The Effectiveness of Daily Behavior Report Cards for Children with ADHD: A Meta-Analysis

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Journal of Attention Disorders, 2017
DOI: https://doi.org/10.1177/1087054717734646

Abstract

Objective:
This meta-analysis examined group-design studies investigating the effectiveness of Daily Behavior Report Cards (DBRC) as a school-based intervention to manage the classroom behavior of students with ADHD.

Methods:
A search of three article databases (PsycINFO, ERIC and Medline) identified seven group design evaluations of DBRC interventions. This meta-analysis included a total of 272 participants, with an average age of 7.9 years old. Three of the studies compared a control group to a treatment group with randomized group assignment, one study compared a control group to three treatment groups, two studies compared pre-and post-treatment scores in the same group, and one study compared pre-and post-treatment results of two intervention groups without random assignment. Dependent measures for these studies were teacher ratings (n = 5) and systematic direct observation of student academic and social behavior (n = 2). Standardized mean differences (Hedge’s g) were calculated to obtain a pooled effect size using fixed effects.

Results:
DBRCs were associated with reductions teacher-rated ADHD symptoms, with a Hedge’s g of 0.36 (95% CI: 0.12-0.60, z=2.93, p ≤ .005) with low heterogeneity (Q-value: 2.40, I² = 0.00). This result excluded two studies that used observational coding instead of standardized tests to evaluate the effects of the intervention. A moderator analysis indicated that the effect size for systematic direct observation was large (Hedge’s G = 1.05|95% CI: 0.66-1.44, z=5.25, p ≤ .00]), with very high heterogeneity (Q-value: 46.34, I²: 93.53). A second moderator analysis found differences in the effects of DBRCs for comorbid externalizing symptoms with an overall effect size of 0.34 (95%CI: -0.04-0.72, z=1.76 p =0.08) with high heterogeneity (Q-value: 3.98, I²: 74.85).

Conclusions:
DBRCs effectively reduce the frequency and severity of ADHD symptoms in classroom settings. Additionally, they have a significant effect on co-occurring externalizing behaviors. It appears that systematic direct observation may be a more sensitive measure of treatment effects compared to teacher ratings of ADHD symptoms.