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## Social and Cognitive Stress Impact on Neuroscience and PTSD

Authors: Sadra Abbasi

**Abstract :** The complex connection between psychological stress and the onset of different diseases has been an ongoing issue in the mental health field for a long time. Multiple studies have demonstrated that long-term stress can greatly heighten the likelihood of developing health issues like heart disease, cancer, arthritis, and severe depression. Recent research in cognitive science has provided insight into the intricate processes involved in posttraumatic stress disorder (PTSD), suggesting that distinct memory systems are accountable for both vivid reliving and normal autobiographical memories of traumatic incidents, as proposed by dual representation theory. This theory has important consequences for our comprehension of the neural mechanisms involved in fear and behavior related to threats, highlighting the amygdala-hippocampus-medial prefrontal cortex circuit as a crucial component in this process. This particular circuit, extensively researched in behavioral neuroscience, is essential for regulating the body's reactions to stress and trauma. This review will examine how incorporating a modern neuroscience viewpoint into an integrative case formulation offers a current way to comprehend the intricate connections among psychological stress, trauma, and disease.

Keywords: social, cognitive, stress, neuroscience, behavior, PTSD

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