Assessment and Implementation of Positive Behavior Support in Preschools

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There is increasing concern over the number of young children who exhibit challenging behaviors in early childhood settings. Comprehensive prevention models are needed to support teachers' management of challenging behaviors and to avert the development of such behaviors within at-risk populations. One approach utilizes a three-tier prevention model called positive behavior support (PBS). The present research first assessed one region's implementation of PBS in 15 early childhood settings and found that on average, few features of PBS (30.79%) were implemented. Next, the impact of PBS consultation on teachers' use of universal PBS practices and children's behavior was evaluated in a multiple baseline design across four classrooms. A functional relationship was established between PBS consultation and teachers' implementation of universal PBS practices, but overall low levels of problem behavior prevented assessment of the impact of these changes on child problem behavior. Implications for future applications of PBS to early childhood settings are discussed.

There is growing concern over the number of young children who exhibit challenging behaviors in early childhood settings (Squires & Bricker, 2007). Behaviors such as hitting, biting, tantrums, yelling, noncompliance, or withdrawal are major barriers to young children's development of social competence and effective social networks (e.g., Campbell, Spieker, Burchinal, Poe, & the NICHD Early Child Care Research Network, 2006; Dunlap et al., 2006; Wood, Cowan, & Baker, 2002). Typical child development includes the exhibition of challenging behaviors during the early years. It is not unusual, for example, for a 2-year-old to yell when a caregiver has told her that she may not have a cookie. It is also not unusual for a 3-year-old to hit another child and take his toy. However, these challenging behaviors are expected to decrease during the preschool years, when language, social and emotional regulation, and cognitive problem-solving skills increase (Campbell, 1995; Tremblay et al., 2004).

The percentage of young children who continue to exhibit challenging behaviors into their preschool years is estimated at approximately 10% (e.g., Kuperschmidt, Bryant, & Willoughby, 2000). This estimate is higher for children with risk factors such as living in a low-income family (e.g., Qi & Kaiser, 2003). The outcome for young children who exhibit sustained and/or severe challenging behavior, especially those with multiple risk factors, is bleak. Long-term negative outcomes of challenging behavior may include, but are not limited to, academic failure, social rejection, drug abuse, and commision of crimes in adulthood (e.g., Patterson, Reid, & Dishion, 1992). Research has indicated that this developmental pathway toward serious conduct disorders or antisocial behavior is established in the preschool period (Webster-Stratton, 2000).

EARLY INTERVENTION AND PREVENTION

A need exists for early intervention efforts focused on young children who are at risk for developing patterns of challenging behaviors in preschool. Since their conception in 1986 under P.L. 99-457, federally funded early intervention and early childhood special education services have focused on providing comprehensive programs to young children who are at risk for or have disabilities. However, these services have not always been provided to all children who exhibit social and/or emotional/behavioral problems due to idiosyncrasies with eligibility criteria and/or a lack of systematic screening and assessment methods (Conroy & Brown, 2004; Powell, Fixsen, Dunlap, Smith, & Fox, 2007). When services have been provided, they have often been reactive rather than proactive (Conroy & Brown, 2004). In other words, interventions are developed in response to one child's disruptive behavior without systematically reducing the risk of other children in the classroom developing similar

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patterns of challenging behavior. This concentration on individualized interventions for a particular child is important to remedy severe problem behavior, but it fails to address the needs of all children in the classroom.

Researchers, families, and preschool teachers are calling for the development of comprehensive, research-based intervention efforts to manage young children's challenging behaviors and to prevent emergence of problem behaviors (e.g., Gilliam & Shabar, 2006; Joseph & Strain, 2003; Raver, 2002). Some effective and empirically sound programs have been developed, such as The Incredible Years training series (Webster-Stratton & Reid, 2004), First Steps to Success (Walker et al., 1998), and "Promoting the Social Emotional Competence of Young Children: Training Modules" (Center on the Social and Emotional Foundations for Early Learning, 2003). However, preschool teachers continue to note children's challenging behavior as their biggest concern (Alkon, Ramler, & MacLennan, 2003; Joseph & Strain, 2003).

CLASSROOM-BASED CONSULTATION

One indicator that early educators do not have the support they need to provide proactive behavior interventions is the recent report that expulsion rates are 3.2 times higher for preschool-age children than for school-age children (Gilliam & Shabar, 2006). When preschool teachers had access to classroom-based mental health consultation, children's expulsion rates dropped. This was especially true if the consultation was provided on an ongoing basis (Gilliam & Shabar, 2006). Other reports provide initial support for the effectiveness of consultation to support preschool teachers' management of young children's challenging behaviors and social–emotional development (e.g., Alkon et al., 2003; Duda, Dunlap, Fox, Lentini, & Clarke, 2004).

In preschool-based consultation to prevent challenging behaviors, a consultant works with a teacher to strengthen the use of environmental arrangements and teaching strategies that are associated with children's improved social and emotional functioning (Dougherty, 2000). In a comprehensive, systems-level approach, a consultant may also work with administrators and other related service personnel to address systems-level policies and procedures (e.g., referral practices, data management, teacher schedules) that would support the identification, assessment, and prevention of, and intervention for, challenging behavior.

POSITIVE BEHAVIOR SUPPORT

Young children, families, teachers, and early childhood service delivery systems may benefit from a comprehensive, systemwide model that includes consultation to support the prevention of young children's challenging behaviors. One comprehensive, team-based approach that has been well tested in school settings and shows promise in its adaptation to preschool settings is positive behavior support (PBS; Conroy & Brown, 2004; Fox, Dunlap, & Powell, 2002; Stormont, Lewis, & Beckner, 2005). PBS is a systemwide model for reducing challenging behaviors. The model includes three levels of prevention and intervention to meet the needs of all children within a school or program setting (Carr et al., 2002; Horner, Sugai, Todd, & Lewis-Palmer, 2005). This continuum of support is depicted in Figure 1.

At the primary level of prevention, all children are provided with a safe and predictable environment with a focus on building positive relationships (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). Attention is given to the physical classroom design (e.g., well-defined learning centers), organization (e.g., schedule that is regularly followed), and verbal interactions with children, families, and other teachers (Fox et al., 2003). Additionally, all children are exposed to clearly defined behavioral expectations (e.g., use quiet voices inside, use listening ears, use safe hands) that are explicitly taught during large-group instruction (e.g., circle time; Stormont et al., 2005; Sugai et al., 2000). Often these expectations are translated into "classroom rules" and appear in a poster for children and others to refer to in the classroom. Three to five simple expectations and use of pictures on rules posters are recommended. Explicit teaching of the expectations, with examples and nonexamples of rule-following behaviors, occurs frequently (e.g., every day). At the primary level, children also receive feedback about their use of socially appropriate behaviors throughout the day (Stormont et al., 2005).

The secondary level of support involves small-group, targeted interventions for children who exhibit some deficits in social skills and/or challenging behaviors (Hawken & Horner, 2003). In early childhood classrooms, these programs may involve small-group activities using commercially available curricula, peer or "buddy" programs, or teacher-implemented strategies that are used throughout the day (e.g., supporting several children's use of self-regulation strategies during transitions; Fox et al., 2003). Due to the low intensity of behaviors exhibited by children in the at-risk group addressed by secondary prevention, strategies are provided in the most efficient manner possible (e.g., with groups of children). Only at the tertiary level of prevention are individualized interventions provided for children who do not respond to other preventive efforts and who continue to exhibit chronic and/or severe challenging behavior. These interventions should be practical, socially and culturally appropriate, and based on functional behavior assessments (FBA; Lewis & Sugai, 1999; Sugai et al., 2000).
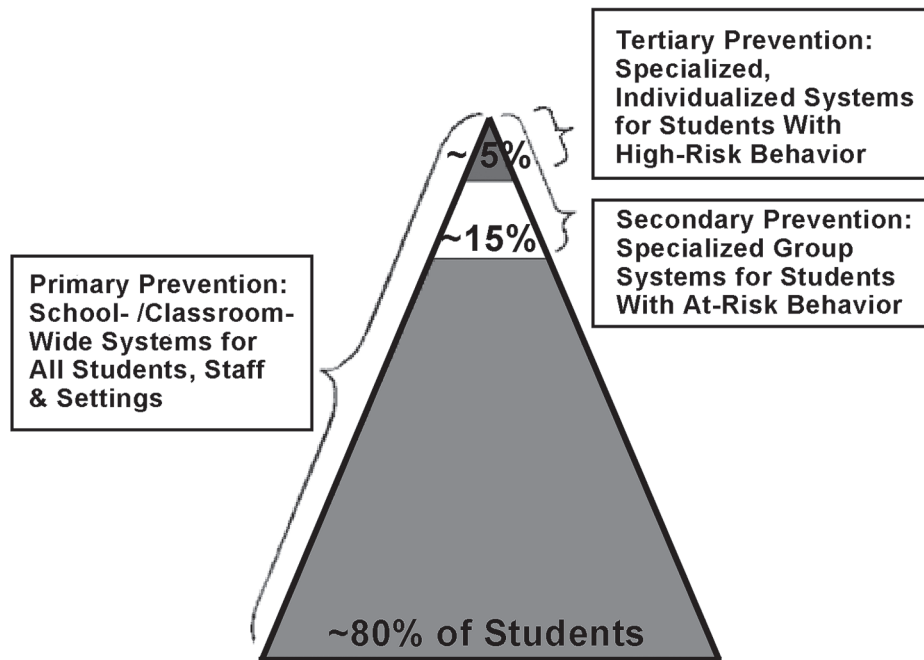
FIGURE 1. Continuum of schoolwide instructional and positive behavior support. *Note.* From OSEP Technical Assistance Center On Positive Behavioral Interventions & Supports (www.pbis.org).

Additional key features of PBS include the formation and use of a leadership team to help implement PBS within the school or program and data-based procedures to monitor progress (Albin, Lucyshyn, Horner, & Flannery, 1996). In early childhood classrooms, the leadership team may include lead and assistant classroom teachers, administrators, families, and related service personnel (e.g., mental health specialists) who frequently work with preschool teachers to support children's social and emotional development. Data collection procedures must consider the organizational structure (e.g., schedules, routines) of early childhood classrooms (Fox & Little, 2001; Stormont et al., 2005).

Although PBS has a strong research base to support its use within educational and social service environments serving children and adolescents who exhibit challenging behavior, its use in early childhood settings has received limited attention (Blair, Umbreit, & Eck, 2000; Duda et al., 2004; Schepis, Ownbey, Parsons, & Reid, 2000). To date, there has been a case study of implementation of PBS in a religious preschool (Fox & Little, 2001) and one experimental evaluation of PBS consultation to address the challenging behaviors of two children in a preschool classroom (Duda et al., 2004). These studies demonstrated the feasibility and efficacy of using PBS in early childhood settings. However, they mirrored much of the clinical work being done in early childhood settings that involves a focus on tertiary, individualized interventions for children who are already engaging in challenging behaviors (Alter, Lingo, & Frey, 2007).

Given its design as a model with a continuum of supports, PBS is intended to be implemented with primary, secondary, and tertiary levels of prevention and intervention. There are some indications, from schoolwide PBS in K–12 settings, that without at least 80% implementation of all levels of PBS, sustainability of critical features is threatened (Scott & Martinek, 2006). In other words, partial or piecemeal implementation of PBS may not be adequate to make targeted change or to sustain that change over time.

Despite relying on reactive efforts to address young children's challenging behavior, more early childhood programs are introducing comprehensive PBS approaches, including universal PBS practices. For example, there has been a quasi-experimental study of the effects of PBS in-service training on Head Start teachers' PBS strategies, including universal practices (Stormont, Covington, & Lewis, 2006). Other evaluations of programwide PBS with a universal prevention component are under way in early childhood programs across the country, including in Kentucky and New Hampshire (Alter et al., 2007; New Hampshire Center for Effective Behavioral Interventions and Supports, 2007).

The current study seeks to extend the literature base on implementing PBS in early childhood settings. The following research was conducted in two parts. First, a preassessment determined existing implementation of all levels of PBS in early childhood classrooms in a medium-size community in the U.S. Pacific Northwest. Second, PBS consultation was provided in four low-performing

preschool classrooms to increase teachers' use of universal PBS practices and to reduce children's challenging behaviors in a single-subject multiple-baseline design across classrooms. The experimental study focused on universal PBS practices because preassessment information indicated that universal supports were underimplemented in participating classrooms. Changes to systems-level supports, such as data management and program budgets, were not addressed due to time and budgetary constraints.

The initial descriptive preassessment addressed this question: To what extent are preschool programs currently implementing the core elements of PBS? An experimental analysis followed the descriptive preassessment and focused on two research questions:

1. Is implementation of PBS consultation associated with changes in (a) universal PBS practices, and (b) child problem behavior?
2. Did teachers find PBS consultation appropriate and effective?

METHOD

Participants

Fifteen preschool classrooms in a medium-size U.S. Pacific Northwest community participated in a preassessment to evaluate the presence of critical features of PBS. Classrooms were eligible to participate if they were located in the targeted community, if the lead teacher had attended a workshop in PBS in the last academic year, and if the classroom was receiving support from a behavior consultant employed by the community's early intervention and early childhood special education (EI/ECSE) agency. Seventeen classrooms were nominated by behavior consultants. Fifteen agreed to participate.

Classrooms were integrated settings serving ECSE-eligible and Head Start preschoolers. Head Start funded and operated 6 of the 15 classrooms, 6 were community preschools, and 3 were special education classrooms. The Head Start classrooms included both full- and half-day programs. Two of the Head Start classrooms were located in the same program. All others were located in separate programs. Community preschool classrooms were located in separate agencies and generally served children in the neighborhood in which they were located. One of the community preschools provided specialized services for children at risk. Three classrooms were special education classrooms. Two of these classrooms were reverse-inclusion classrooms, enrolling between three and five children without disabilities, and one classroom was a self-contained special education classroom.

No demographic data were collected for the characteristics of teachers, families, or children participating in all 15 classrooms. Available information about children attending these community early childhood programs in the 2005–2006 academic year indicated that 118 of the 1,199 children (approximately 10%) being served by the EI/ECSE agency were referred for behavioral issues, and 69 of 173 ECSE children in Head Start settings were referred for behavioral issues (approximately 40%).

Setting

The interior and exterior spaces (e.g., playground) of preschool classrooms were the settings for assessment, observation, and consultation sessions.

Preassessment of Critical Features

The *Preschool-wide Evaluation Tool* (Pre-SET; Horner, Benedict, & Todd, 2005) was conducted with 15 preschool classrooms. The Pre-SET was developed by the first author and modified from the *Schoolwide Evaluation Tool* (SET; Sugai, Lewis-Palmer, Todd, & Horner, 2001). Modifications to the SET included removing, adding, and amending items while maintaining the basic structure (e.g., format, scoring) of the instrument.

Like the SET, the Pre-SET includes categories of universal PBS practices at the classroom level. For example, the first category is Expectations Defined, which includes items regarding the documentation of classroom rules (e.g., a rules poster hanging in the classroom), and the second category is Behavioral Expectations Taught, which includes items related to teachers' planning and execution of lessons to teach expectations (e.g., a lesson plan, children able to state the rules when interviewed). Also like the SET, the Pre-SET includes categories that address systems-level practices (Monitoring and Decision-Making, which includes items related to taking data on children's problem behavior, and Management, which includes items related to a team focused on addressing PBS goals throughout the year). The Pre-SET maintains the SET's scoring system. Each item is scored with a 0 (*not implemented*), 1 (*partially implemented*), or 2 (*fully implemented*), using observations, interviews, or reviews of permanent products (e.g., instructional materials, classroom handbook).

Changes to the SET were made in the form of additional categories and revisions to individual items to ensure the applicability of the Pre-SET to early childhood settings. These changes were based on research articles that provided recommendations for implementing PBS in preschools (Fox & Little, 2001; Powell, Dunlap, & Fox, 2006; Stormont et al., 2005) and documented classroom structures, arrangements, and strategies that are associated with positive social and emotional outcomes for young children (e.g., Bredekamp & Copple, 1997; Legendre, 2003; McEvoy, Fox, & Rosenberg, 1991; NICHD Early Child Care Research Network, 2001). First, there

were changes to individual items in the category of Expectations Defined, including the addition of pictures with words when posting behavioral expectations and the use of routine-specific (e.g., circle time) expectations. Another change included modifying the SET categories Ongoing System for Rewarding Behavioral Expectations and System for Responding to Behavioral Violations to Appropriate Behavior Acknowledged. The items within these categories were revised to include developmentally appropriate ways to acknowledge young children's appropriate and inappropriate behavior that would fit accepted practices in early childhood settings. For example, items on the SET referring to systems of rewards were revised to refer to acknowledgment that may include social recognition and tangible items.

Three categories were added to the Pre-SET that are not included in the SET. The first was Organized and Predictable Environment, which includes items that address the consistency of routines, schedules, and transitions in the classroom. These items were added because the research base supported their efficacy in preventing young children's problem behavior (e.g., McEvoy et al., 1991). The second category, Additional Supports, includes items to address secondary and tertiary supports in the early childhood classroom. The SET was designed and is used to evaluate only universal interventions. The category of Additional Supports was added to the Pre-SET, given the absence of other measures to evaluate the implementation of secondary and tertiary interventions in early childhood classrooms. The last category added to the Pre-SET was Family Involvement. This category was added to address the early childhood field's focus on making connections with families (Bredekamp & Copple, 1997).

Additional revisions to the SET included modifying data-monitoring systems from the office discipline referral (ODR) to a nonspecific method of documenting children's problem behavior and revising the category of District-Level Support to Program and District-Wide Support. The result was an instrument that contains nine categories of critical features of programwide PBS in preschool settings: Expectations Defined, Behavioral Expectations Taught, Appropriate Behavior Acknowledged, Organized and Predictable Environment, Additional Supports, Family Involvement, Monitoring and Decision-Making, Management, and County or State-Wide Support.

Consultation with experts in PBS at a university in the Pacific Northwest and a content validity questionnaire established validity for these categories and individual items. First, two experts in PBS were consulted during the development of the Pre-SET. These experts provided written and verbal feedback on the organization of the Pre-SET, scoring guidelines, and individual items. An assessment of content validity then was conducted

with 14 individuals. Four of the individuals were university faculty in the Pacific Northwest with expertise in early childhood programs and at-risk preschool-age children. Ten individuals were master's students in an early intervention program at the same university. Individuals were given a copy of the Pre-SET and an assessment of content validity. The assessment included four questions in which respondents were asked to rate the Pre-SET on a 6-point Likert scale (1 = *strongly disagree*; 6 = *strongly agree*). Mean ratings across items ranged from 4.85 to 5.14, indicating that there was strong agreement that the Pre-SET measured key variables associated with PBS and the content was appropriate for early childhood settings.

Administering the Pre-SET. A contact person (e.g., lead teacher) was identified for each classroom to provide permanent products and access to staff and children during a mutually convenient classroom visit and meeting. During the classroom meeting, the observer(s) asked the lead teacher to provide permanent products (e.g., classroom schedule, social skills curricula), asked him or her interview questions, and then observed classroom activities. Observations were conducted during morning activities, which were similar across classrooms (e.g., breakfast, circle time, free play). All 10-min observations to score items in the category of Appropriate Behavior Acknowledged were conducted during free play.

All classroom staff and at least three children were interviewed during each assessment. Assessors selected children for interviews by the degree to which they appeared available to answer questions. For example, a child who was playing with blocks was chosen over a child listening to headphones. When one or more children provided inadequate or inaccurate responses, more than three children were interviewed. The requirement to interview at least three children, as opposed to 50% of children interviewed for the SET, was determined for two reasons. First, early childhood classrooms have smaller class sizes than K–12 classrooms, making a sample of three children more representative than such a sample would be in a K–12 setting. The second reason was to address the need for a measurement that was minimally disruptive and relatively quick to administer. The Pre-SET took approximately 45 min to complete, with a range from approximately 30 min to 1 hr.

After administering the Pre-SET in each classroom, the PBS consultant summarized the scores. The PBS consultant communicated the classroom's Pre-SET results in person, on the phone, or through an e-mail message to each of the 11 lead teachers who did not go on to the next phase of the study.

Interrater Reliability of the Pre-SET. An independent observer completed a Pre-SET in 5 of the 15 (33.33%) assessment sessions. On three occasions, the

independent observer was a behavior consultant employed by the local EI/ECSE agency, and on two occasions a doctoral student in early intervention served as the independent observer. The first author trained all observers on the administration and scoring of the Pre-SET prior to assessment sessions. Interrater reliability on the Pre-SET was calculated by dividing the number of agreements (i.e., identical scores) by the total number of items scored. Interrater reliability was 96.88%, with a range of 93.75% to 100%.

Results of the Preassessment. The mean percentage of Pre-SET features implemented across the 15 early childhood classrooms was 30.79%, with a range of 13.33% to 46.48% and a standard deviation of 11.80. The mean percentages of features implemented are presented by classroom in Figure 2.

The mean percentage of Pre-SET features implemented varied for each of the nine categories, with a range from 0% to 78.33%. The highest average scores were found in Categories E (Additional Supports; 78.33%) and D (Organized and Predictable Environment; 66.67%). The lowest average scores were found in Categories G (Monitoring and Decision-Making; 0%), I (County or Statewide Support; 0%), F (Family Involvement; 5%), and B (Behavioral Expectations Taught; 22.67%). The mean percentages of features implemented are presented by category in Figure 3.

Experimental Analysis of PBS Consultation

Following the preassessment, four low-performing classrooms (i.e., Pre-SET total score < 60%) were selected to participate in PBS consultation to assess a potential relationship between consultation and changes in classrooms, teachers, and children.

Classrooms. The four classrooms selected to participate in PBS consultation implemented less than 60% of the critical features of programwide PBS on the preassessment and had 100% staff and guardian consent to participate. Two of the classrooms were full-day Head Start classrooms, one classroom was a half-day Head Start classroom, and one was a community preschool. The classrooms served children from 3 to 6 years old, with a mean age ranging from 42 to 63 months of age. Demographic information by classroom is provided in Table 1.

PBS Consultant. The first author was the PBS consultant for the study. The investigator was a PhD candidate in early intervention with training in PBS and 6 years of experience providing behavioral support to educators working with toddlers and preschoolers.

Independent Variable. The PBS consultation model used in this study was patterned after published models
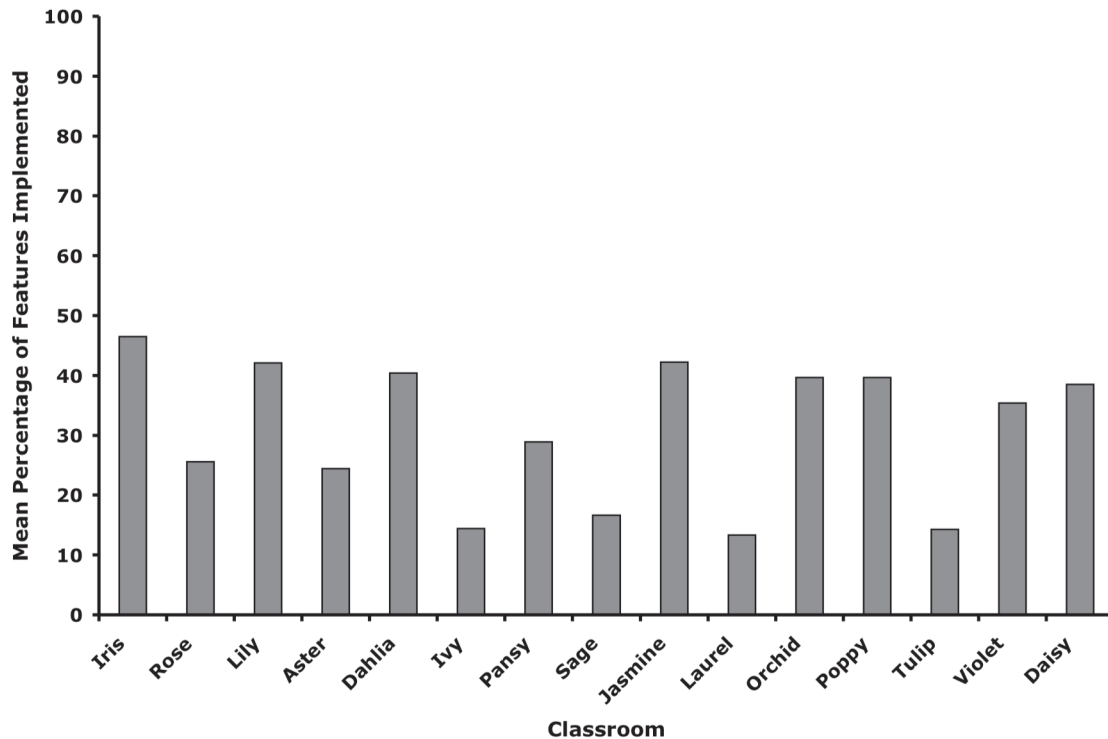
FIGURE 2. Mean percentage of Pre-SET features implemented across classrooms.

of the PBS process used in school settings (e.g., Crone & Horner, 2003; Hawken & Horner, 2003; Lewis & Sugai, 1999; Sugai et al., 2000) and preschool settings (Duda et al., 2004; Fox & Little, 2001; Hayden, Frederick, & Smith, 2003). PBS consultation included an initial meeting with a leadership team and subsequent consultation sessions involving the PBS consultant and the lead teacher.

Initial meeting. During an hour-long initial meeting, the PBS consultant met with the lead teacher and other individuals (Head Start administrator, assistant teachers) comprising the leadership team. The PBS consultant's role was to provide information about PBS and the classroom's Pre-SET results and to support the team's development of an action plan to guide all future consultation sessions. The lead teacher was the individual responsible for developing goals and implementing PBS in the classroom. The role of other members of the classroom (e.g., assistants) and/or program (e.g., Head Start program supervisor) at the meeting and throughout intervention was to support the lead teacher's implementation of PBS through consistent adherence to newly developed classroom practices and the provision of resources, such as materials or time for planning. All program staff were informed of the recommendation to include family members in the leadership team, but no classroom elected to do so.

During the initial meeting, the PBS consultant provided the meeting participants with a training packet, *Building Blocks: A Training Guide for Implementing Program-wide Positive Behavior Support in Preschool Settings* (Benedict & Horner, 2006). The PBS consultant verbally reviewed the information in the training packet, including the rationale for and critical features of preschool positive behavior support. Critical features included (a) building positive relationships and having an organized and predictable environment, (b) involving families, (c) using data-based procedures for decision making, (d) managing programwide PBS efforts, and (e) providing systemwide resources that support effective practices. The consultant showed participants examples of PBS skills and supports, such as classroom rules posters and a teaching plan for addressing classroom rules during large- or small-group lessons.

The PBS consultant then shared the preschool's Pre-SET information with the meeting participants, highlighting areas of strength and identifying skills and supports not yet implemented. Each lead teacher received a copy of the classroom's Pre-SET. Next, the PBS consultant facilitated a discussion of the lead teachers' concerns (e.g., classroom staff consistency), needs (e.g., materials for posters), and available resources (e.g., administrative support). This discussion culminated in the collaborative completion of the PBS action plan to target specific goals for consultation sessions.

The PBS action plan included universal PBS practices from the following three key areas of the Pre-SET:

1. classroom materials (classroom rules poster, classroom matrix, and classroom schedule)
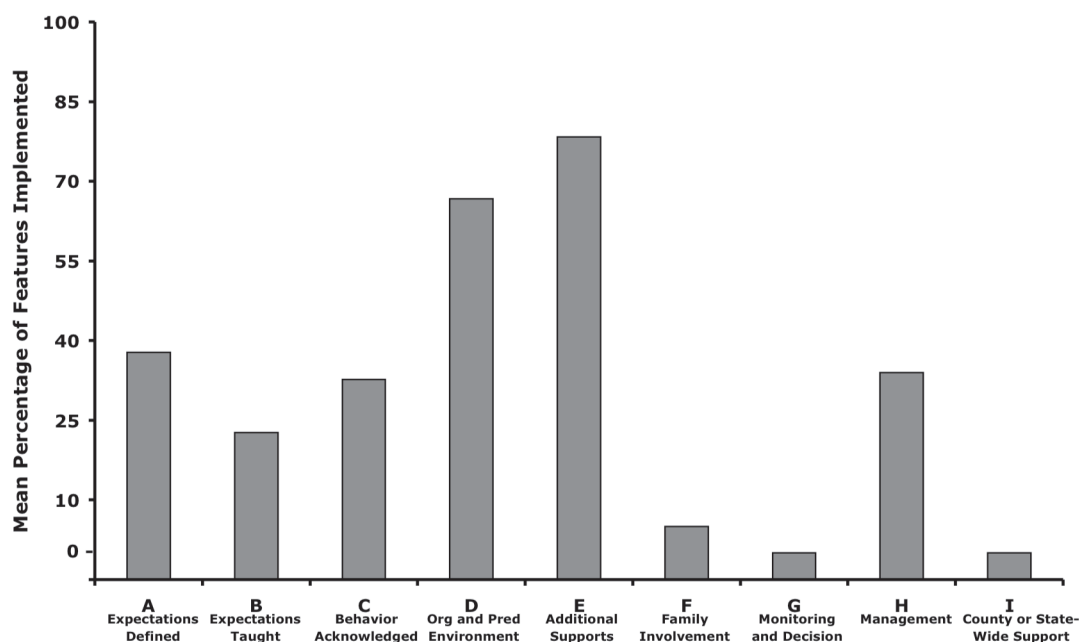2. transitions (use of warnings, signals, and precorrection)

FIGURE 3. Mean percentage of Pre-SET features implemented across categories (*n* = 9).

3. classroom routines (use of acknowledgment for following classroom rules, high ratio of positive statements to negative statements, and use of specific verbal praise)

Teams were instructed to choose particular skills and supports from the three categories that (a) they viewed as most relevant for their classroom and (b) they would like to focus on in the next 3 months. These items were related to low-scoring items on the Pre-SET and were individualized for each classroom. For example, within the category of classroom materials, one lead teacher and her assistant elected to develop a classroom rules poster and matrix, but they chose to continue using their existing classroom schedule. Another classroom had a classroom rules poster and a visual schedule but had scored low on items related to children and teachers stating the classroom's rules and routines. The lead teacher and Head Start supervisor stated that the rules poster and schedule were left over from the previous academic year, and teachers had not used either in their discussions with children. The lead teacher chose the goal of developing a revised classroom rules poster and schedule for one of the items on her action plan. For each of the three categories of universal PBS practices, all classroom staff left the initial meeting with a PBS action plan that included teacher-identified goals for classroom materials, transitions, and classroom routines.

Consultation sessions. Subsequent consultation sessions involved the PBS consultant and lead teacher only and occurred during regular classroom activities. The PBS consultant observed classroom activities, modeled strategies, and provided verbal and written feedback on the lead teachers' use of targeted skills and supports. Written feedback on teachers' implementation of skills and supports in these areas was provided on a standardized consultation notes sheet. Feedback related to PBS practices varied by classroom and consultation visits but always included written comments on three areas of universal PBS practices:

1. classroom materials
2. transitions
3. classroom routines

Feedback was directly related to the classroom's targeted goals identified on the PBS action plan. An "other" category was available to provide feedback on other teacher behaviors that were relevant to supporting young children's social and emotional competence, such as implementing a social skills activity during circle time, responding consistently to children's challenging behavior, or facilitating the sharing of materials by children during choice time.

The PBS consultant discussed her observations with the lead teacher during each consultation visit. These discussions involved specific feedback that included positive comments (e.g., noticing those aspects of the action plan that were newly implemented or implemented more frequently or consistently) and a few constructive comments (1–2 per consultation visit). Verbal feedback also included questions, such as what the teacher's perceptions were about how the activity had gone; what was working or not working; and materials, information, or support that she or he needed to implement targeted goals. Lead teacher–PBS consultant discussions occurred as appropriate, given the demands on the teachers' attention during the PBS consultant's visit (e.g., longer duration if the teacher was setting up materials for choice time, shorter duration if the teacher was interacting with children during free play). Consultation also occurred through e-mail and phone calls between the consultant's visits to the classroom.

Consultations occurred 1 or more days after the initial meeting and continued throughout the postconsultation phase. The schedule and timing of consultation visits were determined by the consultant's availability. The consultant and lead teacher's schedules and the scope of targeted skills for the visit determined the duration of consultation visits. For example, if the lead teacher was scheduled to be out of the classroom for an extended pe-

TABLE 1. Classroom Characteristics

Classroom	Program type	Teacher-to-child ratio	Mean child age (months)	Age range (months)	English as a second language	IFSP
Poppy	Full-day Head Start	2:17	53	46–60	4	5
Tulip	Community preschool	2:16	42	35–50	0	1
Violet	Full-day Head Start	2:15	62	53–69	3	7
Daisy	Half-day Head Start	3:15	63	59–68	3	2

Note. Number of classrooms = 4. IFSP = Individualized Family Service Plan.

riod of time (e.g., Individualized Family Service Plan meeting), the consultation was shortened. If the lead teacher and consultant were working on a particular universal skill (e.g., providing warnings prior to transitions) through repeated practice, the visit was lengthened. There was not a predetermined criterion upon which a classroom was considered finished with consultation. In all cases, consultation continued through the last week of the postconsultation phase. Consultation visits varied from 10 to 90 min, with total number of minutes averaging 373.75 (range = 350–390). The number and duration of visits are presented in Table 2.

Dependent Variables. Implementation of universal PBS practices and children's problem behaviors were among the dependent variables measured in the classrooms.

Teachers' implementation of universal PBS practices. Dependent variables for teacher behavior included the percentage of universal PBS practices implemented. The following nine classroom materials or teaching practices were the universal PBS practices:

1. a rules poster with three to five positively stated classroom rules
2. a posted classroom schedule
3. a classroom matrix of behavioral expectations for each classroom routine
4. use of a transition signal
5. use of a warning prior to transitions
6. use of precorrection
7. use of an acknowledgment system
8. a ratio of four positive statements to one negative statement
9. use of specific verbal praise

Operational definitions of universal PBS practices are provided in Table 3.

Children's problem behavior. The children's dependent variable was the percentage of intervals with problem behavior. Problem behaviors were operationally defined as any instance of leaving a designated area without teacher permission (e.g., leaving circle time, running

from the playground), vocal disruption (e.g., yelling or screaming at a level above what would be expected for the activity), aggression (e.g., hitting, kicking, biting), environmental destruction (e.g., breaking materials), and self-injury (e.g., head banging, face slapping, scratching).

Measurement. Observers recorded teachers' implementation of universal PBS practices on the *Preschoolwide PBS Fidelity Checklist* in a 15-min observation and recorded children's problem behavior using pencil and paper during a 10-min observation session.

Teachers' implementation of universal PBS practices. Teacher behaviors and classroom structures were observed in a 15-min observation following or prior to the observation of child behavior. Data collectors recorded the presence of practices on the *Preschool-wide PBS Fidelity Checklist*. The percentage of universal PBS practices implemented was reported.

Children's problem behavior. During baseline and posttraining observations, children were observed for 10-min sessions. Children's problem behavior was recorded using partial-interval recording in 15-s intervals with 10 s to observe and 5 s to record. The problem behavior that occurred during each interval (e.g., leaving a designated area, being vocally disruptive, acting aggressively) was coded, and the percentage of intervals with problem behavior was reported.

Eight children from each classroom were observed for 5 consecutive intervals of the 40 intervals in the 10-min session. A class list was used to rotate the eight children observed during each 10-min session. Data collectors marked the class list next to the name of the child observed last during their session. In the next observation session, data collectors observed the next eight children on the class list. If a child on the list of eight was absent, data collectors moved to the next name on the list.

Order of observations. The order of observations (10-min child behavior and 15-min fidelity checklist) was different for each preschool classroom but was consistent across sessions in each classroom.

Excluded observations. Observation sessions in which a substitute teacher replaced the lead teacher were

TABLE 2. Number of Consultation Sessions and Duration of Consultation by Classroom

Classroom	Number of consultation sessions	Mean duration of each session (min)	Range of duration (min)	Total duration (min)
Poppy	7	50.00	10–80	350
Tulip	8	54.29	20–90	380
Violet	7	55.71	15–90	390
Daisy	7	53.57	30–90	375

Note. Number of classrooms = 4.

TABLE 3. Operational Definitions of the Classroom Materials and Teaching Used to Measure Teachers' Implementation of Universal Positive Behavior Support (PBS) Practices

Classroom material or teaching practice	Operational definition
1. Rules poster with three to five positively stated rules	Posters may be of any size, as long as they are affixed to a wall no higher than 4 feet tall and not blocked partially or in full by furniture or other materials. Must include at least 3 and no more than 5 positively stated rules in both picture and written forms.
2. Posted classroom schedule	Classroom schedule includes sequenced pictures of classroom routines and is posted at eye level for children. Schedule includes words and/or pictures and is affixed to a wall no higher than 4 feet tall and not blocked partially or in full by furniture or other materials.
3. Classroom matrix of behavioral expectations for each classroom routine	Classroom matrix includes behavioral expectations for each classroom routine (e.g., free play, circle time, snack). Matrix can be of any size and located on either a wall or in a teacher's materials (e.g., binder, folder), as long as it is easily accessed by the lead teacher or other support staff. Each classroom routine must be depicted on the matrix, as well as each classroom rule. Some expectations (less than 80%) may repeat across routines (e.g., keep hands to self in circle and free choice).
4. Transition signal	Teachers use a system other than or in addition to a verbal direction to signal a transition from one activity to another. Signal may be auditory (e.g., ringing a bell, singing a song), physical (e.g., putting hand on head), visual (e.g., turning off light momentarily), or gestural (e.g., pointing to a picture). Signal must accompany or be no later than 10 seconds after a verbal direction.
5. Warning prior to transitions	Teachers provide a warning before a transition from choice, free play, or outside play to another activity. Teachers provide a specific warning indicating that the activity will end soon (e.g., "5 more minutes," "It's cleanup time soon") prior to any child's transition to the next activity.
6. Precorrection	At least one teacher makes at least one statement about expected behavior to one or more children in the absence of misbehavior. For example, a teacher states, "Remember to use your walking feet" before the children walk in the hall, where running is common but has yet to occur.
7. Acknowledgment system	At least one teacher makes at least one acknowledgment of a child's appropriate behavior, using a systematic procedure other than praise. May include activities such as giving children lotion for coming inside from the playground right away or providing children with a raffle ticket after they help a friend. Acknowledgment in the form of praise is included if the praise is systematic and consistent across teachers for the particular activity, such as recognizing children who are sitting appropriately at each circle.
8. Ratio of 4 positive statements to 1 negative statement	Teachers use ratio of 4 positive statements to 1 negative statement. Include all teacher statements in tally. Positive statements are defined as teacher statements made to one or more children that include praise or indicate approval. Examples include "I like how Billy is sitting criss-cross applesauce," "Thank you for putting your picture in your cubby," and "You're such a fast runner." Nonspecific positive statements, such as "Thank you," "That was nice," or "Good job," are also included. Negative statements are defined as teacher statements to children that include a reprimand, correction, or indicate disapproval. Examples include "Stop that," "Use a quiet voice inside," and "You've made Nico sad. Please say you're sorry."
9. Specific verbal praise	At least one teacher makes at least one positive and specific verbal comment to a child immediately following his or her appropriate behavior. Examples include "You were a nice friend to share with Eva," "Good job finding your name," and "I liked how you used your words to tell me you were upset." Nonspecific verbal praise—such as "Nice job" or "Great!"—are not included.

excluded from data analysis. Six sessions, two in the Poppy classroom and four in the Tulip classroom, were excluded. Observation sessions were also excluded from data analysis if the conditions of the activity were substantially different from the regular routine (e.g., instead of playing on the playground, the class took a walk to a museum). This eliminated three total sessions, one session each in the Poppy, Tulip, and Daisy classrooms.

Experimental Design. A single-subject multiple-baseline design across classrooms examined the effect of PBS consultation on the dependent variables of teachers' implementation of universal PBS practices and child problem behavior.

Baseline. During baseline, observation sessions were 25 min in length. No instructions were provided to staff or children.

Postconsultation. The PBS consultant facilitated an initial 60-min consultation meeting and individualized consultation sessions with observations, modeling, and written and verbal feedback. Observational data for each preschool took place at least 1 day after the initial consultation meeting. During the postconsultation phase, observations were 25 min in length. No instructions were provided to staff or children.

Postassessment of Critical Features. The Pre-SET was conducted after the last PBS consultation in each of the four preschool classrooms that participated in PBS consultation. The activities (e.g., breakfast, circle time, free play) were constant for each classroom from pre- to postassessment. The percentage of possible points for each of the nine categories was reported for each of the subscales. Total percentage implementation of all features was also reported.

Interobserver Agreement. Two independent observers recorded teacher and child behaviors in 32.65% of sessions across the baseline and postconsultation phases in the four classrooms. Interrater reliability for observers' ratings (0, 1, or 2) on the fidelity checklist during baseline and postconsultation sessions across classrooms was calculated by dividing the number of identical scores by the total number of items scored. Interrater reliability for scores on the fidelity checklist was 97.57%, with a range of 77.78% to 100%. Interrater reliability for the Poppy classroom was 95.24% (77.78%–100%). Interrater reliability was 98.41% (88.89%–100%) for the Tulip classroom, 98.89% (88.89%– 100%) for the Violet classroom, and 97.22% (88.89%–100%) for the Daisy classroom.

Interobserver agreement was calculated by dividing the number of intervals of agreements by the total number of agreements plus disagreements. Interobserver agreement for problem behavior during the baseline and postconsultation sessions was 99.92%, with a range of 97.5% to 100%. Interobserver agreement for occurrence-only scores for instances of problem behavior during baseline and postconsultation sessions was 96.15%, with a range of 88.89% to 100%.

Cohen's kappa was computed for data collected on children's problem behavior. Cohen's kappa provides an estimate of agreement that accounts for chance agreement. Kappa is computed by subtracting the expected agreement from the observed proportion of agreement, divided by 1 minus the proportion of agreement. The value of kappa for problem behavior was 0.9799.

Social Validity

The PBS Consultation Questionnaire, assessing the social validity of PBS consultation, was distributed to participating preschool teachers immediately following the last consultation session in each preschool. The questionnaire contained eight questions in which teachers were asked to rate the PBS consultation on a 6-point Likert scale (1 = *poor* to 6 = *excellent*). Examples of items included (a) the consultant's attention to the particulars of your classroom, (b) the effectiveness of consultation to improve children following classroom rules, and (c) the ability of the consultant to communicate effectively with teachers. There were two open-ended questions in which teachers were asked to describe the best part about consultation and recommendations for improving future consultation. For the final question, teachers strongly agreed, agreed, disagreed, or strongly disagreed with the statement *I would recommend consultation to other individuals in my field.* Teachers were asked to complete the questionnaire in 7 to 14 days and place the questionnaire in a sealed envelope for the PBS consultant to pick up.

RESULTS

Features of PBS

Changes in the presence of features of PBS at the classroom level increased from pre- to postconsultation for each of the four preschool classrooms. The Poppy classroom increased from 39.63% to 52.22% of features implemented, as measured by the Pre-SET. The Tulip classroom's preassessment implementation of 14.26% of features increased to 50% implementation at postassessment. The Violet and Daisy classrooms started with mean preassessment percentages of 35.37% and 38.52%, respectively, and ended with 64.44% and 63.33% of features implemented. Figure 4 presents the changes by classroom in mean percentage of features implemented from pre- to postassessment.

The increases in the mean percentage of features implemented from pre- to postassessment varied by categories on the Pre-SET for the four classrooms participating in PBS consultation. The most significant increases

were observed in Categories C (7.5%–85%) and H (35%–95%). There were no changes observed across Categories F (Family Involvement), G (Monitoring and Decision-Making), and I (County or Statewide Support), which remained at 0% from pre- to postassessment. The changes in the mean percentage of features implemented are presented by category in Figure 5.

Teachers' Use of Universal PBS Practices

Graphic and visual analysis of teachers' implementation of universal PBS practices during the baseline and postconsultation sessions showed an increase in the percentage level of practices implemented following PBS consultation in each of the four preschool classrooms. Changes in the percentage of universal PBS practices in the four classrooms are presented across sessions in Figure 6.

The trend and variability of teachers' implementation of universal PBS practices were inspected within and between the baseline and postconsultation phases. Within-classroom changes will be discussed first.

There was a change in trend (negative to positive) and variability (moderate to low) across the baseline and postconsultation phases for the Poppy classroom. There was a rapid change in the pattern of data (i.e., immediacy of effect) between phases and no overlapping data points (0%). Immediacy of effect was also observed

within the phase change for the Tulip classroom, which had one overlapping data point between the baseline and postconsultation phases (4.76%).

There was a lower level of change between phases for the Violet classroom than there was for the two previous classrooms. This was due to the overall high percentage of universal PBS practices implemented during baseline. However, the data pattern changed between the baseline and postconsultation phases. Reductions in variability in the postconsultation phase and changes in the overall data trend were observed. There was one overlapping data point for the baseline and postconsultation phases (3.57%).

Finally, in the Daisy classroom an increasing trend was observed across both the baseline and postconsultation phases. With the exception of one overlapping data point (4.34%), there was an observable change in the level of implementation of universal PBS practices during the PBS consultation phase. This was accompanied by decreased variability. Between-classroom analyses showed that changes in the trend and variability of teachers' use of practices occurred upon implementation of PBS consultation.

Children's Problem Behavior

Observations of children's problem behavior were conducted during baseline and postconsultation sessions across the four classrooms participating in PBS consulta-
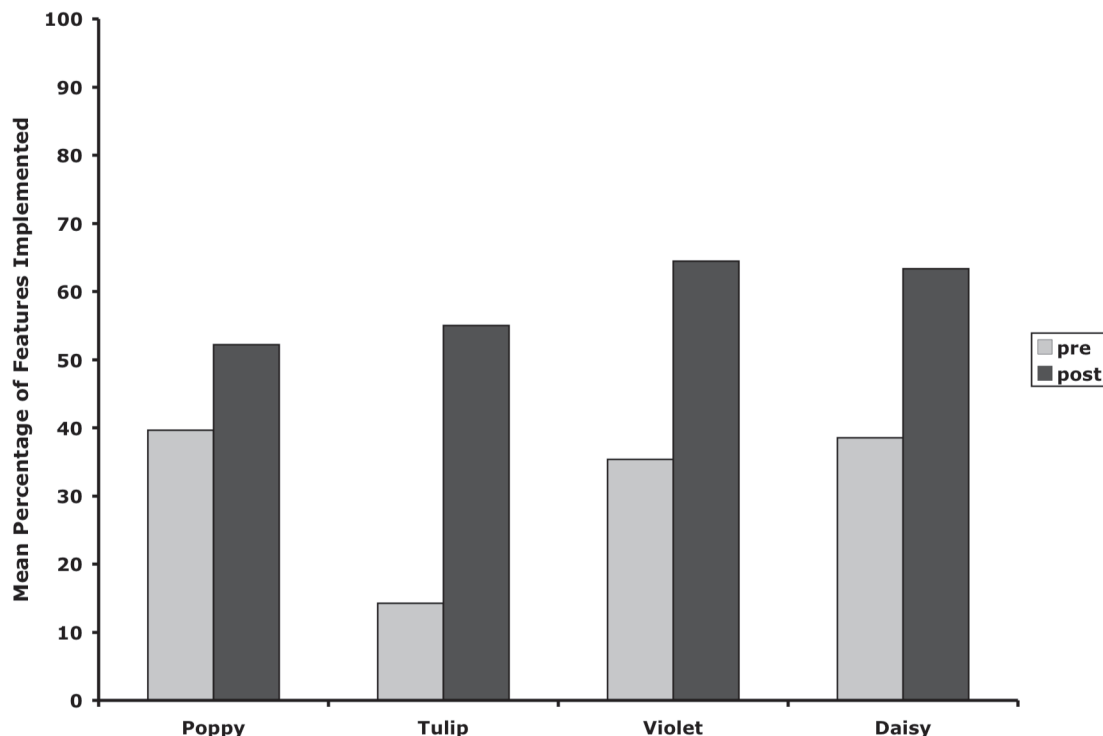

FIGURE 4. Mean percentage of Pre-SET features implemented across classrooms during pre- and postassessments (number of classrooms = 4).

tion. Overall problem behavior rates were low across conditions and classrooms, with an overall mean of 2.76% (range = 0%–20%). Graphic and visual analysis of these data showed an absence of discernible changes in the level, trend, and variability of children's problem behavior within and between phases. This extended across all classrooms participating in the multiple-baseline design. Figure 7 presents the percentage of children's problem behavior during the baseline and postconsultation sessions.

The mean percentage of intervals with problem behavior decreased between the baseline and postconsultation phases in three of the four classrooms. The Daisy classroom displayed a slight increase in the mean rate of children's problem behavior.

Social Validity

Social validity questionnaires assessed teachers' perceptions of the PBS consultation for those classrooms participating in PBS consultation. Eight of the nine participating lead and assistant teachers completed the 11-item PBS Consultation Questionnaire. Teachers used a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). Overall, teachers reported that the PBS consultation was excellent and that they would recommend it to others in the field. Teachers' mean ratings for Items 2 through 8 are presented in Table 4.

DISCUSSION

The purpose of this study was to assess implementation of PBS in one county's EI/ECSE and Head Start service delivery system and evaluate the impact of PBS consultation on teacher and child behavior in four preschools. The Pre-SET measured features of PBS in area early childhood settings, revealing that, on average, classrooms implemented approximately 31% of PBS features. PBS consultation that focused on primary prevention was conducted using a multiple-baseline-across-classrooms design, and a functional relationship was established between consultation and increases in teachers' use of universal PBS practices. No functional relationship was established between PBS consultation and children's challenging behavior. Results are discussed as they relate to the study's limitations, implications for practice and future research, and final conclusions.

Limitations

Limitations of this research study included selection of participants, participant characteristics, timing of the PBS consultation, a limited focus on universal prevention, and the lack of a functional relationship between PBS consultation and changes in children's challenging behavior. The first limitation of the study is the selection of participants. Two behavior consultants employed by
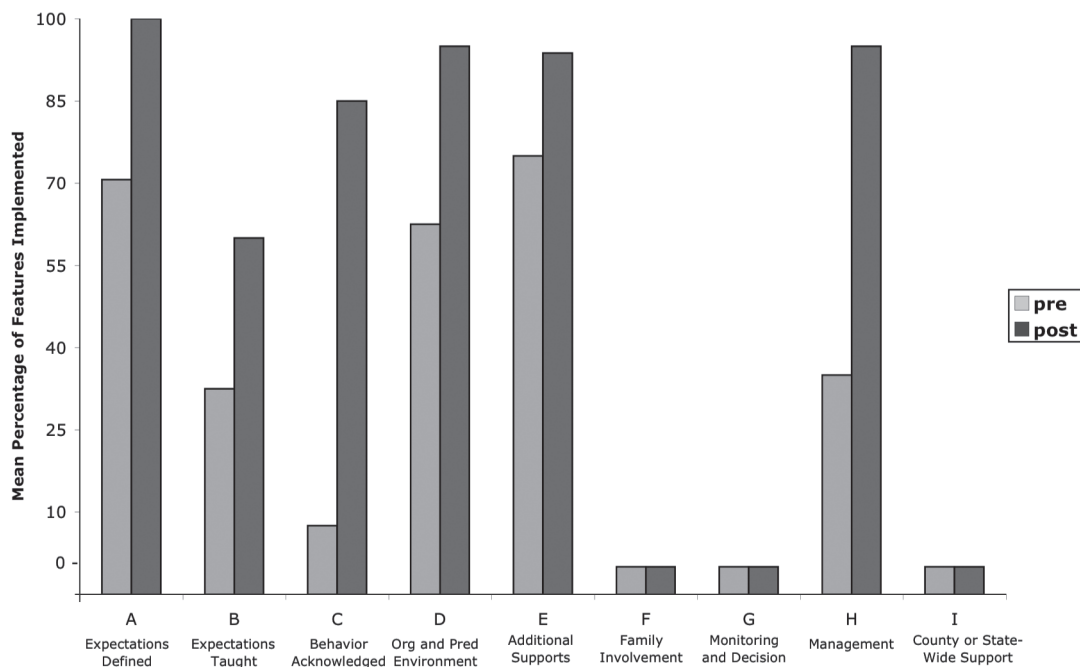

FIGURE 5. Mean percentage of Pre-SET features implemented across categories during pre- and postassessments (*n* = 9).
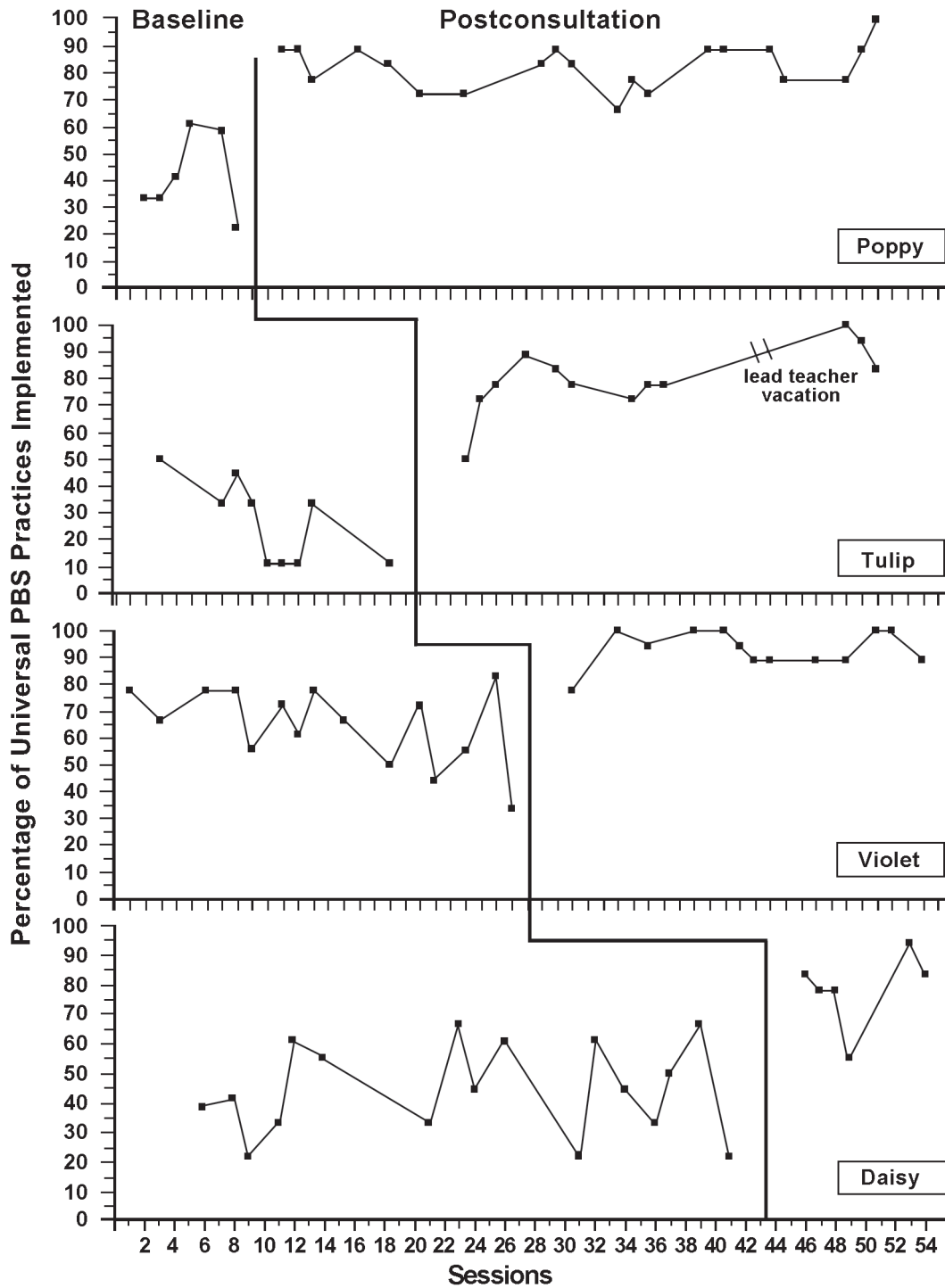
FIGURE 6. Percentage of universal PBS practices implemented during the baseline and post-consultation sessions across classrooms (*n* = 4).

the local EI/ECSE service agency nominated the original 15 early childhood settings selected for participation in the preassessment. This nomination procedure capitalized on the relationships already established between the behavior consultants and the preschool administrators and lead teachers. Although this facilitated successful implementation of the preassessments in many early childhood settings, the nomination process may have involved selection bias. For example, it is possible that behavior consultants unconsciously nominated early childhood
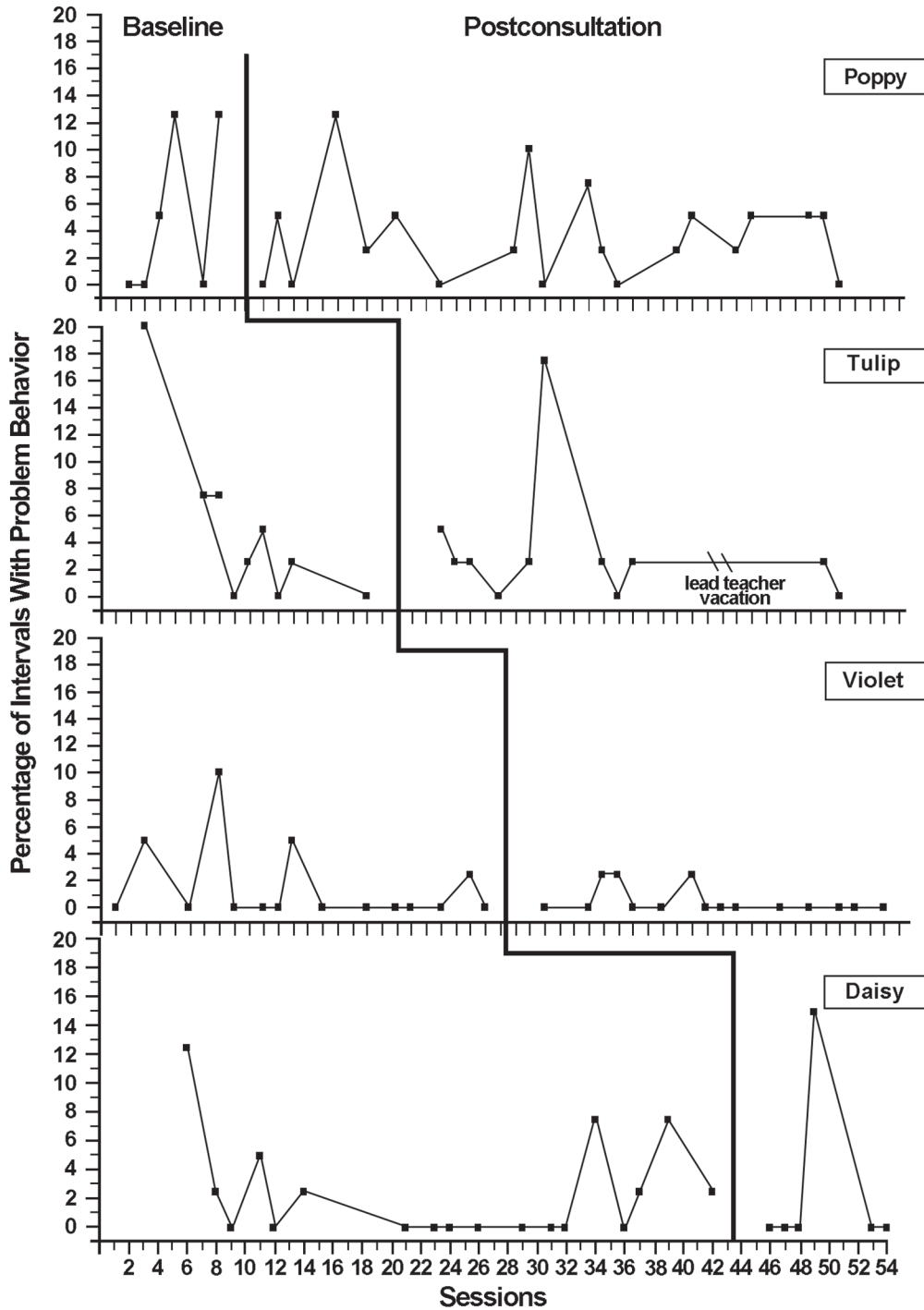
FIGURE 7. Percentage of intervals with problem behavior for baseline and postconsultation sessions across classrooms (*n* = 4; scale = 0–20).

settings that they believed implemented more features of PBS to reflect favorably on the work they had done thus far. Further, 17 teachers were initially contacted to participate in the preassessment, with 2 teachers declining to participate. It is possible that the characteristics of the 15 of 17 preschool classrooms that did participate in the preassessment are different from those 2 that did not, limiting the generalizability of the results.

The sample of 15 classrooms consisted of 6 Head Start, 6 community preschool, and 3 special education

TABLE 4. Mean Teacher Ratings and Range of Ratings on Items 2–8 on the Consultation Questionnaire (*n* = 8)

Item	Mean rating	Range
2. The appropriateness of consultation information for use with young children	5.25	4–6
3. The consultant's attention to the particulars of the classroom (e.g., program goals, needs, values)	5.38	4–6
4. The effectiveness of consultation to encourage you to reflect on your teaching	5.13	4–6
5. The effectiveness of consultation to decrease young children's problem behavior in your classroom	4.50	1–6
6. The effectiveness of consultation to improve children following classroom rules	5.00	4–6
7. The ability of the consultant to communicate effectively with teachers	5.89	5–6
8. The responsiveness of the consultant to your questions and feedback	5.89	5–6

classrooms. The classrooms sampled mirrored the prevalence of Head Start, community, and special education classrooms in this community in the Pacific Northwest and included programs for children with risk factors (e.g., identified disability, English as a second language, low income). However, it is possible that the classrooms with these characteristics are not representative of other county early childhood settings around the country. In addition, classrooms sampled included mostly preschool classrooms serving children 3 to 5 years of age and did not adequately sample classrooms serving children birth to 3 years of age.

The timing of PBS consultation was also a study limitation. PBS consultation started in the Poppy and Tulip classrooms at the end of March, in the Violet classroom in April, and in the Daisy classroom at the end of May, just 4 weeks prior to the last day of school. Conducting PBS consultation at the end of the year limited the time that could be spent fully implementing features of PBS and was inconsistent with teachers' classroom planning and organization. The participating teachers were flexible in implementation of new and different materials, classroom structures, and strategies at the end of the year. However, it is likely to be easier to implement these changes (both for consultants and teachers) at the beginning of an academic year. It is recommended that future PBS consultation efforts start at the beginning of the academic year, possibly even prior to school starting, when it is natural for teachers to plan classroom materials, organization, and lessons.

Another limitation involves the restricted focus of the experimental study on primary prevention strategies. This focus was intentional, given participating classrooms' low scores on universal PBS practices on the Pre-SET and higher scores on items related to secondary and tertiary interventions. Systems-level supports, such as data collection, data entry, and district resources, were not addressed due to the time frame (close to the end of the

academic year) and limited budget for the study. A more thorough implementation of PBS in preschools, including primary, secondary, and tertiary supports and systems-level procedures, is needed. More information is needed about how various levels of PBS may be implemented most efficiently (e.g., universal interventions first, then targeted and individualized interventions, or the reverse) and what systems-level supports (e.g., data collection methods that are sustainable in an early childhood program) contribute to fidelity of implementation and positive child outcomes.

Finally, although PBS consultation affected teacher behavior, no functional relationship was established for children's challenging behavior. There are multiple possible explanations for this effect. First, the focus of PBS consultation and observed changes in teachers' use of universal PBS practices were not likely to significantly affect children's challenging behavior. Increasing the use of universal PBS practices may modestly reduce severe problem behaviors such as hitting, biting, and self-injury. However, it is acknowledged in the PBS model that 20% of children are likely to engage in problem behavior and require additional supports beyond universal prevention. For the study, adding alternative dependent variables, such as prosocial behaviors, engagement, or rule-following behaviors, would have been more appropriate and might have more accurately measured changes in child behavior. Further, because universal PBS practices are intended as preventive strategies, there may be additional dependent variables, such as fewer behavior referrals for tertiary interventions or fewer expulsions to include in future research.

Another explanation for the lack of results for children's behavior is there may not have been sufficient time between the intervention and observations. PBS consultation continued through the final weeks of the consultation phase, and teachers continued to change their classrooms and practices through the last observation.

Children may not have noticed and responded to the revised contingencies by the time the study was completed. Beginning the study earlier in the year and continuing it for a longer period of time would allow a more complete analysis of changes in children's behaviors.

Further, children's challenging behavior might have changed if teachers had more fully implemented universal PBS practices. Although there were significant changes in teacher behavior from pre- to postconsultation, 100% fidelity was reached in only a handful of sessions. A maximum threshold of teacher fidelity of implementation may be required before changes in children's behavior are observed.

Implications for Practice and Future Research

The results of the Pre-SET in 15 preschools indicated that some PBS features were implemented in each classroom. The mean percentage of features implemented was 30.79%. There was variability across sites, with a mean range of 13.33% to 46.48%. Overall, Pre-SET scores increased in the four classrooms receiving PBS consultation. This indicates that the Pre-SET may be sensitive to classroom change over time.

The Pre-SET may potentially be a reliable and useful tool to evaluate implementation of PBS practices in preschools. It could be used in annual or biannual evaluations to provide information to administrators and teachers about current implementation and plan goals for the leadership team to address on a classroom or program-wide level. Future research should use a larger sample and focus on analyzing the psychometric properties of the Pre-SET (e.g., interrater reliability, test–retest reliability, and concurrent validity with other early childhood instruments). The utility and meaningfulness of the Pre-SET may also be investigated by obtaining social validity data from EI/ECSE professionals.

Implementation of PBS in Preschools

A functional relationship was established between PBS consultation and teachers' implementation of universal PBS practices using a multiple-baseline design across four preschool classrooms. The impact of PBS consultation on teacher behavior corroborates previous research suggesting that PBS consultation is successful in supporting preschool teachers' adoption of new skills and strategies (Duda et al., 2004; Stormont et al., 2006). This is the first experimental analysis demonstrating that consultation is related to an increase in teachers' use of universal classroom practices in preschools. This relationship was established in a relatively brief amount of time (2 months) without a significant amount of teacher time spent in consultation (approximately 6 hr in each classroom).

This is the same amount of time often spent in workshop trainings, and it did not take more than 1 hr away from teachers' time with children.

It is unclear whether the consultation in this study would have been effective without teachers' prior participation in a PBS workshop. Future research on PBS consultation should address the potential for differential effects of workshops alone, PBS consultation alone, and workshops plus PBS consultation. It would also help to better understand the optimal consultation schedule (e.g., 60-min visits once per week) and duration of consultation required for fidelity of implementation.

Future efforts to implement PBS interventions in preschools should augment the PBS consultation in this study, which focused on universal features, with consultation that includes primary, secondary, tertiary, and systems-level practices. It would also be beneficial to extend consultation to programs (e.g., a Head Start center) rather than to individual classrooms. Addressing what systems-level features are essential for sustainability and maintenance of teachers' PBS practices in the absence of a PBS or behavior consultant will be an important contribution of future work.

All efforts should be made to address the nature and culture of early childhood settings when considering the content of PBS interventions in preschools. For example, supports such as a daily data collection system to track rates of problem behavior will systematize the collection of such data for evaluation purposes, but it must be practical and useful for teachers or the information will not be accurate and it will not continue to be used. Further, PBS training should be individualized, as early childhood educators differ in their individual philosophies, classroom culture, and use of particular strategies.

Conclusions

This research study provided evidence that PBS may be assessed and implemented in preschools. The results of the use of the Pre-SET as an assessment measure provided evidence that it may indicate the presence or absence of features of PBS in early childhood settings. When seeking to increase teachers' use of universal PBS practices, PBS consultation appears to be an effective and viable option. PBS consultation was related to teachers' increased use of classroom rules, matrices, schedules, transition supports (e.g., signals, warnings, precorrection), and specific verbal praise and positive statements. These results maintained over time with minimal support. Teachers reported that they were satisfied with the PBS consultation and would recommend it to others in the field.

This research provides the first experimental analysis of PBS implementation that included universal supports in preschool settings. The functional relationship established for teacher change demonstrates PBS consul-

tation's promise in supporting teachers' adoption of PBS skills and supports. There is clearly more research to be done in the area of PBS in early childhood settings. This study provides evidence that PBS may be implemented effectively in preschools, supporting teachers' efforts to address young children's challenging behavior and to build their social and emotional competence. ◆

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