SELF-REFERENCING IN ALZHEIMER'S DISEASE: AN EFFICIENT ENCODING STRATEGY IN EPISODIC MEMORY

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We know that we memorize personal information much more than no self-related information. The Self is described as a set of multidimensional representations stored in memory but also as a set of self-referent-cognitive processes involved in self-consciousness. In the literature, Self-referencing during the encoding and retrieval processes in episodic memory lead to stronger mnesic benefit than other reference, in young adults and elderly.

What about individuals with an identity and memory impairment as in Alzheimer's disease (AD), is the Self-reference effect (SRE) still present? Our originality was to study the SRE using reference to two components of autobiographical memory (semantic and episodic).

3 young adults, 13 normal elderly and 13 AD patients judged personality traits (positive and negative) according to four types of encoding varying in depth of processing: Perceptive (alphabetic order), Valence (normative judgement), Self-Semantic reference (personality traits), Self-Episodic reference (personally experienced events). We evaluated the quantitative performances in free recall and recognition and the qualitative state of consciousness associated to recognition with the remember-know-guess paradigm.

ANOVA indicated in all groups, a significant benefit of Self-referencing, Self-Semantic more than Self-episodic, with superior mnesic performances and superior Remember responses. Moreover, the SRE in aging and AD was specific to the positive valence.

The SRE persists in Alzheimer's disease despite of a massive impairment of autobiographical memory. The Self-referencing is an efficient learning strategy to enhance mnesic performances and promote recollective experience. This research has important perspectives for the creation of new non-medical therapies of anterograde and retrograde amnesia.