

most clinical and research applications with adults, age 18 and older. The tests are grouped in a modular format with a Screening Module and five main modules, including Attention, Language, Memory, Spatial, and Executive Functions Modules. During its initial development, several clinical groups were administered the NAB, including samples of patients with dementia, traumatic brain injury, aphasia, multiple sclerosis, HIV/AIDS, and attention deficit hyperactivity disorder (ADHD). For each clinical group, an age-, education-, and gender-matched control group was selected from the NAB standardization sample. Discriminant function analyses were conducted using the five NAB Screening Domain scores and the five main Module Index Scores, as well as the Total Screening Index and the Total NAB Index. Resulting sensitivities and specificities were good to excellent for all clinical groups. In addition, the profiles of clinically relevant standardized score ranges for each group were consistent with those expected for the specific clinical disorders. These results provide evidence for the clinical validity and utility of the NAB for a variety of patient groups commonly examined by neuropsychologists in both clinical and research settings.

Correspondence: *Robert A. Stern, PhD, Psychiatry and Neurology, Brown Medical School, Neuropsychology Program, 110 Lockwood St., Suite 430, Providence, RI 02903. E-mail: bob_stern@comcast.net*

Measures of Specific Neuropsychological Functions

L. MARON, W. PERRY, R. BILDER & T. SHARMA. DETECTING ATTENTIONAL DEFICITS USING THE COGTEST.

Cogtest (Cogtest plc, London, 2002) is a newly developed computerized neurocognitive test battery designed for use with a variety of clinical populations. The computerized platform allows for accurate recording of reaction time data, enhanced standardization and is easily adapted for implementation in functional neuroimaging environments. Additionally, it is amenable to repeated testing sessions across time making it an excellent tool for clinical trials. The Cogtest consists of 16 subtests that assess a number of neuropsychological domains, including working memory, executive functioning and attention. The Continuous Performance Test – AX Version (CPT–AX), for example, is an experiment of conditional target-nontarget discrimination ability, sustained attention and the ability to sustain effort in a cognitively demanding situation. The Continuous Performance Test – Flanker (CPT–Flanker) version is a test of selective attention, particularly sensitive to executive dysfunction. We administered the CPT–AX and the CPT–Flanker to 2 patient groups with known attentional difficulties, adults with attention deficit hyperactivity disorder (ADHD) and acutely ill inpatients with schizophrenia (Scz), in addition to a healthy comparison group. Preliminary data reveals that Scz patients have a decreased probability of making a correct discrimination on the CPT–AX task [$F(2,14) = 6.75$; $p = .009$] relative to both the comparison and the ADHD group. Scz patients also demonstrated fewer correct responses to all trials types of the CPT–Flanker task. No differences were observed between the ADHD and control groups. Taken together, results suggest that the Cogtest may be sensitive to parsing attentional deficits in different patient populations.

Correspondence: *Leeza Maron, Ph.D., Department of Psychiatry, UCSD, UCSD Medical Center, 200 West Arbor Drive, San Diego, CA 92103-8620. E-mail: lmaron@ucsd.edu*

R.J. SPENCER, F.A. WOLKENBERG, L. SPURGEON, S. STENCER, L.M. EVANS, E.T. MOOLCHAN, E. MONIQUE & A.S. KIMES. INTERNAL CONSISTENCY AND TEMPORAL STABILITY OF THE CONNERS' CONTINUOUS PERFORMANCE TEST: A STATE NOT TRAIT MEASURE.

Continuous performance tasks (CPTs), in general, and the Conners' CPT (Conners, 1995, 2000) in particular, are widely used in research and in

clinical assessments of attention, including measurement of medication effects (Riccio, Waldrop, Reynolds, & Lowe, 2001). Despite this widespread use, remarkably limited data exist concerning the reliability of these instruments. Here, we report on the reliability after a one year interval of four measures of the Conners' CPT (omission, commission, response time and standard error of response time) in a sample of 53 adolescents between the ages of 12 and 14 (mean age 12.8 SD .9), (24 control participants without diagnosis, 20 participants with a diagnosis of ADHD and 9 participants with a diagnosis of ADHD and at least one other disorder). Performance consistency within session (internal consistency) was high for three of the four measures. However, while statistically significant, for all four measures, correlations of performance across sessions (temporal stability) were too low to offer much reassurance concerning their discriminative utility in clinical practice. There were few practice effects among the control participants, but the ADHD-diagnosed adolescents improved significantly between CPT administrations one and two. We conclude that the Conners' CPT demonstrates acceptable internal consistency, but unacceptable temporal stability, suggesting that this neuropsychological test is a better state than trait measure. It also suggests that on the individual level, practice effects may lead to a misunderstanding of medication effects.

Correspondence: *Robert J. Spencer, M.A., Psychology, University of Maryland/Baltimore County, 1 Shawnee Ct., Apt 104, Parkville, MD 21234. E-mail: rspencer@umbc.edu*

C. LOUREIRO, T. FERNANDES, I. PAVAO MARTINS & J. FERRO. BEHAVIOURAL INATTENTION TEST: NORMATIVE DATA AND THE NEED FOR A NEW CRITERION.

Background: Behavioural Inattention Test (BIT) is a neuropsychological instrument for the evaluation of brain damage patients with possible neglect. In the original version (Wilson et al., 1987) the diagnostic criteria for neglect is defined as a score below the cut-off point in at least one of the subtests. In this study we propose an additional criterion: a lateralized pattern of errors/omissions. This aspect is special important because it is one of the major characteristics of neglect. Aims: To obtain normative data for the Portuguese population considering the two criteria; and to analyse the performance pattern of patients with neglect according to the new criterion. Method: Two groups performed the BIT. The healthy group were 72 Portuguese adults with ages 20-82 yrs old (48,46; 17,48) and educational level 0-17 years (8,43; 6,30). The clinical group were 47 patients with ages 21-83 yrs old (57,62; 13,86) and educational level 0-17 years (6,32; 4,96). Results: On the healthy group it was found a main effect of the level of education, with significant differences between the illiterate group and the others. We did not find any gender or age effects on the global score. In the clinical group, the use of the new criterion permitted a reduction of false positive clinical diagnostics. Discussion: The use of the new criterion is of major importance for a reliable neglect diagnosis. The definition of cut-points according to educational level is essential for a correct evaluation of the Portuguese population.

Correspondence: *Isabel Pavão Martins, PhD, Language Research Laboratory - Centro de Estudos Egas Moniz, Faculdade de Medicina de Lisboa, Avenida Prof Egas Moniz, Lisbon 1649-028, Portugal. E-mail: labling@mail.telepac.pt*

D. BYRD, D. SANCHEZ & J. MANLY. AN EXPLORATION OF THE COMPARABILITY OF DIGIT AND SPATIAL SPAN IN AN ELDERLY AFRICAN-AMERICAN SAMPLE.

Working memory is theorized to be a major contributor to higher level cognition and the main deficit in some psychiatric symptomatology. Yet empirical investigations of commonly used clinical tests of this domain are lacking. We explored the relationship between clinical measures of verbal (WAIS-III Digit Span (DS)) and nonverbal (WMS-III Spatial Span