Hyperactivity Intervention: Contingency Management

In contingency management for hyperactivity, behavioral interventions are used to modify consequent events (i.e., events that occur after the behavior) that are often maintained through the reinforcement of overactive and impulsive behavior. The goal of contingency management is to decrease activity levels that negatively impact learning by shaping the child's existing behavior and providing opportunities for the new, desired behavior to become internalized. The procedural steps for incorporating contingency management strategies into the treatment of hyperactivity are summarized below.

Procedural steps for the application of contingency management:

1. Define the behavior in operational terms.

2. Determine the behavioral goals.

3. Determine the reinforcers.

4. Explain the system to the child.

5. Implement the chosen reinforcement strategy (e.g., token system).

6. Adjust the reinforcement as needed.

Considerations When Implementing a Contingency Management Intervention Strategy

 For Teaching. Teachers are generally adept at procedures that involve classwide prompting or acknowledgement and may need only minimal coaching to be more effective with students with hyperactivity. Some issues that typically frustrate teachers include the modification of systems, the immediacy of reinforcer use, the consistency in application, and the setting of goals that will encourage and change student behavior. Teachers must modify the structure of token economy systems when the student loses more points than he or she earns, or students will not maintain an interest or be able to access the reinforcer. Reinforcement must be immediate for students with hyperactivity; contingencies that are hours, days, or weeks away are unlikely to be effective. Behavioral interventions for students with hyperactivity require long-term consistency, and once a student engages in appropriate behaviors, fading may occur but monitoring should also occur so that the intervention can be reapplied when necessary. Goal setting or criteria setting for access to reinforcers is as critical as immediate access. If a student is engaging in hyperactive behaviors 90% of the time, a goal of 0% is unrealistic. Goals need to be seen as gradual, and intermediate steps toward reaching a long-term solution are important for reducing hyperactivity. Goals should also be specific when possible, targeting the relevant behaviors that fit under the class of hyperactivity. For example, fidgeting and running around a classroom may have a differential impact on the setting and need to be addressed separately, even if both actions are part of hyperactivity.

For Culture and Language Differences. Home-school communication and the use of contingency management techniques in both settings will improve the application of any intervention. At minimum, attempt to provide communication in the primary language of the parent, and, if necessary, use an adult translator or bilingual staff person to articulate the program of intervention and describe how contingencies could be managed at home.

For Age and Developmental Level. Contingency and reinforcement choices should include the child or adolescent's preferences and should be age and developmentally appropriate.

Research Studies Supporting Use of Contingency Management Intervention Strategies

The following studies support the use of contingency management intervention strategies for dealing with hyperactivity problems. Detailed annotations of these studies are included in the BASC-2 Intervention Guide.

Ayllon, T., Layman, D., & Kandel, H. J. (1975). A behavioral-educational alternative to drug control of hyperactive children. Journal of Applied Behavior Analysis, 8, 137-146.

Ayllon, T., & Roberts, M. D. (1974). Eliminating discipline problems by strengthening academic performance. Journal of Applied Behavior Analysis, 7, 71-76.

 DuPaul, G. J., Guevremont, D. C., & Barkley, R. A. (1992). Behavioral treatment of attention-deficit hyperactivity disorder in the classroom: The use of the Attention Training System. Behavior Modification, 16, 204-225.

Fabiano, G. A., & Pelham, W. E., Jr. (2003). Improving the effectiveness of behavioral classroom interventions for attention-deficit/hyperactivity disorder: A case study. Journal of Emotional and Behavioral Disorders, 11, 124-130.

McGoey, K. E., & DuPaul, G. J. (2000). Token reinforcement and response cost procedures: Reducing the disruptive behavior of preschool children with attention-deficit/hyperactivity disorder. School Psychology Quarterly, 15 (3), 330-343.

Reitman, D., Hupp, S. D. A., O'Callaghan, P. M., Gulley, V., & Northup, J. (2001). The influence of a token economy and methylphenidate on attentive and disruptive behavior during sports with ADHD-diagnosed children. Behavior Modification, 25 (2), 305-323.