A comparison of workshop training versus intensive, experiential training for improving behavior support skills in early educators[☆]

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ABSTRACT

Effective behavior support is an important component of high-quality and nurturing early childhood classroom settings. At present, there are few studies that investigate the best way to train and support teachers in these strategies. The present study compared two different training approaches: (1) a workshop that included a one-day classroom-based training that introduced effective preventative and behavior support strategies followed by school year behavioral consultation support; or (2) an intensive condition that included the one-day workshop plus four days of experiential learning and practice in a preschool classroom followed by school year behavioral consultation support. Eighty-eight teachers/aides were randomly assigned to one of the two training conditions, and training occurred in August before the commencement of the school year. Results indicated that on observations of effective behavioral management and instructional learning formats, teachers in the intensive condition were improved proximally, with effects waning over time. For measures of teacher use of praise, the intensive group maintained the improved rate throughout the school year relative to the workshop group. Rates of commands and observations of classroom productivity were not different between groups. Teachers were satisfied with both approaches to training.

Early educators are required to manage a wide array of situations and child behaviors throughout the school day. Most teachers will need to utilize strategies to effectively deal with challenging behaviors (Technical Assistance Center on Social Emotional Intervention for Young Children, 2010), as these behaviors may result in injury to self or others, damage of the physical environment, interference with the acquisition of new skills, or social isolation (Division for Early Childhood [DEC], 2007). Notably, even those students without identified behavioral challenges may benefit from effective classroom management in early education settings that promotes the development of appropriate self-regulation, social skills, and classroom behaviors (Barnett, 2008). Although early educators may be confronted with challenging behaviors on a daily basis, they consistently indicate that effective classroom behavior support is one of the areas where they feel they are in most need of support and training (Hemmeter, Santos, & Ostrosky, 2008), particularly in working with children who have diverse needs (Bruder, Mogro-Wilson, Stayton, & Dietrich, 2009). The negative outcomes associated with these needs are considerable. Teachers who experience high stress and substantial classroom management demands without appropriate behavioral supports are likely to have classrooms with higher rates of student expulsion or suspension (Gilliam & Shahar, 2006); thus, investments made to support teachers in the effective management of challenging behaviors may have considerable benefits in the long-term and these can be employed at the class-wide level (Heckman, 2000).

The challenges in providing effective behavioral supports within early childhood settings occur within a context of increased emphasis on accountability and the use of recommended practices within

early educational settings (DEC, 2007). As a result, professional development efforts intended to support the use of such strategies by early educators have received increased attention (Buysse, Winton, & Rous, 2009; Joyce & Showers, 2002; Sheridan, Edwards, Marvin, & Knoche, 2009; Snyder, Hemmeter, & McLaughlin, 2011; U.S. Department of Education, 2010). Indeed, most early education programs have regular professional development initiatives for teachers and classroom aides. Yet, in a blunt review by the National Research Council, the state of in-service professional development for early educators was summarized as follows, ". . . it has been repeatedly documented that the amount, scope, and quality of professional development provided to early childhood teachers is inconsistent, fragmented, and often chaotic" (p. 76; National Research Council, 2001). Thus, studies that investigate effective training and support programs for early educators are clearly needed.

1. Studies on professional development in early education settings

There are several studies in the literature that can guide efforts to implement effective professional development. General findings suggest that professional development strategies that rely solely on workshops that provide information or passive professional development approaches such as intervention guidelines yield modest outcomes, at best (Odom, 2009). Reviews of the early childhood literature (U.S. Department of Education, 2010) suggest that there are commonalities between professional development approaches that are effective and may include: (a) a focus on a specific skill set for development (Fukkink & Lont, 2007), (b) an opportunity for "hands-on" practice is part of the training approach (Fantuzzo et al., 1996), and (c) follow-up mentoring, coaching or consultation is necessary to promote positive outcomes (e.g., Downer, Kraft-Sayre, & Pianta, 2009; Landry, Anthony, Swank, & Monseque-Bailey, 2009).

Several approaches that include training in behavioral supports for early educators provide guidance on content that should be included in professional development efforts. Such strategies include those that use a positive behavioral support approach that focuses on promoting adaptive behaviors (e.g., development of self-regulation, academic, and social skills) and preventing challenging behaviors (inattention, aggression, noncompliance) for individual students as well as the whole class (e.g., Crone & Horner, 2003; DEC, 2007; Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter & Fox, 2009; Hemmeter, Fox, Jack, & Broyles, 2007; Jolivette & Steed, 2010; Neilsen, Olive, Donovan, & McEvoy, 1999; Strain & Hemmeter, 1999). Specific strategies might include: (a) providing praise and attention for positive behaviors; (b) planning to ignore minor, inappropriate behaviors; (c) using rules, structure, and routines; and (d) issuing clear and effective requests for behavior. Although these approaches have been around for decades for use in early childhood settings as well as elementary schools (e.g., Brophy, 1983; Hester, Hendrickson, & Gable, 2009; O'Leary & O'Leary, 1972; Thomson, Holmberg, & Baer, 1978), studies indicate that there is considerable variation across classrooms in teachers' use of these strategies (Anthony, Anthony, Morrel, & Acosta, 2005; Brophy-Herb, Lee, Nievar, & Stollak, 2007), and this variation has implications for individual child outcomes. This is because studies have demonstrated that these behavior management approaches have strong and lasting impacts on positive child outcomes. As an example, Webster-Stratton, Reid, and Hammond (2001) illustrated that an intensive parent, teacher, and child intervention promoted the use of behavioral support strategies with children in Head Start that resulted in fewer conduct problems at post-intervention and at a one-year follow-up intervention. Raver et al. (2009) reported comparable findings; children within classrooms taught by teachers who received intensive professional development in classroom behavior management, coupled with mental health consultation, reported that children exhibited reduced levels of externalizing behavior problems relative to a control condition. In summary, well-managed classrooms are environments conducive to the promotion of learning and development in young children, and studies demonstrate that the implementation of approaches to support positive teacher–child interactions and to promote effective behavior management yield positive child outcomes (e.g., Barkley et al., 2000; NICHD Early Child Care Research Network, 2002; Palermo, Hanish, Martin, Fabes, & Reiser, 2007; Raver et al., 2009).

Efforts to continue the development of effective trainings in behavior support for early educators can be guided by some illustrative examples from prior research. For instance, Webster-Stratton et al. (2001) compared Head Start teachers who received 36 hours of teacher inservice training, during which teachers viewed videotapes that promoted group discussion on how to promote positive interactions with children and deal with misbehavior, to a group that did not receive this intervention. The group that received the training had greater parent–teacher bonding, fewer child conduct problems in school, and teachers exhibited more effective classroom behavioral support procedures (e.g., more positive strategies) relative to the comparison condition. Raver and colleagues have also produced a strong program of research that demonstrates intensive, sustained professional development programming in behavior management can produce positive outcomes for early educators as well as children in their classrooms (Raver et al., 2008, 2009). Raver demonstrated that an intensive, 30-week professional development intervention (conducted outside of the school hours on Saturdays) that included stress reduction and training in behavior management, coupled with direct intervention with targeted children through consultation, resulted in improved teacher and child behaviors following the program. In another study, Fantuzzo et al. (1996) compared a didactic training approach to one where an experiential learning approach was used. Experiential learning approaches are unique in that they provide an immediate opportunity to practice newly introduced or developed skills. Trainees are also provided with immediate feedback about their performance. In the experiential learning approach used in this study, teachers and parents who had received information about developmentally appropriate classroom techniques were videotaped in their own classrooms as they practiced the implementation of these skills and were given feedback on performance (Fantuzzo et al., 1996). Results showed that teachers who participated in experiential learning activities issued double the rate of praise toward students relative to teachers who received the didactic training. Another example is the My Teaching Partner program (e.g., Downer et al., 2009; Pianta, Mashburn, Downer, Hamre, & Justice, 2008) where teachers had access to web-based videos that illustrated effective teacher–child interaction skills. In this study, it was demonstrated that teachers who received on-line consultation and feedback about their teaching practice combined with the online videos improved significantly more than teachers who had access to the videos without consultation (Pianta, Mashburn, et al., 2008). Across these studies, effective professional development approaches included training on specific skills, active learning through practice, and mechanisms for follow-up and consultation following the introduction of professional development content, suggesting that these are all important components in training.

2. Limitations of current professional development investigations

In spite of these promising examples noted above, there are a number of limitations in the research literature related to early

childhood teachers' professional development in the area of classroom behavior support. First, there are relatively few, randomized, controlled trials that compare two approaches to one another. Fukkink and Lont (2007) were only able to identify four randomized trials in their exhaustive literature review of early childhood professional development approaches. Additional randomized trials that allow causal statements about the efficacy of training approaches are needed. Further, as noted by Sheridan et al. (2009), there is a need to investigate how the method of delivery of professional development (workshops, "hands-on" practice, coaching), influences skill acquisition and the use of the strategies introduced through the training. This is especially important now that positive behavior support strategies have been identified as a recommended practice (DEC, 2007); the next logical step is to determine the most effective manner of introducing these strategies and promoting their use. It is also important to acknowledge that few professional development approaches are effective without ongoing consultation, mentoring, or coaching (Fuchs & Fuchs, 1989; Pianta, Mashburn, et al., 2008). Thus, consultation or coaching approaches that promote the maintenance and application of strategies taught in professional development will typically be required. Finally, studies of professional development have to move toward evaluation approaches that document the sustainability and long-term outcomes that result from training.

3. Contributions of classroom quality to positive child outcomes

The primary goal of many early education, professional development efforts is to establish a classroom context that is of high quality for children in early education settings. This is because the proximal goal of improving educator effectiveness is intended to lead to the distal goal of positive student outcomes in the domains of academic achievement and social competence. Classroom quality, which includes effective behavior management practices, organization, productive use of classroom time, and the cultivation and maintenance of positive student–teacher relationships has positive effects on children's academic and social behavior that are immediate (Curby et al., 2009; Mashburn et al., 2008) as well as lasting (e.g., Piesner-Feinberg et al., 2001). Strategies to meet these aspects of quality could be addressed through teaching how to use praise, how to issue effective commands, and how to ignore minor negative behaviors (e.g., behavior management), plan ahead, use consistent schedules, and ensure appropriate and engaging lessons are implemented effectively (e.g., organization, productivity, instructional learning formats), and foster the development of supportive student teacher interactions (e.g., positive student–teacher interactions). Thus, professional development approaches that are effective in encouraging teachers to use recommended strategies in these areas are likely to have positive outcomes for students in such classrooms, and they are logical targets for professional development efforts.

4. Current study

The present study attempted to address some of these issues. It aimed to compare two approaches to professional development in effective classroom management using positive behavioral supports. Specifically, a one-day summer workshop in effective positive behavioral supports was compared to a condition where the one-day summer workshop was followed by four days of an intensive, experiential learning condition that occurred in preschool classrooms. All teachers had access to a behavioral consultant during the school year to support their implementation of the strategies within their classroom. It was hypothesized that

teachers in the intensive condition would be more effective at implementing positive behavioral supports in their classroom during the school year, relative to teachers in the workshop condition.

5. Method

5.1. Participants and procedures

This study was conducted in partnership with Head Start programs in Western New York. These programs included multiple preschool classrooms. Teachers and aides were recruited from these centers to participate in the study through informational sessions held at the Head Start centers. During these sessions, the investigators met with groups of early educators and presented an overview of the study. Inclusion criteria included that the individual was a current Head Start teacher or aide, and that the individual had to be available to attend the summer training in August immediately preceding the school year.

In total, 88 teachers (96.6% female) were enrolled. Overall, 37% of participants completed High School, 24% held an Associate's Degree, 22% held a Bachelor's Degree, and 17% held a Master's degree. Participants were employed as lead teachers (47.7%) or teacher assistants/aides (52.3%), and they had an average of 8.57 years (SD = 6.23) of teaching experience. Table 1 lists the demographic characteristics of study participants; there were no significant differences between groups on any of these variables. The Social and Behavioral Sciences Institutional Review Board approved all procedures.

Twenty-seven Head Start centers were matched on the number of participating teachers/aides and the center's locale (i.e., urban, suburban, rural), creating matched pairs on these variables. Random assignment to each of the two study groups then occurred at the center level; thus all teachers in a center were randomized to the same condition (the 27th center's teachers were assigned via a random number generator). Randomization at the center level was done to prevent the possibility of contamination between groups if teachers/aides worked in the same center/classroom and to account for confounding factors such as staff participation and locale. Notably, although a teacher and aide could be from the same classroom and enrolled in the study, all measures focused on *individual* teacher behaviors and observations were completed on separate days for participants in these cases.

Participants were informed whether they were randomly assigned to one of two teacher training conditions: (1) a workshop condition that included a one-day training introducing effective preventative and behavior support strategies, or (2) an intensive condition that included the one-day workshop plus four days of experiential learning and practice in a preschool classroom. Groups are hereafter referred to as the workshop and intensive conditions, respectively. Teachers were compensated $180 for each day of training attended. All teachers in both conditions had access to a behavioral consultant during the entire school year following the summer training. Participants were observed in May of the school year preceding the summer training for a baseline observation, and post-training observations were collected during October (immediately following the training), February, and May of the school year. Observations at these assessment points focused on the frequency and quality of the teacher's use of behavioral support strategies.

Workshop. Participants assigned to the workshop training attended a 6-hour workshop on positive behavior support practices. The workshop training was designed to reflect a typical professional development workshop for Head Start organizations. It was held in a lecture hall from 9:00 am until 4:00 pm with a one-hour lunch break.

Table 1
Demographic characteristics of teachers and teacher aides enrolled in the study.

	Workshop	Intensive	Total
N	48	40	88
Age	37.96 (10.73)	38 (9.57)	37.98 (10.25)
Percent Female	95.8%	97.5%	96.6%
Race			
Caucasian	27 (56.3%)	25 (62.5%)	52 (59.1%)
African-American	16 (33.3%)	15 (37.5%)	31 (35.2%)
Asian	1 (2.1%)	0 (0.0%)	1 (1.1%)
Native American	1 (2.1%)	0 (0.0%)	1 (1.1%)
Another Race	3 (6.3%)	0 (0.0%)	3 (3.4%)
Ethnicity			
Hispanic/Latino	2 (4.2%)	2 (5.0%)	4 (4.5%)
Not Hispanic/Latino	46 (95.8%)	38 (95.0%)	84 (95.5%)
Highest Level of Education			
High School	15 (31.9%)	17 (42.5%)	32 (36.8%)
Associate's Degree	14 (29.8%)	7 (17.5%)	21 (24.1%)
Bachelor's Degree	9 (19.1%)	10 (25.0%)	19 (21.8%)
Master's Degree	9 (19.1%)	6 (15.0%)	15 (17.2%)
Number of Years Teaching	7.7 (5.16)	9.62 (7.15)	8.57 (6.23)
Number of Years in Current Position	4.97 (4.63)	5.28 (5.30)	5.11 (4.96)
Hours spent with children per week	34.11 (5.98)	35.56 (4.97)	34.77 (5.56)
Current Position			
Lead Teacher	22 (45.8%)	20 (50.0%)	42 (47.7%)
Teacher Assistant/Aide	26 (54.2%)	20 (50.0%)	46 (52.3%)
Classroom Demographics			
Total Number of Children in Classroom	21.40 (6.50)	24.13 (6.48)	22.66 (6.59)
Total Number of Children with IEPs	3.98 (3.65)	5.35 (4.32)	4.61 (4.01)
Total Number of Dual Language Learners	2.74 (1.00)	1.55 (1.32)	2.49 (4.68)

Notes: Tests to determine differences between study groups revealed no significant differences between groups on any of these variables. Some percentages may not round to 100% due to rounding.

Content for the workshop was based on the research literature of positive behavior supports in early childhood settings (e.g., Crone & Horner, 2003; Dunlap et al., 2006; DuPaul & Stoner, 2003; Hemmeter & Fox, 2009; Hester et al., 2009; Pelham, Massetti, et al., 2005; Sugai & Horner, 2002; Walker & Eaton-Walker, 1991; Webster-Stratton et al., 2001). Topics addressed during the full day presentation included: establishing a daily schedule and classroom routines, using planned ignoring and when/then contingencies, effective transitions, classroom rules, social recognition (i.e., praise), and effective requests (i.e., commands). In addition to didactic presentations, educators participated in small group discussions where they reviewed effective strategies they had used in their own classrooms, made attributions related to long-term positive outcomes of using the strategies, and discussed the consequences of using/not using the recommended strategies (Cunningham, Davis, Bremner, Dunn, & Rzasa, 1993). The workshop presentation was audiotaped to allow for an examination of adherence to the intended training material and was reviewed by a predoctoral intern in school psychology who did not attend the workshop.

Intensive. Participants assigned to the intensive condition attended the same one-day workshop training as the workshop-only participants, plus four additional days of experiential training designed to provide the teachers with authentic classroom-based practice to apply their knowledge of recommended behavioral support practices.

To provide a realistic classroom environment for teacher practice, 32 preschool children (4–5 years of age) were recruited to attend a one-week "kids camp" program using flyers sent to Head Start classrooms and preschool programs within a 10-mile radius of the university where the training was conducted. All parents were informed as to the purpose of the camp and signed an informed consent allowing their child to participate. Children were divided across three experiential classrooms that used identical procedures (12–15 teachers participated in each classroom); children remained in the same classroom for the entire week.

The choice of a summer classroom with enrolled children who were not the teachers' typical students was intentional. Focus group feedback prior to the study from educators and administrators suggested that the practicality of our training approach during the school year would be low given competing demands faced by educators. There was consensus that a summer training that focused clearly and explicitly on implementing positive behavior supports would provide an opportunity for teachers' full attention. Second, the focus groups made some interesting suggestions that were also not practical to implement in the teachers' actual classrooms including: (1) the class size should be smaller so that teachers could focus on correctly implementing strategies; (2) children should be older, four-year-olds so that child behavior was generally appropriate to permit the practice of positive, preventive strategies; and (3) teachers strongly wanted opportunities to observe other educators in action, something that is not routinely possible during the school year. This stakeholder feedback was directly integrated into the development of the intensive condition as described below.

Teachers in the intensive training condition were assigned to teams of three staff (to reflect typical staff coverage in a Head Start classroom). Throughout the day, teams rotated through (1) leading the classroom activities, (2) systematically observing classroom activities led by other teams, (3) providing structured feedback to other teaching teams regarding their use of the effective behavior support skills addressed in the workshop training following their observation, and (4) preparing for the classroom activities. On each of the days, teachers typically led one 30-minute and one 40-minute classroom session, observed two 30-minute and two 40-minute class sessions, and had two preparation periods. Across the week, all participants had an opportunity to practice the behavioral support strategies across all preschool related activities (e.g., circle time, large group, gross motor, etc.)

Each classroom was lead by a trainer who supervised the classroom and facilitated feedback sessions; trainers rotated classrooms so as not to work with the same group of teachers the entire week. Trainers were doctoral-level faculty in school psychology or

pediatrics or an advanced school psychology graduate student. During each of the four experiential learning days, trainers emphasized a particular skill related to positive behavioral supports. These skills, which were presented during the one-day workshop presentation, were reviewed briefly each morning. The skills emphasized each day were: (1) Tuesday – catching children being good/using positive attention and labeled praise (e.g., I like the way you are sharing the blocks!), (2) Wednesday – using effective commands (e.g., it's clean up time, please put the puzzles on the shelf), (3) Thursday – planned ignoring of minor misbehavior (e.g., not attending to fidgeting at circle time), and (4) Friday – when-then contingencies (e.g., when you put away these toys, then you can play in the sand table). Once introduced, a topic was re-emphasized each day, and teachers were encouraged to apply these strategies in their interactions with the children. In addition to the daily skills, teachers were asked to maintain an overall sense of order and routine in the classroom everyday. To this end, they were instructed to remain on schedule, review the classroom rules before an activity (e.g., we use our walking feet, we keep our hands and feet to ourselves, we use our inside voices and listening ears), permit time for transitions, and give feedback for following rules.

Observers had a small index card with a checklist of general classroom routines as well as boxes to record teachers' use of the other positive behavior support strategies. Once each teaching practice period ended, the teachers who were leading the activities and the teachers who observed them were brought into the hallway to meet with the training facilitators. There, both teachers and observers were guided through a feedback session on the teaching team's use of the techniques. As such, facilitators: (1) asked each observer to provide a specific example of an instance when the team used the positive behavior support strategy emphasized for that day, (2) asked the teaching team who had been leading the activity to reflect on opportunities to use behavior support that they may have missed and to consider what they would like to work on during their next practice session, and (3) provided a summary of the group discussion. To ensure that all teachers had equal feedback time and were observed for the same length of time, the feedback session was timed and did not go over five minutes. An advanced graduate student collected fidelity checks that were equally distributed across facilitators, day, and time.

School year follow-up. During the school year following the training, all study participants were given the opportunity to work with a behavioral consultant. Participants were informed of the opportunity to participate in consultation during the one-day workshop. Teachers were reminded of the opportunity to receive consultation in quarterly newsletters sent to all participants and during each of the three data collection timepoints following the training. Referrals for behavioral consultation followed standard Head Start procedures. Thus, education supervisors reviewed the referrals before they were assigned for consultation.

Doctoral-level graduate students in school psychology served as the behavioral consultants. Standardized consultation procedures were implemented to ensure consistency across the consultant visits. During the first behavioral consultation meeting, the consultant introduced the consultation procedures, conducted a semi-structured interview to gain a greater understanding of the behavior support strategies that were currently being implemented in the classroom by the teacher, and gathered more information about the reason for referral. Following the initial meeting, the behavioral consultant conducted three observations that focused on the appropriate use of positive behavioral supports in the classroom. Subsequently, the teacher and the behavioral consultant met to discuss the outcome of the observations and to establish an individualized intervention plan. Plans were aimed at increasing the effectiveness of overall behavior support practice as well as addressing specific concerns related to a single student.

Intervention follow-up and re-evaluation meetings were completed as necessary. Detailed records were maintained for each referral, documenting the number, length, purpose, and outcome of the evaluation visits.

5.2. Measures

Research assistants who were blind to study hypotheses conducted observations according to manualized observation procedures (Pianta, La Paro, & Hamre, 2008; Pelham et al., 2008). Baseline observations using the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, et al., 2008) and the Student Behavior Teacher Response System (SBTR; Pelham et al., 2008) were conducted on each participant during May of the school year and study measures (e.g., ratings of classroom impairment; Fabiano et al., 2006) were completed by each participating teacher. The CLASS and SBTR observations were completed on the same day, with the duration of the classroom observation for each participant at each timepoint lasting approximately 2.5 hours. Observers completed four, 20-minute observations of the CLASS throughout the morning and the SBTR was completed for a half-hour during center-time. During center-time, all teachers work to actively monitor children in the room, regardless of their role as a lead teacher or aide, so this was chosen as an appropriate activity to observe frequency counts of behavior management strategies.

Classroom Assessment Scoring System (CLASS). The CLASS (Pianta, La Paro, et al., 2008) is a well-established judgment-based scale that is informed by classroom observations. The CLASS has been recommended for widespread use by Head Start in response to the charge in the Improving Head Start for School Readiness Act (2007) of evaluating programs based on research-based metrics. It assesses the quality of preschool classrooms across three broad domains: (a) Emotional Support (ES), (b) Classroom Organization (CO), and (c) Instructional Support (IS). The ES domain measures the teachers' ability to support the social and emotional functioning of children in the classroom. The CO domain measures classroom practices to organize and manage child behavior, time, and attention. The IS domain measures teachers' support of cognitive and language development through curriculum implementation. Within each of the three broad domains are three or four focused dimensions: (a) Emotional Support (positive climate, absence of a negative climate, teacher sensitivity, and regard for student perspectives), (b) Classroom Organization (behavior management, productivity, and instructional learning formats), and (c) Instructional Support (concept development, quality of feedback, and language modeling). Each of the 10 dimensions is rated along a 7-point scale (1, 2 = low quality; 3, 4, 5 = mid-range of quality; 6, 7 = high quality). Once completed, individual dimension scores are added across cycles and divided by the number of observation cycles completed, yielding an average score on each dimension across the four observation cycles.

The CLASS has been well-developed and is valid for use in preschool settings (Pianta, La Paro, et al., 2008). The measure evidences good reliability (internal consistency alphas ranging from .79 to .80; Pianta, La Paro, et al., 2008). Score agreement across the 10 dimensions ranges from 78.8% to 96.9% (Pianta, La Paro, et al., 2008), and it demonstrates stability across cycles, school days, and across the school year (Pianta, La Paro, et al., 2008). Further, the CLASS has demonstrated strong criterion validity estimates as reported by Pianta, La Paro, et al. (2008). Importantly, CLASS scores within the classroom organizational domain predict important child outcomes including improvements in academic achievement, self-control, and social competence (Curby et al., 2009; Mashburn et al., 2008).

In the present study, given the emphasis on training teachers in the use of positive behavioral supports, the analyses focused

on the dimensions within the Classroom Organization Domain (i.e., Behavior Management, Productivity and Instructional Learning Formats). This domain was chosen as a primary outcome measure because the ratings are reflective of teacher behaviors related to the professional development training. A certified CLASS trainer trained observers to use the observation coding schemes and all research assistants successfully passed the required reliability testing prior to collecting any study data. Scores ranged from 1–7 with higher scores indicating better use of classroom organization strategies. Observations were conducted at Baseline (May) and three follow-up timepoints following the summer training (October, February, May). Observers completed four, 20-minute observation/10-minute scoring cycles for each teacher at each assessment point. Reliability checks were conducted on 20.7% of CLASS observations. In this study, an investigation of mean differences between the observer and reliability observer ($N = 58$ paired observations) revealed no significant differences between raters overall ($p > .05$) or across raters within intervention groups ($p > .05$).

Student Behavior Teacher Response (SBTR). The SBTR is a class-wide, manualized observation tool, and it is available from the manual authors (Pelham et al., 2008). The SBTR collects information on the frequency of child and teacher behaviors. Each time a child engages in a challenging behavior (i.e., defined as breaking one of the classroom rules), the behavior is coded. Following each instance of challenging behavior, observers watch the teacher for her/his response and code the teacher's behavior along two dimensions: (1) whether the teacher acknowledged the behavior, coded as appropriate, inappropriate, or not acknowledged; and (2) whether the teacher provided a consequence for the behavior, coded as appropriate consequence, inappropriate consequence, or no consequence. This procedure is repeated for each instance of challenging behavior that occurs during the 30-minute observation period. In addition to coding the instances of challenging behaviors, observers also collect a frequency count of the teacher's use of commands and praise statements.

The SBTR observation coding scheme has been successfully utilized in prior studies (e.g., Fabiano et al., 2010; Massetti, Pelham, & Waschbusch, 2007; Vujnovic et al., submitted for publication) to measure the frequency of child behaviors, teacher behavior, and the quality of response to challenging child behavior for preschool through 6th grade classrooms. In these studies, the measure demonstrated appropriate psychometric properties. In the present study, the number of challenging behaviors was used as a covariate in analyses, and the instances of praise along with the number of teacher commands that were effective and ineffective were investigated as measures of outcome. Reliability checks were conducted on 19.7% of SBTR observations. Correlations between the observer and a second reliability coder were $r = .88$ for child rule violations, $r = .81$ for group praise and .88 for individual praise, and $r = .80$ for group and individual commands, suggesting this observational measure was reliably coded in this study. Observations were conducted at Baseline (May) and three follow-up timepoints following the summer training (October, February, May).

Classroom Impairment Rating Scale (IRS). Teachers rated the level of classroom impairment as adapted from an item on the Impairment Rating Scale (Fabiano et al., 2006). The teacher is asked to place an "X" on a continuum from "No problem; definitely does not need treatment or special services" to "Extreme problem; definitely needs treatment or special services" in considering the impact of any behavioral challenges in the classroom on a visual analogue scale. The IRS is scored along a 0–6 point scale and greater scores are considered to fall in the impaired range of functioning. In prior work in preschool samples, the IRS exhibited acceptable temporal stability as well as evidence of convergent and discriminant validity (Fabiano et al., 2006). For the present study, the item

on classroom functioning was reworded to address overall classroom functioning rather than the classroom functioning of a single student. The IRS was used as an overall indicator of classroom functioning.

Teacher satisfaction with professional development. There were two major questions addressed through teacher satisfaction ratings. First, we asked all teachers to rate their satisfaction with the initial workshop. Then, for the group of teachers in the intensive group, we asked them to complete an additional rating, comparing the workshop portion of training to the intensive condition.

First, following the one-day workshop presentation, all teachers who attended the one-day workshop (i.e., those in the workshop and intensive condition) were asked to complete a Workshop Satisfaction rating. Using a seven-point scale (1 = strongly disagree, 7 = strongly agree), teachers were asked to rate how much they agreed or disagreed with statements such as this training included suggestions for how to: manage behavior in my classroom, how to structure my classroom, how to increase positive child behavior, how to decrease challenging behavior. Additionally, teachers were asked to consider whether they would recommend the training to others who work with preschool-aged children. These items were adapted from a related satisfaction measure that was used to investigate satisfaction with behavior management interventions (Pelham, Fabiano, Gnagy, Greiner, & Hoza, 2005).

Second, following the four days of the experiential learning sessions, a Comparative Training rating was given to only the teachers who attended the experiential learning days. This rating asked teachers to consider which training experience they preferred (e.g., full day workshop, experiential learning, or no preference). Further, on a four-point scale (1 = not at all, 4 = very much), teachers were asked to rate how much they felt they benefited from the experiential training and how much they enjoyed the overall training (e.g., workshop and intensive) experience. Finally, teachers were asked if they would do the training again, and if they would recommend the program to other early childhood educators.

5.3. Training integrity

On the initial workshop day, 100% of teachers in the intensive condition and 90% of teachers in the workshop condition attended. A review of the audiotaped lecture reveals that 100% of the intended lecture material was presented during the full day workshop.

For the intensive condition days, 39 teachers attended all four days (98%), and one teacher attended three of the four experiential learning days (2%). Research assistants performed integrity checks to ensure all core training topics were covered throughout the 5-minute interactions to process peer observations of teacher performance for 20% of all performance feedback sessions. These checks indicated 100% of planned content was covered for all sessions.

5.4. Attrition

Sixteen participants dropped out by the fourth observation point. The most common reason for dropout was that a teacher was no longer employed at Head Start ($N = 12$). In total, nine teachers (19%) from the workshop condition dropped out of the study by May 2010; seven teachers reported that they were no longer employed by Head Start, one teacher reported that she was assigned to a nonteaching position, and one declined participation because she was not randomized into the group she wanted. Seven teachers assigned to the intensive condition (18%) dropped out of the study by May 2010; six teachers reported that they were no longer employed by Head Start and one teacher reported that she was assigned to a nonteaching position. An

examination of demographic differences between teachers who continued their participation and those who dropped out prior to the May assessment point did not reveal differences between groups in terms of gender, current teacher role, the number of years experience in teaching, training condition, or level of education.

5.5. Data analysis plan

In analyses of primary outcome, mixed models were used that made use of all available data from each case. Specifically, the repeated-measure outcomes were analyzed using a mixed ANOVA where the main explanatory variables included the treatment group, time, and their interaction as class variables and the value of the child rule violations per classroom as a covariate. In accordance with the study design, clustering effects from repeated measurements within subjects and each Head Start center were handled in the error terms and random effect terms (Pinheiro & Bates, 2000), respectively. As a result, the covariance structure was composed of the two sources of clustering effects (i.e., two error terms), one is by centers and the other is by each subject nested within center. The pair-wise comparisons and group comparisons at specific time points were carried out using contrasts based on the mixed ANOVA model.

Primary measures of outcome were the three dimensions falling within the Classroom Organization domain of the CLASS measure (Behavior Management; Productivity; and Instructional Learning Formats) and the SBTR frequency counts of the number of praise statements issued by the teacher, number of inappropriate commands issued by the teacher, and the number of appropriate commands issued by the teacher. Groups did not differ on any measure of primary outcome at baseline, with the exception of the frequency of inappropriate commands, $t(207) = -3.01, p = .003$, with teachers in the workshop group issuing a greater number of inappropriate commands than teachers in the intensive condition (adding this variable as a covariate did not change the pattern of results so the analyses presented are for the more parsimonious model). Descriptives for these outcomes at each timepoint are displayed in Table 2.

Using the analysis described above, the main effects of Teacher Group (workshop, intensive) and Assessment Point (Baseline, October, February, May) were modeled along with the Teacher Group × Assessment point interaction. Consultation and satisfaction outcomes were also analyzed, using descriptive statistics and group comparisons.

6. Results

6.1. Study outcomes

Observational outcomes. On observational measures of primary outcome, there were no significant group by time interactions. Main effects of group were analyzed with planned contrasts between the workshop and intensive groups at each of the four assessment points.

For the CLASS Behavior Management dimension, groups differed significantly at the October observation point, $t(203) = 2.97$, $p = .003$. An inspection of mean scores on this dimension indicated teachers in the intensive group were rated as exhibiting better behavior management-related procedures ($M = 5.49, SD = .87$) than teachers in the workshop condition ($M = 4.90, SD = .93$). The effect size for this difference was $d = .66$. For the CLASS Instructional Learning Formats dimension, groups differed significantly at the October observation point, $t(203) = 3.32, p = .001$. An inspection of mean scores on this dimension indicated teachers in the intensive group were rated as better ($M = 4.51, SD = .91$) in the area of Instructional Learning Formats than teachers in the workshop condition ($M = 3.81, SD = .92$). The effect size for this difference was $d = .77$. There were no significant differences between groups on any of the other assessment points or in the dimension of Productivity.

On the SBTR frequency count of praise statements issued, groups differed significantly at the May observation point, $t(207) = 2.32$, $p = .021$. An inspection of mean scores on this domain indicates teachers in the workshop group were observed to issue fewer praise statements ($M = 8.30, SD = 6.76$) than did teachers in the intensive learning group ($M = 13.10, SD = 7.21$). The effect size for this difference between groups at the Final May assessment point was $d = .69$. Also notable is that the frequency of praise statements decreased as the year progressed for teachers in the workshop condition, whereas teachers in the intensive group maintained approximately the same rate of praise throughout the school year, though these differences did not become significant until the final post-training observation. Teacher rates of appropriate and inappropriate commands were not significantly different across training groups at any of the follow-up assessment points.

Consultation outcomes. All teachers were offered the opportunity to work with a behavioral consultant during the school year. Overall, results do not reveal significant differences on the Behavior Management dimension score on the CLASS between teachers who requested consultation ($M = 4.75, SD = .95$) and those who did not

Table 2
Descriptive outcomes for the primary observational outcome measures.

	Baseline	October	February	May	*p*-value for Group × Time Interaction
CLASS Classroom Organization Domains					
BM – Workshop	3.98 (1.09)	4.90 (0.93)[a]	4.96 (0.76)	4.89 (0.90)	.1971
BM – Intensive	4.28 (0.98)	5.49 (0.87)[a]	5.10 (0.90)	5.01 (0.84)	
Productivity – Workshop	4.02 (0.89)	5.18 (1.01)	5.34 (0.74)	5.19 (0.78)	.6450
Productivity – Intensive	4.36 (0.94)	5.54 (0.80)	5.47 (0.68)	5.31 (0.73)	
ILF – Workshop	3.08 (0.89)	3.81 (0.92)[a]	4.13 (0.76)	3.72 (0.91)	.1114
ILF – Intensive	3.17 (0.97)	4.51 (0.91)[a]	4.37 (0.98)	3.87 (0.90)	
SBTR Teacher Behaviors					
Praise – Workshop	6.70 (5.21)	10.43 (6.90)	10.13 (8.17)	8.30 (6.76)[b]	.1618
Praise – Intensive	6.41 (4.10)	13.23 (11.08)	13.34 (10.69)	13.10 (7.21)[b]	
Inappropriate Commands – Workshop	1.13 (1.78)	0.55 (1.15)	1.08 (1.56)	0.86 (1.61)	.2580
Inappropriate Commands – Intensive	0.33 (0.66)	0.20 (0.63)	0.69 (1.40)	0.68 (1.38)	
Appropriate Commands – Workshop	16. 04 (10.91)	18.75 (9.24)	17.78 (10.36)	18.58 (12.78)	.7462
Appropriate Commands – Intensive	15.23 (9.40)	19.80 (12.65)	18.56 (12.99)	19.65 (12.95)	

Notes: BM = Behavior Management Scale. ILF = Instructional Learning Formats Scale. SBTR = Student Behavior Teacher Response Observational Measure.

[a] October observations significantly different between groups.
[b] May observations significantly different between groups.

receive consultation ($M = 5.06$, $SD = .79$), $t(70) = 1.13$, $p > .05$ during the February observations. However, on the IRS, results did reveal significant differences between teachers who requested consultation ($M = 3.2$, $SD = 1.93$) and those who did not ($M = 1.27$, $SD = 1.55$), $t(70) = 1.13$, $p = .001$, $d = 1.10$. This indicated that teachers who requested consultation viewed their classroom as requiring intervention.

An investigation of the use of behavioral consultation during the subsequent school year revealed that 12 teachers self-referred for consultation. Overall, a significantly larger percentage of the teachers in the intensive condition requested behavioral consultation ($N = 9$ of intensive vs. $N = 3$ for workshop), $\chi^2(1) = 4.89$, $p = .03$; further, teachers in the intensive condition were more likely to request consultation to manage the specific needs of an individual student, $\chi^2(1) = 8.00$, $p = .02$.

Although the sample size in each group of consultees was small, differences between groups were investigated at the end of the school year in an exploratory manner. Results did not reveal significant differences in ratings on the CLASS Behavior Management dimension at the end of the school year between teachers in the workshop condition who requested consultation ($M = 4.42$, $SD = 1.38$) and those in the intensive condition who received consultation ($M = 4.89$, $SD = .80$), $t(8) = .71$, $p > .05$. Additionally, on the IRS, there were no differences between teachers in the workshop condition ($M = 3.33$, $SD = 2.89$) who requested consultation and those in the intensive condition ($M = 3.14$, $SD = 1.68$), $t(8) = .14$, $p > .05$. Thus, consultation did not appear to work differently across groups in these exploratory analyses.

Training and consultation satisfaction. Following the one-day workshop, educators were asked to complete a Workshop Satisfaction rating. Participants reported that the workshop training included useful strategies for managing behavior in the classroom ($M = 6.45$, $SD = .74$), for structuring the classroom ($M = 6.22$, $SD = .96$), for increasing positive child behavior ($M = 6.51$, $SD = .67$), and included strategies for decreasing challenging behavior ($M = 6.12$, $SD = .94$). Further, attendees reported that the workshop training made sense for their classroom situation ($M = 6.44$, $SD = .77$), that they had a chance to discuss the training topics with other preschool educators during the training ($M = 6.65$, $SD = .63$), and reported that they would recommend the strategies to others who teach preschool children ($M = 6.64$, $SD = .67$). The majority of teachers agreed or strongly agreed (95.2%) that they would recommend the training to other educators who work with preschool-aged children.

Following the intensive training, teachers who participated in these activities completed a Comparative Satisfaction rating. In their evaluation of the intensive training, participants reported that the training included useful strategies for managing behavior in the classroom ($M = 6.21$, $SD = .95$), for structuring the classroom ($M = 5.82$, $SD = 1.02$), for increasing positive child behavior ($M = 6.56$, $SD = .59$), and it included strategies for decreasing challenging behavior ($M = 5.85$, $SD = 1.01$). Further, attendees reported that the training made sense for their classroom situation ($M = 6.28$, $SD = .89$), that they had a chance to discuss the training topics with other preschool educators during the training ($M = 6.77$, $SD = .42$), and reported that they would recommend the strategies to others who teach preschool children ($M = 6.64$, $SD = .67$).

Additionally, 69.4% of teachers reported that they preferred the intensive training component relative to the workshop, 25% reported they preferred the workshop, and 5.6% reported no preference. Teachers in the intensive condition reported that they benefited from training (100%), enjoyed the training (100%), would definitely attend the training again (92.3%), would recommend the program (94.8%), and were satisfied with this training more than others they had attended in the past (92.3%).

7. Discussion

This study investigated two approaches for improving the use of positive behavioral supports for preschool children in Head Start classrooms. A one-day workshop or an intensive training condition that included a one-day workshop plus an additional four days of practice in preschool classrooms was conducted over the summer, and results of the training were evaluated proximally (during October of the ensuing school year) and distally (during February and May). Results indicated that on measures of effective behavioral management and instructional learning formats, teachers in the intensive condition were improved proximally, but these effects waned over time. For measures of teacher use of praise, both groups improved in their rates of praise relative to baseline, but the intensive group improved more and maintained the improved rate throughout the year. Rates of commands and ratings of classroom productivity on the CLASS were unchanged. Teachers were satisfied with both approaches to training, and the training approaches were feasible to implement. Importantly, significant differences and meaningful effect sizes were obtained favoring the intensive training in spite of the fact that the comparison condition also included active training. Each of these outcomes will be discussed in turn.

Positive effects of the intensive training condition, relative to the workshop condition, were found on the CLASS, a measure of recent emphasis in Head Start settings (Improving Head Start for School Readiness Act, 2007). In the present study, teachers afforded the opportunity to practice behavioral management strategies with students in a positive manner, as well as observe other teachers practicing the same skills, were observed to demonstrate these competencies more than a group of educators that attended a lecture and discussed the use of these strategies. This is consistent with previous research supporting the benefits of experiential learning procedures (e.g., Eyberg, Boggs, & Algina, 1995; Fantuzzo et al., 1996; Forehand & Long, 1988). These results are interesting in light of considerable resources dedicated to the professional development of educators in early childhood settings each year. Importantly, the apparent benefits of the experiential learning during the initial observation early in the school year did not persist during the observations that were more removed from training. This suggests that the effects of training may wane as the time between training and observations lengthens, even in spite of access to a behavioral consultant to assist with classroom management. This finding is therefore both positive in the respect that teacher behavior was effectively changed, yet sobering in that gains were not maintained over the course of the school year. Other investigations have suggested more directive and prescribed coaching may be necessary to promote the maintenance of positive outcomes on this measure (Pianta, Mashburn, et al., 2008). Thus, there may be benefit to a prescribed and ongoing maintenance or booster training approach that follows the initial intensive training (e.g., Pianta, Mashburn, et al., 2008 worked with teachers throughout the entire school year in an intensive web-based professional development program). In addition, other effective professional development studies included over 30 hours of instruction implemented over months rather than a single week (Raver et al., 2009; Webster-Stratton et al., 2001), and this may be beneficial to teachers as classroom management demands wax and wane over the course of a school year. Future studies that include a finer-grained investigation of procedures to promote maintenance of gains (e.g., incentives, monitoring) as well as the correct "dose and schedule" of professional development interventions are needed to determine how to best promote the continued use of best practice strategies.

A different pattern of results was found on the SBTR frequency count of praise statements issued. Although both groups increased

their rates of praise for the October observation relative to the initial baseline observation, teachers in the intensive group maintained the increased rates of praise, whereas teachers in the workshop group appeared to return closer to baseline levels by the end of the school year. Experiential practice has long been used as a means of increasing the rates of parents' use of praise (e.g., Eyberg et al., 1995; Forehand & Long, 1988), and this study suggests that it may also be effective for improving teachers' use of praise. Interestingly, these results appear to replicate the findings of Fantuzzo et al. (1996), where increased rates of praise during parent–teacher led classroom activities were observed following experiential learning. The present study also extended these findings to include teacher assistants, collect outcome data over the course of an entire school year, and to focus on implementation of skills during classroom instructional and activity times that were teacher-directed (rather than parent–teacher directed). Given that "catching children being good" rather than redirecting or reprimanding following a negative behavior is a recommended practice with a considerable evidence base in early education settings (Hester et al., 2009), and that positive student–teacher relationships characterized by emotional support result in positive student outcomes (e.g., Mashburn et al., 2008), further investigations of the merits of experiential learning for the application of this skill appears warranted. For instance, given that this skill was increased and this increase was maintained during the entire school year, studies may investigate whether professional development trainings targeting this skill alone have merit. It is also important to investigate alternative procedures for improving other skills that did not evince maintenance of gains over time (e.g., CLASS dimension scores). Alternative approaches may be needed as these areas may be more complex and require multiple skills working in concert, which may be more difficult for educators to implement consistently over time (see Fukkink & Lont, 2007).

Following the summer training, all participating teachers were given access to a behavioral consultant regardless of prior training condition. A few outcomes are straightforward – overall only a minority of educators sought consultant support, those that did were more likely to be in the intensive group. These consultation usage outcomes are modest, yet they are consistent with the outcomes related to behavioral consultation at the elementary school level (Fuchs & Fuchs, 1989; Martens & Ardoin, 2002). Interestingly, scores on the IRS related to classroom functioning, which was the subjective rating from the teacher, was a possible predictor of a teacher seeking consultation support. This suggests that perhaps teachers needed to acknowledge that the classroom was impaired in order to take the step to seek help, regardless of the objective observation of classroom functioning. Future studies may investigate the best approaches to promoting teachers' accurate appraisals of their classroom functioning. An additional observation was that teachers in the intensive condition were four times as likely to request follow-up consultation, and the target of the consultation was more often a particular child rather than a whole-class issue. One might speculate that the intensive training promoted increased use of effective classwide strategies, leaving more time to work on individual cases, and that the intensive teachers were more comfortable requesting and receiving consultation based on their four days of similar interactions working within the experiential classroom. These results provide some justification for additional studies of consultation use and content as the best approach to increase uptake and collaboration in behavioral consultation remains an important area of future study. This may be especially important given the findings that access to a behavioral consultant in preschool settings was one of the strongest protective factors for preventing preschool expulsion (Gilliam, 2005).

The results of the satisfaction measures administered to the educators in the study suggested that all the professional development activities used in the present study were acceptable to teachers. It is also interesting that the majority of teachers in the intensive group, who had the ability to compare the two training conditions to one another, favored the condition that included intensive practice. This may suggest that future efforts to train Head Start teachers include experiential learning components, as this study adds to the literature suggesting this is an effective means of working with Head Start personnel (Fantuzzo et al., 1996).

7.1. Limitations

This study does have limitations. The small sample size prevented the investigation of moderators of response to the training. The study methods also did not control for training time – teachers in the intensive condition attended four additional training days so it is not possible to rule out if additional attention and training time resulted in the positive effects observed in the intensive condition. This may also have influenced ratings of satisfaction as teachers were not blind to condition. However, the intent of the study was to compare a well-conducted experiential learning condition to the standard of care – a one-day workshop; future studies that control for training time and trainer attention now appear warranted. This study also used a one-time summer training approach, which may limit the use of this approach in early education settings. That is, given the potential for high rates of staff turn-over in early education settings, and that preschool staff typically do not work in summers, it is likely that alternative models of professional development training that can be implemented throughout the school year also need to be considered. Related to this issue is that some participants worked in the same classroom with other study participants whereas others did not. This was one reason measures focused on individual teacher behaviors rather than overall classroom functioning and that individual child behaviors were only used as a control variable. Relatedly, child outcomes are not reported as classroom rule violations were recorded in aggregate, and reflect a different group of students at baseline than at each of the follow-up assessment points. Additionally, participants in this study were compensated for attending each day of training. Thus, the high rates of attendance may have been influenced by monetary incentives. Finally, because the access to a consultant was provided to all educators, the interaction between the training approaches and consultation could not be investigated.

It is also worth discussing the cost of the intensive training relative to the potential benefits obtained. In practice, it is more costly to provide early childhood educators with more intensive professional development training. However, in the long run, the cost of professional development to enhance teachers' use of positive behavior support strategies may reduce future costs associated with challenging student behavior (e.g., the cost of hiring an additional classroom aide to help manage behavior, salary time for education supervisors and teaching staff to meet with parents regarding behavioral challenges, the costs associated with more restrictive placements). The elementary school costs of intervening with students exhibiting disruptive classroom behavior are estimated to be over 15 times that of a typically-developing student (Robb et al., 2011). Thus, early intervention, while more costly in the short-term, may confer cost savings from a long-term perspective if it promotes positive elementary school and longer-term outcomes (see also Barnett & Masse, 2007; Heckman, 2000). It should also be noted that although more costly, the intensive training resulted in improvements in teachers' use of praise and behavior management procedures beyond that of a workshop. Thus, although the workshop approach is less costly, it was not as effective suggesting the greater cost of the intensive program may be justified.

7.2. Future directions

This study begins to identify professional development procedures that have merit for supporting early educators in their use of behavior management strategies that are positive and student-centered. A novel aspect of this study was the use of a summer experiential learning classroom for early educators. The summer classroom offered multiple benefits because it capitalized on a time period when early educators are available for full-day trainings, offered an opportunity to interact and observe with other educators, and it offered intensive, hands-on practice on the skills targeted through the training. Future studies might investigate this approach to support the development of other skills (e.g., use of instructional strategies) or determine how to integrate it into center-based training plans. Further, as noted in the limitations, it was not possible in this sample to investigate training outcomes separately for teachers versus assistants. Future studies are needed to investigate the impact of professional development approaches for lead teachers, as well as assistant teachers, as all have behavior management responsibilities in early education classrooms.

Other future directions relate to the school-based consultation. For example, this study did not cross access to the behavioral consultant with training type. Future studies that do this may result in different outcomes. Future studies should also investigate ways to promote teachers' use of these consultation resources either through systematic progress monitoring by supervisors or through other mechanisms (e.g., online learning; videotape review; see Pianta, Mashburn, et al., 2008 for an example). Additional studies may also focus on even more specific skills. For instance, given the findings that rates of praise improved in both groups and intensive teachers maintained their rates of praise across the school year, this may be a good candidate skill for additional intensive training given its impact of child-related behavioral outcomes (Hester et al., 2009). Further studies need to also directly address how these teacher practices impact student outcomes, and additional investigation is also needed to identify approaches that can promote the maintenance of other skills across the school year (e.g., use of effective instructions). Finally, procedures for implementing the intensive professional development program into community organizations in a cost-effective manner require additional study.

In conclusion, this study supports the use of experiential learning with Head Start teachers. Based on the results of the study, early childhood educators who learned about effective positive behavioral supports and were provided the opportunity to practice these strategies in the summer exhibited greater rates of positive attending across the school year and were also rated as having classrooms that were better organized, engaging, and well-managed. These effects waned over the course of the school year, however, so additional studies are needed to determine the best way to maintain these potentially promising gains.

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