

## **EMOTIONAL MEMORY IS PRESERVED IN HEALTHY ELDERLY BUT DEGRADED IN PATIENTS WITH ALZHEIMER'S DISEASE**

**Z. Baran**, B. Cangoz, T. Ozel-Kizil

*Hacettepe University Department of Psychology & Ankara University Department of Psychiatry, Ankara, Turkey*

Emotional enhancement of memory (EEM) has been a well-known phenomenon which corresponds to the advantage of emotionally-valenced stimuli to be better recalled and recognized than the neutral stimuli. Previous studies suggest that aging favors the recollection of positively-valenced items, but Alzheimer's disease (AD) may disrupt EEM. Emotional valence of the context may have an effect on the encoding and thus retrieval processes. This study aims to evaluate how emotional valence of the stimuli and the context affect recall and recognition scores in the healthy young (YG,  $n=30$ ,  $M=21.43$ ,  $SD=1.25$ ), the healthy elderly (HE,  $n=30$ ,  $M=71.50$ ,  $SD=5.82$ ) and the patients with AD ( $n=30$ ,  $M=76.10$ ,  $SD=6.34$ ). A battery consisting of emotionally-valenced words presented with emotionally-valenced pictures was used. Recall and recognition scores were analyzed with a 3(Group: YG, HE, and AD)  $\times$  3(Emotional Valence of Picture)  $\times$  3(Emotional Valence of Word) Mixed ANOVA design. Analyses indicated different results for recall and recognition scores. For recall, EEM was valid for both words and pictures, but only for pictures in the recognition phase. Patients with AD could process the emotional information similar to other groups; however they showed EEM only for picture recalling. Emotional valence of the context had boosting effect, if the contextual valence was congruent with the valence of the stimulus especially in the HE and AD groups. Future studies should address the neurobiological underpinnings of impaired EEM effect for verbal declarative memory and preserved EEM effect for non-verbal declarative memory in patients with AD.