

## Study of emotional perception and affective memory in a sample of normal subjects. Comparison with different clinical populations

### **Results:**

Major outcomes from this study are:

Healthy subjects (N=131) have enhanced memory for positive information compared to neutral and negative information both when analysed short and long term memory. This effect is independent of tested factors (age, education and gender). In what concerns emotion recognition, education positively influences the ability to recognize emotions, both by facial expressions and prosody. Contrarily, ageing negatively influences the recognition of emotional prosody.

The analysis of the clinical populations with focal or diffuse deficits on the limbic system reveals that: after a unilateral Selective Amygdalo-Hipocampectomy for treatment of the epilepsy, patients (N = 35) do not show impairment on emotional processing. Subjects with Mild Cognitive Impairment (N = 38) and Major Depression (N = 39) significantly misunderstand neutral faces as sad, and are also impaired in the recognition of emotional prosody. Despite this impairment on emotion recognition both groups of patients have shown a pattern of emotional memory similar to healthy controls, which reveals dissociation between both processes.

These last results are being interpreted with the recently highlights of the overlap of dementia and depression.

### **Published Works:**

Marreneca S & Martins IP (in prep) Emotional memory in healthy subjects.

Marreneca S & Martins IP (in prep) Influence of education and age on the recognition of emotions.

Marreneca S, Martins IP, de Mendonça A. (in prep) Recognition of emotions but not emotional memory is affected on Mild Cognitive Impairment

Marreneca S & Martins IP (in prep) Emotional disruption in Major Depression is modality dependent?

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