

PSYCHOLOGY

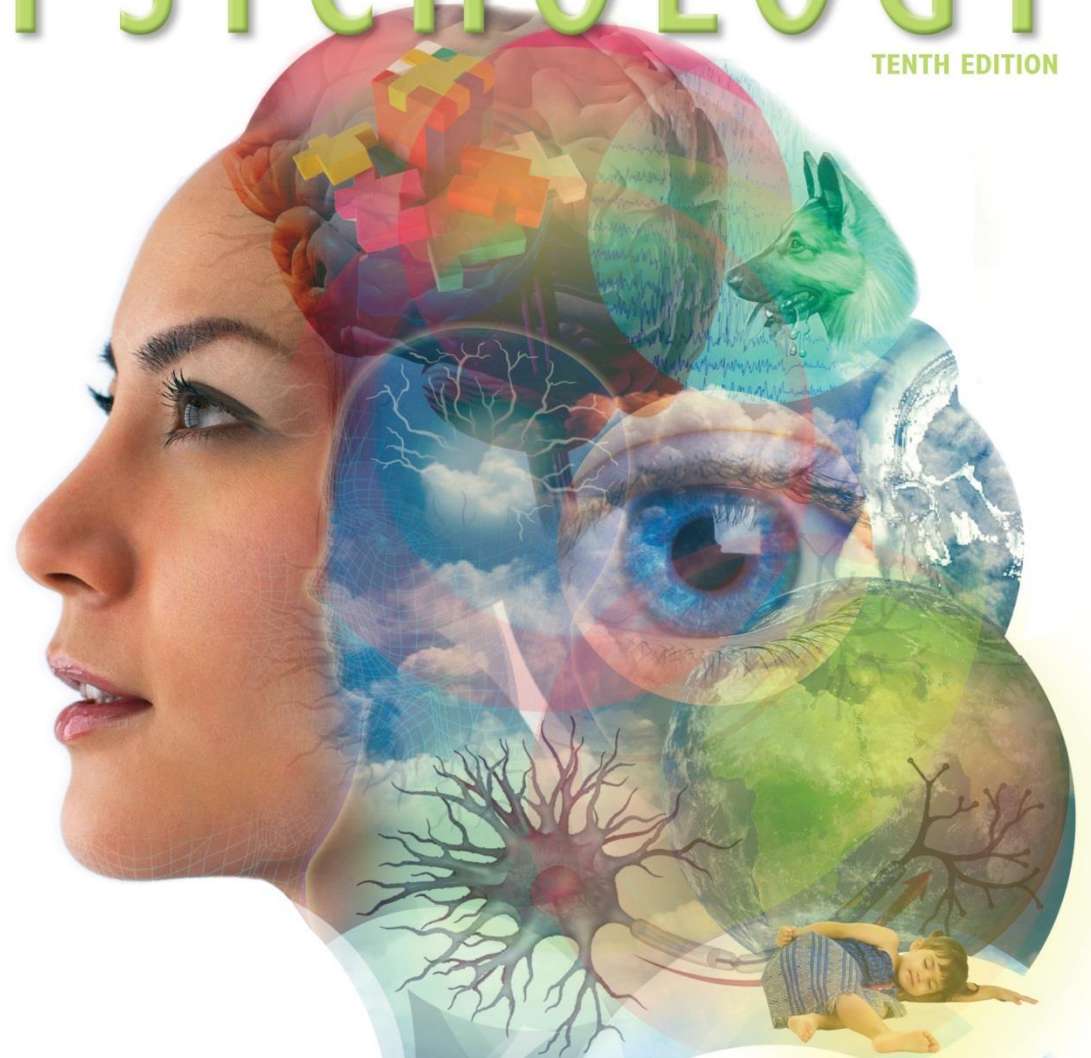
TENTH EDITION

Intelligence

Adapted from
PowerPoint
Presentation
by Asim Tarar

THE COLLEGE OF
WOOSTER

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David G. Myers

The Triarchic theory of intelligence

Sternberg focuses on how all of these intelligence factors work together. People do better when matched for a task in their strongest area of intelligence. Sternberg was more focused on improving overall performance of all three factors. The Triarchic Theory Intelligence refers to the analytic, creative, and practical aspects of intelligence.

1. Creative abilities:

The ability to generate/invent new ideas.

2. Analytic abilities:

The ability to analyze a problem or situation as well as compare.

3. Practical abilities:

The ability to apply techniques to situations and persuade others.

Sternberg's Intelligence Triarchic

Robert Sternberg (b. 1949) proposed that “success” in life is related to **three** types of ability.

Sternberg was more focused on improving overall performance

Analytical intelligence:
solving a well-defined problem with a single answer

Practical intelligence:
expertise and talent that help to complete the tasks and manage the complex challenges of everyday life

Creative intelligence:
generating new ideas to help adapt to novel situations

Robert Sternberg's Five Components of Creativity

Creative environment: having support, feedback, encouragement, and time and space to think

Venturesome personality: tending to seek out new experiences despite risk, ambiguity, and obstacles

Intrinsic motivation: enjoying the pursuit of interests and challenge, without needing external direction or rewards

Expertise: possessing a well-developed base of knowledge

Imaginative thinking: having the ability to see new perspectives, combinations, and connections

Emotional Intelligence

- The Ability to monitor one's own and others emotions and feelings, to discriminate among them, and to use this information to guide one's thinking and action.

Components of Emotional Intelligence

Perceiving emotions

- Recognizing emotions in facial expressions, stories, and even in music

Understanding emotions

- Being able to see blended emotions, and to predict emotional states and changes in self and others

Managing emotions

- Modulating and expressing emotions in various situations

Using emotions

- Using emotions as fuel and motivation for creative, adaptive thinking

Benefits of Emotional Intelligence

People with high emotional intelligence often have other beneficial traits, such as the **ability to delay gratification** while pursuing long-term goals.

The level of emotional intelligence, including the skill of reading the emotions of others, correlates with **success in career and other social situations.**

Assessing Intelligence

Assessment refers to the activity and the instruments used to measure intelligence.

The challenge is to make these instruments **valid** (measure what they are supposed to measure) and **reliable** (yielding the same score if administered again, even if administered by someone else).

Why Try to Measure Intelligence?

- to study how (and why) people differ in ability
- to match strengths and weaknesses to jobs and school programs
- to help the “survival of the fittest” process; trying to select the people who have the greatest abilities. This was the position of eugenicist Francis Galton (1822-1911).

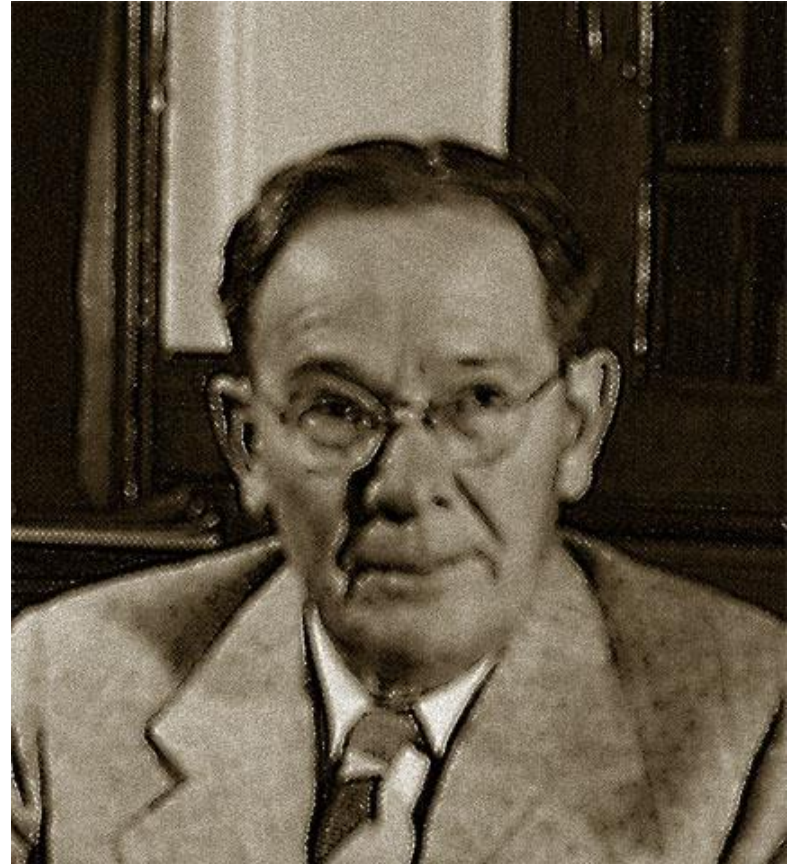
Alfred Binet and Simon

- The first Intelligence test was created by Binet and Simon using simple tasks to distinguish children who would do well in school from those who wouldn't
- Binet and Simon used Mental age to distinguish “bright” from “dull” children



Lewis Terman

In the US, Lewis Terman adapted Binet's test for American school children and named the test the Stanford-Binet Test. The following is the formula of **Intelligence Quotient (IQ)**, introduced by William Stern:



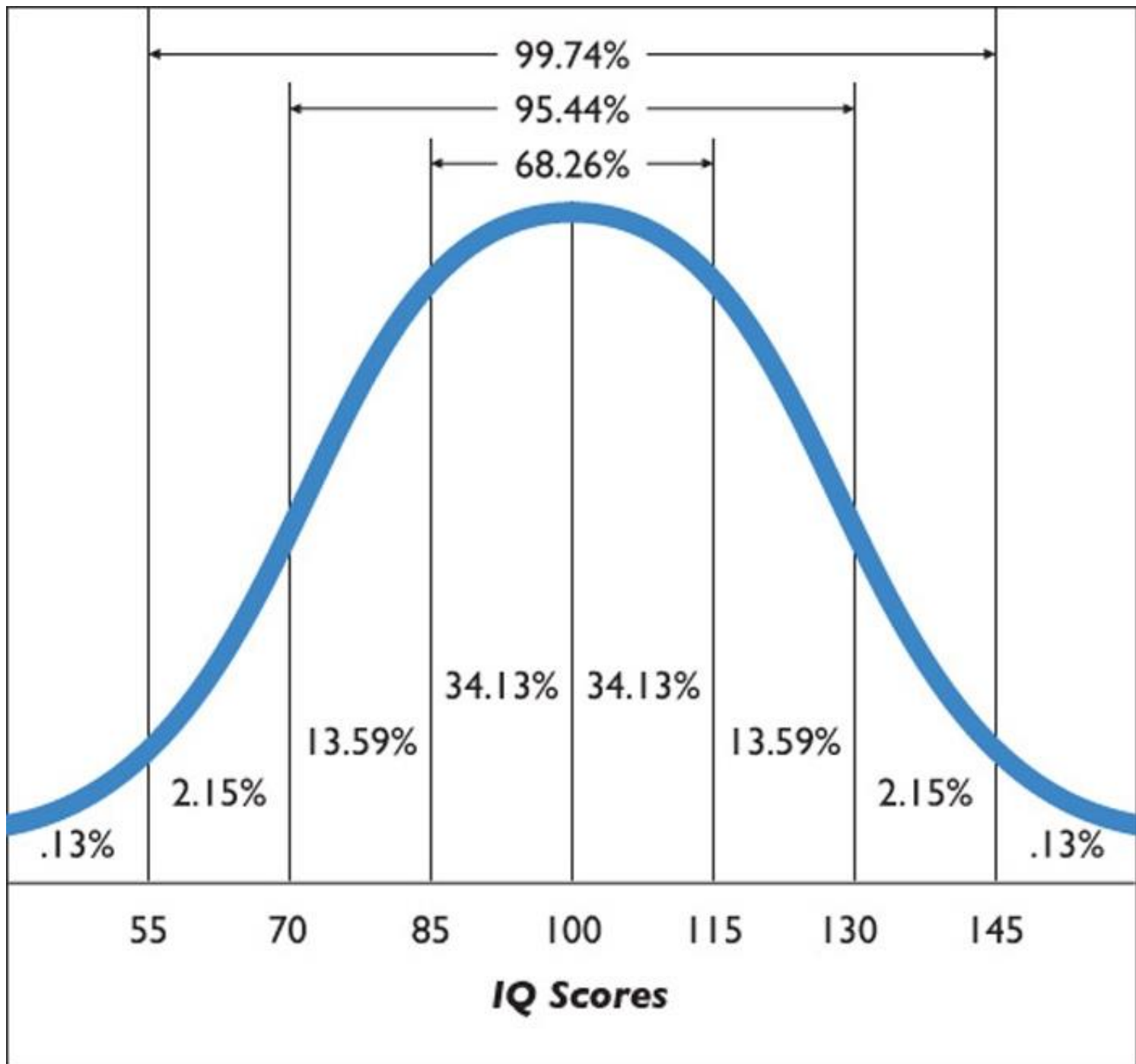
What is I.Q ?

$$\text{IQ} = \frac{\text{mental age}}{\text{chronological age}} \times 100$$

- Mental Age: An individual's level of mental development relative to others

Measuring Intelligence

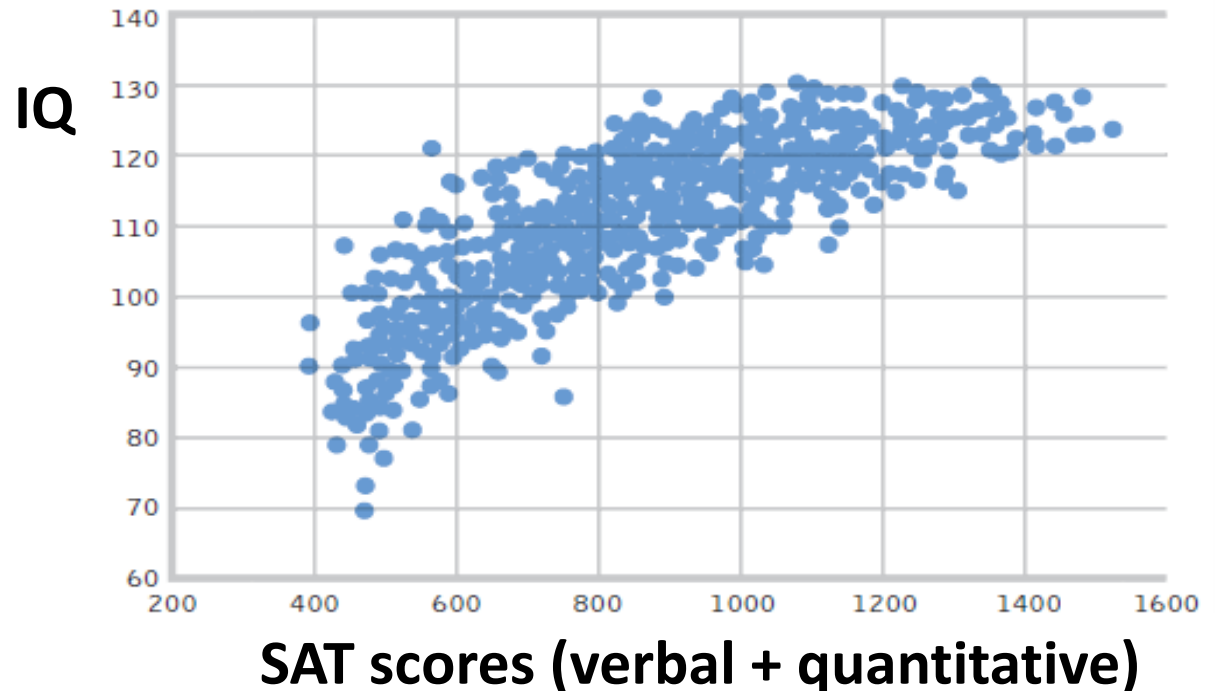
- At any age, children who are average will have an IQ of 100 because their mental age equals their chronological age.
 - Roughly two-thirds of children will have an IQ score between 85 and 115
 - Approximately 95% will have scores between 70 and 130



Aptitude vs. Achievement

- **Achievement tests** measure what you already have learned. Examples include a literacy test, a driver's license exam, and a final exam in a psychology course.
- **Aptitude tests** attempt to predict your ability to learn new skills.
- The SAT, ACT, and GRE are supposed to predict your ability to do well in future academic work.

If the SAT is an aptitude test, should it correlate with IQ?



Thank You