Psychological Testing

Many Types of Tests

- Many are related to testing of personality types, behavior, or intelligence.

Personality Tests

- Are many types of tests.
- Generally each category of tests are related to the dominant theory of the time.

Projective Tests

- Are an offshoot of psychoanalytic theories.

Rorschach Inkblot Test

- Consists of 10 symmetrical inkblots
- Some are multicolored
- Some are black and white
- You are asked to see what the inkblot is.
- What the inkblot might be.
- Then the person is quizzed on their responses.
Scoring

- Is based on four categories
  - A. Location
    - Portion of the blot that is used in the response
    - Whole dot vs. small detail
  - B. Determinants
    - Attributes of the stimulus that are the basis of the response.
    - Form, shading, or color that is described
    - Also movement

- Content
  - What the subject sees, Not where or how they see it
    - Human figures or parts
    - Animals or parts
    - Blood
    - Plants
    - Etc.

- Popularity
  - Whether the person gives responses that are unusual or outside the mainstream of responses.

Thematic Apperception Test (TAT)

- In the Rorschach, the content is a secondary concern.
- In the TAT, the content is the primary focus.

Emphasis is placed on the Person’s

- Motives
- Preoccupations
- Defenses
- Conflicts
- Ways of interpreting the world

TAT Consists of:

- 10-20 pictures examining various scenes of things, pictures, or people.
- Subjects are asked to tell a story about each picture.
  - Describe what is happening
  - What led up to the scene
  - What the outcome will be
  - What the characters are thinking or feeling

Scoring and Interpretation

- Look at trends emerging from all of the scenes (not just one).
- Stories suggest a hypothesis.
- The hypothesis is then elaborated on or discarded after additional information is obtained.
Children’s Apperception Test

- Consists of cartoons or pictures of animals or humans in in various family situations.
- Scoring is the same as TAT.

Sentence Completion Test

- Fill in the incomplete sentences
- E.g..
  - My mother ______________
  - My father ______________
  - My mother “Washes the dishes.”
  - My father “Sweeps the floor.”

Advantages of Projective Tests

- The subject does not know how the test provides information to the tester.
  - Very difficult to engage in intentional deception.
  - Tests may be especially sensitive to unconscious, latent features of the personality.
  - Often enables a client to relax due to familiarity of what psychologists do.
  - Is good to establish initial rapport and trust.

Problems

- Responses are often difficult to interpret.
- Interpretations are often very subjective.
- Poor reliability
- Poor validity

Second Type of Personality Tests

Self-Report Inventories

Minnesota Multiphasic Personality Inventory (MMPI)

- Is the most frequently used personality test by clinical psychologists.
- Has been involved in more than 10,000 empirical studies.
- Is designed to aid clinicians in the diagnosis of psychological disorders.
  - Includes traits such as
    - Paranoia
    - Depression
    - Schizophrenia
    - Others
Consists of

- 567 true/false questions
- Yields scores on 14 subscales
  - 9 scales measure aspects of personality
  - 1 scale measures masculinity-femininity
  - 4 scales are used for validity purposes
    - Determines if the person is lying

Problems

- Many scales are intercorrelated
  - E.g., A person with depression
    - Will score high on depression
    - But will also score high on other scales too
- Responses change over time
  - Is a reliability problem
  - Take one day, take a couple days later
  - Get different scores and the scales are different.

California Personality Inventory (CPI)

- Used only “Normal” individuals
  - Problem – What is “normal?”
- Has 15 scales that measure personality.
- 3 scales used to eliminate response bias
- Has 480 true-false items (178 are taken from the MMPI).
- Is written at a fourth grade level.

Advantages of Self-Report Inventories

- Provides objective and precise estimates of aspects of the personality.
- Lots of studies have examined them (especially the MMPI).
- Are easy to use
Problems with Self-Report Inventories

• Deception is possible for clients to intentionally fake a particular personality trait.
• Social desirability bias: Some individuals unconsciously respond to questions in ways that make them look good.
• Response Sets: Is a systematic tendency to respond to test questions in a particular way and is unrelated to the content of the test items. Some people tend to agree with almost every statement. Some people tend to disagree with almost every statement.
• Has low validity; Especially predictive validity

More Problems

• Is dependent on the person’s accurate knowledge of their attitudes, beliefs, feelings, and behavior.
• Is dependent on a person’s willingness to disclose their knowledge of beliefs and feelings.
• Rarely assesses the reasons behind the statements.

Conclusions

• First, it is hard to measure personality
• Lots of tests try.
  – Problem:
    – Many tests have poor validity or reliability
• Regardless, personality tests are used in many contexts. (employment)
  – Problem. False Positives
    Say you have a problem when you actually do not.
    Can ruin your reputation or your life.

Behavioral Tests

• Insist on measuring objective behavior
• Types of techniques
  a. Self-Report questionnaires
    Ask specific questions about a behavior
  b. Self-Monitoring
    • Client keeps track of own behavior in specific categories
      – Number of foods eaten
      – Number of hours spent studying
    • Records information on paper or uses counters
  c. Direct Observation in Natural Settings
    • Is often used in hospital or school settings
  d. Direct Observation in Artificial Situations
    • Subjects are shown scenes on a videotape and reactions are observed.
  e. Behavioral interviews
    • Ask structured questions with specific statements
    • Collect specific data
    • No interpretation is used

Advantages

• Usually are highly reliable and valid
• Can be used across a variety of settings
• Can be used to assess a variety of behaviors
Problems

• Clients may lie
• Clients may inaccurately record behavior
• Usually have fewer problems than other techniques

Intelligence Tests

• Many different types of tests
• Issues for intelligence testing,
  – What is intelligence

  • Binet

Binet

• Developed his test in response to the French Government
• Differentiate between normal students and slow learners
• Test assessed mental abilities such as
  – memory
  – imagination
  – attention

– Used the concept of mental age developed from the test with the chronological age of the child
  – mental age from test = 9,
    • kid was 8 years old - smart
    • If kid was 12, kid was slow

  – Test did what it was supposed to do
  – Separated students

Intelligence Quotient

IQ

• Developed by Terman
• Mental Age / Chronological Age \times 100

Stanford Binet

• Test was adapted in the US by Stanford University
• Still is used across the country
• Works great with younger kids
Wechsler Adult Intelligence Scale
WAIS

• Most used test today
• Newest test    WAIS-R
• Has 11-12 sub-tests
  – Six for Verbal
  – Five for non-verbal

Differences between the Tests

• Binet
  – Has 4 sub tests
    • Verbal
    • Quantitative
    • Abstract Reasoning
    • Short term memory
• WAIS
  – Has 12 subtests

Other Wechsler Tests

• Wechsler Intelligence Scale for Children
  • WISC - R
• Wechsler Preschool and Primary Scale of
  Intelligence    WPPSI - R

Other Intelligence Tests

• Group Tests
  – Army Alpha
    • Developed in WWI
    • Emphasized Verbal Capabilities
  – Army Beta
    • Developed for individuals who couldn’t read or
      write
    • Emphasized Performance Capabilities

Aptitude Tests

• Tests to determine if you can do something
• SAT, ACT
Workplace Tests

• Tests are geared towards workplace issues
• Many Types

• General Ability Tests
  – Shipley Institute of Living Scale
  – Wonderlic Personnel Test

• Multiple Aptitude Test Batteries
  – General Aptitude Test Battery
  – Armed Services Vocational Aptitude Battery
  – Employee Aptitude Survey

• Mechanical Aptitude
  – Bennett Mechanical Comprehension Test
  – Minnesota Spatial Relations Test

• Motor Ability Tests
  – Crawford Small Part Dexterity Test
  – Purdue Pegboard
  – Hand-tool Dexterity Test

• Clerical Tests
  – Minnesota Clerical Test
  – Clerical Abilities Battery
  – General Clerical Test
  – SRA Clerical Aptitudes