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#### **ACCEPTED MANUSCRIPT**

# Neural correlates of visuospatial working memory in attention-deficit/hyperactivity disorder and healthy controls

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#### Abstract

Impaired visuospatial working memory (VSWM) is suggested to be a core neurocognitive deficit in attention-deficit/hyperactivity disorder (ADHD), yet the underlying neural activation patterns are poorly understood. Furthermore, it is unclear to what extent age and gender effects may play a role in VSWM-related brain abnormalities in ADHD. Functional magnetic resonance imaging (fMRI) data were collected from 109 individuals with ADHD (60% male) and 103 controls (53% male), aged 8-25 years, during a spatial span working

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