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abstract
Summary Abstract:
The history of psychological test translation
includes problems of inaccuracy and
unintentional or intentional racial, ethnic, and
linguistic discrimination. Methods for accurate
and fair psychological test translation,
adaptation, and development have advanced,
but neuropsychology has been slow to
implement these methods. Inadequate
translations and adaptations of
neuropsychological tests may substantially
impact their psychometric properties for target
populations, increasing risk of clinical errors and
other harms.
The International Test Commission's (ITC) 2017
Guidelines for Tests Translation and Adaptation
summarize current technologies for tests whose
constructs depend upon the semantic content of
the items. This is helpful, but insufficient
because many neuropsychological tests focus
on cognitive, linguistic, and emotional constructs
that are measured by processes other than
semantic content. Neuropsychological tests may
depend on word length, familiarity, written form,
visual stimuli, culture-dependent behavioral
expectations, or other features apart from
meaning. Furthermore, the ITC Guidelines were
developed primarily from experiences of
translation and adaptation among European
languages, with populations with a restricted
range of education and cultures, hindering their
generalization to more diverse populations.
To make the guidelines practical for
neuropsychological users, the Assessment
Workgroup of the INS Cultural Neuropsychology
Special Interest Group has developed
neuropsychological commentary on the ITC
Guidelines. The Workgroup has also sponsored
a discussion group among members involved in
neuropsychological test translation, adaptation,
and development projects around the world. Our
objectives in this symposium are to present an
overview of our neuropsychological commentary
on the ITC Guidelines and illustrate the
relevance of these guidelines and commentaries
through presentations of projects from around
the world. At the 2022 INS New Orleans meeting
our group presented lessons learned from
Africa, Australia, Europe, South America, and
South Asia. In the current Part 2 presentation we
will present projects from Australia, India, and
Vietnam and lessons derived from comparisons
among many projects. Our panel will discuss
lessons learned from these projects and outline
potential future diversity strategies, including the
following:
- The concept of universal or culture-fair
  tests is unrealistic, naïve, and potentially
  harmful.
- The concept of culture-broad tests and
  test paradigms is viable but requires
  empirical verification in all applications.
- Even with viable culture-broad tests,
  multicultural neuropsychology requires
  specific cultural and linguistic
  knowledge, skill, and sensitivity.
- Drawing is a learned skill that is viable
  for neuropsychological testing only
  when baseline abilities are well-
  understood.
- Verbal fluency is a cognitive task that
  varies in its nature depending upon
  characteristics of specific languages and
  their writing systems as well as the
  nature of education.
- One pragmatic possible strategy for
  better serving speakers of relatively rare
  languages is to develop ways of doing
  neuropsychology designed for those
  who speak popular languages
  moderately well as their second
  language.

Keyword 1: cross-cultural issues

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1 Adaptation of the Addenbrooke's Cognitive Examination III for the Bengali speaking population in India: A systematic approach to reducing cultural and linguistic bias

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Objective: A systematic approach is vital for adapting neuropsychological tests developed and validated in western monocultural, educated and English-speaking populations. However, rigorous and uniform methods are often not implemented during adaptation of neuropsychological tests and cognitive screening tools across different languages and cultures. This has serious clinical implications. Our group has adapted the Addenbrooke's Cognitive Examination (ACE) III for the Bengali speaking population in India. We have taken a 'culture-specific' approach to adaptation and illustrate this by describing the process of adapting the ACE III naming sub-test, with a focus on the process of selecting culturally appropriate and psychometrically reliable items
Participants and Methods: Two studies were conducted in seven phases for adapting the ACE III naming test. Twenty-three items from the naming test in the English and the different Indian ACE-R versions were administered to healthy Bengali speaking literate adults to determine image agreement, naming and familiarity of the items. Eleven items were identified as outliers. We then included 16 culturally appropriate items that were semantically similar to the items in the selected ACE-R versions of which 3 were identified as outliers. The final corpus consisting of 24 items was administered to 30 patients with mild cognitive Impairment, Alzheimer's disease and vascular dementia, and 60 healthy controls matched for age and education to determine which items in the corpus best discriminated patients and the controls, and to examine their difficulty levels.
Results: The ACE III Bengali naming test with an internal consistency of .76 included 12 psychometrically reliable, culturally relevant high naming-high familiarity and high naming-low familiarity living and non-living items. Item difficulty ranged from .47 to .88 and had discrimination indices ≥.44.
Conclusions: A key question for test development/adaptation is whether to aim for culture-broad or culture-specific tests. Either way, a systematic approach to test adaption will increase the likelihood that a test is appropriate for the linguistic/cultural context in which it is intended to be used. Adaptation of neuropsychological tests based on a familiarity driven approach helps to reduce cultural bias at the content level. This coupled with appropriate item selection statistics helps to improve the validity of the adapted tests and ensure cross-cultural comparability of test scores both across and within nations.

2 The Vietnamese Montreal Cognitive Assessment: An Evaluation of Construct Validity and Recommended Cut-off for Cognitive Impairment after TBI

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Objective: Cognitive screening tools such as the Montreal Cognitive Assessment (MoCA) play an essential role in the clinical evaluation of neuropsychological functions. Despite the extensive investigations of the MoCA in English-