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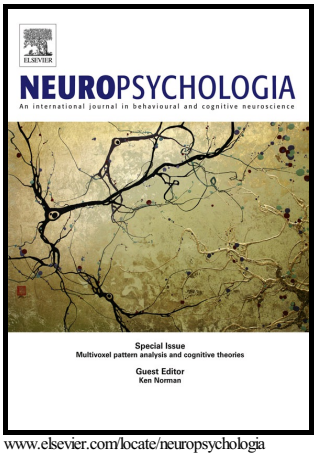

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Abstract

Anxiety disorders are among the most common psychiatric disorders of adolescence. Behavioral and task-based imaging studies implicate altered reward system function, including striatal dysfunction, in adolescent anxiety. However, no study has yet examined alterations of the striatal intrinsic functional connectivity in adolescent anxiety disorders.

The current study examines striatal intrinsic functional connectivity (iFC), using six bilateral striatal seeds, among 35 adolescents with anxiety disorders and 36 healthy comparisons.

Anxiety is associated with abnormally low iFC within the striatum (e.g., between nucleus accumbens and caudate nucleus), and between the striatum and prefrontal regions, including subgenual anterior cingulate cortex, posterior insula and supplementary motor area.

The current findings extend prior behavioral and task-based imaging research, and provide novel data implicating decreased striatal iFC in adolescent anxiety. Alterations of striatal neurocircuitry identified in this study may contribute to the perturbations in the