

402 - Cognitive reserve and linguistic skills in Spanish older adults with Alzheimer's disease

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Background: Cognitive reserve, or the extent to which brain can cope with damage, is associated with extended healthy aging and with slow age-related cognitive decline, as well as a lower number of dementia-associated clinical cognitive signs. Thus, understanding how cognitive reserve might affect different cognitive abilities is important. This study aims at investigating the associations between cognitive reserve and linguistic abilities in a group of Spanish older adults with Alzheimer's disease.

Method: The sample comprised 25 older adults with a clinical diagnostic of AD with mild to moderate dementia, and 25 controls who were residing in care homes from the province of Granada and with ages between 52 and 92 years old ($M= 83.40$, $SD= 7.18$). The Mini Mental State Examination (MMSE), the Global Deterioration Scale, the Cognitive Reserve Questionnaire, and the Short Form of the Boston Naming Test for Individuals with Aphasia were used to collect data. Correlations and regression analysis were performed.

Results: Results showed that cognitive reserve positively and significantly correlated with naming and with phonological fluency but not with semantic fluency word or sentence repetitions or with the global cognitive functioning and the severity of cognitive impairment. The regression analysis showed that cognitive reserve explained 24.7% of the variance in spontaneous naming ($F=3.764$, $p=.039$). On the contrary cognitive reserve did not predict verbal fluency.

Conclusions: People with higher cognitive reserve score obtained higher scores in phonological fluency and in spontaneous naming and in naming after a semantic clue. Thus, cognitive reserve is linked with better linguistic abilities in AD patients and therefore it should be considered when designing speech therapy interventions for these patients.

Keywords: cognitive reserve, dementia, Alzheimer's disease, linguistic skills, verbal fluency