

Chapter One:

❖ What are Psychological tests & why do we need them?

- Development & application of psych tests considered one of the major achievements of psychologists in the last century
- Tests used to assist in making decisions or promoting self-understanding by providing more accurate info about human behavior
- Psych tests important for conducting psych research
- Select, administer, score & interpret psych tests -> core skill for professional psychologists

❖ History of psych testing:

TIMELINE OF MAJOR DEVELOPMENTS IN THE HISTORY OF PSYCHOLOGICAL TESTING

- 1890 The term 'mental test' is first used by James McKeen Cattell
- 1905 Alfred Binet and Theodore Simon devise the first test of intelligence for use with children
- 1916 Lewis Terman publishes the Stanford-Binet test, based on the pioneering work of Binet and Simon
- 1917 Robert Yerkes leads the development of the Army Alpha and Beta tests for selection for military service in the USA

- 1917 Robert Woodworth devises the first self-report test of personality
- 1921 Hermann Rorschach, a Swiss psychiatrist and psychoanalyst, publishes *Psychodiagnostics* on the use of inkblots in evaluating personality
- 1927 The first version of the Strong Vocational Interest Blank is published
- 1938 Oscar Buros publishes the first compendium of psychological tests, the *Mental Measurements Yearbook*
- 1939 David Wechsler reports an individual test of adult intelligence
- 1942 The *Minnesota Multiphasic Personality Inventory* (MMPI) is published to assist the differential diagnosis of psychiatric disorder
- 1948 Henry Murray and colleagues publish *Assessment of Men* and the term 'assessment' comes to replace mental testing as a description of work with psychological tests
- 1957 Raymond Cattell publishes on performance tests of motivation
- 1962 Computer interpretation of the MMPI is introduced
- 1968 Walter Mischel publishes his widely cited critique of personality assessment
- 1970 Computers are used for testing clients; computerised adaptive testing follows
- 1971 The Federal Court in the USA challenges testing for personnel selection
- 1985 Publication in the USA of the first edition of the *Standards for Educational and Psychological Testing*
- 1988 Jay Ziskin and David Faust challenge the use of psychological test results in court
- 1993 The American Psychological Association publishes guidelines for computer-based testing and interpretation
- 1993 John Carroll publishes *Human Cognitive Abilities: A Survey of Factor-Analytic Studies*, in which he proposes his three-stratum theory of intelligence
- 1999 Publication of the second edition of the *Standards for Educational and Psychological Testing*
- 2001 Gregory Meyer and colleagues publish the results of a review of 125 earlier literature reviews indicating the value of psychological tests

- Origins:
 - Chinese dynasties in public service examinations
 - Era of Han dynasty
- Programs of testing conducted from 2000BCE to early 20th century
- Modern development of psychological testing due to:
 - USA need to select men for military service during WW1
 - Work of Alfred Binet:
 - ❖ Provided method to objectively determine which children would benefit from special education- devised first modern intelligence test
 - ❖ Quantified intelligence in terms of mental age
 - ❖ Mental age: child's standing among children of different chronological ages in terms of his/her cognitive capacity
 - ❖ Binet thought of as originator of psychological testing
 - ❖ Relied on skills taught at school (verbal skills- most important)
- Charles Spearman – first theory of intelligence (something common in all cognitive ability tests)
- Henry Goddard, Cyril Burt & Gilbert Phillips developed versions of Binet's test
- Stanford-Binet test:
 - Lewis Terman
 - Most ambitious version of the Binet's test for English speakers
 - Appropriate for ages 3-16 years
- David Wechsler:
 - Test for individual assessment of adult intelligence
 - Individual test of general ability for adults
 - Inpatient psychiatric settings as an aid in differential diagnosis
 - Sought a test that would provide an overall assessment of intellectual intelligence & a test that would assist in identifying which possible diagnosis was the most likely
 - Superior to Stanford-Binet test:
 - ❖ Content more age appropriate
 - ❖ Replaced mental age scoring with Deviation IQ method
 - ❖ Deviation IQ method: compared performance of individual with that of his/her age peers by dividing the difference between the individual's score and the mean for the group by SD of the scores for the group
 - ❖ Deviation IQ method continues to be used in Wechsler & Binet tests to this day
- Practical ability tests:
 - Stanley Porteus:
 - ❖ Earliest researcher
 - ❖ Mazes used to assess comprehension & foresight
 - ❖ Test: test taker must trace increasingly complex mazes while avoiding dead ends & not lifting pencil from paper (still used by neuropsychologists to test executive functioning)
 - ❖ Forerunner of the development in Australia of a number of tests of ability that aren't dependent on access to English for their administration
- Donald McElwain & George Kearney:
 - Queensland test
 - Administrator of the test used mime to indicate task requirements

- Performance tests & Binet's test & its adaptations were individual tests
- Arthur Otis & Cyril Burt trialed group tests of intelligence
- Clarence Yoakum & Robert Yerkes developed two group tests of general mental ability for use with recruits to US armed services in WW1:
 - Army alpha test: access ability levels of those who could read/write
 - Army Beta test: for those not literate
 - Army Alpha & Beta tests valuable for psychological testing in postwar period & structure used by Wechsler when developing Verbal & Performance subscales for his test of adult intelligence.
- Robert Woodworth:
 - 1st self report personality test
 - Screening test for psychological adjustment to military
 - Short questions from textbooks of psychiatry
 - Forerunner of self-report tests
- Starke Hathaway & John McKinley:
 - Minnesota Multiphasic Personality Inventory (MMPI)
 - Self-report test
 - Designed to discriminate between those without mental illness (normals) and patient groups with diagnoses (yield 2 patterns of response (strategy: empirical keying))
 - Was long (566 items)
 - Heterogeneous content
 - Included 4 validity scales
- Edward Strong
 - Strategy: empirical keying
 - Developed a test of vocational interest
 - Basis for occupational & vocational guidance
- Personality & cognitive functioning tests were the principle methods of clinical judgment
- Objective tests: method of scoring is straightforward for scorers of the same test (ones discussed above)
- Projective tests:
 - "Projective techniques"
 - Genesis in psychodynamic theorizing
 - Freud – psychic determinism: all mental events have a cause (taken to mean that no behavior is accidental but it betrays the operation of unconscious motivational effects)
- Herman Rorschach:
 - Follower of Jung
 - Inkblot tests
- Henry Murray:
 - Projective hypothesis
 - Test takers must draw on their own psychic resources & demonstrate workings of their mind
 - Thematic Apperception Test (TAT): a projective test
 - Diagnostic council: case conference whereby all staff involved with a particular participant in the project would provide info/interpretation (consensus view about personality structure & dynamics of the individual)