# Chapter 16 Cognition and Stress

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# Abstract

For a cognitive conceptualization, stress arises when environmental demands are perceived as taxing or potentially exceeding one's own capacity or resources to manage them, and there is threat to well-being if coping responses do not satisfy such demands. A cognitive vulnerability factor enhancing stress is trait anxiety, through hypervigilant processing styles involving selective orienting to threat cues, biased negative interpretation of ambiguous stimuli, and focusing attention on unfavorable thoughts. Short-term episodes of mild-intensity stress can facilitate cognitive functions, mainly encoding and memory consolidation of task-relevant stimuli, and in implicit memory or simple declarative tasks. However, exposure to high-intensity stress impairs the formation and retrieval of explicit memories and cognitive processes requiring complex or flexible reasoning. Long-term stress, particularly during childhood and adolescence, consistently undermines cognitive mechanisms. This can be due to chronic elevations of glucocorticoids inhibiting neurogenesis, which damages important functions in the hippocampus and, possibly, the prefrontal cortex.