

discriminates AD from controls (AUC: 0.98 and 1.00; sensitivity: 100% and 100%; specificity: 82% and 87%; cut-off:  $\geq 7.5$  and  $\geq 6.5$ ) and AD from MCI (AUC: 0.89 and 0.91; sensitivity: 88% and 80%; specificity: 74% and 75%; cut-off  $\geq 9.5$  and  $\geq 7.5$ ). The test was less accurate to discriminate MCI from controls (AUC: 0.62 and 0.82; sensitivity: 75% and 95%; specificity: 54% and 50%; cut-off:  $\geq 3.5$  and  $\geq 3.5$ ). **Conclusions:** The SKT is subject to educational bias, and discriminates patients with AD from MCI and controls.

**P3-127 IDENTIFICATION OF COGNITIVE DECLINE USING A LONGITUDINAL TELEPHONE SCREENING VERSUS BRIEF, ONE-DAY COMPUTERIZED TESTING**

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**Background:** Early identification of cognitive decline is important in order to provide appropriate planning and treatment to lessen morbidity of Alzheimer's disease. Ideally, brief measures that detect likely decliners can be identified. This study examines the relationship between two such measures: a longitudinal telephone-based cognitive screen and brief repeated computerized testing. **Methods:** Participants were 83 volunteers from a larger study of aging and cognition (mean age=78.8). Annual evaluation for 7 years used the AHEAD, a 42-point telephone cognitive screen. Following this, seven computerized CogState cognitive tasks were administered assessing processing speed (Detection), attention (Identification), working memory (One Back), executive function (Strategy Learning) and learning and memory (One Card Learning, Associate Learning, Continuous Paired Associate Learning). As suggested by Darby and colleagues (2002), participants completed CogState four times in one day to elicit learning trajectories. A regression model was fitted for each participant's sets of AHEAD and CogState scores, yielding estimated intercept and slope values. To examine the relationship between the tests, linear modeling for the CogState variables was performed with the AHEAD variables as covariates. **Results:** AHEAD performance never fell below the clinical cutoff for impairment. There was a positive relationship between increasing serial AHEAD scores and increasing One Back speed and accuracy over the four trials ( $p < 0.05$ ). Those with better initial or ongoing AHEAD performance performed better on their first trial of Strategy Learning ( $p = 0.02$ ) and Continuous Paired Associate Learning ( $p = 0.005$ ). Participants with lower initial AHEAD scores also had a rapid decline in accuracy on One Card Learning over the four administrations, whereas higher initial AHEAD score was correlated with stable One Card Learning performance ( $p = .005$ ). For all analyses, there were no significant differences based on age, gender, or education level. **Conclusions:** Overall, improving longitudinal performance on the AHEAD was related to better present performance on CogState measures of attention, memory, and executive function, but not processing speed. There were mixed results regarding the usefulness of multiple CogState assessments in one day. Our findings suggest that this brief computerized assessment may have utility in identifying patients with subtle cognitive decline.

**P3-128 COMMUNICATIVE AND LINGUISTIC ABILITIES OF ALZHEIMER'S DISEASE AND VASCULAR DEMENTIA PATIENTS: PRELIMINARY RESULTS**

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**Background:** There is an extensive literature concerning language impairments in Alzheimer's disease (AD), however less is known on patterns of

language impairment in Vascular dementia (VaD). The few studies addressing language-related functions in VaD versus AD analyze specific features and have yielded conflicting results. The objective of the present study is to describe and to compare the communicative and linguistic abilities of AD and VaD patients. **Methods:** Twelve AD patients (age: 78.7 (1.37); schooling: 5.4 (0.56) and 14 VaD patients (age: 71.9 (2.3); schooling: 9.6 (1.35) were examined with the Brazilian version of the Arizona Battery for Communication Disorders of Dementia (ABCD). All patients fulfilled consensus criteria for AD (NINCDS-ADRDA) and VaD (DSM-IV). Both groups were compared to a control group of 13 healthy elderly (age: 73 (1.4); schooling: 11.5 (1.5)). **Results:** AD patients had worse performance in the Mental Status and Episodic Memory tests when compared to VaD. VaD patients had worse performance in Linguistic Expression, Comprehension and Visuospatial Construction subtests when compared to AD. However, the only subtest that discriminated AD from VaD patients was Concept Definition ( $p = 0.04$ ). It was observed a greater heterogeneity in the performance on the VaD group in all subtests, so it was not possible to identify a "VaD profile" in language impairment. AD and VaD patients performed poorer than controls in all subtests of the ABCD. **Conclusions:** The performance of ABCD demonstrated the Episodic Memory impairment expected for AD patients and disclosed a greater difficulty of VaD patients in the Linguistic Expression and Comprehension tests.

**P3-129 COMPLEX PICTURES TEST IN DIFFERENT FORMS OF DEMENTIA**

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**Background:** The Complex Pictures Test (ComPT) we have developed examines aspects of language, memory and executive functions, corresponding to temporal and frontal lobe activities as well as perceptual and visual-spatial abilities associated with the parietal lobe control. Objective: To evaluate the potential usefulness of Complex Pictures Test in assessment of patients with dementia. **Methods:** 50 patients with different forms of dementia (14 VaD, 30 AD, 6 PDD), 12 MCI subjects and 30 age- and gender matched healthy controls took part in the study. All participants were examined by the Complex Pictures Test, and the patients were additionally assessed on Mini Mental State Examination (MMSE), the WAIS-R Digit Span subtest and the Clock Drawing Test (CDT). ComPT: The test was composed of 10 complex pictures. Each picture presented an object that had two characteristics that were paradoxically in opposition to each other. Each picture was shown to the patient who was asked to describe it and to comment on the picture. The subject scored points for naming objects in the picture, noticing the paradox and one point was added when the patient commented on the paradox immediately after seeing the picture. The subject could score 3 points for each picture, maximum 30 points altogether. Statistical analyses: Results are presented as  $M \pm SD$ . The differences were tested by ANOVA. The associations between the scores on ComPT and the scores on the other tests were calculated as Spearman's  $\rho$  correlation coefficients. The results were considered significant at  $p < 0.05$ . **Results:** ComPT scores were significantly higher in the control group ( $M \pm SD 29.46 \pm 1.43$ ) than in the AD, VaD, MCI and PDD groups ( $13.08 \pm 2.28$ ;  $16.92 \pm 3.47$ ;  $23.16 \pm 1.37$ ;  $23.58 \pm 3.35$ ;  $p < .05$ ). Significant positive correlations between MMSE, Digit Span, CDT scores and ComPT scores were observed ( $\rho$  respectively: 0.76; 0.35; 0.56). **Conclusions:** These data support the hypothesis that the visual perception of complex pictures is significantly compromised in patients with dementia. The strong correlation between the Complex