

Preventing Severe Problem Behavior in Young Children: The Behavior Education Program

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Best practice in preventing severe problem behavior in schools involves implementing a continuum of effective behavior support. This continuum includes primary prevention strategies implemented with all students, secondary prevention strategies for students at-risk, and tertiary interventions for students who engage in the most severe problem behavior. This article outlines one type of secondary prevention program called the Behavior Education Program (BEP) which is a modified, check-in, check-out intervention. Key features of the BEP intervention are outlined along with a summary of the research that has been conducted to evaluate intervention effects on problem behavior. In addition, recommendations are provided about the modifications that would be necessary to implement the BEP in preschool settings.

Keywords: Secondary Level Prevention, Behavior Education Program, School-wide Prevention, Check-in, Check-out.

Doss and Reichle (1991) define challenging behavior as “behavior by a learner that results in self-injury or injury of others, causes damage to the physical environment, interferes with the acquisition of new skills, and/or socially isolates the learner” (p. 215). Challenging behaviors may take many forms. Behaviors that are self injurious may include scratching, biting, head banging, punching, face slapping, pinching, eye gouging, ear pulling, hand mouthing, arm biting, and self choking (Carr, 1977; Horner & Day, 1991, Iwata, Dorsey, Slifer, Bauman, & Richman, 1982; Taylor & Carr, 1992). Aggressive behaviors may involve hitting, scratching, kicking, biting, pinching others, and knocking over objects (Carr & Durand, 1985a; Carr & Durand, 1985b; Horner & Day, 1991; Horner, Sprague, O’Brien, and Heathfield, 1990; Taylor & Carr, 1992). Behaviors that involve tantrums may include persistent crying, loud vocalizations, screaming, and whining (Carr & Durand, 1985a; Carr & Newsom, 1985; Durand & Carr, 1987; Taylor & Carr, 1992). Finally, the form of some challenging behaviors may entail more unique or stereotypical mannerisms such as body rocking, hand flapping, mouthing, and body posturing (Carr & Durand, 1985a; Carr & Newsom, 1985; Durand & Carr, 1987; Taylor & Carr, 1992).

Oftentimes, the immediate influence of a challenging behavior on a child and/or his environment (e.g., self-injury or injury of others, damage to the physical environment, interference with the acquisition of new skills, social isolation of the learner) is significant enough to warrant intervention. The importance of intervention is further accentuated by research examining the potential long term influence of challenging behaviors. Research has demonstrated that challenging behaviors create a barrier to community placement (Hill, Lakin, & Bruininks, 1984; Pagel & Whitling, 1978) and are a major cause of admission as well as readmission to state institutions (Nihara & Nihara, 1975; Pagel & Whitling, 1978). Furthermore, individuals who engage in challenging behaviors are at increased risk for rejection by teachers and peers (Walker, Ramsey & Gresham, 2003).

Increased awareness and understanding of the potential immediate and long-term influence of challenging behaviors on a child and/or his environment has resulted in an interest in developing interventions to address challenging behaviors during the early childhood years. Reichle et al (1996) note that this interest has met with some resistance given that many individuals who serve preschool aged children who engage in challenging behaviors report a belief that these children will “grow out of” the challenging behaviors. However, this belief is not supported by analyses suggesting that challenging behaviors engaged in by preschoolers are not outgrown and many preschool aged children who engage in

challenging behaviors will continue to engage in problem behaviors in elementary school (Campbell, 1998).

For children who engage in the most severe problem behavior, researchers recommend developing individualized interventions based on functional assessment data (Crone & Horner, 2003; Sugai & Horner, 2002). Functional assessment is the process that is used to obtain information regarding the environmental antecedents (Richman, & Wacker, 2001) and consequences that motivate an individual's emission of challenging behavior (e.g., Durand, 1990; O'Neill et al, 1997). This process involves (a) identifying and defining the challenging behavior, (b) identifying the events and circumstances that are regularly associated with the occurrence and nonoccurrence of the challenging behavior, and (c) determining the social function or the purpose of the challenging behavior (Foster-Johnson, & Dunlap, 1993; McIntosh, & Av-Gay, 2007; O'Neill et al, 1997). A number of methods have been described for collecting functional assessment information. These functional assessment methods include indirect assessments, direct observations, and environmental manipulations (see O'Neill et al, 1997; Reichle & Johnston, 1993; Johnston & O'Neill 2001 for summaries of these assessment strategies).

Interventions that are designed and implemented based upon the results of functional assessments have been shown to reduce the emission of challenging behaviors (e.g., Horner & Day, 1991; Horner et al., 1990; Horner et al., 2002). However, individualized interventions such as those derived from functional assessments are time and resource intensive (Waguespack, Vaccaro, & Continere, 2006). The significant demand on time and resources to implement individualized interventions has led researchers to explore a continuum of intervention options rather than rely on the exclusive use of individualized interventions (Hawken & Horner, 2003). Figure 1 illustrates a continuum of intervention options for individuals who engage in challenging behaviors. As illustrated by this heuristic, researchers posit that primary prevention efforts (e.g., school/classroom wide systems of support) will be sufficient for approximately 80-85% of individuals, secondary prevention efforts (e.g., specialized group interventions for students who are at-risk) will be necessary for approximately 5-15% of individuals, while tertiary prevention efforts (e.g., intensive, individualized interventions) are needed for only 1-5% of individuals (Walker et al., 1996). This heuristic suggests that, by adopting a continuum of effective behavior supports, rather than relying exclusively on tertiary prevention efforts, educators may increase their effectiveness and efficiency in decreasing children's emission of challenging behaviors.

FIGURE 1, NEXT PAGE!

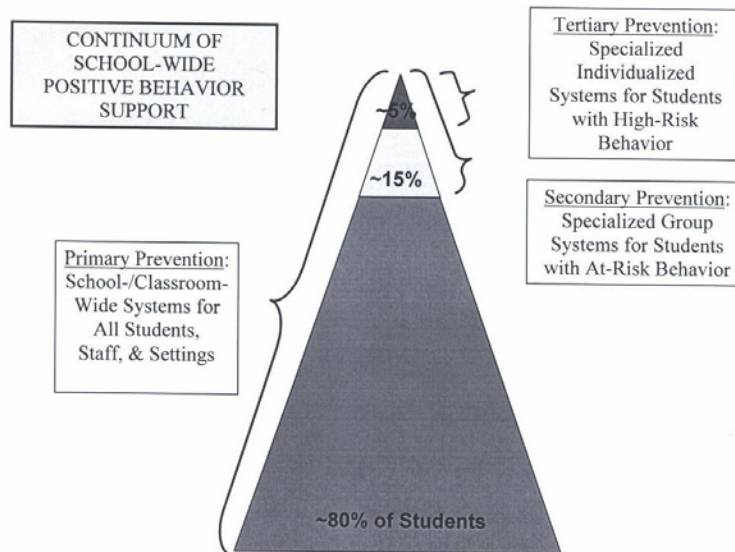


Figure 1. Continuum of School-wide Positive Behavior Support

In preschool settings, researchers have explored the impact of primary prevention efforts related to arranging the physical environment, modifying the instructional environment, and utilizing schedules on the prevention of challenging behaviors in young children (e.g., Dodge & Colker, 2002; Lawry, Danko, and Strain, 1999). The impact of tertiary prevention efforts with young children who engage in challenging behavior has also been examined (e.g., Fox, Dunlap, & Cushing, 2002). However, the implementation and impact of secondary prevention efforts in early childhood settings is less clearly understood. The purpose of this paper is to explore the use of one secondary level prevention effort, a targeted intervention referred to as the Behavior Education Program (BEP) for preschool aged children who engage in challenging behaviors. Although the effective use of BEP has been noted in elementary and secondary school settings (Fairbanks, Sugai, Gardino, & Lathrop, 2007; Filter et al., 2007; Hawken, 2006; Hawken & Horner, 2003; Hawken, MacLeod, & O'Neill, 2007; Hawken, MacLeod, & Rawlings, 2007), the use of BEP has not been explored with preschool aged children. Specifically, this paper will (a) provide an overview of the BEP, (b) propose an array of modifications that should be considered when implementing BEP in preschool settings, and (c) present a case example illustrating the effective and efficient use of BEP in a preschool classroom.

Overview of the Behavior Education Program

The BEP is a modified check-in, check-out intervention that is implemented across a school with students who are not responding to school-wide, universal prevention programs (Crone, et al., 2004). Teacher, parent or other school staff members refer students to the BEP if there is a need for increased behavior support. This referral would be indicated by an increase in office discipline referrals, in school suspensions, interclass time-outs or other consequences for not following behavioral expectations. Some schools implement more systematic screening mechanisms such as the Systematic Screening for Behavior Disorders rating system (Walker & Severson, 1990) to determine if students could benefit from additional behavior support provided by the BEP (e.g., Cheney, Blum, & Walker, 2004). The main goal is to

identify students early who are at-risk for engaging in severe problem behavior. The following is a description of the daily, weekly and bi-monthly procedures of the BEP intervention.

After a student has been referred and recommended for BEP support, the daily and weekly features of the BEP intervention are implemented (Crone et al., 2004; Hawken, Pettersson, Mootz, & Anderson, 2005). The daily BEP process begins with the student checking in before school with the BEP coordinator. The BEP coordinator is usually a paraprofessional who has 10-15 hours per week dedicated to implementing the BEP, flexibility to check students in and out daily, and perhaps most important, someone with whom the students really enjoy interacting. During check-in, the BEP coordinator asks whether students have their materials (e.g. pencils, paper, homework) they need to be ready for the day and provides them with a Daily Progress Report (DPR). A sample DPR for an elementary school is provided in Figure 2 (Sample DPRs for middle schools or additional elementary schools can be obtained from the first author). The DPR lists behavioral expectations for students to follow and a place for teachers to rank how well the students followed the expectations for a specified period of time. To reinforce school-wide expectations, schools are encouraged to list their school-wide rules/expectations on the DPR.

**Jackson Elementary
Daily Progress Report**

Name: _____ Date: _____

| GOAL | 8:20 – AM Break | AM Break – Lunch | Lunch – PM Break | PM Break – 2:45 |
|-----------------|-----------------|------------------|------------------|-----------------|
| Be Safe | 0 1 2 | 0 1 2 | 0 1 2 | 0 1 2 |
| Be Respectful | 0 1 2 | 0 1 2 | 0 1 2 | 0 1 2 |
| Be Responsible | 0 1 2 | 0 1 2 | 0 1 2 | 0 1 2 |
| Work Completion | 0 1 2 | 0 1 2 | 0 1 2 | 0 1 2 |

Teacher Initials: _____

Successes: _____ Assignments: _____

Parent Signature _____ Goal for Today: _____ % Total for Today _____ %

Key
0=No
1=Sorta
2= Great

Figure 2. Sample Daily Progress Report for Elementary School

After check-in, students take the DPR to their teachers and teachers are expected to provide a positive greeting and prompt them to have a good day or period. Teachers provide feedback on social behavior at the end of each class period (or during natural transitions in elementary school, such as after math, reading, recess etc.). At the end of the school day, students take the DPR to the BEP coordinator to check-out. Points received on the DPR are totaled and students receive reinforcement (verbal and tangible) for meeting their daily point goals. Daily point goals are usually set at 80-85% of the total points

(e.g. 40 out of 50 points) or may be set lower for students who would not be able to meet the 80% criterion during the initial implementation of the intervention. Students take home a copy of the DPR for their parents to sign and provide feedback. Students then return the DPR back to the BEP coordinator during check-in the following day (Crone, et al, 2004; Hawken et al, 2005).

Bi-weekly, the school's behavior support or multi-disciplinary team meet to determine whether or not students are making progress on the BEP. Prior to this meeting the data should be summarized in graphic format by the BEP Coordinator. During this meeting, the team determines whether (1) to continue the BEP as planned, (2) to modify the BEP for students who are not being successful or (3) to fade students off of the BEP who have met their goal on a consistent basis. Criteria for fading students off of the BEP are determined by each school but typically include some sort of average number of days at or above a pre-specified goal. (e.g., average of 80% of points for 6 weeks). Once students are faded off of the intervention, the BEP coordinator will continue to check in on this student (i.e., once or twice a week) to insure he or she is continuing to be successful without the support of the intervention. Some schools will have "alumni parties" on a quarterly basis for students who have faded off of the BEP to celebrate behavioral success without the support of the intervention.

The cost for implementation is reasonable given the numbers of students that can be supported; from 15-25 students during a school year (Filter et al., 2007; Hawken, 2006; Hawken, et al., 2007). It typically requires 10-15 hours per week of the BEP coordinator's time. The BEP coordinator is typically a paraprofessional (i.e., educational assistant, teaching assistant) whose responsibilities are to check students in and out, enter data at least weekly and create graphs for team meetings. In addition, resources are needed to purchase reinforcers to be used when students meet their goals. To keep the costs reasonable, schools are encouraged to use more natural and/or social reinforcers such as extra time at recess with a friend or reinforcers that can be donated from community businesses (i.e., free DVD rentals). The final cost that must be taken into consideration is the time the team spends analyzing BEP data for decision-making. Analyzing BEP data is only one component of a team meeting and therefore should not take more than 15-20 minutes (Crone et al., 2004). Given that the BEP has been shown to decrease the need for more intensive behavior support and special education services (Hawken et al., 2007; Cheney et al., 2007) the time spent to implement the BEP appears to be a good investment. For more information on the time and resources required to implement the intervention see the book by Crone et al., (2004) and the educational DVD by Hawken et al. (2005).

The BEP intervention is based on effective behavioral principles and essential elements necessary for behavior change. To begin with, behavioral expectations are clearly defined. Students receive feedback on their behavior frequently and reinforcement is delivered contingent upon students meeting their daily point goal. Adult contact is increased and home-school collaboration is improved as parents receive frequent feedback on their student's behavior at school (Crone, et al., 2004). Increased positive adult contact is essential for the success of the BEP. Research indicates that students who are connected to at least one adult are less likely to engage in criminal activity, severe problem behavior, drop-out of school or use drugs and/or alcohol. (Bernard, 1995; Biglan, 1995; Furlong & Morrison, 2000; Masten, Best, & Garmezy, 1990; Metzler et al., 1998).

Research on the effectiveness of the BEP is promising. March and Horner (2002) and Hawken (2006) examined the effects of the BEP on reducing rates of office discipline referrals (ODRs) with middle school students and researchers found that 67% and 70% of the students who received the BEP intervention had reductions in ODRs following implementation, respectively. Research on the BEP with elementary school students has demonstrated similar effects. Filter, et al. (2007) and Hawken, MacLeod, & Rawlings (2007) found the BEP was effective in reducing ODRs with 67% and 75 % of the students who received the intervention showing reductions in ODRs respectively. In both studies, the difference in ODRs between pre-post BEP implementation was statistically significant. In addition, Hawken et al.


(2007) found that implementing the BEP lead to a decrease in the number of students who needed additional behavior support and who were referred for a special education evaluation for problem behavior. In a study by Fairbanks et al. (2007) examining the effectiveness of the BEP with elementary school students, the percentage of students who responded to the BEP was lower (i.e., 40%) than in the Filter et al., (2007) and the Hawken et al. (2007) studies. However, their sample was limited to two second grade classrooms rather than examining the BEP school-wide as is typically recommended (Crone et al., 2004).

The aforementioned studies focused on office discipline referrals as outcome measures. To provide a more fine grained analysis of the BEP, Hawken and Horner (2003) examined the effects of the BEP on problem behavior and academic engagement in the classroom using direct observation. Using a multiple baseline design across students, the authors documented reductions in problem behavior in the classroom and increases in academic engagement using direct observation measures. Hawken and Horner also documented the social acceptability of the intervention with the majority of teachers, parents and students rating the BEP as (a) helpful in reducing problem behavior, (b) easy to participate in and (c) worth the time and effort. Overall, the BEP has been shown to be a promising targeted intervention for students at risk. To date, there have not been published, randomized control studies summarizing the effectiveness of the BEP but one study is in progress and the preliminary results have been submitted for publication (Cheney, Flower, & Templeton, 2007)

Modifications to the BEP for Preschool Settings

Research to date has examined the effectiveness of the BEP in middle and elementary school settings. Prevention of problem behavior should begin as early as possible (Walker & Colvin, 1995) and many of the key features of the BEP can be adapted to address the needs of children and teachers in preschool settings. Table 1 lists the key features of the BEP intervention and the suggested modifications for preschool settings. Key features of the BEP intervention include: (a) it is implemented school-wide, (b) intervention is continuously available, (c) students receive the intervention quickly, (d) time has been allocated for a BEP coordinator to oversee the intervention, (e) student checks in daily, (f) student receives regular feedback on DPR, (g) student checks-out at the end of the day, (h) BEP coordinator summarizes the data, and (i) there is a team in place that regularly reviews BEP data. The majority of the features would remain the same when implementing the BEP in preschool settings. However, some modifications may be necessary, and may be dependent upon whether a preschool is part of a program with several preschool classrooms or whether there is only one preschool classroom. If the BEP is implemented program wide (e.g., across several Head Start classrooms), a check-in, check-out person can serve multiple students whereas if there is only one preschool classroom, either the teacher or classroom aide can serve as the check-in, check-out person. Another modification may relate to the composition of the behavior team. Rather than having a team who reviews the BEP data bi-weekly, the data could be examined by the teacher and classroom aide and perhaps a specialists (e.g., special education teacher, behavior specialist, inclusion specialist) to determine if modifications are necessary.

Table 1. Critical Features of the BEP and Modifications for Preschool

| BEP Essential Features in Elementary & Middle School Settings | Modifications for Preschool Settings |
|---|--|
| Implemented School-wide | Implemented classroom or program-wide |
| Intervention is continuously available | |
| Students receive intervention quickly-usually within a week | |
| School has allocated 10-15 hour per week for BEP Coordinator | Teacher or teacher’s aide serves as BEP Coordinator |
| Students checks-in in the morning with BEP coordinator | Student checks in with teacher, classroom aide, other support staff |
| Student receives copy of the Daily Progress Report with school-wide expectations listed and a numbered ranking system | Student receives a copy of the Daily progress report with classroom or program-wide expectations with a smiley face ranking system  |
| Students receive feedback on behavior following each period or during natural transitions (i.e., 8:30 to AM recess) and receive 4-6 ratings per day | Student receives feedback after before transitioning to new center???? |
| Students check-out with BEP coordinator | Student checks out with teacher, classroom aide, other support staff |
| Student receives verbal and tangible reinforcement for meeting daily point goal | Student receives verbal and tangible reinforcement for meeting daily point goal |
| Copy of the DPR is sent home to parents for signature and return the following day | Copy of the DPR is sent home to parents for signature and return the following day |
| BEP Coordinator summarizes data for team meeting | ????? teacher’s aide? |
| Behavior team meets twice a month to review BEP data for decision making and progress monitoring | Teacher, aide, and other personnel (i.e., speech language therapist, special education teacher) meet twice a month review BEP data for decision making and progress monitoring |

In addition to the modifications listed in Table 1, how children are identified for the BEP may be different in preschool versus elementary and middle school settings. As mentioned previously, students who qualify for the BEP in elementary and middle school settings are typically identified via some sort of documentation of their problem behavior (e.g., office discipline referrals) or by using a school-wide screening tool. If a preschool program does not collect systematic data on problem behavior it may be necessary to rely on teacher referral to select students for the BEP.

The following section will detail a case example of BEP implementation at the preschool level with a boy named Jalen. Figure 3 outlines the steps and procedures that are implemented with Jalen during the referral, daily BEP intervention, and data evaluation process.

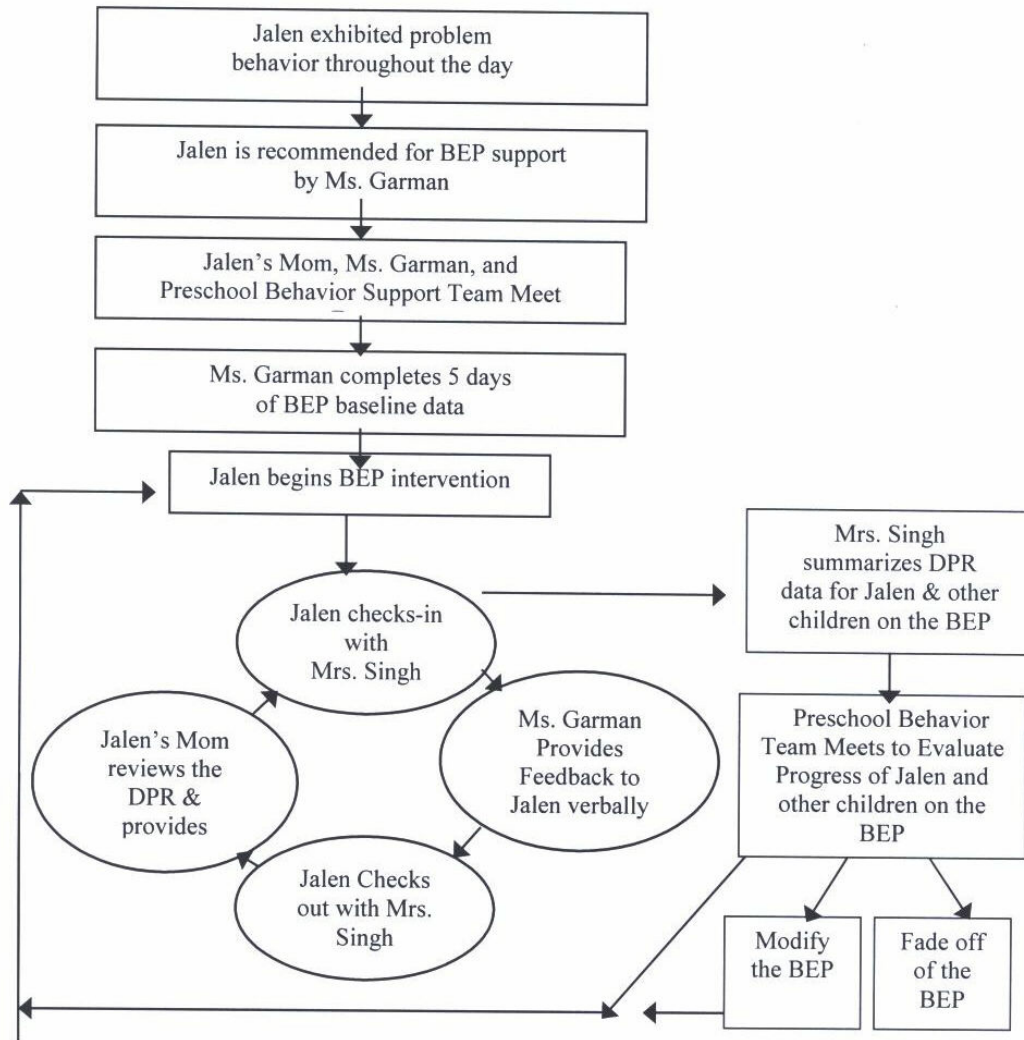


Figure 3. Behavior Education Program Schematic for Preschool

Case Example

The following is a hypothetical example of how the BEP could be applied with a preschool-aged student. Jalen is a 5 year old who attends a Head Start preschool program. According to his teacher, Ms. Garman, he is making progress on his academic skills (i.e., letter naming, phonological awareness, basic math concepts) but she is concerned about his recent “acting out” behavior (e.g., pinching peers, grabbing objects, not following directions, tantruming during transitions). Jalen has received redirections, verbal feedback, and other consequences (e.g., asked to choose a different center after acting out in the dramatic play area) eight times in the past two weeks. Jalen’s parents report that they have also noticed an increase in problem behavior at home. Ms. Garman refers Jalen to the preschool behavior support team (which includes a special education consultant, a speech language therapist, and the Head Start director) and since Jalen does not have a long history of engaging in problem behavior, the team felt he could benefit from the support of the BEP to get more feedback on his behavior and provide increased positive adult




attention. Jalen’s parents agreed and stated they liked that the BEP would provide them with feedback on Jalen’s behavior on a daily basis.

To help determine where to set Jalen’s daily point goal and to gather baseline data on his behavior, Ms. Garman completed the preschool DPR (See Figure 4) for 5 days. During baseline, Jalen did not check-in or check-out and no verbal feedback was provided to him on his behavior by Ms. Garman. His baseline data can be seen in Figure 5. A general expectation for students who participate in the BEP is that they will be able to earn 80% of total points or more per day. Based on Jalen’s baseline data – it seems that 80% is a realistic goal and it is clear that he could benefit from additional feedback on these expectations. Following, baseline data collection, Jalen started participating in the BEP intervention.

Preschool Daily Progress Report

Name: _____ Points received _____

Date: _____ Points possible _____

 = 2 points Daily goal reached? YES NO
 = 1 point
 = 0 points





































| GOALS | Calendar/ Circle Time | Learning Center | Free Choice | Learning Center |
|---|---|---|--|---|
| Keep my hands, feet, body, and objects to myself. |    |    |    |    |
| Say nice things or no things to other people. |    |    |    |    |
| Follow adult directions the first time. |    |    |    |    |

Figure 4. . Sample Daily Progress Report for Preschool

It is important to note that Jalen was referred to the BEP on a Friday and baseline data collection began the following Monday. Baseline data was collected for 5 days and he was placed on the BEP the following Monday. Thus, Jalen received support quickly. One important message from this scenario is that Jalen did not have to engage in severe problem behavior before receiving support. The key to prevention is to catch children in the early stages of acting out (Walker, Colvin, & Ramsey, 1995). Further, although the team felt that Jalen needed additional behavior support, extensive time and money were not needed for an intensive, individualized assessment. Thus the BEP is a good starting point for students like Jalen.

As detailed in Figure 3, before school starts Jalen checks-in with the BEP coordinator, Mrs. Singh who is a teacher’s aide in the Head Start program and serves as the BEP coordinator. Mrs. Singh greets Jalen with a smile, asks how his weekend was, and hands him a DPR which lists his teacher’s classroom expectations (see Figure 4). Mrs. Singh asks him what things he needs to work on for the day and Jalen states “I need to keep my hands to myself and not grab other kids’ stuff.” Mrs. Singh praises him for knowing what he needs to work on and, to focus on some successes, tells him that she observed him being helpful last week. Ms. Singh puts Jalen’s name on his DPR, puts the DPR on a clip board and tells him that she’ll see him after school.

Jalen takes his DPR to his teacher, Ms. Garman, who also greets him warmly and prompts him to have a good day. Ms. Garman provides Jalen with feedback on his DPR based on a smiley-face system after circle time, first learning center, free play, and second learning center. Ms. Garman praises Jalen for meeting expectations and provides prompts of how he could improve behavior the following day. At the end of the preschool day, Jalen takes his DPR back to Mrs. Singh who helps him total up his points and determines whether he met his daily point goal of 80% of total points. Jalen has been told that it’s important to get more “smiley faces” than “frowny faces” and that smiley faces equal more points. Jalen received 88% of total points, was given a sticker on a chart and praise for meeting his goal and a copy of his DPR went home to be reviewed by his parents.

Mrs. Singh serves as the BEP coordinator and part of her role is to summarize and graph BEP data. Twice a month, the preschool behavior support team meets to determine whether Jalen and other students on the BEP in the Head Start program are making progress. During these team meetings, members examine graphs of student performance similar to Jalen’s performance on the BEP in Figure 5. The goal of the meeting is to determine 1) which students are ready to fade off of the BEP, 2) which students are not meeting daily point goals consistently and may need modifications to the BEP, and, 3) for which students the BEP should continue as planned. Based on Jalen’s data detailed in Figure 5, it is apparent that he is meeting his goal of 80% of total points on a regular basis and his daily percentage of points has much improved from baseline. Ms. Garman and Jalen’s parents have also noticed a change in his behavior and would like to continue the BEP for awhile to provide Jalen more opportunities for feedback and reinforcement.

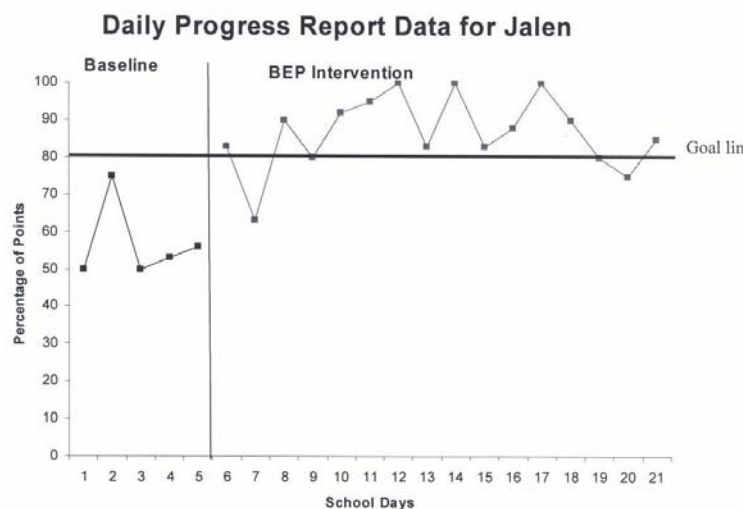


Figure 5. Daily Progress Report Data for Jalen

Discussion

Time and resources in schools are scarce and schools need efficient and effective secondary level interventions for students who are not responding to primary prevention efforts. The purpose of this article was to outline the key features of one type of secondary level intervention, the BEP, and summarize research related to its effectiveness. Furthermore, given that the BEP has been implemented primarily in elementary and middle school settings, this paper illustrates how it could be modified to work with children in preschool settings. Prevention of problem behavior should begin as early as possible. The BEP is one efficient strategy that has been shown to be effective in reducing problem behavior in elementary school settings and shows promise for preschool settings.

As mentioned previously, effective prevention of severe problem behavior involves a commitment to implementing a three-tiered continuum of behavior support. Although the BEP has been shown to be effective in decreasing problem behavior for the majority of students who receive the intervention (i.e., Filter et al, 2007; Hawken, 2006; Hawken et al, 2007), some students will need more support than the BEP can provide. For those students, implementing tertiary level interventions (i.e., conducting a functional assessment and implementing an individualized, behavior support plan) has been shown to be effective in decreasing problem behavior and increasing academic engagement (Fairbanks, et al., 2007; March & Horner, 2002).

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