

Is the feeling of familiarity driven by weak recollection as well as by an independent familiarity mechanism?

The aim of this experiment is to examine how recollection and familiarity change over time and whether there is a qualitative difference between familiar items that were previously recollected and items that have always been familiar. It might be that, when an item is initially recollected and becomes just familiar after a delay, this form of familiarity is actually a weak and partial recollection, qualitatively different from mere familiarity. To address this issue, a task have been developed in which, at study, participants encoded two series of 100 pictures representing scenes under respectively shallow and deep encoding conditions. Memory for these pictures was tested by means of a yes-no recognition test. Recognised items were classified as recollected or as familiar. Half of the pictures from each encoding condition were tested after 10 minutes and the other half were tested after 2 days. The results indicated that recollection decreased after 2 days while familiarity increased (deep encoding condition) or did not change (shallow encoding condition). This suggests that, among the items judged as familiar after 2 days, some items would have been recollected after 10 minutes and some were initially already familiar. Because deep encoding produced a higher proportion of recollection at the 10-minute interval, the proportion of recollection-changed-into-familiarity responses should be greater in this condition than in the shallow encoding condition. Whether there is a qualitative difference between these responses and pure familiarity responses should be explored in a fMRI experiment.

241 words