Applications of Cognitive Ability Tests

Neuropsychological Assessment

Executive Function: Hayling & Brixton Tests (Burgess & Shallice, 1997) Measures response initiation and response suppression. In the first test, participants must complete the sentence. In the second test, participants must provide a word that is meaningless to the end of the sentence.

Wisconsin Card Sort Task (Milner, 1963) Patients asked to sort cards. In the classic version they are not told any rules but told whether they are right or wrong. The rule changes every 10 goes.

Stroop Task (Stroop, 1935)

Diagnosing Depression

Hamilton Rating Scale for Depression (HRSD) A 21-question multiple choice questionnaire used to **rate severity of patients depression**. Higher the score, the more severe.

Beck Depression Inventory (BDI, BDI-II): 21-question multiple-choice self-report inventory. Rooted in patients **own thoughts** and composed of items relating to hopelessness, irritability and **cognitions** such as guilt or fear for being punished as well as **physical symptoms** such as fatigue, weight loss, low libido etc. (Beck argued that these caused depression, rather than being manifestations of depression). Treatment like CBT is said to help change these cognitions.

Why administer a test?

Classification (e.g. diagnosis), promote self-understanding, course training/occupational guidance and scientific enquiry.

Personality

Minnesota Multiphasic Personality Inventory (MMPI): This uses clinical scaled derived by selecting items that were endorsed by patients known to have been diagnosed with certain pathologies (atheoretical). This allows for diagnosis of symptoms that are supposedly indicative of human psychopathology (e.g. depression, schizophrenia etc.)

Myers-Briggs Type Indicator (MBTI) Based on the work of Jung. Participants are measure according to **Extraversion-Introversion, Sensing-Intuitive, Thinking-Feeling, Judgers-Perceptives.**

Projective Techniques

Rorsarch Inkblot (1921) An examiner hands 10 symmetrics inkblots one at a time to a viewer and asks them to say what the blot resembles. The images can be rotated. There are typical responses (e.g. a bat)

Thematic Apperception Test (TAT, Murray 1938) Patients are given a series of cards portraying ambiguous situations. The feelings and expressions of the humans figures are also ambivalent. The test taker interprets a picture by telling a story about what is happening, what led up to the scene and what will be the outcome.

Watkins et al. (1995) found that of 412 randomly selected clinical psychologists,43% use rorsarch all of the time (82% occasionally) and the TAT 34% of the time (82% occasionally). They use non-projectives like WAIS 59% of the time (93% occasionally).

Diagnosing Autism

Autism was first described by Leo Kanner (1943) as a syndrome characterised by social, communicative and behavioural features (unusually repetitive). Asperger's (first described by Hans Asperger (1944)) is characterised by all of the above put high language and intellectual proficiency. **4x more prevalent in boys.**

Autism Diagnostic Observation Schedule ADOS (Rutter et al 2002) A semi structured assessment involving various activities that allow a professional to observe social and communication behaviours. There are planned social interactions and four modules: individuals with no speech, three word phases, verbally fluent and adolescents to adults that are fluent. This scores on: communication and social interaction.

Checklist for Autism in Toddlers (CHAT) Baron-Cohen (2000) Assesses to markers in toddlers at 18 months: **pretend play and joint attention.** Useful for screening, not diagnosis.