Methodological and cross-cultural barriers of neuropsychological assessment in a refugee population

Bahrie Veliu
Janet Leathem
Massey University, Wellington, New Zealand
Neurological Conditions

- Traumatic brain injury
- Stroke
- Age related cognitive decline
- Dementia
- Developmental difficulties
- Strengths & weaknesses
Neuropsychological Assessment

• Attention
• Learning & Memory
• Language
• Motor Function
• Information Processing Speed
• Visual perception/Construction
• Reasoning & Higher executive function
• Mood & Social Functioning
Cross Cultural Neuropsychology

• CALD (culturally & linguistically diverse)
• Hispanic / African American
  – Puente
  – Ardila
• National Academy of Neuropsychology Guidelines use of Interpreters, (Heilbronner, 2007)
Refugees

• 16 million worldwide (UN, 2009)
• 20-100% experience torture (Mollica, Henderson & Tor, 2002)
• Impaired cognitive functioning (Vasterling & Field, 2007)
The Current Study

- 18 participants (13 male/6 female)
- Nationality (Burma 7; Middle East 8; Africa 5)
- Age 25-60 (most [8] 35-40)
- Education (0 yrs = 2; 1-4yrs = 6; 4-8 yrs = 9)
Additional Factors

• Choice of tests
  – All professionally translated

• Time
  – To establish rapport
  – Flexibility to complete
  – To meet with counselors/family members

• Innovation
  – Stroop test
Results

• Administration
  – Challenges due to use of interpreters
  – Interaction with the researcher
  – Communication during testing
  – Motivation
  – Literacy
Results

• Scoring
  – Age appropriate scoring
  – Inferring pre-morbid functioning
  – Assessing presence of brain injury & other insults
  – Collateral Information
Results

• **Specific Measures**
  
  – Verbal
    
    • *Wechsler Memory Scale IV* –
      
      ‒ *Logical Memory (Story 1 - Anna Thompson)*
    
    • *Auditory Verbal Learning Test –AVLT*
    
    • *Patient Competency Rating Scale*
  
  – Non Verbal
    
    • *WAIS IV- Block design*
    
    • *Delis Kaplan Executive Function Scale (DKEFS)*
      
      ‒ *Color Word Test*
      
      ‒ *20 Questions*
Results

• Ecological Validity
Conclusions

• Assessment people who are CALD may be invalid due to
  – Different communication styles
  – Unfamiliar/inappropriate content
  – Lack of prior experience with testing
  – Lack of educational opportunity
Methodological and cross-cultural barriers of neuropsychological assessment in a refugee population

Veliu, B