

The Distracted Brain

The neurobiology and neuropsychology of attention-deficit/hyperactivity problems in the general population

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1. Children with attention-deficit/hyperactivity symptoms show specific problems in executive functioning, rather than a general cognitive deficit (this thesis).
2. Decreased cortical thickness and gyrification are a shared neurobiological substrate underlying both inattention/hyperactivity and executive functioning (this thesis).
3. Although symptoms partly overlap, there is no shared pattern of brain gyrification underlying attention-deficit/hyperactivity disorder and velocardiofacial syndrome (this thesis).
4. Children with more attention and hyperactivity problems have smaller volumes of the putamen (this thesis).
5. Candidate genetic pathways for ADHD are not related to symptoms of inattention and hyperactivity in the general population (this thesis).
6. In psychiatry, dimensional and categorical approaches should be combined in both research and clinical practice.
7. Even if there is evidence for focal abnormalities, there is a role for whole-brain exploratory analyses in neuroimaging research.
8. Due to variability and non-specificity of brain differences in ADHD, it will be extremely challenging to assist clinicians in diagnosing ADHD with the use of one MRI neuroimaging modality.
9. To bridge the gap between 'bench' and 'bedside', every researcher should have clinical experience and every clinician should have expertise in research.
10. As a proven effective method in developmental and behavioral problems, musical therapy should be considered as intervention for each child with ADHD.
11. 'All good things start at a playground' (Human Brain Mapping, June 11th 2014, Tamara Vanderwal, MD).