

Implicit and Explicit Mechanisms of Emotional Contagion

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Abstract : Emotional contagion is characterized as an automatic tendency to synchronize behaviors that facilitate emotional convergence among humans. It might thus play a pivotal role to understand the dynamics of key social interactions. However, a few research has investigated its potential mechanisms. We suggest two complementary but independent processes that may underlie emotional contagion. The efficient contagion hypothesis, based on fast and implicit bottom-up processes, modulated by familiarity and spread of activation in the emotional associative networks of memory. Secondly, the emotional contrast hypothesis, based on slow and explicit top-down processes guided by deliberated appraisal and hypothesis-testing. In order to assess these two hypotheses, an experiment with 39 participants was conducted. In the first phase, participants were induced (between-groups) to an emotional state (positive, neutral or negative) using a standardized video taken from the FilmStim database. In the second phase, participants classified and rated (within-subject) the emotional state of 15 faces (5 for each emotional state) taken from the POFA database. In the third phase, all participants were returned to a baseline emotional state using the same neutral video used in the first phase. In a fourth phase, participants classified and rated a new set of 15 faces. The accuracy in the identification and rating of emotions was partially explained by the efficient contagion hypothesis, but the speed with which these judgments were made was partially explained by the emotional contrast hypothesis. However, results are ambiguous, so a follow-up experiment is proposed in which emotional expressions and activation of the sympathetic system will be measured using EMG and EDA respectively.

Keywords : electromyography, emotional contagion, emotional valence, identification of emotions, imitation

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