The HKU Scholars Hub   The University of Hong Kong   香港大學學術庫

Title	**Cross-Cultural Validation of the Test of Everyday Test of Attention With Confirmatory Factor Analysis**
Author(s)	**Chan, RCK; Robertson, I; Manly, T**
Citation	**The 30th Annual International Neuropsychological Society Conference, Toronto, Canada, 13-16 February 2002, v. 8 n. 2, p. 260**
Issued Date	**2002**
URL	**http://hdl.handle.net/10722/46978**
Rights	**Creative Commons: Attribution 3.0 Hong Kong License**

changes were apparent in patients with early MS who performed well within the normal range on neuropsychological tests. We conclude that rCBF in MS patients during auditory attention is reduced, and that plasticity within attentional networks occurs early in the disease process.

Correspondence: *Michael Santa Maria, Department of Neurology (D-6), SUNY at Buffalo, 100 High St., Buffalo, NY 14203. mps675@ kaleidahealth.org*

P. ANDERSON & B. BANWELL. Neuropsychological Functioning in Pediatric Multiple Sclerosis: Preliminary Findings of a Prospective Investigation.

Multiple sclerosis (MS) is a relatively rare demyelinating disease, with approximately 3.5–7.5/100,000 persons newly diagnosed with MS each year. Pediatric MS is much rarer, as only 3–5% of total diagnoses are made at 16 years of age or younger. Adult onset MS has been well-studied and significant neuropsychological deficits have been documented (e.g., Rao, Leo, Bernardin & Unverzagt, 1991), while the available literature on pediatric MS consists of case reports and retrospective case series. In our prospective investigation, children and adolescents ($n = 10$; 9–17 years of age) with clinically definite MS (time since diagnosis ranging from 2 months to 4 years, 9 months) completed a comprehensive neuropsychological battery. Relative to normative samples, the MS group performed significantly poorer on some indices from a measure of psychometric intelligence (FSIQ, VIQ, PIQ, VCI), visual motor integration, visual learning and memory, story recall, and spelling. Though these findings are more widespread than those typically reported in the adult literature, the weaknesses noted are consistent with adult findings. The influence of time since diagnosis was also explored (< 2 years, $n = 6$; > 2 years, $n = 4$). Participants with a longer time since diagnosis performed significantly worse on some indices from a measure of psychometric intelligence (FSIQ, PIQ, POI), visual perception/construction, reading comprehension, and applied mathematical knowledge. These findings are more consistent with those reported in the adult literature, with a clear deficit in visual-spatial processing in the face of relatively preserved verbal functioning found for those participants with a longer time since diagnosis.

Correspondence: *Peter Anderson, Department of Psychology, Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, M5G 1X8 Canada. peter.anderson@sickkids.ca*

Poster Session 5/12:00–2:30 p.m.

CROSS CULTURAL

R. CHAN, I. ROBERTSON, & T. MANLY. Cross-Cultural Validation of the Test of Everyday Test of Attention With Confirmatory Factor Analysis.

The Test of Everyday Attention (TEA) was developed in improve upon existing methods of assessing attentional problems in clinical practice. It consists of 8 subtests measuring sustained, selective, and divided attention. Its construction was also designed to mimic everyday activities. However, the construct validity of the TEA has not been fully studied with a more stringent methodology. This study aimed to examine the construct validity and its stability across cultures with confirmatory factor analysis (CFA). A sample of 148 healthy UK and 133 Hong Kong Chinese participants were recruited. They were well-matched with gender proportion and educational level. Three models were tested in the present study: (1) the one from the original proposed underlying attentional contructs (Visual Selection, Sustained Attention, and Switching) (Robertson et al., 1996); (2) the discovered 4-factor structure by exploratory factor analysis (Robertson et al., 1996); and (3) the discovered 4-factor structure by exploratory factor analysis (Chan et al., 1999). The CFA solutions suggested that the 3-factor model provided the best fit for both samples (AGFI = 0.83, GFI = 0.91, CFI = 0.91 for UK sample; AGFI = 0.85, GFI = 0.93, and CFI = 0.90 for HK sample). A direct comparison of chi-squares further indicate significant differences among the 3-factor models and the alternative models ($\chi^2 = 6.54$, $p = 0.075$ for UK sample, and $\chi^2 = 25.3$, $p =$

0.001 for HK sample). Therefore, the 3-factor model provides the best fit of attentional components embedded in the TEA and it is consistent and stable across cultures.

Correspondence: *Raymond Chan, Department of Psychiatry, University of Hong Kong, Pokfulam Road, Hong Kong, China. rckchan@hkucc.hku.hk*

R. CHAN, M. WONG, E. CHEN, R. CHEN, A. WONG, L. LAM, & D. NGUYEN. Verbal Fluency Norms in a Community Population in Hong Kong.

Category fluency tests are important cognitive and clinical neuropsychological assessments, particularly for patients with frontotemporal impairments like in schizophrenia and dementia. The lack of local Hong Kong Chinese norms together with the growth in the number of Hong Kong immigrants to North America, Canada, and Australia, have increased the need for well-validated normative data for Hong Kong Chinese. This study aimed to provide normative data for healthy Cantonese-speaking Hong Kong Chinese, ranging in age from 16 to 65, on 4 commonly used measures of category fluency—"animal," "means of transport," "food," and "furniture." A total number of 100 healthy subjects (42 male and 58 females) were recruited in the community. The mean age and educational level of the sample was 32 ($SD = 11.76$) and 11.31 years ($SD = 3.64$), respectively. The findings indicate that the category "food" and "animal" had the highest mean number of citations (mean = 21.52, $SD = 7.14$ for food; mean = 20.07, $SD = 5.84$ for animal), whereas the category "furniture" and "means of transport" had the lowest mean score (mean = 14.24, $SD = 4.79$ for furniture; mean = 15, $SD = 3.86$ for means of transport). Rankings of frequently cited individual items within each category were also presented. The implication of applying this western driven measure in Hong Kong Chinese and psychiatry research is discussed.

Correspondence: *Raymond Chan, Department of Psychiatry, the University of Hong Kong, Pokfulam Road, Hong Kong, China. rckchan@ hkucc.hku.hk*

L. WALKER, A. SMITH, S. KINNEY, & J. TIBBS. Neuropsychological Norms for African-Americans.

Neuropsychological tests are commonly used to evaluate deficits associated with traumatic brain injury (TBI). TBI produces a variety of cognitive and behavioral deficits that can be identified through neuropsychological tests, which can assist in the development of specific rehabilitative strategies that may facilitate the patient's ability to function better both occupationally and socially. Studies have shown that individuals of lower socioeconomic status (SES) have a greater likelihood of sustaining a TBI. Further, African-Americans tend to be over-represented at the lower end of the SES. One long-standing issue with standardized testing has been the lack of adequate normative test data for non-European-Americans. Cross-cultural and psychometric psychologists suggest that one method for providing adequate clinical evaluation is to develop separate normative data for different racial groups as is often done with other demographic factors (i.e., age, gender, etc.). In the current preliminary study, 20 African-American, orthopedic patients were recruited from an acute care orthopedic hospital unit. Patients with a history of drug/alcohol abuse, psychiatric disturbance, or neurological illness were not included in the study. Cognitive measures were administered 2 to 5 days post-injury involving orientation, attention, concentration, speech and language, perceptual processes, memory, new learning, and executive functions. Preliminary results indicate that African-American participants performed below normative means on some subtests of the Wechsler's Adult Intelligence Scale–Third Edition (WAIS–III) and at the normative mean on other WAIS–III subtests. A similar pattern was observed on neuropsychological measures.

Correspondence: *Ayanay Smith, Morehouse College, Department of Psychology, 830 Westview Drive, Atlanta, GA 30314. ayanay0616@aol.com*

E. GÓMEZ, F. OSTROSKY-SOLIS, A. ARDILA, & M. ROSELLI. Neuropsychological Batteries for the Assessment of Spanish-Speaking Subjects.

The purpose of this research was to develop, standardize, and test the reliability of 2 neuropsychological test batteries in Spanish. Both tests