

Cognitive effects of depression: Valence evaluation, decision times, focal attention, recall, priming and repetition effects

R. Pórnios¹ and N. Gaspar¹

¹Faculty of Psychology and Educational Sciences, University of Porto, Portugal.

Depression is a serious mental health problem characterized by a number of maladaptive cognitive phenomena. Despite the growing study of the mechanisms involved, there is still insufficient knowledge on how depression affects cognitive abilities. The aim of this study was to explore the association between the level of depression in a nonclinical sample and the performance in tasks of valence evaluation, decision, focal attention, explicit and implicit memory and the repetition effects in the valence evaluation task.

The study involved 240 college students (207 females and 33 males) aged between 18 and 27 years ($M = 20.18$, $SD = 1.83$) and with average education of 14.09 years ($SD = 1.07$). Participants were allocated to four conditions, each one corresponding to different sequences of tasks. The distribution was random and balanced by gender, age and course. Independent variables were the experimental condition to which participants were allocated and the level of depression, as measured by the Inventory of Clinical Assessment of Depression. The stimuli used were positive, neutral and negative words, controlled in terms of grammatical features, length and familiarity.

There was no effect of depression on attention and recall, but there appears to be a trend toward worse performance in terms of implicit memory in participants with higher levels of depression. Trends were also found towards that more depressed participants evaluated stimuli with emotional valence more neutrally and presented greater repetition effects to the same stimuli.

The results were interpreted as showing the involvement of executive functions and other cognitive deficits associated with depression, the preferential processing of emotional stimuli congruent with the level of depression and its secondary activation by stimuli of opposite valence.