NON LIVING CONCEPTS ARE BETTER PROCESSED IN MALES THAN IN FEMALES WITH ALZHEIMER'S DISEASE IN AN EPISODIC MEMORY TASK

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Introduction: Dissociations in the processing of living and non living concepts are reported in Alzheimer's disease (AD). Some authors propose that this differential pattern is due to the existence of a gender specialization in the processing of semantic categories (Laiacona et al., 2001), men showing better performances with some nonliving categories (e.g., tools) and women with some living categories (e.g., fruit). This pattern is generally reported in semantic memory tasks as the picture naming and verbal fluency tasks.

Aims: The aim of this study was to determine if the episodic memory is influenced by the conceptual domain, by the gender and/or by the interaction between both factors.

Method: Thirty-four participants (17 patients with AD and 17 elderly) were evaluated with an episodic memory task (e.g., three free recall trials). The list used is composed of 10 living concepts and 10 nonliving concepts matched for different psycholinguistic variables.

Results: Overall, patients showed poorer performances than elderly participants. Neither conceptual domain nor gender had a significant effect on the learning of concepts. In contrast, performances were improved according to the trials and this effect was in interaction with the others factors explored.

Conclusions: Findings of this study have shown that learning of concepts was modulated by the conceptual domain, gender and pathology. In AD group, males showed better performance than females on the non living concepts whereas no difference according to the gender was observed on the living concepts. These results are partially in agreement with the social/familiarity hypothesis.