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The neural bases of distraction and reappraisal.

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Source

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Abstract

Distraction and reappraisal are two commonly used forms of cognitive emotion regulation. Functional neuroimaging studies have shown that each one depends upon interactions between pFC, interpreted as implementing cognitive control, and limbic regions, interpreted as mediating emotional responses. However, no study has directly compared distraction with reappraisal, and it remains unclear whether they draw upon different neural mechanisms and have different emotional consequences. The present fMRI study compared distraction and reappraisal and found both similarities and differences between the two forms of emotion regulation. Both resulted in decreased negative affect, decreased activation in the amygdala, and increased activation in prefrontal and cingulate regions. Relative to distraction, reappraisal led to greater decreases in negative affect and to greater increases in a network of regions associated with processing affective meaning (medial prefrontal and anterior temporal cortices). Relative to reappraisal, distraction led to greater decreases in amygdala activation and to greater increases in activation in prefrontal and parietal regions. Taken together, these data suggest that distraction and reappraisal differentially engage neural systems involved in attentional deployment and cognitive reframing and have different emotional consequences.

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