

Psychology & Neuropsychological Testing

American Medical Association's
Relative Value Unit Committee (HCPAC)
Chicago, Illinois
October 30, 2004

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Outline of Presentation

- **Functions of Psychological Testing**
- **Historical Overview**
- **Technical and Methodological Issues**
- **Difference Between Psychological & Neuropsychological Tests**
- **Types of Tests**
- **Practical Aspects of Psychological Testing**

Functions of “Psychological” Testing

- **What is a “Psychological” Test?**
 - A Standardized Set of Questions in Which the Responses are Compared to a Qualified Sample
- **General Purpose of “Psychological” Testing**
 - To Obtain Critical Information About an Individual in a Limited Amount of Time
- **Current Typical Uses of “Psychological” Testing**
 - From School to Industry
 - Clinical and Neuropsychological

Historical Overview

- Origins
 - Francis Galton (World's Fair)
 - Alfred Binet (Mental Retardation)
 - Robert Yerkes (Selection of Army Personnel)
- Development
 - Intelligence
 - Personality
 - Clinical
 - Neuropsychological
 - Achievement & Aptitude
- Current Status
 - Almost 4,000 Psychological Tests (e.g., *Buros Mental Measurement Yearbook*)
 - Representation of Psychological Practice (e.g., Div 40/NAN survey)

Technical & Methodological Issues

- **Test Administration**
 - Standardization of Administration
 - User Qualification
- **Norms & Interpretation of Test Scores**
 - Samples & Norms
 - Interpretation in Biopsychosocial Contexts
- **Reliability** (similar results over time)
- **Validity** (meaningfulness)
- **Confidentiality, Privacy & Copyright Issues**

Psychological vs. Neuropsychological Tests

- **Purpose**

- Psychological = Affective, Intelligence, & Personality
- Neuropsychological = Brain Dysfunction

- **Approach/Process**

- Psychological = Outcome (retarded or not)
- Neuropsychological = Strengths vs. Deficits- Process

- **Time**

- Psychological = Approximately 4-5 hrs.
- Neuropsychological = Approximately 8-10 hrs.

Types of Tests

- **Individual vs. Group**
 - Individual = All Neuropsychological Tests (HRNB)
 - Group = Very Few Psychological Tests (e.g., Quick Test)
- **Self-report Inventories vs. Interactive**
 - Self-report = Beck, MMPI
 - Interactive = Weschler Scales
- **Computerized vs. Non-Computerized**
 - Computerized Tests Represent less than 5%
 - Computerized Tests Still Have to be Interpreted

Practical Aspects of Testing

- **Pre-Service** (*least time intensive; non face-to-face*)
 - Selection of Tests
- **Intra-Service** (*most time intensive*)
 - Administration of Tests
 - Face-to-Face
- **Post-Service** (*non face-to-face time intensive*)
 - Scoring
 - Interpretation
 - Report Writing
 - Follow-up
 - Disposition

Practical Aspects of Testing

- **Selection** – Matching Test to Symptoms
- **Administration** – Close Observation to Standardized Instructions
- **Scoring** – Matching Observed Responses to Possible Ones
- **Interpretation** – Integration of Prior Findings, Interview, Observations and Test Results; Most Demanding Aspect of Evaluation
- **Report Writing** – Written Report of Procedures & Findings
- **Follow-up** – With Referral Source, Patient, Significant Others
- **Disposition** – Appropriate Referral for Further Diagnostics/Treatment
- **Time**
 - Defined as “What the Professional Does” (vs. patient)
 - Overall time varies with tests but a rule of thumb is-
 - One hour of contact time results in 1.5 hours of professional work
 - See Camara, Nathan & Puente (2000) for specific information on individual tests

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