

collecting normative data. Results were compared to samples taken from an Argentine university, Universidad Católica de Córdoba, and combined with another American university, Marymount Loyola University. The goal of this comparison was to provide evidence supporting the validity of the MUNS as a universal, cross-cultural neuropsychological assessment battery.

**Participants and Methods:** Students from James Madison University (JMU) in Harrisonburg, Virginia (N = 24, Age = 20.083 ± 1.93, Female = 87.5%) were recruited via a campus-wide email. Students who met inclusionary criteria were selected for MUNS administration. Students completed a background questionnaire and effort measure (REY-15; Rey, 1964) before completing the MUNS battery, consisting of eight subtests with four delayed trials. Descriptive statistics of the group were assessed, and one-way ANOVAs were conducted on the various subtests to determine whether differences exist between the American and Argentine samples.

**Results:** No significant difference between groups was found for seven subtests. A difference existed on the Attention subtest between the American ( $f(1, 106) = 45.409, p < .001$ ).

**Conclusions:** The results show support for the cross-cultural validity of the MUNS. The only significant difference was found in the Arrows (Old) subtest. This is in alignment with previous administrations of the MUNS (Fernandez et al., 2018). Further studies are needed to assess potential bias within this subtest, as well as to pursue comparison studies for the New Arrows subtest administered within this USA sample. The present findings provide further evidence that the MUNS can be applied as a neuropsychological assessment across a variety of populations.

**Categories:** Cross Cultural Neuropsychology/  
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**Keyword 1:** cross-cultural issues

**Keyword 2:** test development

**Keyword 3:** neuropsychological assessment

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## 6 A review of neuropsychological measures of executive functioning in the

## Japanese and Japanese-American population

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**Objective:** There are approximately 1.5 million Japanese and Japanese Americans in the United States, with the Japanese population increasing steadily over the past two decades. Given the growing number of the Japanese population, it is likely that a clinical neuropsychologist may encounter a Japanese patient, particularly for neurocognitive disorder evaluations given the aging population.

Literature has reported that cross-cultural bias in neuropsychological testing and cultural factors affect individuals' test performance. In order to conduct and interpret neuropsychological assessments for this population, it is important to use normative data and consider the impact of various factors such as acculturation, language, and generation in the U.S. Availability of normative cognitive test data for Japanese-Americans is limited. Tests with most extensive use, adaptation, validation, and norming were identified. Many clinically used measures of executive functioning (EF) have been translated into Japanese and studied in multiple clinical populations. We present information on tests in this domain given their appropriateness for use in cross-linguistic and cross-cultural evaluations.

**Participants and Methods:** Available studies of neuropsychological tests measuring EF that have been translated and normed in the Japanese and/or Japanese-American patient population are reported. Review of the literature was conducted by authors of Japanese descent familiar with neuropsychological assessment and Japanese and Japanese-American culture. We prioritized studies published in both English and Japanese and those that included commonly utilized tests in the U.S, allowing for maximum accessibility and utility for Western-based neuropsychologists. Additionally, inclusion priority was given to studies published in English which report the clinical diagnoses, age range, and gender characteristics of the sample population. The Wisconsin card sorting

test (WCST) and Trail Making Test (TMT) were reviewed.

**Results:** The WCST and the TMT, with its variant, was the most normed EF cognitive test currently available. The Keio version Japanese-Trail Making Test (J-TMT) and a simplified version of the Trail Making Test (S-TMT) has been utilized in Japan, however norms are still lacking. Of the available studies, the S-TMT and J-TMT were found to be moderately correlated with the TMT. The Keio version WCST (KWCST) (Kao et al., 2012) was correlated to education level (Abe et al., 2004), appropriately differentiating severity of social anxiety disorder (Fujii et al., 2013), patients with schizophrenia (Banno et al., 2012), and cognitive impairment in Parkinson's disease (Yoshii et al., 2019).

**Conclusions:** Information regarding translated and normed tests are presented to assist clinical neuropsychologists provide competent services to Japanese-Americans. The J-TMT and the S-TMT may be clinically useful as an evaluation of attention for the Japanese population. The KWCST has also been found to be an appropriate tool for this population. However, publicly available norms for these assessments are still sparse, and there is very limited information about administration of these tests by English-speaking neuropsychologists with the use of interpreters. Further work is needed to increase access to and awareness of linguistically and culturally appropriate versions of clinical measures to better serve the Japanese and Japanese-American population.

**Categories:** Cross Cultural Neuropsychology/  
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**Keyword 1:** normative data

**Keyword 2:** executive functions

**Keyword 3:** test reliability

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## 7 Do Race and Educational Attainment Impact Subjective Reports of Cognitive Decline?

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**Objective:** To establish how participant and informant reports of cognitive decline may differ

between groups or remain consistent based on race and level of education in a large, national sample.

**Participants and Methods:** Participants were selected using the National Alzheimer's Coordinating Center (NACC) database. Participants who were cognitively healthy at baseline and at least 65 years of age were selected. All informants either lived with the participant or visited the participant weekly (N = 9300). Participant racial groups included White American (n = 7534), Black American (n = 1453), Native American/Alaskan (n = 68), or Asian American (n = 239). Native Hawaiians were not included in this study, given the small sample size (n = 6). Participant education-levels included less than high school degree (n = 395), high school degree or GED (n = 1326), some post-secondary education (n = 1727), bachelor's degree (n = 2184), and graduate studies (n = 3668). Pairwise comparisons examined each racial and educational attainment group by subjective reports of cognitive decline using Bayesian contingency tables to find reliable evidence to support the null or alternative hypothesis. Participant and informant reports of decline were coded to create a single variable to express no reported decline, participant reported decline, informant reported decline, or agreed decline.

**Results:** Pairwise race comparisons found moderate evidence that Native Americans reliably reported cognitive decline differently than Black (BF10 = 6.973) and White Americans (BF10 = 3.634). In both cases, the Native American group reported more cases of decline than expected in all groups and reported no decline less than expected. Further analysis found very strong evidence for the null hypothesis when comparing White Americans with Black (BF01 = 60.506) and Asian Americans (BF01 = 65.72). A comparison of Black and Asian Americans found extremely strong evidence for the null hypothesis (BF01 = 199.464). No conclusive evidence was found when comparing reports of Native and Asian Americans (BF01 = 2.401). Pairwise comparisons of educational attainment with subjective reporting of cognitive decline found no evidence of reliable differences between groups. No conclusive evidence was found when comparing the reporting pattern of individuals with some post-secondary education and individuals who did not complete high school (BF01 = 1.257). Moderate evidence for the null hypothesis was found when comparing