Emotion processing and its regulation: What words can tell us about it

Cornelia Herbert *1

¹Department of Psychology, University of Wuerzburg – Germany

Abstract

Emotion perception in self and others is important for successful social interactions. It is involved in the generation of subjective emotional experiences (i.e., feelings) and the regulation of emotions. Building upon previous research using verbal material for emotion induction the present studies investigated by means of ERP and functional imaging methods how emotional words describing the own emotion are processed in the brain and what the underlying mechanisms are. In association with this, we investigated if verbally negating the own emotion serves as an effective emotion regulation strategy when exposed to emotional facial expressions. The results allow a number of conclusions: During reading, emotional words describing the own emotion are more deeply processed compared to unreferenced or other-related emotional words. Second, processing of self-related emotional words increases activity in medial prefrontal brain structures involved in conscious emotion processing, whereas reading of emotional words, particularly unpleasant ones, leads to an increase in amygdala and insula activity irrespective of the word's reference. Third, reframing one's emotion by using negated emotional cue words decreases cortical processing of fearful faces and spontaneously triggers emotion regulation strategies that appear more closely associated with cognitive reappraisal than with emotion suppression. Theoretically, these findings support an embodied view of language. More specifically, they demonstrate that investigating emotional word processing in social contexts could tell us much about the neural mechanisms underlying the most private and subjective aspects of emotion processing, i.e., of emotional experience and its regulation.

^{*}Speaker