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

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

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

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

- 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

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

