# Chapter 29 Chronic Stress, Regulation of Emotion, and Functional Activity of the Brain

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# Abstract

Stress has been conceptualized as a threat to physiological or psychological homeostasis. Reappraisal, suppression, and rumination are emotion regulation techniques utilized to alter the affective components of stress. Reappraisal consists of activation of prefrontal cortical areas that reduces cortical activity in limbic areas such as the amygdala. Suppression and rumination involve similar brain areas but have different patterns of activation. Pathological chronic stress, such as posttraumatic stress disorder (PTSD), is associated with disruptions in emotion regulation, particularly suppression and rumination. Although there are no significant disruptions in reappraisal in PTSD, brain activity during reappraisal differs compared to individuals without PTSD. These findings indicate that chronic stress is associated with emotion regulation functioning and its neural underpinnings.