Hyperactivity

The *DSM-5™* lists symptoms such as fidgeting and squirming, leaving a seat unexpectedly, running or climbing inappropriately, failing to stay quiet, having difficulty waiting for a turn, or frequently interrupting and intruding socially. Hyperactivity problems can occur alone or can co-occur with attention problems and are usually exhibited by children in both home and school settings.

There are a variety of interventions that have been shown to reduce, or have shown promise for reducing, hyperactive behavior, including:

- Contingency Management

- Daily Behavior Report Cards (DBRC)

- Functional Behavioral Assessment

- Multimodal Interventions

- Parent Training

- Self-Management

- Task Modification

Detailed summaries of the Contingency Management and Self-Management intervention strategies are provided below. See the BASC-3 Behavior Intervention Guide for more information about these strategies and the other intervention strategies listed above.

Hyperactivity Intervention Option 1: Contingency Management

In contingency management for hyperactivity, behavioral interventions are used to modify consequent events that maintain hyperactive and impulsive behavior. Contingency management involves shaping the child's existing behavior and providing opportunities for the new, desired behavior to become internalized. Contingency management programs for hyperactivity include the individual or combined use of behavioral intervention strategies such as token economies; point systems; verbal praise; response cost; timeout from peers, reinforcers, attention, or privileges; varying amounts and frequency of teacher attention; verbal reprimands; and removal of praise. The goal of contingency management is to decrease the child's activity levels that negatively impact learning by reshaping the environment to reinforce or eliminate behaviors.

The essential elements of Contingency Management include the following:
1. Define the behavioral objectives clearly in operationally defined terms.
2. Identify pre-established and taught routines for earning and losing reinforcers.
3. Provide appropriate levels and types of reinforcers to shape behavior.
4. Deliver contingencies consistently at fixed or random intervals.
5. Implement response-cost contingencies as needed.

The procedural steps for incorporating contingency management strategies into the treatment of hyperactivity are summarized below. See the BASC-3 Behavior Intervention Guide for a detailed discussion of this topic.

PREP
- Select a behavior to target. There may be several that are problematic, but only choose one to start.
- Define the child's behavior in operational terms.
- Identify who will record baseline data on the frequency (i.e., how often) and/or severity (i.e., how much) of the hyperactivity. Use this information as a sample of functioning (e.g., length of time child remains seated, amount of time child waits before blurting out an answer) before the intervention to permit evaluation of the degree of post-intervention improvement.
- Consider the child's preference for reinforcers. For example, if the child enjoys computer games, computer time can be earned or lost. Reinforcement surveys can help to determine reinforcers that are appropriate and meaningful to the child.

IMPLEMENT
- Use the baseline data to set behavioral goals. Common goals include increasing the amount of time spent on task or decreasing the amount of off-task behavior during a specific interval. Modest increases in the amount of time spent on task, such as 20%, are more appropriate than large increases, such as 100%. If age appropriate, review the goals with the child or have the child participate in goal setting.
- Review the rules for providing reinforcers and ensure the child understands them by asking the child to repeat them back or to demonstrate when contingencies will occur and for what.
- Use a 1:1 ratio of behavior to reinforcement (i.e., every time the child performs the appropriate behavior, reinforce it) when teaching new skills. If the behavior is a performance problem and not a skill problem, then it may be sufficient to reinforce less frequently (e.g., one out of three times the child performs the appropriate behavior). Intermittent intervals may also work, such as providing a non-scheduled ratio of reinforcement to behavior.

    * Consider using tokens or points that can be cashed in for reinforcers at the end of a specified time period as a modification to the intervention if necessary. Token systems are typically more effective once basic behavioral goals have been met, and the tokens can be used to maintain the behavior.
- Use an electronic or paper visual aid to track behavior. This will assist the child in understanding progress and which specific behaviors are being targeted.
- Provide the reinforcer to the child when they meet the goal. Do not provide the reinforcer if the goal is not met. Previously earned reinforcers, such as tokens, may be taken away when a goal is not met.

EVALUATE
- Collect and examine data during the use of contingency management. You should expect to see large changes in behavior in a few days. If you do not, reconsider the implementation. Ensure reinforcement opportunities are consistent and not missed. If it seems that reinforcement opportunities have been inconsistent or missed, revisit the implement phase.
- Remain aware of the potential for satiation or boredom with a reinforcer, such as filling up on candy or getting tired of listening to music.

       * After consistent effects are established, thin and fade the schedule of reinforcement to become more unpredictable and more irregular over time to avoid creating dependency on rewards to obtain appropriate behavior.

Hyperactivity Intervention Option 2: Self-Management

Self-management strategies for hyperactivity are techniques children can use to monitor their own activity level, record the results, and compare this level to a predetermined acceptable level of activity. Self-management in this context involves a combination of three behavioral techniques: self-monitoring, self-monitoring plus reinforcement, and self-reinforcement. The goal of self-management training is to increase children's awareness of their own levels of activity in order to produce an automatic response without relying on external reinforcement or prompting.

The essential elements of Self-Management Training include the following:
1. Teach the child to monitor their own activity level.
2. Teach the child to record their own activity level.
3. Teach the child to check against self-determined goals.
4. Teach the child to reinforce themself.

The procedural steps for incorporating self-management strategies into the treatment of hyperactivity are summarized below. See the BASC-3 Behavior Intervention Guide for a detailed discussion of this topic.

PREP
- Determine the specific area for self-management of hyperactivity (e.g., impulsivity control, hyperactive behavior).
- Determine the cuing method for the self-management (e.g., audio cue tape, wrist counter, teacher signal).
- Identify the paper self-recording form.
- Identify a goal.
- Determine a reinforcer.
- Gain commitment for participation from the child.
- Determine if an adult will provide simultaneous monitoring and recording for accuracy checks later. (If so, be sure to demonstrate to both the child and adult during the IMPLEMENT step.)

IMPLEMENT
- Teach self-monitoring procedures to the child including any new replacement behaviors (e.g., relaxation, deep breathing).
- Model the replacement behavior and indicate the level (i.e., the frequency and/or intensity) at which it should occur. Consider role-playing the expected level and behavior with the child as a check for understanding.
- Explain what cuing is and how it will work. Discuss and determine how often the cue will be heard or seen (e.g., every 30 seconds for 10 minutes, or every 1 minute for 20 minutes during a certain class or instructional time).
- Demonstrate how the child will record their attention to task when the cue is heard. The cues or prompts can be audio recorded or generated by a watch with intermittent beeps; intervals from 15 seconds up to 2 minutes can be used, depending on the child. At the sound of each cue, the child records their activity level by placing a check mark on the self-monitoring sheet.

- Ask the child to demonstrate the techniques and check for understanding.
- Start the cuing and prompt if necessary to remind the child to record.
- Monitor activity levels and the replacement behavior. Provide a basic level of reinforcement for participation even if goals are not met, and provide a higher level of reinforcement when goals are met.

EVALUATE
- If an adult was monitoring the child at the same time, ask the child and adult to compare their recording forms.
    * Place scores on a single graph to facilitate the comparison.

    * Discuss if the scores are dramatically different allowing for some degree of error is acceptable and expected.

    * Highly praise and encourage perfectly matched scores as a goal depending on the number of intervals.
- Encourage the child to self-reinforce the behavior both for displaying appropriate activity levels and consistently and accurately recording the replacement behavior. Reinforcement is phased out as naturally occurring reinforcement takes place (e.g., better grades, better skills, less discipline in classrooms).