Addressing Homework Performance As Part of a Comprehensive Behavioral Intervention for a Student with Attention Deficit Hyperactivity Disorder: A Case Study

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Introduction
- Attention deficit hyperactivity disorder (ADHD) is one of the most prevalent psychiatric disorders of childhood for which there is no known cure.
- The American Academy of Pediatrics (2002) estimates that 6% of school aged children are affected by ADHD.
- The central features of the ADHD are difficulty with rule-governed behavior, attention, and impulse control (Barkley, 1997).
- Deficits in attention have been reported in numerous studies of classroom behavior and academic performance (DuPaul & Stoner, 1994).
- Difficulty sustaining attention and its subsequent interference with school performance has been demonstrated empirically (DuPaul & Stoner, 1994; Epstein et al., 1994).
- Homework completion presents considerable difficulty for students with ADHD (Barkley, 1998; Haboush, et al. 2001).
- Numerous methods have been effectively used to improve homework completion in students with learning disabilities but few, if any, have been used with children who have clinical problems such as ADHD (Haboush, et al., 2001; Kelly & McCain, 1995).

Objectives of the Current Study
- The current study seeks to expand the existing literature by examining a student diagnosed with ADHD who struggles with homework completion and accuracy.
- An intervention designed to address homework was added to a behavioral intervention package to determine if it resulted in increased levels of homework completion and accuracy.

Method
Participant
An 11 year-old Caucasian male attending 5th grade in a public school in a medium-sized mid-western city participated in this study. He had a diagnosis of ADHD verified through psychoeducational assessment. He had no other physical or mental health diagnoses and no prior treatment for ADHD.

Intervention Components
1. Home-school note to address in-class behavior
2. Homework intervention consisting of:
   • Goal setting procedure as described by Miller & Kelly (1995).
   • Add error correction to increase homework grades.
   • Add positive reinforcement for homework completion.
   • Add a response cost (job card grounding) for homework refusal.

Dependent Measures
1. Daily Percent on Home-school Note (classroom behavior)
2. Percent of daily homework completed
3. Percent of homework that is accurate

Procedure
- The researcher made daily visits to the participant’s home to copy homework and home-school notes.
- The researcher taught the goal-setting procedure to the participant in a one-on-one manner in his home.
- The researcher worked with the participant’s parents to develop a reinforcer menu to be used for homework completion as well as job cards for homework refusal.

Study Design
- A single-subject design was used for this research study
- The intervention components were introduced individually to determine relative impact of each component on all dependent measures.
- Daily copies of homework and teacher behavior rating sheet were made and retained as permanent products of the participant’s behavior and also were used to calculate reliability.

Results

Discussion
- The Goal-Setting Procedure increased completion percentage and also had some impact on homework accuracy.
- The Accuracy Component was introduced second. It resulted in increased accuracy of homework.
- The combination of Goal-Setting and Accuracy resulted in improvement in homework completion and performance. This intervention had a only marginal impact on behavior. For this participant, classroom behavior needed additional intervention aside from a home-school note to result in improvement
- Goal-setting with an accuracy component shows some promise for addressing homework difficulties in students with ADHD and thus, merits additional research.