Moving Tests Between Contexts: Neuropsychological Assessments in Rural Populations

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If that is not where you want to go, don’t start from here!
The purpose of assessment

Disease effects / Treatment effects

“..........To Measure
Differences
The brain behavior link
or
Implications
That is the question…..”
At the level of “Differences”

Can we observe a significant difference? √

What does the difference mean?

– Psychological significance  
  ?

– Clinical significance  
  ?

– Functional significance
Describing the brain – behaviour link

- Isolating the most vulnerable pathways?
  » Latent skills
  » Selected skills
Differences at the Individual or Cultural Level

Serpell –”Uneven access to schooling makes it difficult to conceive of a unitary, standardized test that could serve as a valid measure...for all sections of the national population”

Schakel “Can children who normally have no test-taking experience be expected to respond in a testing situation in a way that truly reflects their capabilities?”
“Implications”

- Selecting those in need of intervention and support
  - Defining Impairment
  - Defining Disability
  - Accounting for changes over time
In a Nutshell

1. *Reduce* the problems of unfamiliar test demands
2. *Include* where possible functional measures in the assessment process
Guidelines for test development/adaptation

- *Issues to do with test administration*
- *Issues to do with test content and structure*
Appropriate methods of communication

• Verbal communication
• Non-verbal communication
• Assessor-participant interaction
Where to test?

Travel time (fatigue)

Assessment location
(furniture/room/surroundings)
Selecting test administrators

Language – fluency in “test” language

Training –

» Production of test materials
» Learning and Practicing tests
» Observation
» Data Recording
Item selection

• Selecting an appropriate pre-test sample

• Pre-testing of words
  – Translation and back translation – preservation of meaning and pictures
  – Replacement of culturally unfamiliar materials and content
Modifications

Timing
Number of practice trials
Realistic cut-off points
Evaluation

Of Pilot Data
Sensitivity to Individual variations

- Distribution of test scores
Reliability

Test – retest

» Consistency

» Stability
Producing a score

- Accounting for background characteristics
  - age
  - gender
  - school experience
Validation

Neuropsychological measures vs. Achievement

- Academic performance
- Aspects of daily living
Pre-requisites

To have adequate time for careful tool development
To have available a pool of qualified assessors
To have the flexibility to cater for within-region variations in language and educational experience
To overcome community misconceptions and meet their expectations ......
Informed Consent:
Explaining the Study

The type of testing?

The type of follow-up?

Who needs to consent?
Feedback

- Why give feedback?
- Empowerment of participants
- Maintain community support
What do we feed back?

Information that is

• Meaningful
• Of practical use
Levels of feedback

Who and How?

- Community
- Individual
Important Ethical Issues

- Confidentiality
- Stigmatization
  - Alarm