

Behavior Support Coaching for a Paraprofessional Working With First-Grade Students Exhibiting Disruptive Behavior Problems in an Urban High-Poverty Elementary School

Clinical Case Studies

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Alexander Alperin¹ , Linda A. Reddy¹, Todd A. Glover¹, Nicole Breeden¹, Christopher Dudek¹, and Patrick Regan¹

Abstract

Despite receiving little to no training in behavior management, paraprofessionals often support young students with or at risk of disruptive behavior disorders in elementary schools. The Behavior Support Coaching for Paraprofessionals (BSC-P) is a new evidence-based data-driven approach for enhancing paraprofessionals' skills in identifying behavior needs, setting goals, and selecting and implementing evidence-based interventions for improving student disruptive behaviors. The current case study presents the application of the BSC-P (eight sessions over 3 months) with a paraprofessional and teacher who support two first-grade students exhibiting disruptive behaviors in an urban high-poverty elementary school. Implemented evidence-based interventions include *say, show, check*, a *token economy*, and *antecedent modification*. Findings revealed increased paraprofessional intervention fidelity, improved student classroom engagement (effect sizes of 3.77 and 2.10), and decreased student inappropriate verbal and physical behavior (effect sizes of 1.34 and 1.88, respectively).

Keywords

behavior coaching, behavior interventions, paraprofessionals, disruptive behavior disorders, high poverty

I Theoretical and Research Base for Treatment

Disruptive behavior disorders (DBDs) commonly refer to students with attention deficit hyperactivity disorder, oppositional defiant disorder, and/or conduct disorder (Muratori et al., 2017). Broadly speaking, students with DBDs share common features of defiance, impulsivity, disruptiveness, aggression, and overactivity (Reddy, Newman, et al., 2009; Rote & Dunstan, 2011).

¹Rutgers, The State University of New Jersey, USA

Corresponding Author:

Alexander Alperin, Graduate School of Applied and Professional Psychology, Rutgers, The State University of New Jersey, 152 Frelinghuysen Road, Piscataway, NJ 08854, USA.

Email: alexander.alperin@gsapp.rutgers.edu

Children with or at risk of DBDs are identified as the most common reason for referrals to psychiatric outpatient clinics and often present in the schools (Armbruster et al., 2004; Pikard et al., 2018). The Education Advisory Board (2019) recently conducted a survey among 1,400 elementary school teachers. Teachers reported losing an average of nearly 2½ hr of weekly classroom instruction due to student disruptive behaviors. This is problematic as lost instructional time has a negative impact on the social, emotional, and academic development of all students. In addition to students, classroom disruptive behaviors have severe and adverse consequences for teacher mental and physical health, job retention, and overall school safety (Evers et al., 2004; Reddy et al., 2018; Spilt et al., 2011).

If left untreated, these students may manifest chronic and severe difficulties throughout their childhood and adult life, including school dropout, family and peer difficulties, driving accidents, teenage pregnancy, drug use, and suicide (e.g., Barker et al., 2010; Reddy, De Thomas, et al., 2009). The costs to society are enormous and result in an increasing utilization of child-serving sectors, including juvenile justice, child welfare, special education, mental health services, and medical services (i.e., office-based visits, outpatient hospital visits, emergency department visits, inpatient hospital stays, and pharmacy services; see Foster et al., 2005; Guevara et al., 2003).

Due to its prevalence and detrimental impact on the individual and community, DBDs can be considered a critical mental health concern. Intervention is needed to alleviate the negative long-term outcomes and to ensure the well-being of these students, as well as the well-being of school personnel (i.e., teachers, paraprofessionals) who support their educational success in schools (Reddy et al., 2018).

Despite the high need for services, many students with disruptive behaviors do not receive intervention (Conroy & Brown, 2004; Epstein et al., 2015; Furlong & McGilloway, 2015). Of the students who do receive services, approximately 80% use school-based services (Reddy et al., 2016). This is not surprising considering schools have historically been the largest providers of mental health services to children and adolescents (Merikangas et al., 2011). School personnel, such as school psychologists, teachers, and paraprofessionals, provide a range of positive learning and social behavior opportunities to enhance student development and overall school success.

Paraprofessionals play an essential role in supporting classroom instruction, as well as the social and emotional needs of students. Given the extensive responsibilities of teachers in planning and directing classroom instruction, paraprofessionals are often needed to provide valuable supports to individual students to address their unique needs. Often, this involves managing specific students' behavior to promote their engagement in instruction (Giangreco et al., 2013).

Although the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA; section 1412) requires districts to provide paraprofessionals with suitable training and supervision, paraprofessionals receive minimal supervision and training to enhance their professional development (PD). In a survey conducted by Dudek et al. (2018), 72% of paraprofessionals self-reported receiving less than 1 hr of PD each year. This gap in paraprofessional training is alarming, given the high behavioral and academic risks associated with student disruptive behaviors. There is a significant need for job-embedded supports to guide paraprofessionals in the selection and implementation of evidence-based interventions to adequately support students' challenging behaviors (Reddy et al., 2020).

Although existing research-based models for job-embedded PD have been found to be efficacious in multiple large-scale randomized trials for improving teacher/interventionist practices and student behavioral outcomes (e.g., Sheridan et al., 2012; Reddy et al., in press), none of these models have been systematically evaluated for their utility in assisting paraprofessionals in

supporting individual student's behavioral needs. Additional applications of these models and research on their use with paraprofessionals are needed.

Behavior Support Coaching for Paraprofessionals (BSC-P)

BSC-P is a new model of PD for paraprofessionals that structures a process by which a coach and paraprofessional work collaboratively to enhance the paraprofessional's implementation skills for improving students' social behavior and learning in the classroom. BSC-P is grounded in key empirically based instructional coaching principles (Kurz et al., 2017; Reddy et al., 2017) and a behavior consultation framework (Bergan & Kratochwill, 1990) that has been found to produce moderate to large effects on educators and student outcomes via decades of research (Erchul & Sheridan, 2014; Reddy et al., 2000). Behavior consultation is based on behavior theory and behavior therapy (e.g., Ollendick & Cerny, 2013; Skinner, 1953). Like other behavioral consultation approaches with demonstrated efficacy in improving teacher/interventionist practices and student behavioral outcomes (e.g., Reddy et al., in press; Sheridan et al., 2012), BSC-P uses observational assessment data to identify (a) student needs and the mechanisms responsible for those needs (needs identification and needs analysis); (b) specific, observable, and measurable goals (goal setting); and (c) evidence-based interventions (plan implementation) that match students' needs. Within this process, coaches provide regular modeling, support, and feedback during intervention implementation. Through the continued use of data collection, the paraprofessional and coach regularly monitor intervention implementation, goal progress, and goal attainment. As paraprofessionals are providing support for a wide range of student needs in inclusion classrooms, the BSC-P approach and its emphasis on data-driven decision-making helps ensure that the coach and paraprofessional are maintaining a child-centered and solution-focused perspective while accurately capturing student progress (Glover, 2017). In a randomized controlled trial (RCT; Reddy & Glover, 2020) examining the efficacy of BSC-P, preliminary findings are promising for paraprofessional intervention fidelity (over 75%) and student behavior outcomes. Specifically, systematic observational data suggest significant ($p < .05$) and clinically meaningful improvements in student academic engagement and inappropriate verbal and physical aggression (Cohen's d effect sizes [ESs] of .68, .66, and .42, respectively).

This article focused on a case study of BSC-P implementation in an urban, high-poverty school setting. It is important to examine the application of BSC-P in this setting, given that the rate of disruptive classroom behaviors is higher in urban high-poverty schools (Evans & Cassells, 2014; Skiba et al., 2014; Thomas et al., 2006). Likewise, educators working in schools serving urban high-poverty communities experience higher rates of stress and turnover (e.g., Boyd et al., 2012). Jacobs et al. (2017) suggest that paraprofessionals working and living in urban high-poverty communities might be especially at risk of psychological stress and burnout given that they may be subjected to the same stressors as the student populations they serve. Moreover, paraprofessionals often experience a discrepancy between skills in behavior management and the demands of managing students who cope with numerous environmental stressors (direct and indirect forms of trauma), as well as substantial learning and behavioral difficulties (Reddy et al., 2020). Evidence-based PD supports such as BSC-P can enhance skill development and perceived supports, which may diminish stress often experienced in poverty contexts.

The case study presented in this article focused on the BSC-P coaching implementation for a first-grade teacher and paraprofessional managing two referred students with disruptive behaviors in an urban, high-poverty elementary school. Randomly selected from an ongoing RCT of the BSC-P, the current case study provides insight into the coaching actions, interactions, and processes inherent in implementing BSC-P with paraprofessionals in an inclusion classroom.

2 Case Introduction

All participants in the RCT were recruited through presentations at their respective schools from project staff. One case was randomly selected for the present case study. Robyn is a 27-year-old, African American female paraprofessional with 2 years experience as a paraprofessional. Her partnered teacher, Mildred, is a 34-year-old, Hispanic, female bilingual first-grade teacher with 10 years of experience teaching. Both Mildred and Robyn had limited prior training in behavior management. Two target students were identified in Mildred's 21-student classroom for exhibiting disruptive behaviors. Robyn was assigned a behavioral coach in January. The coach was a 31-year-old male who had a doctorate in psychology, experience conducting school-based consultation and psychotherapy with children with DBDs, and was trained and supervised by the principal investigators of the RCT.

Mildred and Robyn were employed at a large urban, high-poverty school district with over 60 schools. This school district had a K–5 student population that was predominately (i.e., over 90%) African American and Hispanic, with approximately 15% of students receiving special education services. The elementary school where Mildred and Robyn worked had one principal and two vice principals. The coach was in communication with the principal to arrange initial recruitment efforts for the staff, but there was minimal communication once the coaching with Mildred and Robyn began. During initial recruitment efforts, the principal expressed support of the coach and the project to the staff. Approximately 45% of students attending the elementary school were receiving special education services. Please note that Mildred and Robyn taught in an inclusion classroom.

3 Presenting Complaints

The present case study examined the implementation and effects of the BSC-P with two first-grade students with or at risk of DBDs. Students were identified using a three-step process. First, teachers were asked to nominate up to five students with disruptive behaviors. Second, for each nominated student, they completed the Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007). The teacher nominations were narrowed down by selecting only the students who scored in the “elevated” or “extremely elevated” risk categories on the BESS. The students with the highest ranked BESS scores were then observed by independent observers using the Behavioral Observation of Students in Schools (BOSS; Shapiro, 1996) to confirm the presence of disruptive behaviors in the physical classroom. For Mildred's classroom, two students ultimately met study inclusion criteria (i.e., teacher nominated, BESS Total *T*-score above 65, and BOSS scores reflecting classroom disruptive behaviors) and were included.

Joe was a 7-year-old African American male student identified by Mildred for not following directions (i.e., noncompliance) and inappropriate physical behaviors. Inappropriate physical behaviors were defined as taking school materials (e.g., pencils, erasers, and sheets of paper) and using them as toys, such as pretending that the pencil was a Power Ranger and the eraser was a Pokémon. Using school materials as toys interfered with Joe's ability to attend to academic instruction, which in turn caused him to fall significantly behind in his schoolwork. Joe often exhibited noncompliance in regard to not following directives from Mildred and Robyn. In addition, Mildred and Robyn reported that Joe refused to admit when he acted inappropriately (e.g., throws his pencil on the floor and then denies he did it).

Nia was a 7-year-old African American female student. Mildred and Robyn reported that Nia often exhibited inappropriate physical and verbal behavior. She was observed frequently singing and dancing in the middle of instruction. When whole group instruction took place, Nia would often call out answers, frustrating adults and classmates. Furthermore, Nia had difficulty walking

<u>MOMENTARY TIME SAMPLING</u>	:00	:15	:30	:45	1:00	1:15	1:30	1:45	2:00	2:15	Score
Active Engagement											
Passive Engagement											
<u>PARTIAL INTERVAL RECORDING – Student Behavior</u>											
Inappropriate Physical Behavior											
Inappropriate Verbal Behavior											
Noncompliant Behavior											
Disruptive Academic Behavior											

Figure 1. Modified Behavior Observation of Students in Schools (BOSS).

appropriately (i.e., not run, dance, or skip) in the classroom and hallway. For example, Robyn stated that Nia would frequently run or skip away from the class line when returning from lunch.

4 History

Mildred was bilingual (fluent in English and Spanish) and was a certified teacher with a master's degree in special education. Robyn was currently pursuing her associate degree at a community college. This was the first year that Mildred and Robyn had been working together.

Both Joe and Nia had been diagnosed with attention deficit hyperactivity disorder by a physician and were receiving special education services under the category of Other Health Impaired. Joe and Nia were not on stimulant medications. Both Joe and Nia had significant difficulty in their social, behavioral, and academic functioning to the point that they were being considered by the child study team for grade retention (first grade).

5 Assessment

Student Behaviors

The BESS Teacher Form (Kamphaus & Reynolds, 2007) is a brief universal screening measure that results in a total standardized score that assesses behavioral and emotional risk factors for students. The BESS has been shown to have strong psychometrics characteristics for reliability (i.e., split-half, test-retest, and interrater) and forms of validity (e.g., Kamphaus & Reynolds, 2007; Lane et al., 2019). Mildred completed the BESS Teacher Form for both students as part of the nomination process for the larger RCT. This resulted in Joe and Nia having *T*-scores of 76 and 85 (i.e., BESS *extremely elevated* range; 99th percentile compared with their same-aged peers).

The BOSS (Shapiro, 1996) was completed by independent observers at baseline and end-point. Baseline and endpoint each had three different time points. The BOSS is a systematic observation tool that captures student classroom behavior, specifically measuring academic engagement and student disruptive behavior. The BOSS has high interobserver agreement

Table 1. Joe BOSS Observations.

BOSS category	Baseline average %	Endpoint average %	Change	Effect size ^a
Engagement	30	89	+59	2.10
Inappropriate physical	53	3	-50	1.88
Inappropriate verbal	35	5	-30	1.34
Noncompliance	24	0	-24	0.97
Disruptive academic	16	2	-14	0.76

Note. BOSS = Behavior Observation of Students in Schools.

^aBusk and Serlin (1992) single-case design effect sizes were computed.

Table 2. Nia BOSS Observations.

BOSS category	Baseline average %	Endpoint average %	Change	Effect size
Engagement	38	82	+44	3.77
Inappropriate physical	44	2	-42	1.45
Inappropriate verbal	48	3	-45	1.57
Noncompliance	24	0	-24	1.26
Disruptive academic	10	7	-3	0.45

Note. BOSS = Behavior Observation of Students in Schools.

(0.95–1.0) and treatment sensitivity (Sheridan et al., 2012; Volpe et al., 2005). Behavioral coding for the BOSS was modified (see Figure 1) for the purposes of this RCT.¹ Momentary time sampling based on 15-s intervals was used to code for student *active engagement* (e.g., writing, reading aloud) or *passive engagement* (e.g., listening to a lecture, reading assigned work silently). For the remainder of the interval, a partial interval method was used to score observed disruptive behaviors as: *inappropriate physical* (e.g., hitting a peer), *inappropriate verbal* (e.g., calling out, name calling), *noncompliance* (e.g., not following a directive), and/or *disruptive academic* (e.g., daydreaming). Compared with the BOSS, the modified BOSS had an observation duration of 15 min, different labels for off-task behaviors, and did not examine whether the teacher was engaged in directly instructing students. In addition, the modified BOSS did not collect peer normative data. Joe's and Nia's BOSS baseline data illustrated low levels of engagement and high levels of inappropriate physical behavior, inappropriate verbal behavior, and noncompliance (see Tables 1 and 2).

The Coach Observation Form (COF; see Figure 2), a paper recoding form that replicated the modified coding from the BOSS, was administered by the coach prior to coaching sessions to collect targeted information on student behavior (i.e., on task, disruptive, and/or noncompliant) and paraprofessional practices (i.e., specific behavior praise, behavior correction, clear 1- to 2-step directives, and/or vague directives). The COF uses momentary time sampling and the partial interval method for 15-s intervals over the course of 15 min (60 intervals) to capture student behavior. The COF differs from the modified BOSS in that data on paraprofessional practices are captured and the student disruptive behavior category encompasses inappropriate verbal, inappropriate physical, and disruptive academic behaviors. The COF was designed to be used as a clinical tool to enhance the PD conversations between coaches and paraprofessionals. The COF information is entered into a preset data file which graphs the intervention implementation fidelity (percent of steps completed) and student progress toward behavior goals.

For Joe and Nia, behavior goals were focused on reducing two high frequency disruptive behaviors by 50% at the end of coaching. Joe's target behaviors were (a) inappropriate physical

<u>MOMENTARY TIME SAMPLING</u>	:00	:15	:30	:45	1:00	1:15	1:30	1:45	2:00	2:15	Score
Student Engagement (i.e., active or passive engagement)											
<u>PARTIAL INTERVAL RECORDING – Student Target Behavior</u>											
Disruptive Behavior (i.e., Inappropriate Physical, Inappropriate Verbal, and/or Disruptive Academic Behaviors)											
Noncompliant Behavior											
<u>PARTIAL INTERVAL RECORDING – Paraprofessional Behavior</u>											
Behavior and/or Academic Specific Praise											
Behavior Corrective Feedback											
Clear 1- to 2-Step Directives											
Vague Directives											

Figure 2. Coaching Observation Framework (COF).

behavior (e.g., inappropriately using school materials as toys), and (b) noncompliance (i.e., not following directives from Mildred and/or Robyn). Nia’s target behaviors were (a) inappropriate physical behavior (e.g., not sitting in assigned seat) and (b) inappropriate verbal behavior (e.g., calling out in class). For Sessions 2 to 7, the COF captured Joe’s and Nia’s progress toward the behavior goals.² Comparing the average BOSS scores from endpoint to baseline also demonstrated whether the behavioral goals were attained for both students.

Paraprofessional Stress and Support Assessment (PSSA)

Robyn completed the PSSA, an assessment for perceived instrumental support and stress. The PSSA was modified from the Teacher Stress and Support Assessment (TSSA; Reddy et al., 2019) and has acceptable reliability, content, and construct validity. The instrumental support scale (eight items with a 5-point Likert-type scale) measures forms of practical guidance, such as input and resources from colleagues and administrators which may improve classroom practices. The stress scale contains 14 items which the paraprofessional rates on a 5-point Likert-type scale (i.e., *no stress* to *extremely high stress*). For Robyn, the PSSA scores reflected that she had self-rated low instrumental support at school (mean item ratings of 2.38 “disagree”) and a moderate stress related to work (mean item ratings of 3.21 “neutral”).

6 Case Conceptualization

Prior to coaching, Robyn seemed to spend most of her interactions with the two target students correcting their behavior and infrequently engaged in proactive behavior management (e.g., specific behavior praise, supporting within and between classroom transitions) with the students. It appeared that Robyn's efforts were ineffective at producing behavior change in Joe and Nia. Robyn voiced frustration to the coach regarding Joe's and Nia's continued disruptive behavior ("They never listen and do what they are supposed to do, and I've had it."). It was critical that the coach help Robyn provide positive reinforcement frequently and explicitly; recognize and address environmental antecedents and consequences that contributed to problematic student behavior; and view student disruptive behavior as a skill deficit. Through coaching, Robyn was to modify the classroom environment, provide attention for positive behavior, and help both students develop the skills needed to succeed in school. The coach hypothesized that the students' targeted disruptive behaviors would decrease to the extent that student proximal goals, which were Specific, Measurable, Achievable, Realistic, and Timeline (SMART; Williams, 2019) would be achieved.

7 Course of Treatment and Assessment of Progress

The BSC-P model includes eight 45-min coaching sessions and aims to enhance paraprofessional skills to implement evidence-based interventions that will ultimately improve student behavior. The teacher (Mildred) attends Sessions 1 to 3 and Session 8 and paraprofessional (Robyn) attends each of the eight coaching sessions. Coaching sessions occur every 7 to 10 days during school hours (i.e., 8:30 a.m. to 3:00 p.m.) and are based on COF data (i.e., 30-min duration, done prior to Sessions 2 through 8, data gathered on behavior of two target students and paraprofessional intervention implementation fidelity).

To establish a working alliance (e.g., Johnson et al., 2016) with Mildred and Robyn, the coach started each session by engaging in a brief discussion about the latest episode of a mutually enjoyed television program. Robyn and Mildred were attentive and receptive to feedback throughout coaching meetings.

Phase I: Identify Student Behavior Needs and Set Goals

Session 1. The main goals of Session 1 were to (a) build a collaborative relationship with Mildred and Robyn, (b) review baseline behavior data for Joe and Nia, (c) discuss functions of disruptive behavior, and (d) identify one to two high-frequency disruptive behaviors for Joe and Nia for intervention. Regarding behavior functions, it was conveyed to Mildred and Robyn that every student behavior has a purpose or communicates a need. They were informed that student disruptive behavior is often the result of the student not having the skills to behave appropriately; wanting attention or reinforcement; wanting to escape a situation in class (e.g., math test); and/or having difficulty generalizing appropriate behavior to a new setting. The need to select an evidence-based intervention based on the function of a student's behavior (i.e., acquisition intervention strategies, attention seeking/reinforcement intervention strategies, escape intervention strategies, and generalization intervention strategies) was described. The importance of using data to understand Joe and Nia was emphasized.

Mildred and Robyn discussed specific contexts where the two students were disruptive. Antecedents, behaviors, and consequences were identified.

For Joe, inappropriate physical behavior and noncompliance were selected as target behaviors. Inappropriate physical behavior was defined as misusing school materials (e.g., pencils, erasers, and sheets of paper) as toys, such as pretending a pencil and an eraser were Power Rangers

fighting with each other. Noncompliance was defined as not following directives from Mildred and/or Robyn. Student examples were provided, such as Joe refusing to pick up his pencil when he was told.

For Nia, inappropriate physical and verbal behavior were identified as target behaviors. Inappropriate physical behavior was defined for Mildred and Robyn as running, dancing, or skipping in the classroom. Inappropriate verbal behavior was defined as calling out in class without being called on.

Session 2. For Session 2, the goals were to (a) continue building collaboration with Mildred and Robyn, (b) review COF data from coach's observations, (c) review functions of behavior, (d) reconfirm student behavior targets, (e) develop explicit student goals, and (f) provide a sample of possible interventions. The COF data focused on the rate of Joe's inappropriate physical behavior as well as noncompliance and Nia's inappropriate physical and verbal behavior. Joe was observed by the coach for a period of 60 intervals across 15 min and was found to exhibit inappropriate physical behavior 27% and noncompliance 18% of the observed time. Nia was observed by the coach for a period of 60 intervals across 15 min and displayed inappropriate verbal behavior 23% and inappropriate physical behavior 30% of the observed time. Robyn did not use any specific behavior and/or academic praise statements throughout the observation. The COF data and Robyn's and Mildred's recollection of disruptive classroom incidents supported Joe's behavior targets of inappropriate physical behavior and noncompliance and Nia's behavior targets of inappropriate verbal and physical behavior.

Mildred, Robyn, and the coach agreed that Joe engaged in greater rates of disruptive behaviors during independent seatwork. During an independent reading activity, the coach had observed Joe wandering to the back of the classroom and taking an excessive amount of time to gather materials. He was also seen using his pencil as a toy. When receiving corrective feedback from Mildred and Robyn, Joe appeared overwhelmed, which caused him to not answer their questions or follow directives (i.e., noncompliance). The function of his inappropriate physical behavior and noncompliance appeared to be a skill deficit and work avoidance (i.e., escape). The coach recommended that Mildred and Robyn review the interventions *say, show, check* (Rathvon, 2008), and *antecedent modification* (Dunlap et al., 1991; Kern & Clemens, 2007). Both Mildred and Robyn mutually established goals for Joe, which were to reduce rates of inappropriate physical behavior and noncompliance by 50% by the end of coaching.

During instruction, it was observed by the coach that Nia's inappropriate verbal and physical behavior prompted her classmates and Mildred and Robyn to tell her repeatedly to behave. For example, Nia would often start to sing during instruction and her classmates would shout "Stop talking! We can't hear the teacher." Mildred and Robyn would also frequently exclaim, "Enough, behave!" In response, Nia would frequently shout back, "Why am I being picked on!" The attention from classmates and teachers appeared to exacerbate Nia's inappropriate verbal and physical behavior. The coach explained to Mildred and Robyn that for Nia, scolding from adults might have been preferable to receiving no attention at all.

Mildred and Robyn also conveyed to the coach that Nia "could not help" but be disruptive. They provided examples where it appeared Nia was motivated to behave in class but would be unable to sustain appropriate behavior. Taken together, the coach and Mildred and Robyn agreed that the function of Nia's behavior was attention seeking, as well as a skill deficit. Consequently, the coach recommended the interventions *say, show, check*, and the use of a *token economy* (Maggin et al., 2011) for Mildred's and Robyn's consideration. Goals for Nia were to decrease inappropriate physical and verbal behavior by 50% by the end of coaching.

The coach discussed with Robyn the value and importance of systematically providing the two students with specific behavior praise throughout the day. The coach pointed out that during the prior observation, both students were responsive to positive feedback such as when

Mildred provided smiles or high fives. The coach stated that because the students were responsive to positive feedback such as smiles or high fives, they would be even more responsive to specific behavior praise. After the coaching session, the coach modeled specific behavior praise (e.g., “Nia, Great job making eye contact!”) with both students. The coach also provided a handout that summarized specific behavior praise and gave examples and nonexamples for both students.

Phase II: Select Interventions and Prepare for Implementation

Session 3. For Session 3, the coach and Mildred and Robyn (a) reviewed COF data (completed between Sessions 2 and 3), (b) discussed and selected interventions (i.e., *antecedent modifications* and *say, show, check* for Joe and a *token economy* and *say, show, check* for Nia) based on behavior functions for each student, and (c) discussed possible barriers to intervention implementation. An intervention implementation checklist for each intervention was provided, reviewed, modeled, and practiced with Robyn.

The COF data showed Joe was observed engaging in inappropriate physical behavior and noncompliance 48% and 0% of the time, respectively. Nia had inappropriate physical and verbal behavior 18% and 14% of the time, respectively.

Following the COF data review, the coach and Robyn began reviewing the selected interventions. For Joe, *antecedent modification* focused on changing specific environment conditions during independent seatwork. Specifically, *antecedent modifications* included providing Joe with academic materials (e.g., book, pencil, additional eraser) prior to the task, removing these academic materials immediately after task completion and giving him a choice of whether he wanted to sit next to Robyn during independent seat work. *Say, show, check* included two rules: (a) not using academic materials as toys; (b) answering teachers when asked a question. With Nia, a *token economy* involved her getting specific behavior praise and a sticker for appropriate physical (e.g., sitting in seat) and verbal (e.g., raising hand before speaking) behavior. At the end of the week, Nia could exchange her stickers for classroom rewards (e.g., 10 min of computer time). *Say, show, check* included two rules: (a) raising hand before speaking and (b) walking in control down the hallway and across the classroom (refrain from running, dancing, and skipping).

The selected behavior interventions were further discussed, modeled, and practiced with Robyn. In addition, the coach modeled and practiced with Robyn to consistently use specific behavior praise statements when the students exhibited appropriate behavior in class. Robyn was observed delivering general praise statements (e.g., “Great job”), but appeared to struggle using specific behavior praise statements (e.g., “Great job sitting quietly”). Robyn and Mildred were reminded by the coach that the students may initially resist the new interventions and their behavior might get worse (i.e., behavior burst) before improving. Robyn agreed to start implementing the interventions during the coach’s next scheduled observation.

Phase III: Monitor Intervention Implementation and Goal Progress

Session 4. Session 4 consisted of reviewing Robyn’s intervention implementation fidelity. Robyn demonstrated 60% and 80% intervention implementation fidelity for *antecedent modification* and *say, show, check* for Joe and 70% and 80% fidelity for the *token economy* and *say, show, check* for Nia. The coach again modeled and practiced each intervention with Robyn.

While Robyn was adhering to most of the steps of the interventions, her primary difficulty was remembering to provide specific behavior praise to both students. The coach had not observed her providing any specific behavior praise to Joe and Nia during intervention implementation. The coach further reiterated the importance of using specific behavior praise. The outline provided in Session 2 was reviewed, and the coach and Robyn practiced providing specific behavior

praise numerous times during the session. In addition, the coach added a step to the intervention implementation checklist for each of the interventions which stated that Robyn was to now provide five specific behavior praise statement to both Joe and Nia.

Robyn was praised for her effort in implementing the interventions, closely supervising the students, and providing positive nonverbal praise with the students (e.g., smiles). For *say, show, check*, Robyn's initial intervention fidelity was good (i.e., 80% for Joe and Nia). However, the coach observed that the students had limited interactions with Robyn. Specifically, the students avoided or had no eye contact with Robyn and mumbled when speaking. Robyn was instructed to be more playful and positive with the students. The coach modeled for Robyn using high fives, fist pounds, and smiles as methods to be more positive and playful to help the students become more engaged. Nonverbal behavior can help engage young students because it is easier for them to identify and understand (Wada, 2016). Furthermore, research (e.g., Gable et al., 2009) suggests that when educators are closer in proximity, feedback is perceived as more valuable. As high fives and fist pounds caused Robyn to be closer in proximity to Joe and Nia, it may have been perceived by them as more valuable.

Sessions 5 to 7. Sessions 5 through 7 monitored intervention implementation and students' progress toward goals. Robyn was delivering each of the interventions with 100% fidelity. Robyn's use of specific behavior praise exceeded the goal of five statements and increased to 10 statements (from zero in prior observations) for each student as recorded on the COF. She stated that at first, it did "not feel natural" to provide specific behavior praise, but it then became "easy" for her. During the observations, the coach noted that both students appeared to be more engaged (e.g., smiling at Robyn, maintaining eye contact, laughing appropriately) during *say, show, check*, and Robyn was better able to be playful and positive in the manner discussed during prior sessions.

COF data showed that Joe and Nia were making progress and meeting their goals. For Joe, no inappropriate physical behaviors or noncompliance was observed by the coach between Sessions 5 to 7. Likewise, COF data revealed promising improvements for Nia's inappropriate physical behavior (i.e., 8%, 0%, and 4%) and inappropriate verbal behavior (i.e., 52%, 20%, and 0%) between Sessions 5 and 7.

Phase IV: Evaluate Intervention Implementation and Goal Progress

Session 8. In the final coaching session, the coach solicited feedback from Mildred and Robyn on the overall coaching process as well as on intervention fidelity and goal progress. Also, Mildred and Robyn discussed next steps for intervention planning (i.e., discontinue, continue, or adjust). Both Mildred and Robyn were positive about their coaching experience and stated that they found it helpful. Robyn was demonstrating 100% fidelity across interventions and stated that she felt confident in continuing to use the interventions in the classroom and her use of specific behavior praise became more fluid (i.e., natural for her). The final coach observation revealed no rates of verbal and physical behavior issues from both students. The coach asked whether the observation was representative of the students' behavior throughout the day and both Mildred and Robyn felt that it was. They agreed that the students had met their goals and they were pleased with the coaching. Mildred and Robyn decided to continue implementing the specific interventions as planned during the remaining school year.

Postcoaching (endpoint). Robyn's completed PSSA demonstrated that perceived instrumental support increased from a baseline mean item rating of 2.38 (disagree) to a postcoaching mean item rating of 5.00 (strongly agree) and stress decreased from a baseline mean item rating of 3.21 (neutral) to a postcoaching mean item rating of 2.07 (disagree). As part of the RCT's data

collection procedures, independent observers collected BOSS observational data at baseline and postcoaching for each student. Each student had three BOSS time points collected at baseline and postcoaching. Busk and Serlin's (1992) single-subject design effect size was used to measure the impact of interventions on individual student outcomes. For Joe and Nia, ESs were calculated using BOSS data. Effect sizes were calculated by subtracting the BOSS endpoint mean from the BOSS baseline mean and dividing the value by the BOSS baseline standard deviation (Busk & Serlin, 1992). Cohen's (1988) *d* ratios or effect sizes (i.e., *ds* of .20–.49 were small; .50–.79 medium; and .80 and greater were large) were used to determine the magnitude of the effect sizes. Small, medium, and large effect sizes (ESs) for behavior improvement for both students were found (see Tables 1 and 2).

From BOSS baseline to endpoint, Joe's academic engagement (i.e., on-task behavior) increased (ES of 2.10) and inappropriate physical behavior (ES of 1.88), inappropriate verbal behavior (ES of 1.34), noncompliance (ES of .97), and disruptive academic behavior (ES of .76) decreased. Similarly, Nia's academic engagement increased (ES of 3.77) and inappropriate physical behavior (ES of 1.45), inappropriate verbal behavior (ES of 1.57), noncompliance (ES of 1.26), and disruptive academic behavior (ES of .45) decreased. Overall findings suggested that both students were more engaged in class and their disruptive behavior was reduced.

8 Complicating Factors

Educators often attribute student disruptive behavior to factors out of their control such as the student's family situation (Ding et al., 2010; Johansen et al., 2011; Nemer et al., 2019; Wang et al., 2015). When there is a focus on such factors during behavior support coaching, the paraprofessional and/or teacher may not consider all possible solutions to support the students in school. This was evident in the current case study. For example, Robyn and Mildred would frequently mention Nia's medication status during coaching. They would attribute her classroom disruptive behavior to her not being on medication and not initially explore classroom strategies (e.g., specific behavior praise) they could use more often to support the students. It is important that the coach recognize possible factors that may contribute to resistances and redirect to a solution-focused mind-set in a manner that enhances collaboration and problem solving between school staff. An example of this would be when the coach responded to Robyn:

Medication can affect a child's behavior which makes the use of specific behavior praise and these interventions even more important. How can we work together to make sure we keep doing these strategies so we reach her even when she has not taken her medication?

This is consistent with Rote and Dunstan's (2011) recommendation that intervention should involve helping adults to broaden their view of the child, away from a focus on the child's deficits and toward an understanding of the emotional underpinnings and impact of the environment on disruptive behaviors.

9 Access and Barriers to Care

Scheduling coaching meetings and observations can be an obstacle to providing PD to educators working in high-poverty schools. Educators working in high-poverty school districts often encounter great need and limited resources, which causes stress and burnout (Jacobs et al., 2017; Reddy et al., 2019). This combined with assemblies throughout the year, student and staff absences, and weather-related closings create many complications for scheduling PD and intervention implementation. Furthermore, administrators and educators may find it challenging to provide classroom coverage for behavior coaching sessions due to changing classrooms needs and limited

staffing. However, there is a high need for PD for paraprofessionals, and it is imperative to problem solve with administrators, teachers, and paraprofessionals to schedule coaching meetings and observations. With the current case, the coach was able to be flexible with meeting and observation times, often accommodating rescheduling requests a few minutes prior to meetings.

It is important to note that the current case study was conducted as part of a larger behavior coaching RCT and thus may not reflect what would be typically encountered at a school. As part of the study, paraprofessionals and teachers received a great deal of accommodation from the coach.

10 Follow-Up

The last coaching meeting took place a few weeks before the end of the school year. From the last coaching meeting until the end of the school year, the coach checked in with Mildred and Robyn twice per week. Robyn reported that she continued to implement the interventions and both Mildred and Robyn conveyed that the students were maintaining their improved behaviors.

11 Treatment Implications of the Case

With the increased number of students with or at risk of DBDs being referred to child study teams and/or mental health professionals, there is a high need for supports for these students. Paraprofessionals often serve as the primary implementers of behavior interventions for students with or at risk of DBDs (Fisher & Pleasants, 2012). Despite their role in managing student behavior, paraprofessionals receive inadequate PD. The current case demonstrated the positive impact of BSC-P, a form of paraprofessional PD. This study was unique in that it examined the BSC-P model with a paraprofessional working with elementary school students exhibiting disruptive behaviors in a high-poverty school. Research that further examines the BSC-P model in elementary school settings, other settings (e.g., alternative schools, different regions, and states), and with different student populations (e.g., adolescent-aged students) is warranted.

Our current case demonstrated that BSC-P improved Robyn's behavior intervention implementation skills and the two students' disruptive behaviors in the classroom. From baseline to postcoaching, both students increased their rates of academic engagement and decreased their rates of disruptive behaviors. Likewise, Robyn reported positive changes in her perceived instrumental support and work-related stress following coaching. This case study underscores the importance of key coaching actions (e.g., model, practice, observe, ongoing feedback) and processes (e.g., implementation of evidence-based interventions) of a brief job-embedded coaching intervention. There is a need for future investigations that assess the impact of PD components, such as teaching and modeling, on paraprofessional behaviors and student outcomes (Glover et al., 2019). Furthermore, research that evaluates the use of technology (e.g., online training, online fidelity checklists) in the coaching process would be valuable (Reddy et al., 2019). The coaching intervention used in this case study was data-driven and student need and solution-focused. Job-embedded supports that are time-efficient and research-based, such as BSC-P, are vital for supporting the skills and well-being of paraprofessionals and teachers, especially those working in high-poverty schools where disruptive behaviors are prevalent and educators experience high levels of stress and burnout.

12 Recommendations to Clinicians and Students

The present case study results suggest that BSC-P may be an effective form of PD for paraprofessionals administering behavior interventions with students with or at risk of DBDs. Effective behavioral coaching should be solution-focused and child-centered. When engaging in a coaching relationship, it is important that the paraprofessional's knowledge of behavior management is

assessed. As prior research has shown that paraprofessionals do not have adequate, job-specific training in behavior management, the paraprofessional must be taught the basics of behavior management (e.g., providing praise, functions of behavior; Dudek et al., 2018). Clinicians and students who engage in a coaching relationship with paraprofessionals should provide coaching about once every week, scheduling around academic instructional time. It is recommended that the coach complete systematic observations between each coaching session to monitor student behavior, paraprofessional behavior management strategy use, and adherence to intervention protocol. Consistent with Burke et al. (2010), interventions should be behaviorally focused and data-driven. Efficient communication methods (i.e., call, text, and email) will allow for further progress monitoring and coordination of coaching meetings. We agree with Berkout and Gross (2013) that developing and maintaining a working alliance with school staff is key in cultivating teacher and paraprofessional buy in to the coaching process. Overall, data from the present case study show that BSC-P increases paraprofessional behavior management skills as well as student engagement and adaptive behavior. Clinicians and students should consider behavioral coaching models, like BSC-P, when training and consulting with school personnel.


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ORCID iD

Alexander Alperin  <https://orcid.org/0000-0002-5872-1076>

Notes

1. Use of unmodified Behavioral Observation of Students in Schools (BOSS) is suitable for purposes of replication.
2. The Coach Observation Form (COF) did not differentiate between behaviors that were verbally inappropriate, physically inappropriate, or academically disruptive. Rather, each of these behaviors was recorded under the category of *student disruptive behaviors*. However, as one of Joe's behavior goals was inappropriate physical behavior and Nia's behavior goals were inappropriate physical and inappropriate verbal behaviors, the coach collected data on these specific behaviors as well as the other student target behaviors (i.e., Noncompliant Behavior and Disruptive Behavior) listed on the COF.

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Author Biographies

Alexander Alperin, PsyD, is an assistant research professor in the Graduate School of Applied and Professional Psychology at Rutgers University. His research interests include disruptive behavior disorders, evidence-based interventions, and trauma-informed practices. He is a licensed psychologist in New Jersey and New York.

Linda A. Reddy, PhD is a professor in the Graduate School of Applied and Professional Psychology at Rutgers University. She has over 120 publications on classroom assessment, coaching, disruptive behavior disorders, and measurement development and validation. She has served as PI or CO-PI on numerous federal and private foundation grants. She is a Fellow of APA and AERA and is a licensed psychologist in New Jersey.

Todd A. Glover, PhD, is an associate research professor in the Graduate School of Applied and Professional Psychology at Rutgers University. His research focuses on integrating evidence-based interventions and high quality professional development into systems of support for students.

Nicole Breeden, PhD, is an assistant research professor in the Graduate School of Applied and Professional Psychology at Rutgers University. Her research interests include externalizing behavior disorders, evidence-based practices, implementation science, and social media use by school-based personnel.

Christopher Dudek, MEd, is an experienced research project manager in large-scale multi-site research projects at the Graduate School of Applied and Professional Psychology at Rutgers University. He is the co-author of the Classroom Strategies Assessment System (CSAS) and a contributing author on numerous articles related to teacher practices, evaluation, and instructional coaching with the CSAS. His research interests include developing educator and classroom observational assessments, instructional coaching, and evidence based professional development interventions for educators.

Patrick Regan, BA, is a lead behavior coach and program coordinator in the Graduate School of Applied and Professional Psychology at Rutgers University. He has extensive experience working with school personnel, parents and students with disabilities including with disruptive behavior disorders.