Choice-impulsivity in children and adolescents with attention-deficit/hyperactivity disorder (ADHD): A meta-analytic review

Connor H.G. Patros, R. Matt Alderson, Lisa J. Kasper, Stephanie J. Tarle, Sarah E. Lea, Kristen L. Hudec

Clinical Psychology Review (November 2015)
DOI: http://dx.doi.org/10.1016/j.cpr.2015.11.001.

Abstract
Impulsive behavior is a core DSM-5 diagnostic feature of attention-deficit/hyperactivity disorder (ADHD) that is associated with several pejorative outcomes. Impulsivity is multidimensional, consisting of two sub-constructs: rapid-response impulsivity and reward-delay impulsivity (i.e., choice-impulsivity). While previous research has extensively examined the presence and implications of rapid-response impulsivity in children with ADHD, reviews of choice-impulsive behavior have been both sparse and relatively circumscribed. This review used meta-analytic methods to comprehensively examine between-group differences in choice-impulsivity among children and adolescents with and without ADHD. Twenty-eight tasks (from 26 studies), consisting of 4320 total children (ADHD = 2360, TD = 1,960), provided sufficient information to compute an overall between-group effect size for choice-impulsivity performance. Results revealed a medium-magnitude between-group effect size (g = .47), suggesting children and adolescents with ADHD exhibited moderately increased impulsive decision-making compared to TD children and adolescents. Further, relative to the TD group, children and adolescents with ADHD exhibited similar patterns of impulsive decision-making across delay discounting and delay of gratification tasks. However, the use of single-informant diagnostic procedures relative to multiple informants yielded larger between-group effects, and a similar pattern was observed across samples that excluded females relative to samples that included females.