

Effective Interventions in Dropout Prevention: A Practice Brief for Educators

Volume 1, Number 1

Cognitive Behavioral Interventions: An Effective Approach to Help Students with Disabilities Stay in School

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Introduction

Preventing youth from dropping out of school is an enormous challenge for school systems, especially students who display aggressive behaviors at school. While many aspects of managing student behavior in the classroom are challenging, chronic and severe aggressive behaviors are most difficult to manage. The aggressive student is often characterized as verbally (i.e., defiant, use of profane and negative language) and physically (e.g., fighting, spitting, biting, hitting) abusive towards teachers and students. Generally, these students exhibit aggressive behaviors in all school situations, particularly in less structured situations (e.g., lunch, hallways, recess, and inactive classrooms). These behaviors act as impediments to academic success and are threats to school completion. Given that, students with disabilities dropout at over twice the rate of their same-age peers, states and local education agencies are in need of dropout prevention interventions that work. When schools implement effective strategies there are extraordinary benefits for youth, communities, and society. One validated approach that works well to reduce physical and aggressive behaviors in youth with disabilities is cognitive-behavioral interventions.

This *Practice Brief* based on the Office of Special Education Programs (OSEP) supported work by The What Works In Transition Synthesis Center, *The Effects of Cognitive-Behavioral Interventions on Dropout for Youth with Disabilities* (Cobb, Sample, Alwell, & Johns, 2005), provides educators with a conceptual understanding and technical information to assist in implementing cognitive-behavioral interventions that reduce aggressive behaviors in students.

Cognitive-Behavioral Interventions

Cognitive-behavioral interventions (CBIs) refer to a number of different but related interventions used to change behavior by teaching individuals to understand and modify thoughts and behaviors. Problem solving, anger control, self-instruction, and self-control are examples of interventions under the umbrella of CBI. Typically, students learn to recognize difficult situations that have produced inappropriate/violent responses, then identify



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and implement an acceptable response. Students also learn to restrain aggressive behavior using covert speech. Through various teaching and role-playing activities, students will more consistently engage in appropriate behavior when faced with the various situations that have caused problems in the past.

Cognitive-behavioral interventions have shown effectiveness across educational environments, disability types, ethnicity, and gender. For example, positive effects were demonstrated in large urban high schools, private schools with enrollments of over 200 children, and residential facilities. They have also demonstrated positive effects on adolescents who have emotional and/or behavioral disorders, learning disabilities, mental retardation, depression, and other problems associated with dropping out. They have been shown effective in studies that involved male and female African-American and Caucasian students.

Common Components of CBI

CBI incorporates a combination of behavioral and cognitive approaches to teach students to identify difficult situations, think the situation through, and exhibit appropriate responses. CBI provides a series of steps for students to analyze their performance, develop various behavioral options, and then select the most appropriate behavior or response for the situation. The common cognitive and behavioral components used in CBIs are described next.

Cognitive components. The cognitive component of CBI incorporates an internal “road map” for students to use when trying to regulate their behavior. Teachers teach students strategies that promote self-regulation, increase positive behavior, and reduce inappropriate behavior. These various strategies help students to carefully and systematically think through situations and decide how to respond appropriately (e.g., walk away instead of hitting). By teaching students how to think through a situation and apply strategies that generalize, students are more likely to improve their overall behavior across settings. The cognitive components of CBI training usually include the direct teaching of a specific problem-solving strategy, self-instruction, communication skills, relaxation, and situational self-awareness. Problem solving is the most frequently used cognitive component in CBIs. Successful problem-solving instruction consists of several components, and each is taught directly to students with patterns of aggressive behaviors. The generic components of problem solving include:

1. **Recognition of the problem.** Students are instructed and given the opportunity to practice recognizing problem situations. Role playing, case studies, and both real and hypothetical problems are used to help students recognize the existence of problems.
2. **Define and articulate specifics of the problem.** Students are allowed to practice describing the problem including who is involved, where the problem occurred, and what happened. Students are encouraged to view the problem from their own perspective. Question generation and task analysis of situational problems assist students to learn how to articulate problems.
3. **Develop a procedural process for solving the problem.** Students are explicitly taught all steps in the problem-solving process through teacher modeling. Students are then provided ample guided practice with corrective feedback and positive reinforcement, and independent practice. Students learn to order the steps in a sequential process that helps lead to an appropriate solution to the problem. Role playing, group discussions activities, and self-monitoring are effective approaches to teach the systematic process.

The following procedural process is an example used in the research (Etscheidt, 1991):

- a. Stop and think before acting. Students learn to use self-talk and relaxation techniques to restrain aggressive responses and impulsive actions.
- b. Identify the problem. The students are required to distinguish the specific aspects of a problematic situation that may elicit an aggressive response.
- c. Develop alternative solutions. Students generate at least two alternative solutions to a problematic situation.
- d. Evaluate the consequences of possible solutions. Students *assess* the benefits of each possible solution.
- e. Select and implement a solution. The students *perform* the selected alternative.
- f. Evaluate the outcome.

4. **Generate alternative strategies to approach the problem.** Using a systematic procedure, students learn to generate alternative solutions through brainstorming multiple strategies for solving the problem. Students are taught to respond to the probe “What are your possible solutions?” Because learning to generate alternatives is positively related to increased problem-solving skills and social adjustments throughout life, generating alternatives *is a crucial* component of problem solving.
5. **Evaluate the consequences of each generated alternative.** The goal of this component is to teach students to identify the most effective solutions. Students are encouraged to identify the most feasible alternatives and generate possible consequences for each alternative in terms of benefits and risks. Students are encouraged to select alternatives that are safe and fair. This component provides essential practice in evaluating consequences and making appropriate future choices.

6. **Decide on a course of action and try it.** Students are directed to decide upon the best alternative to resolve the problem and to try the selected alternative. Students are allowed to rehearse and implement the solution, and then discuss consequences.

7. **Evaluate the effectiveness of the selected alternative.** Students are assisted to determine if the solution worked. Students are made aware that the initial choice may not always resolve the problem and other alternatives may need to be considered.

Behavioral components. The behavioral components of CBI incorporate systematic procedures for rewarding students for the reduction of aggressive behavior and the use of the problem-solving strategies. The behavioral components generally include the use of social reinforcers of praise and recognition, listening to CDs, playing computer games, token economy point systems, and behavioral contracting. Behavioral contingency contracts are most frequently used to motivate students towards desirable behavioral change. In addition to the contingency management contract, modeling, corrective feedback, and multiple practice opportunities are essential for the consistent and overall reduction of aggressive behavior. The following steps are involved in writing a contingency contract:

Teaching CBI

CBI is generally taught in a series of 10 or more class sessions. CBI can be taught to students by general and special education teachers, school psychologists, or behavior specialists in one-to-one, small group, or large-group instructional formats. The structure of the sessions depends upon the severity of the targeted behavior. Although the specific cognitive and behavioral components may vary (i.e., problem-solving strategy, reinforcers), a variety of instructional techniques can be used including mentoring, teacher and peer modeling, role playing, and behavioral rehearsal.

A common instructional theme in using CBI to reduce aggression that contributes to dropout was that students were explicitly taught a strategy and the appropriate behavioral response by the teacher. The instructional design features included multiple models, frequent opportunities for guided practice with plenty of corrective feedback, positive reinforcement, independent practice, and specific generalization strategies. Students are provided many opportunities to respond and actively engage in role playing and other situational instructional activities. Additionally, teachers monitor student progress by observing and recording student behavior across various settings. When students do not make progress, teachers provide additional models, feedback, and opportunities to practice (i.e., practice behaving appropriately to

The following steps are involved in writing a contingency contract:

1. Teacher determines and outlines the specific behaviors required of the student.
2. The teacher and student identify the reinforcement for which the student will work. The designated reinforcement should only be available to the student for performing the specified behavior.
3. The teacher writes up the behavior contract, specifying the exact terms of the contract, including the amount and type of behavior required and the amount and frequency of the contingent reward. The contract should be fair to both the teacher and student and stated in positive terms. The contract should also state the method and frequency for data collection.
4. The teacher meets with the student to explain the contract and ensure agreement. Both parties sign the contract.
5. The teacher monitors for the specific behavior and rewards the student according to the terms of the contract.

various problematic situations). The monitoring of student performance (e.g., appropriate behavior) is essential to the effectiveness of the CBIs. Monitoring student progress allows re-teaching of specific steps in the problem-solving strategy and appropriate behavior when necessary.

Implementation Considerations

Three major considerations regarding the implementation of CBIs are the (a) availability of resources, (b) expertise of teachers and staff, and (c) specialized curricula modifications. The majority of CBI-based programs involve the use of a commercially available curriculum such as the Walker Social Skills Curriculum (Walker, Todis, Holmes, & Horton, 1998); however, the teacher or Individualized Education Planning (IEP) team using the steps and examples provided in this practice brief can design their own CBI.

Additionally, the behavioral components of the CBI programs include some type of reinforcement. Verbal praise and token economy systems are frequently used. Token economies generally include rewarding students with an item that is positively reinforcing when the student earns a certain number of points. The items may include homework passes, extra computer time, or some edible reinforcer. Some are free; however, some require purchase.

Because most of the CBI programs require some technical expertise in the area of behavior, specific professional development activities and specialized training may be necessary depending on the experience of the teachers and staff. Additionally, some of the CBI-based programs require additional support for the student and teacher by a school psychologist, behavioral specialist, and/or counselor. Careful review of selected CBI curricula is recommended to identify any specialized professional development that may be necessary.

Most CBI curricula include 10-20 traditional sessions; however, some students may require additional instructional lessons containing more models and opportunities for practice. Teachers may need to modify the CBI materials and procedures to include more models, opportunities for guided and independent practice, and specific and systematic



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generalization strategies. The system used to monitor student performance is very helpful in determining what students need additional instructional time.

Conclusion

Using cognitive-behavioral interventions can substantively lessen the kinds of problem behaviors that frequently result in school suspensions and/or expulsions that subsequently lead to school dropout. For students with emotional disorders or other types of disabilities, cognitive-behavioral interventions that teach students to discuss appropriate behaviors, role-play, and sequences of self-talk to problem solve are effective in helping to decrease aggressive behaviors that act as impediments to school completion. Moreover, token economies, behavioral contracts, and/or the use of reinforcers for appropriate behaviors can be successful in motivating students to use CBI to decreasing angry or aggressive outbursts in a variety of settings and situations.

An Example from the Research

Check and Connect is one model that already has evidence of effectiveness and shows great promise in many settings and contexts. Originally funded in the early 1990s by the U.S. Department of Education, Office of Special Education Programs (OSEP), Check and Connect is a dropout

prevention and intervention procedure developed to encourage middle school youth at high risk for dropping out to remain engaged in school and on track to graduate (Sinclair, Christenson, Evelo, & Hurley, 1998). Students may be referred to Check and Connect for a variety of reasons including chronic attendance problems, poor grades and assignment completion, behavioral challenges, and truancy petitions. There are two major components of Check and Connect.

Check. In the “Check” component, an assigned individual monitors student levels of school engagement on a daily basis using the following risk factor measures: (a) tardiness, (b) skipping classes, (c) absenteeism, (d) behavior referrals, (e) detention, (f) suspensions, (g) course failures, and (h) accrual of credits. Key to this component is the role of the monitor—one individual who is responsible for ensuring that a student connects with school and is learning. The Check and Connect monitor must be persistent, believe that all children have abilities, be willing to work closely with families using a “non-blaming approach,” advocate for the student, be committed to documenting interventions, and able to work well in different settings.

The monitor must establish trust with the students and their families, sometimes becoming their lifeline and navigator through the school system. The monitor regularly checks on student attendance and academic performance, talks to the families and listens to students, checking and connecting throughout the year. The monitor also checks student engagement periodically using several indicators that include attendance, social/behavior performance, and academic performance.

Connect. Using indicators from the “check” procedures, the monitor can then “connect” using either basic or intensive interventions. Having two levels of response serves as a way to systematically respond to current and changing levels of individual student needs and maximize resources. All students receive basic interventions that are primarily comprised of purposeful conversations with the monitors once a month for secondary students and once a week for elementary students. The basic interventions are comprised of four strategies: (a) sharing general information with the student about



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the monitoring system, (b) providing regular feedback to the student about his or her progress at school, (c) regularly discussing staying in school (and emphasizing accurate associated benefits), and (d) problem solving with the student about risk factors. At least monthly, students receive instruction and practice in a five step cognitive-behavioral problem-solving strategy:

1. Stop, think about the problem.
2. What are some choices?
3. Choose one.
4. Do it.
5. How did it work?

Students showing high risk on any of the indicators being monitored, such as suspension from school or failing classes receive intensive interventions. As soon as a student shows increased risk, the monitor takes immediate actions to reconnect the student to school. The monitor also taps existing support services when needed and appropriate and increases the degree of interaction with the student, including calling the student and parent in the morning to make sure the student gets out of bed and gets to school. Intensive intervention strategies include:

- **Problem solving:** hold sessions with student social skills groups, parents, and students exhibiting high-risk behaviors to develop individualized behavior contracts for students; negotiate alternatives to out-of-school suspensions; and provide family mediation services for truancy.

- **Academic support:** connect students with a student or mentor, draft individualized contracts with students, meet with teachers regarding areas of student concern, and initiate changes in students' class schedules as needed.
- **Recreation and community service exploration:** raise awareness about afterschool activities, help students fill out application forms, accompany students to neighborhood programs, set up a community service tutoring program, and help students arrange for summer jobs or a structured schedule of activities.

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Additional Resources

Effective Interventions in Dropout Prevention: An Overview of Cognitive-Behavioral Interventions by the National Dropout Prevention Center for Students with Disabilities

Effective Interventions in Dropout Prevention: A Research Synthesis—The Effects of Cognitive-Behavioral Interventions on Dropout for Youth with Disabilities by Brian Cobb, Pat Sample, Morgen Alwell, and Nikole Johns, Colorado State University

Copies of these resources may be downloaded free of charge from our Web site, www.dropoutprevention.org.

If you would like additional information about the development of cognitive behavioral interventions, contact:

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NDPC-SD was established to support state education agencies in assisting local education agencies to increase school completion rates and decrease dropout rates among students with disabilities. NDPC-SD supports states through the following activities:

- Identifying evidence-based dropout prevention interventions, programs and practices.
- Producing evidence-based knowledge useful to school professionals.
- Providing targeted technical assistance to states in a variety of formats.
- Disseminating dropout prevention information through multiple methods.



The National Dropout Prevention Center for Students with Disabilities is funded by the U.S. Department of Education's Office of Special Education Programs Cooperative Agreement No. H326Q030002. The content therein does not necessarily reflect the views or policies of the U.S. Department of Education, nor does mention of other organizations imply endorsement by those organizations or the U.S. government.

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