

Considering several serious limitations of the MMSE like insensitivity to visuospatial deficits or frontal executive dysfunctions other cognitive assessment test tools were developed to overcome the limitations of MMSE. **Methods:** Active search for the patients with memory complaints - General Practitioners and Department of Neurology of Slovak Medical University - Neuropsychological screening of investigated patients with neuropsychological tests for determining global cognitive functions - MMSE (Folstein et al., 1975) and ACE-R (Mioshi et al., 2006) **Results:** In the time period of 1.5 year over 400 patients with memory complaints were screened with neuropsychological screening tests MMSE and ACE-R. The patients with MMSE < 24 and ACE < 88 were further clinically examined by psychiatric, and neurological examination for differential diagnosis of dementia. **Conclusions:** The assessment of patients with memory complaints by neuropsychological screening tests MMSE and ACE-R to determine the cognitive mental state of the patients clearly demonstrated superior sensitivity of ACE-R over MMSE.

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THE EDUCATION ADJUSTED CUT-OFF POINT OF WORD SPAN TEST TO SCREENING DEMENTIA IN A SOUTH BRAZILIAN SAMPLE

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Background: An effect of education on the performance of cognitive tests is well known and this is an important issue in developing countries. The word span (WS) is frequently used as screening test for dementia. This study aims to evaluate the impact of education on the WS diagnostic accuracy to screening dementia in a South Brazilian sample. **Methods:** The WS was applied to 158 dementia patients (DSM IV criteria) from a Dementia Clinic in a University Hospital (Porto Alegre, Brazil) and to 411 healthy elderly participants. Correlation analysis and linear regression analyses were performed. The sample was further subdivided into two groups of different educational level (≤ 4 years, $N = 250$ and > 4 years, $N = 336$) and a ROC curve analysis was carried out in each group to estimate the best cut-off, sensitivity and specificity. **Results:** Dementia patients were significantly older than healthy subjects (69.19 ± 8.7 , 62.50 ± 7.9 - mean \pm SD)($p = 0.05$). Education did not differ between them. Education and age were correlated with WS scores ($R = 0.22$ and -0.37 , respectively, $p < 0.05$). Education and age were independently correlated with WS score in linear regression ($p < 0.05$). The WS AUC (area under curve) was 0.72 and the best cut-off was 4 ($S = 72$, $E = 60$) for the less educated group. The AUC was 0.83 and the best cut-off was 5 ($S = 85$, $E = 64$) in the group with higher education. **Conclusions:** The results highlight the importance of considering educational level when the WS is used as screening for dementia. Different cut-offs should be utilized according to education to optimize the diagnostic accuracy of this test to detect dementia, at least in developing countries.

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ACTIVITIES OF DAILY LIVING QUESTIONNAIRE—CHILEAN VERSION: PSYCHOMETRIC PROPERTIES AND DIAGNOSTIC UTILITY INCLUDING A TECHNOLOGY SUB-SCALE

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Background: Analyze the psychometric properties of ADLQ -Chilean Version- and its diagnostic utility in detecting cases of dementia in a sample of Chilean elderly **Methods:** ADLQ was adapted to Chilean population and then it was administered to 31 caregivers of dementia patients and to 29 witnesses of elderly persons without dementia. A new sub-scale was created (Technology) and its performance was tested to see the possibility of including it in the final version of the test. Both patients with dementia and normal elderly were also evaluated. Convergent Validity, Reliability by internal consistency, cutoff point, sensitivity and specificity for ADLQ were estimated. **Results:** Regarding convergent validity, ADLQ exhibits significant correla-

tions ($p < 0,0001$) with other ratings for functional capacity, measurements for dementia severity and global cognitive efficiency tests ($r = 0,67$ with FAQ; $r = 0,725$ with FAST, $r = 0,737$ with the Blessed Dementia Scale, $r = 0,697$ with IADL, $r = 0,415$ with the Barthel Index; $r = 0,72$ with GDS; $r = 0,715$ with CDR; $r = -0,655$ with MMSE; $r = -0,66$ with ACE-R; $r = -0,669$ with MoCA). In terms of reliability, we obtained a Cronbach alfa coefficient of 0,802 with the new sub-scale included. Its sensitivity was rated 0,97 and its specificity at 0,74 considering a cutoff point higher than 63% for functional impairment in intervals of reliability of 95%. **Conclusions:** The ADLQ Chilean Version shows acceptable psychometric properties, becoming a valid and reliable instrument to evaluate the performance of patients with dementia in activities of daily living. The Technology sub-scale created for ADLQ gives an excellent internal consistency. Its diagnostic utility works very well too.

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ENDOGENOUS ESTRADIOL IS ASSOCIATED WITH VERBAL MEMORY IN NONDEMENTED OLDER MEN

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Background: Age-associated alterations in endogenous hormone levels may be associated with cognitive function in older adults. The objective of this study was to examine the relationship between endogenous hormones and cognitive function in nondemented, ethnically-diverse community-dwelling older men using comprehensive hormone and neuropsychological assessments. **Methods:** A subsample of 185 older men (mean age = 81 years) was drawn from the Einstein Aging Study (EAS), a community-based sample of individuals residing in the Bronx, New York. All participants received neuropsychological assessment (Free and Cued Selective Reminding Test (FCSRT)), Trail Making Test part B, Block Design subtest from the Wechsler Adult Intelligence Scale - Third Edition) and provided blood samples for hormonal assays (total estradiol, total testosterone, and calculated free testosterone index). Hormone data were classified by quartile and then dichotomized using two different categorizations. The High Hormone classification dichotomized quartile 4 vs. quartiles 1, 2, and 3, while the Low Hormone classification dichotomized quartile 1 vs. quartiles 2, 3, and 4. A series of separate linear regression analyses was performed to examine hormone groups as predictors of cognitive test performance. **Results:** In models adjusted for age and education, total estradiol was a significant predictor of FCSRT verbal memory performance ($F(3,180) = 6.25$, $p < 0.01$). Men with lower levels of estradiol demonstrated poorer performance ($\beta = 0.17$, $t = 2.33$, $df = 180$, $p < 0.02$). The results remained unchanged when the model was further adjusted for ethnicity. The removal of individuals with amnesic mild cognitive impairment (aMCI; $n = 3$) similarly failed to impact this relationship. Neither of the testosterone measures were significant predictors of cognitive performance. **Conclusions:** The FCSRT utilizes a cue-based controlled learning paradigm to maximize learning and recall and it has been shown to be a predictor of the development of future dementia. Therefore, our results suggest that lower levels of endogenous estradiol in older men are associated with poorer performance on a verbal memory test that is a sensitive indicator of the development of dementia, even after controlling for age, education, and ethnicity.

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ATTENTION-DEFICIT/HYPERACTIVITY DISORDER IN CHILDHOOD AFFECTS COGNITIVE TEST PROFILES IN THE GERIATRIC POPULATION BUT IS NOT ASSOCIATED WITH THE DEVELOPMENT OF MILD COGNITIVE IMPAIRMENT OR ALZHEIMER'S DISEASE

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