

speaking countries as well as emerging adaptation work in a few Asian cultures, evidence base for the utility of the Vietnamese MoCA (MoCA-V) is lacking. This has posed a huge challenge for current and future clinical practice in Vietnam, as the country continues to assume a large burden of brain-related disorders. This study examined the construct validity of the MoCA-V and identified a cut-off score for the determination of cognitive impairment in a prevalent neurological condition in Vietnam – traumatic brain injury (TBI).

Participants and Methods: Participants included 129 neurologically healthy individuals and 80 patients with moderate-to-severe TBI. All participants completed the MoCA-V, along with other common neurocognitive measures such as the Trail Making Test (TMT) Parts A and B, Vietnamese Verbal Fluency Test, and Digit Span.

Results: Pearson's correlations revealed significant, moderate correlations between performance on the MoCA-V subdomains and more comprehensive cognitive measures. Performance on the MoCA-V Attention domain was correlated with both Digit Span Forward, $r(110) = .453, p < .001$] and Digit Span Backward, $r(110) = .303, p = .001$; performance on the MoCA Language domain was correlated with the Vietnamese Verbal Fluency Test, $r(107) = .334, p < .001$; and performance on the MoCA Executive Function domain was correlated with the TMT-B, $r(108) = -.479, p = .022$.

Performance on the MoCA-V was also associated with age, $r(127) = -.659, p < .001$, and education, $r(127) = .769, p < .001$, consistent with the general effects of age and education in cognitive abilities. Finally, a cut-off score of 22.5 was identified for the detection of cognitive impairment in Vietnamese people with TBI (AUC = 0.811; 95% CI = .75-.87, $p < .001$).

Conclusions: This study provides the first evidence for the construct validity and clinical utility of the MoCA-V. Future research is necessary to cross-validate study findings among other clinical populations. Lessons learned from neuropsychological test translation and adaptation process will be discussed, particularly in the development of the administration materials and test instructions (e.g., considerations for individuals with limited formal education, influences of colonialism in the development of test stimuli).

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: cognitive screening

Keyword 2: cross-cultural issues

Keyword 3: traumatic brain injury

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3 Validity of Visuoconstructional Assessment Methods within Healthy Elderly Greek Australians: Quantitative and Error Analysis

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Objective: Visuospatial skills are frequently assessed with drawing tests. Research has suggested that the use of drawing tasks in low educated groups may lack the ability to discriminate healthy individuals from clinical populations. The aims of this study were to investigate the validity of visuoconstructional tests in a sample of older Greek Australian immigrants and compare their performances to a matched sample of patients with Alzheimer's disease (AD).

Participants and Methods: We assessed visuoconstructional performances in a sample of 90 healthy older Greek Australians, with a primary school level of education, and compared

performances to a demographically matched sample of 20 Greek Australians with a diagnosis of AD on four visuoconstructional drawing tests: Greek cross, four-pointed star, intersecting pentagons, and the Necker Cube.

Results: While healthy participants tended to outperform the AD group on most copy tasks, high fail rates within the healthy sample were observed for the intersecting pentagons and Necker cube (78% and 73% fail rates respectively) when using established clinical cut-off scores. High rates of curved angle, omission, distorted relation between elements, spatial disorganization and three-dimensional design errors were found across the four-pointed star, intersecting pentagons, and the Necker cube in both healthy participants and those with AD. Exploratory receiver operating characteristic curve analysis revealed that, with perhaps the exception of the Greek cross, meaningful sensitivity and specificity could not be reached for the four-pointed star, intersecting pentagons, and Necker cube.

Conclusions: Cognitively healthy immigrants with low education appear to be at a disadvantage when completing visuoconstructional drawing tests, as their performance may be misinterpreted as indicating cognitive impairment. Future research is needed to identify alternative approaches to assess visuoconstructional ability in low education older cohorts.

Categories: Cross Cultural Neuropsychology/
Clinical Cultural Neuroscience

Keyword 1: cross-cultural issues

Keyword 2: visuoconstruction

Keyword 3: demographic effects on test performance

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4 Second-Language Neuropsychology: A Pragmatic Strategy for Reaching the Next Billion People

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Objective: The world's 8 billion people speak about 7000 languages; 3.2 billion of those people natively speak the top 10 languages. Currently neuropsychology is moderately well-developed in 6 of the top 10 languages, serving roughly 2.5 billion. Developing robust neuropsychology in all 7000 languages to serve everyone equitably in their native language seems impractical within the next few decades. However, 1-2 billion people speak a major language as their second language so a pragmatic strategy may be to develop an alternative approach of second-language neuropsychology (SLN) to serve clients who speak rare languages natively but widely-diffused languages as their second language. This strategy involves adapting all levels of neuropsychological services to the second language user.

Participants and Methods: Intended participants are those who speak a language of limited (e.g., <1 million speakers) diffusion as their first language and a language of wider diffusion (historically-colonial languages such as English, Russian, Mandarin, or Arabic; regional trade languages such as Swahili or Lingala; or nationalized languages such as Indonesian or Tagalog) as their second or more language. Intended participants are those with Basic Interpersonal Communication Skills (BICS) in their second language, but not necessarily Cognitive and Academic Language Proficiency (CALP).

SLN will adapt current neuropsychology techniques in the following domains:

1. Oral language: interview, feedback, treatment, and communication among professionals;
2. Detailed language use evaluation;
3. testing and norms;
4. written materials: reports, client education materials, treatment materials, professional education materials, etc.

The language style for such communication will use standard versions of such traditional or national languages, as commonly taught as a second language. It will use basic vocabulary, simple grammatical structures, and broadly-understood cultural referents. It will minimize grammatical complexity, slang, regionalisms, figures of speech, and metaphor. Materials will be available in the specified language both for those who are literate and for those with inadequate literacy. The development of such