

# Familial clustering of executive functioning in affected sibling pair families with ADHD

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**Objective:** To investigate familial clustering of executive functioning (i.e. response inhibition, fine motor functioning and attentional control) in sibling pairs affected with ADHD.

**Method:** Fifty-two affected sibling pairs ranging in age from 6 to 18 years and diagnosed with ADHD according to DSM-IV performed the Stroop test, Go Nogo task, two different fine motor tracking tasks, and a sustained-, divided-, and focused attention task.

**Results:** Significant sibling correlations were found for response inhibition ( $r = 0.42$ ) and attentional control ( $r = 0.40$ ). With respect to fine motor functioning, only motor skills that made high demands on executive functioning showed significant sibling correlations ( $r = 0.40$ ).

**Conclusions:** Response inhibition, higher-order controlled fine motor functioning, and attentional control seem to cluster in ADHD affected siblings, which suggests that these aspects of executive dysfunctioning in ADHD may reflect an endophenotype to the disorder. Measurement of these executive functions may facilitate the identification of genes involved in ADHD by forming more homogeneous subgroups.

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