (MR)

1. subaverage intellectual functioning (IQ < 70)
2. poor adaptive behavior skills (e.g., daily living)

## II. CHILD & ADULT IQ TESTS

### A. Stanford-Binet (2-24) - 2 hours

- 15 subtests

- IQ + other scores

Pros: 1) Best test for very high/low IQs

2) Wide age span

3) 2 equivalent forms

4) Very good norms

Cons: 1) lengthy

2) difficult to administer

3) lower examiner reliability

4) norms stop at age 24

### B. 3 Wechsler Tests 1-1.5 hours

WPPSI-R (4-6.5)    WISC-III (6-16.5)    WAIS-III (16-89)

WASI (brief, ages 2-89)

- FSIQ + VIQ + PIQ

Pros: 1) Shorter

2) Easier to administer

3) Most commonly used

4) Excellent norms

5) Can compare performance across ages/tests

Con: Not as useful for IQ extremes - important for MR

### IQ Classifications

130+	Very Superior
129-129	Superior
110-119	High Average
90-109	Average
80-89	Low Average
70-79	Borderline
≤69	Mentally Retarded

### Wechsler subscales

Verbal:	Vocabulary
	Information
	Similarities
	Comprehension
	Arithmetic
	Digit Span
Performance:	Picture Completion
	Picture Arrangement
	Block Design
	Object Assembly
	Coding
	Mazes

### III. WECHSLER & THE WAIS-III

#### Major changes from WAIS-R

1. Updating test items & materials
2. Editing to detect biased items
3. Lowering floor & raising ceiling
4. Raising age ceiling to 89
5. Inclusion of homogenous factor scores
6. Reduction of importance of speed

#### Wechsler's view of intelligence

- a global characteristic (g)
- plus specific abilities
- hierarchical

WAIS & WAIS-R = 3 IQ scores

- VIQ = language-based
- crystallized intelligence

- PIQ = visual-spatial/motor
- fluid intelligence

VIQ ~+~ PIQ -> FSIQ

Subtests: mean = 10, SD = 3

IQ scores: mean = 100, SD = 15

Factor analysis

- incomplete support for VIQ/PIQ
- instead, 3-4 factors

### WAIS-III

- retains FSIQ, VIQ, PIQ

+ 4 index scores

Verbal comprehension

Working memory

Perceptual organization

Processing speed

- index scores mean = 100, sd = 15

### WAIS-III norms

- 2,450 “normal” individuals

- minority populations “oversampled”

- for item analysis

- to identify biases

- expert & lay minority consultants examined each item

- problem items revised or deleted

- the Flynn Effect — scores on a given IQ test tend to drift higher over time

- more education

#### IV. LEVELS OF MR

Mild (55-70) - Educable

Moderate (35-55) - Trainable

Severe (20-35)

Profound (< 20/25)

##### Outcomes worse than nonretarded peers

- lower incomes
- worse housing
- worse social adjustment
- greater dependency

##### Better than stereotypes

- majority of males work
- most in skilled labor/retail
- generally self-supporting
- most married
- most felt satisfaction

##### Severe & Profound

- institutionalization
- very small percentage

## VI. MENTALLY GIFTED

### Findings as kids

- weighed more at birth
- walked & talked sooner
- puberty earlier/health generally better
- better adjusted emotionally/more mature
- leaders in classroom

### Findings as adults

- fewer psychological & health problems
- higher satisfaction with marriage & sex
- many college grads with notable careers

### Why better in all domains?

- IQ/g
- Home:
  - higher parent education
  - more stimulating environment
  - fewer divorced parents