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 Flyn 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