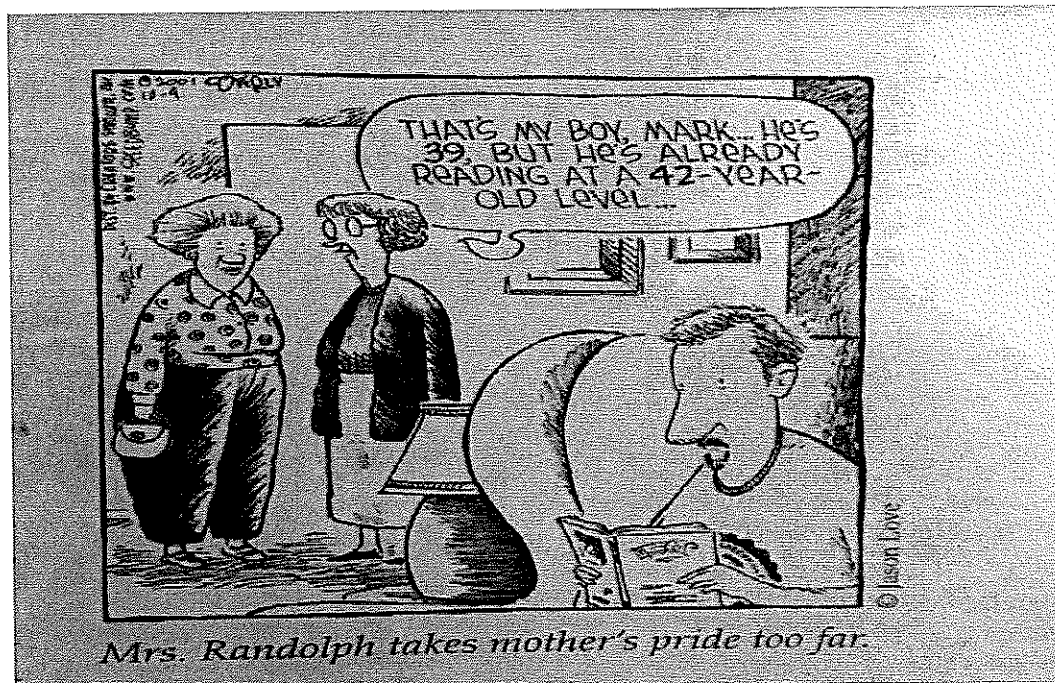


MODULE 61 ASSESSING INTELLIGENCE

THE ORIGINS OF INTELLIGENCE TESTING

- The modern intelligence-testing movement began at the turn of the 20th century, when France passed a law requiring all children attend school. The public school system was not a right “fit” for every child and Alfred Binet was commissioned to study the problem. Binet noticed that a child considered “dull” should perform as does a typical younger child while a child considered “bright” should perform as a typical older child.
- Thus brought on the idea of MENTAL AGE. This is the level of performance that deems a chronological age that most typically corresponds to a given level of performance. Thus, a child who does as well as the average 8-year-old is said to have a mental age of 8.



- Binet never approached the “why” reasoning for this but did account it back to environmental pressures. Binet feared that this approach would eventually begin to label students and limit their opportunities (which education does try to accommodate those that need it).
- Lewis Terman took on Binet’s ideas and modified them which today is known as the STANFORD-BINET TEST (the Americanized revision). German psychologists William Stern derived the famous INTELLIGENCE QUOTIENT (IQ). Works well for children but not for adults.

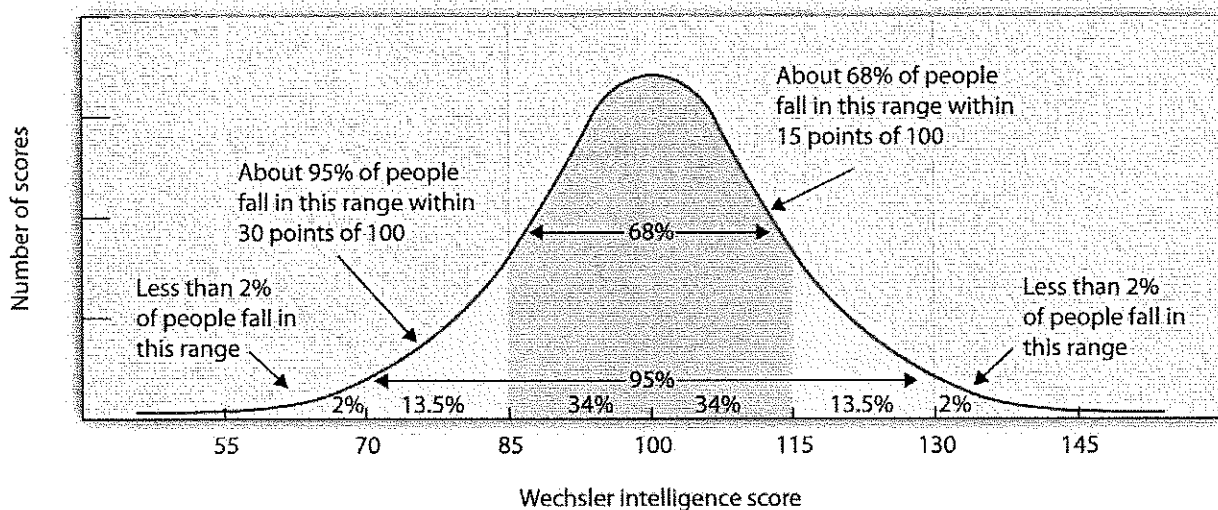
$$IQ = \text{MENTAL AGE} / \text{CHRONOLOGICAL AGE} * 100$$
- The US government acclimated the Stanford-Binet test into their evaluations of immigrants and WW1 army recruits but instead of testing intelligence it tested the inferiority of people not sharing their Anglo-Saxon heritage.

MODERN TESTS OF MENTAL ABILITIES

- **ACHIEVEMENT TEST** is a test designed to assess what a person has learned while an **APTITUDE TEST** is a test designed to predict a person's future performance; aptitude is the capacity to learn.
- David Wechsler created what is now the most widely used individual intelligence test, the **WECHSLER ADULT INTELLIGENCE SCALE (WAIS)**, with a version for school age children, and another for preschool children.

PRINCIPLES OF TEST CONSTRUCTION

- **STANDARDIZATION** is defining uniform testing procedures and meaningful scores by comparison with the performance of a pretested group. The **NORMAL CURVE** is the symmetrical, bell-shaped curve that describes the distribution of many physical and psychological attributes. Most scores fall near the average, and fewer and fewer scores lie near the extremes.



- The Flynn Effect is the astonishing rise in today's standard on intelligence tests. Not only have people gotten smarter but they have also gotten taller across countries. Cause is still unknown due to so many confounding variables.
- **RELIABILITY** is the extent to which a test yields consistent results, as assessed by the consistency of scores on two halves of the test, on alternate forms of the test, or on retesting. **VALIDITY** is the extent to which a test measures or predicts what it is supposed to. **CONTENT VALIDITY** is the extent to which a test samples the behavior that is of interest. **PREDICTIVE VALIDITY** is the success with which a test predicts the behavior it is designed to predict; it is assessed by computing the correlation between test scores and the criterion behavior.

BE ABLE TO ANSWER: What was the purpose of Binet's pioneering intelligence test?

PRACTICE FRQ: What are the fundamental differences between achievement and aptitude tests?