addition, the diagnostic accuracy of the test was studied by the ROC curve method, its concurrent validity by correlation with other memory tests (RAVLT), and its internal consistency with Cronbach's alpha test.
Results: The Baremization sample was divided into 16 groups: 4 age groups (41-51, 51-61, 61-71 and >72 years), two educational levels (6-12 years and >12 years), and sex (male and female). Performance was significantly different between age groups ($p < 0.003$**). No significant differences were found in Craft Story 21 performance between education ($p > 0.09$) or sex ($p > 0.56$) groups within the same age group. Normative values in terms of means and standard deviations are presented for each group. Regarding the design of the recognition phase, the groups did not show significant differences in age ($p= 0.13$), sex ($p= 0.88$), or schooling ($p= 0.33$). The overall score of Craft Story 21 test showed the ability to discriminate between healthy controls from patients with MCI (sensitivity = 81.6% and specificity = 72.4%). Its diagnostic accuracy by phase (immediate AUC= 0.86; delayed AUC= 0.86 and recognition AUC= 0.75) was superior than Rey Auditory and Verbal Learning Test (RAVLT): immediate (AUC= 0.79), delayed (AUC= 0.82) and recognition (AUC= 0.74). It presented evidence of concurrent validity with RAVLT in its immediate ($r=0.56$, $p<0.001$), delayed ($r= 0.66$, $p<0.001$) and recognition ($r= 0.37$, $p<0.001$) trails. The instrument also presented evidence of reliability ($\alpha= 0.82$).
Conclusions: The Craft Story 21 test is a practical, brief and multicultural scale. Thus having appropriate scales for the specific population to be assessed to a more accurate and precise description of the memory profile. Additionally, the new Recognition phase of the test showed evidence of validity and reliability for assessing memory processes.

Categories:
Assessment/Psychometrics/Methods (Adult)
Keyword 1: neuropsychological assessment
Keyword 2: mild cognitive impairment
Keyword 3: normative data
Correspondence: María Agostina Carello Fleni, Buenos Aires, Argentina
agostina.carello@gmail.com

39 Neurocognitive Function in People Living with HIV from Tijuana: a Comparison Between Norms for Latin-American Population and Norms for US-Mexico Border Region

María L García-Gomar, Agustín J Negrete-Cortés, Ana J Castro-Alameda, José R Chavez-Mendez
Facultad de Ciencias de la Salud, Universidad Autónoma de Baja California, Tijuana, Baja California, Mexico

Objective: Global neurocognitive impairment (NCI) has been reported in white people living with HIV/AIDS (PLWHA) in 40%. In Latino populations there have been variable rates described from 30 to 77%. This variation has to do with the lack of normative data for Latino population and the application of norms for English-speakers, increasing the probability of misidentification of NCI. Thus, recognizing which are the best norms available for the Mexican population is important for the accurate identification of NCI. The aim of the present study was to investigate the rate and pattern of HIV associated neurocognitive impairment (NCI) and to compare rates of NCI between rates calculated using norms for the Latin-American population (NLAP) and norms for the US-Mexico border region (NP-NUMBRS).
Participants and Methods: CIOMS international ethical guidelines for the participation of human subjects in health research were followed. 82 PLWHA living in Tijuana (Mexico) participated in the study (Age: Mean=39.6, SD=10.9; 28.3% Female; Years of education: Mean=8.5, SD=3.6). PLWHA were recruited from the board-and-care home “Las Memorias” (73.4% on antiretroviral therapy; Years since HIV diagnosis: Mean=9.9, SD=7.1). Participants completed a neuropsychological test battery sensitive to detect HIV associated NCI that assessed four cognitive domains (verbal fluency, speed of information processing, executive function and learning/memory). Raw scores in these tests were transformed to percentiles using LAPN and transformed to T-scores using NP-NUMBRS. T-scores were averaged across tests to compute domain specific and global impairment scores. NCI was defined as percentile scores <16 and T-scores < 40. McNemar´s tests were used to compare the rate of NCI utilizing NLAP vs NP-NUMBRS.
Results: According to NLAP, rates of global NCI were about 13.4%. Utilizing NP-NUMBRS rates of global NCI were about 34.1%. However, there

https://doi.org/10.1017/S1355617723008974 Published online by Cambridge University Press

is a positive and significant correlation between Global Neurocognitive Function score in PLWHA according to NLAP and NP-NUMBRS (r=0.66, p<.05). Rates of global NCI in PLWHA were significantly lower when using LAP norms (McNemar Chi-Square=29.89; p<.001). Regarding the pattern of NCI according both norms learning and memory was the most affected cognitive domain with 34% of impairment according to NLAP vs 51% of impairment according to NP-NUMBRs. **Conclusions:** Utilizing NP-NUMBRS, rates of NCI are consistent with findings of prior studies. Employing norms for LAP the rates of NCI are lower that the ones reported in the literature. This is an important finding since PLWHA included in the sample have several vulnerable factors such as deportation, prostitution, drug abuse and discrimination for sexual preference, factor that could impact cognition. The pattern of neurocognitive function was also similar to those of prior studies in HIV. To accurately make NCI diagnosis it is important to use norms that consider specific characteristics of the population. The diagnosis of NCI is important since these deficits present a strong risk of concurrent problems in a wide range of health behaviors like medication non-adherence in PLWHA.

Categories:
Assessment/Psychometrics/Methods (Adult)
Keyword 1: HIV/AIDS
Keyword 2: cognitive functioning
Keyword 3: normative data
Correspondence: García-Gomar María Luisa, Facultad de Ciencias de la Salud Universidad Autónoma de Baja California, luisa.garcia42@uabc.edu.mx

40 Educational Quality vs Years of Education is More Strongly Associated with Neuropsychological Test Performance

Marilyn J Steinbach[1], Corey J Bolton[2], Marissa A Gogniat[2], Angela L Jefferson[2], Holly J Westervelt[2]
[1]University of Iowa, Iowa City, Iowa, USA. [2]Vanderbilt University Medical Center, Nashville, Tennessee, USA

Objective: Education is known to impact neuropsychological test performance, and self-reported years of education is often used in stratifying normative data. However, this variable does not always reflect education quality, particularly among underrepresented populations, and may overestimate cognitive impairment in individuals with low education quality. This cross-sectional study evaluated relative contributions of years of education and reading level to several verbally mediated assessments to improve interpretation of neuropsychological performance.
Participants and Methods: Data was obtained from the Vanderbilt Memory and Aging Project. Cognitively-unimpaired participants (n=175, 72±7 years, 59% male, 87% Non-Hispanic White, 16±2 years of education) completed a comprehensive neuropsychological protocol. Stepwise linear regressions were calculated using education and Wide Range Achievement Test (WRAT)-3 Reading subtest scores as predictors and letter fluency (FAS, CFL), category fluency (Vegetable and Animal Naming), the Boston Naming Test (BNT), and California Verbal Learning Test (CVLT)-II as outcomes to assess increase in variance explained by educational quality. Models covaried for age and sex. The False Discovery Rate (FDR) based on the Benjamini-Hochberg procedure (Benjamini & Hochberg, 1995) was used to correct for multiple comparisons.
Results: The mean WRAT-3 score was 51±4 (range:37-57), indicating post-high school reading level. Education and WRAT-3 scores were moderately correlated (r=0.36, p<0.01). Both WRAT-3 and years of education independently predicted letter fluency (WRAT-3 p<0.001; education p<0.02), category fluency (WRAT-3 p<0.001; education p<0.05), and CVLT-II performance (WRAT-3 p-values<0.005; education p-values<0.02) in single predictor models. On BNT, WRAT-3 (p<0.001), but not education (p=0.06), predicted performance in single predictor models. In combined models with both WRAT-3 and education, WRAT-3 scores remained a significant predictor of FAS (WRAT-3 b=1.21, p<0.001; education b=0.006, p=0.99) and CFL performance (WRAT-3 b=1.02, p<0.001; education b=0.51, p=0.14). Both WRAT-3 (b=0.21, p=0.01) and years of education (b=0.35, p=0.03) predicted Animal Naming, while WRAT-3 (b=0.16,p=0.008), but not years of education (p=0.37), predicted Vegetable Naming. WRAT-3 was a significant predictor of BNT performance (b=0.21, p<0.001)

https://doi.org/10.1017/S1355617723008974 Published online by Cambridge University Press