by Meghan Miller, PhD

Predicting ADHD Symptoms

THIS RESEARCH UPDATE will focus on predicting ADHD symptoms—inattention and hyperactivity-impulsivity—from both behavioral and biological measurements.

ADOLESCENT ADHD SYMPTOMS

Can adolescent ADHD symptoms be predicted from early childhood temperament?

Although ADHD tends not to be diagnosed until children are seven or eight years old, many parents report that they noticed differences in their diagnosed child's behavior much earlier. This study sought to determine whether measurements of certain temperament traits—effortful control, activity level, and anger—measured in preschoolers would predict later ADHD symptoms in adolescence. The researchers followed a sample of boys from the time they were between 36-54 months of age until they were between eleven to fifteen years old, and found that preschool-measured activity level and effortful control predicted adolescent ADHD symptoms. These findings suggest that a focus on these behaviors in early childhood may be useful in helping to identify risk for ADHD much earlier than has previously been possible.

Einziger, T. et al. (2017). Predicting ADHD symptoms in adolescence from early childhood temperament traits. *Journal of Abnormal Child Psychology*, epub ahead of print.

GENETICS & ADHD SYMPTOMS

How do genes impact ADHD symptoms?

It is well known that ADHD runs in families. However, researchers and medical professionals have not been able to identify reliable and specific genetic markers of ADHD diagnoses. This may be because genes don't directly correlate with diagnostic categories (ADHD or not) but rather with traits or dimensions of behaviors, like inattention or hyperactivity. This study examined various genetic effects on ADHD symptom dimensions. The researchers found that certain genes were associated with inattention whereas others were associated with hyperactivity-impulsivity, and that these differences in these genes were quite heritable. This study indicates that new ways of looking at genetics in ADHD may be useful, by focusing on the manner in which genes influence ADHD *symptoms* rather than ADHD *diagnoses*.

Bidwell, L.C. et al (2017). Genetic influences on ADHD symptom dimensions: Examination of a priori candidates, gene-based tests, genome-wide variation, and SNP heritability. *American Journal of Medical Genetics*, epub ahead of print.

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