A Meta-Analysis of Decision-Making and Attention in Adults With ADHD

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Objective: Deficient reward processing has gained attention as an important aspect of ADHD, but little is known about reward-based decision-making (DM) in adults with ADHD. This article summarizes research on DM in adult ADHD and contextualizes DM deficits by comparing them to attention deficits.

Method: Meta-analytic methods were used to calculate average effect sizes for different DM domains and continuous performance task (CPT) measures.

Results: None of the 59 included studies (DM: 12 studies; CPT: 43; both: 4) had indications of publication bias. DM and CPT measures showed robust, small to medium effects. Large effect sizes were found for a drift diffusion model analysis of the CPT.

Conclusion: The results support the existence of DM deficits in adults with ADHD, which are of similar magnitude as attention deficits. These findings warrant further examination of DM in adults with ADHD to improve the understanding of underlying neurocognitive mechanisms.