### Module 23: Intelligence



### Defining Intelligent Behavior

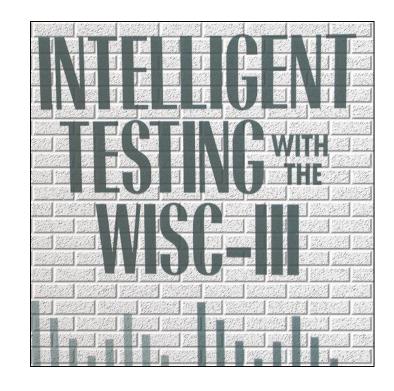
#### **MODULE 23**

#### Intelligence

 The capacity to understand the world, think rationally, and use resources effectively when faced with challenges

#### Intelligence tests

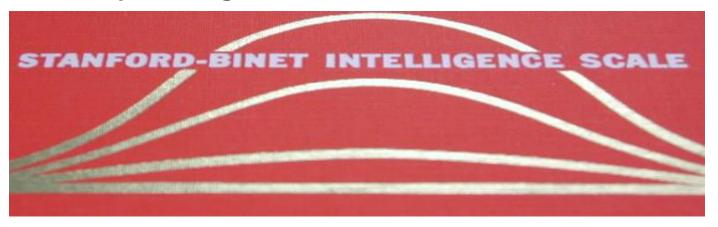
 Tests that are developed in order to identify a person's level of intelligence



#### **MODULE 23**

## Measuring Intelligence

- Mental age
  - The average age of individuals who achieve a particular level of performance on a test
- Chronological age
  - Physical age

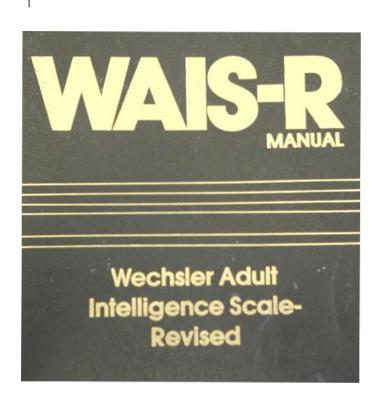


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### Measuring Intelligence

$$IQ = \frac{MA}{CA} \times 100$$

## IQ Tests: Gauging Intelligence



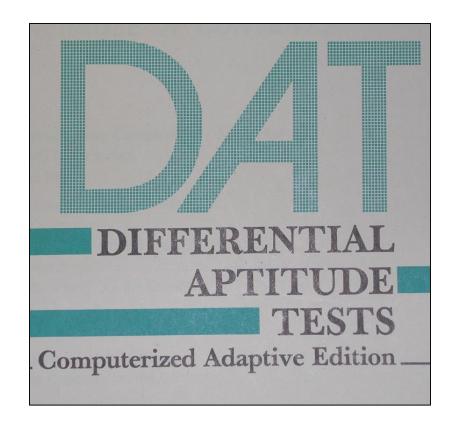
- Stanford-Binet IV
- Wechsler Adult IntelligenceScale III (WAIS-III)
- Wechsler Intelligence Scale for Children - III (WISC-III)

## Achievement and Aptitude Tests

#### **MODULE 23**

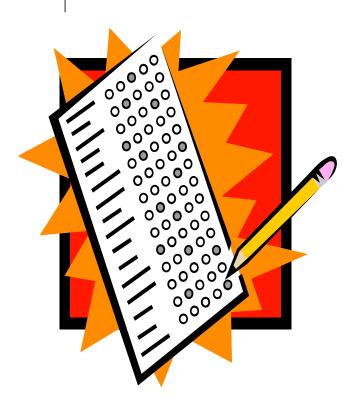
#### Achievement test

- A test designed to determine a person's level of knowledge in a given subject area
- Aptitude test
  - A test designed to predict a person's ability in a particular area or line of work



## MODULE 23

# Reliability and Validity: Taking the Measure of a Test



#### Reliability

 A tests ability to consistently measure what they are trying to measure

#### Validity

 The tests ability to measure what it is supposed to measure

#### Norms

Standards of test performance

## Variations in Intellectual Ability

- Mental retardation
  - Significantly below-average intellectual functioning, plus limitations in at least two areas of adaptive functioning involving
- Communication skills
- Self-care
- Ability to live independently
- Social skills
- Community involvement
- Self direction
- Health & safety
- Academics
- Leisure & work

#### **MODULE 23**

#### Mental Retardation

Classification	IQ Range
Mild Retardation	55 - 69
Moderate Retardation	40 - 45
Severe Retardation	25 -39
Profound Retardation	Below 25

### Identifying Roots of **Mental Retardation**

- Biological causes
  - Down syndrome
- Familial retardation
- Care and treatment
  - Least restrictive environment
  - Mainstreaming
  - Full inclusion



### **Intellectually Gifted**



- 2 to 4 % of the population have IQ scores greater than 130
- Most often are well adjusted, popular, and outgoing

## Individual Differences in Intelligence

**MODULE 23** 

#### Culture-fair IQ test

 A test that does not discriminate against members of any minority group



Ryan McVay/Getty Images

## Individual Differences in Intelligence

**MODULE 23** 

#### Heritability

 A measure of the degree to which a characteristic is related to genetic, inherited factors

#### "The Bell Curve"

A widely debated study that suggested that there was an inherent difference in the ability levels of African American and Caucasion subjects.