

Eye movement patterns during the scanning of emotional images

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A narrow relation between the eye movements and the emotional experience exist. Hermans, Vansteenwegen & Eelen (1999) found that during visual scanning of spider images spider anxious participants exhibited a different exploration patterns than controls. Isaacowitz (2005) identified different attentional preferences of optimists and pessimists to negative emotional stimuli (looking a melanoma image). Xing e Isaacowitz (2006) reported shorter fixations durations when participants, to whom emotional regulation processes were induced, look to negative emotional stimuli, in relation to positive ones.

The aim of this study was to determine if the emotional content of a stimuli induces differential gaze patterns and if they were related to the emotional valence and activation ratings. Eye movements of 125 participants (89 women and 36 men) were recorded while looking to 16 emotional images belonging to the IAPS (International Affective Picture System). Pictures were selected taking into account the extreme ratings given to them by the Spanish sample (Moltó et al., 2001) on the orthogonal dimensions of valence and activation. Results indicated that valence dimension affected the images scanning pattern. Those with negative emotional content obtained more fixations and shorter fixation durations, as well as, shorter scanning times.