How Do We Measure Individual Differences?

Core Concept: Measuring individual differences is an essential component of psychology, ...but strict guidelines and ethical standards must be followed to ensure results and conclusions are valid and appropriate.

Validity:

Reliability:

Face Validity:

Content Validity:

Item Analysis:

Criterion Validity:

Split-Half Reliability:

Test-retest Reliability:

Test Standardization:

Normal Range:

TWO TYPES OF TESTS
Objective Tests:

Subjective tests:

Inter-rater Reliability:

How Is Intelligence Measured?

Core Concept: Intelligence testing has a history of controversy, but most psychologists now view intelligence as a normally distributed trait that can be measured by performance ona variety of tasks – both verbal and nonverbal.

Mental Age:

Chronological Age:
Stanford – Binet Test:

Intelligence Quotient - IQ:

Wechsler Test: (WAIS, WISC, or WPPSI)

Mental Retardation:

Savant Syndrome:

What Are The Components of Intelligence?

Core Concept: Some psychologists believe that the essence of intelligence is a single, general factor, while others believe that intelligence is best described as a collection of distinct abilities.

Psychometric Theories of Intelligence

G factor: Charles Spearman

Raymond Cattell:

    Crystallized Intelligence:

    Fluid Intelligence:

Cognitive Theories of Intelligence

Sternberg’s Triarchic Theory:

    Practical Intelligence:

    Analytical Intelligence:

    Creative Intelligence:

Howard Gardner’s Multiple Intelligence Theory:
Each intelligence has its neurological base in a different area of the brain

Self-fulfilling Prophecy:
How Do Psychologists Explain IQ Differences Among Groups?

Core Concept: While most psychologists agree that both heredity and environment affect intelligence, they disagree on the sources of IQ differences among racial and social groups.

Neither heredity and environment explains the source of intelligence fully.

Intelligence is influenced by heredity as shown by the similar IQ among twins.

Evidence for environmental influences is seen where a nurturing environment contributes to IQ scores.

Heritability:

The Jensen Controversy:

Scarr and Weinberg Adoption Study:

Social Class effects on IQ:

Head Start Program:

Test Biases:

Eugenics:

Added Notes:

Intelligence Allows People to...think, understand complex ideas, reason, problem solve, learn from experience, adapt to the environment.

Louis Thurstone Eight Specific Factors of Primary Mental Activities

1. Visual and spatial abilities
2. Perceptual speed
3. Numerical Ability
4. Verbal Meaning
5. Memory
6. Word Fluency
7. Deductive Reasoning
8. Inductive Reasoning

Creativity and Intelligence

Characteristics of Creative People

1. They take chances
2. The refuse to accept limitations
3. They appreciate art and music
4. They use materials around them to make unique things
5. They challenge social norms
6. They take unpopular stands
7. They examine and question ideas that others accept at face value