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# Facial emotion influences the face-biographical information associative processing in a function of age

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## Abstract

Few studies took an interest in the effect of emotion on face-biographical information associative process. We investigate the effect of facial expression on the retrieval of face-biographical information associations. We also look at age effect since that individual factor seems to disturb several sociocognitive processes. 43 young, 38 middle-aged and 42 older adults were compared. After an encoding phase where participants saw 30 faces associated to names and jobs, they were told to decide in the retrieval phase whether the presented associations were correct or not. In the encoding phase, faces could express neutrality, happiness or anger. In order to test the effect on recognition of the emotion seen in encoding, all faces were neutral in the retrieval phase. The main result shows an interaction between age and facial emotion that suggests a clear change with age in the influence of emotion on associations memory. Young and middle-aged adults recognize better associations when the face expressed no emotion in encoding, than when it expressed happiness or anger, whereas older adults recognize better associations when the face expressed no emotion or happiness in encoding, than when it expressed anger. This set of results suggests that aging modulates the influence of emotion on such memory task and especially enhances the influence of emotional valence. Results are discussed in light with hemispheric asymmetry theories of emotion and socioemotional selectivity theory of aging.

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