Abstract

The perirhinal region is one of the brain regions that show the earliest pathological changes during the development of Alzheimer's disease (AD), and semantic memory has been a function associated with the perirhinal regions. Thus, the present study aimed to examine the utility of semantic memory in identifying AD high risk older adults by investigating both quantitative and qualitative perspectives of two category fluency tasks in samples of young healthy adults, cognitively intact older adults, and individuals with mild cognitive impairment (MCI). The results showed that in both tasks the MCI group had the lowest total number of correct responses compared with the young and elderly healthy control groups. The MCI group also demonstrated decreased number of switching compared with the young adults. Furthermore, the three groups demonstrated significant differences in number of correct responses during the first interval of the task in the fruit but not in the animal fluency condition. The results indicate the semantic fluency task and the number of switching show promise for dementia early detection.

Title: Quantitative and qualitative differences in semantic verbal fluency in mild cognitive impairment

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