BEST IN CLASS: A CLASSROOM-BASED MODEL FOR AMELIORATING PROBLEM BEHAVIOR IN EARLY CHILDHOOD SETTINGS

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As more young children enter school settings to attend early childhood programs, early childhood teachers and school psychologists have been charged with supporting a growing number of young children with chronic problem behaviors that put them at risk for the development of emotional/behavioral disorders (EBDs). There is a need for effective, feasible models that help school personnel address the needs of these young children within early childhood settings. This article describes Behavioral, Emotional, and Social Training: Competent Learners Achieving School Success (BEST in CLASS). BEST in CLASS is a classroom-based intervention designed to help early childhood teachers master effective instructional strategies for preventing and ameliorating problem behavior in young children at risk for EBDs through a teacher training and performance-based coaching model. The BEST in CLASS intervention model is described, and preliminary data are presented, followed by a discussion of implications for practice and future research directions. © 2012 Wiley Periodicals, Inc.

There is a strong national initiative and growing evidence base to support the critical importance of early childhood programs for increasing school readiness among young children prior to kindergarten entry (Barnett et al., 2010; National Association for Educating Young Children & National Association of Early Childhood Specialists in State Departments of Education 2002; National Research Council, 2001; Pianta & Howes, 2009). However, as more young children enter early childhood programs, policy makers, researchers, and practitioners have found that many children lack the necessary social and behavioral skills to succeed in early childhood settings (Dunlap et al., 2006; Kaiser, Xinsheng, Hancock, & Foster, 2002). In fact, many of these children demonstrate problem behaviors that increase their risk for the future development of emotional/behavioral disorders (EBDs). Recent estimates suggest that the number of young children who demonstrate chronic problem behaviors that place them at elevated risk for EBDs ranges from 15% to 25% (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Hamre & Pianta, 2001; Loeber & Farrington, 2000; Webster-Stratton, 1997). These figures indicate that this is a national, if not international, health concern (e.g., Abdel-Fattah et al., 2004; Elhamid, Howe, & Reading, 2009; Feil et al., 2005; van Oort, van der Ende, Wadsworth, Verhulst, & Achenbach, 2010) with far-reaching impact. Research has shown that when children exhibit chronic problem behaviors at a young age, these behaviors impact their current and future performance in school (Burchinal et al., 2002; Hamre & Pianta, 2001; Loeber & Farrington, 2000; Webster-Stratton, 1997), as well as their trajectory into adulthood (Dishion, French, & Patterson, 1995; Patterson, Reid, & Eddy, 2002).

With more young children attending early childhood programs (Barnett et al., 2010), interactions between teachers and young children have emerged as an important factor with the potential to influence child outcomes. In fact, positive interactions between teachers and young children are associated with later school adjustment and social, emotional, behavioral, and developmental outcomes (e.g., Hamre & Pianta, 2001; Henricsson & Rydell, 2004; Ladd & Burgess, 1999). Unfortunately,

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children who engage in chronic problem behavior are more likely than their peers to develop coercive relationships with their teachers (Ladd & Burgess, 1999), and such relationships, when developed early in children's school careers, put them at further risk for later behavioral and academic problems (Hamre & Pianta, 2001). The development of coercive interaction patterns is particularly troubling, as the nature of relationships between teachers and children tends to remain stable over time (Henricsson & Rydell, 2004). Research suggests that these interactions are transactional in nature (Doumen et al., 2008; Sutherland & Oswald, 2005), with interactions between teachers and young children with chronic problem behavior having the potential to serve as either a risk or protective factor (Burchinal et al., 2002; Mantzicopoulos, 2005). That is, positive teacher–child interactions can serve as a protective factor, whereas coercive interactions can place children at increased risk for future negative teacher–child interactions and associated outcomes.

Although research indicates that early childhood teachers can play a critical role in supporting young children's behavior, it also indicates that many early childhood teachers are unaware of evidence-based practices that might increase the protective nature of their interactions with these children (Stormont, Reinke, & Herman, 2011). This lack of knowledge may be associated with a lack of sufficient experience, training, or support (Reinke, Stormont, Herman, Puri, & Goel, 2011). Thus, there is a need for interventions that focus on building teachers' knowledge and skills to promote positive teacher–child interactions that are developmentally appropriate and supportive of children's emotional and behavioral growth. Fortunately, teachers do not work in isolation and often receive support in working with children with problem behavior from other school personnel, including school psychologists. School psychologists can and do play a key role in supporting children with problem behaviors and other mental health concerns in school settings and also provide support to teachers working with these children. In fact, teachers view school psychologists as a primary source of support for both the prevention- and intervention-related needs of children with mental health concerns (Reinke et al., 2011).

Although the role of school psychologists in early childhood settings has typically involved assessment administration, eligibility determination, and intervention for children with disabilities, researchers, practitioners, and professional organizations have argued for an expanded role in which school psychologists participate in preventive measures and support school readiness goals for all children (Bagnato, 2006; Bagnato, Neisworth, Paget, & Kovaleski, 1987; Hojnoski & Missall, 2006). This shift may in part be reflective of the increasing move toward tiered intervention models in the fields of early intervention and school psychology (Division for Early Childhood, 2007; National Association of School Psychologists [NASP], 2008). Within such models, school psychologists can play a critical role in preventing and ameliorating problem behavior by helping early childhood teams to select, implement, and monitor behavior-related instruction and intervention at the universal, targeted, and individual levels. Specifically, school psychologists can help schools or programs to select evidence-based interventions that target each of the three tiers; provide training, consultation, and coaching (including performance feedback) to teachers; and provide support in the use of progress monitoring and data-based decision making (NASP, 2008).

Behavioral, Emotional, and Social Training: Competent Learners Achieving School Success (BEST in CLASS; Sutherland, Conroy, Abrams, & Vo, 2010) was developed as a targeted intervention (i.e., Tier 2) for children at risk for the development of EBDs designed to improve teachers' use of effective instructional practices that positively influence teacher–child interactions, which in return improve young children's current and future social and behavioral outcomes. However, it was also intended to function as a universal intervention (i.e., Tier 1) by improving the quality of teachers' instructional interactions with all children. In light of research that indicates the importance of teacher–child interactions and the influence of these interactions on improving young children's outcomes, BEST in CLASS targets key effective instructional practices that are associated with

decreases in children's problem behavior and increases in children's engagement using a teacher training and performance-based coaching model. Teachers' use of these effective instructional practices serves to change the nature of teacher–child interactions by increasing the likelihood of positive child responses, which further encourages the use of positive behaviors and practices by teachers. Through an increase in positive reciprocal teacher–child interactions, child outcomes and the overall classroom climate are improved. In the BEST in CLASS model, school psychologists with expertise in early childhood education may be ideally situated to guide school teams as they implement the model by providing support with the data collection and progress monitoring components, delivering performance feedback and monitoring treatment integrity, and providing ongoing consultation related to implementation and child outcomes.

The primary purpose of this article is to provide a description of the BEST in CLASS intervention model. Specifically, we describe the theoretical framework that the intervention model is situated within; the specific intervention components, including the training and performance-based coaching delivery system; and preliminary outcome data. Future research and practice directions will also be discussed.

Overview of the BEST in CLASS Intervention Model

The BEST in CLASS intervention model was developed through an ongoing collaboration between university researchers and community partners (i.e., early childhood teachers, school psychologists, and program administrators) with the overall purpose of developing an intervention that addressed the needs of young children who demonstrate chronic problem behaviors and their teachers in early childhood settings. We used a collaborative approach to support the development of a manualized intervention that would (a) have a strong theoretical and empirical foundation, and (b) address the instructional needs of early childhood educators for implementation of a classroom-based model.

Theoretical and Empirical Foundation

The BEST in CLASS theoretical framework recognizes the complex relationship among child, teacher, and context within early childhood classrooms. Specifically, BEST in CLASS weaves together three theoretical models, whereby behavioral teaching principles (Skinner, 1954) are embedded in social transactions (Sameroff, 2009) between teachers and children within the ecology of the early childhood classroom (Bronfenbrenner, 1979, 2005). The BEST in CLASS intervention comprises effective instructional strategies that represent teacher behavior designed to promote effective teacher–child interactions and relationships, increase child engagement and learning, and decrease problem behavior (Conroy, Sutherland, Haydon, Stormont, & Harmon, 2008; Sutherland et al., 2010).

The effective instructional practices selected for inclusion in the BEST in CLASS model include (a) rules, expectations, and routines; (b) behavior-specific praise; (c) precorrection and active supervision; (d) opportunities to respond (OTRs) and instructional pacing; and (e) teacher feedback. Effective strategies for proactive and positive home-school communication are also included to support the use of each of the components of the BEST in CLASS model across the school and home environments. These strategies were selected because they have empirical support with elementary-age children with EBDs or other disabilities (e.g., Barbetta & Heward, 1993; Colvin, Sugai, Good, & Lee, 1997; Dunlap et al., 2006; Sutherland, 2000; Sutherland, Alder, & Gunter, 2003; Witt, VanDerHeyden, & Gilbertson, 2004), use a preventive and positive orientation, and are appropriate (with adaptation) for use in early childhood settings. The content and delivery of the BEST in CLASS model were developed around these effective practices within the context of our theoretical framework. The overall goal is to improve the social, emotional, and behavioral functioning, and
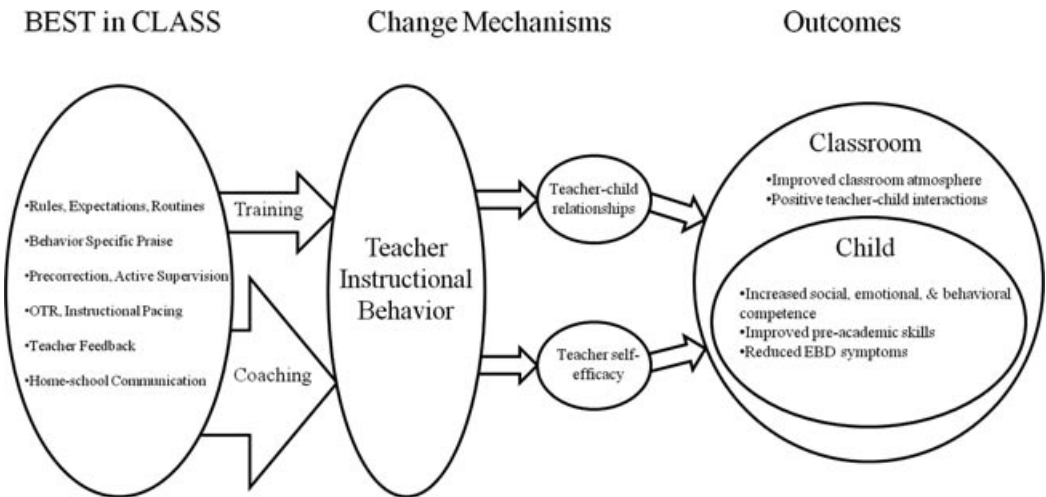
FIGURE 1. BEST in CLASS theory of change model.

concomitantly, the pre-academic competence of preschool-age children who are at elevated risk for EBDs.

Whereas early childhood teachers may employ these practices naturally, research suggests that these teacher behaviors occur infrequently and that their quality may be limited (Sutherland et al., 2010). BEST in CLASS alters characteristics of the early childhood classroom environment (through teacher training and coaching in targeted effective practices), as well as enhancement of teacher's home-school communication skills and sharing of targeted instructional strategies with caregivers. Figure 1 illustrates our theory of change model, including the process by which BEST in CLASS adds value to typical teacher instructional behavior in early childhood classrooms, as well as hypothesized change mechanisms. We propose that increases in both the quantity and quality of evidence-based instructional practices delivered by teachers will result in improvements in key classroom and child outcomes via improved teacher–child relationships and increased teacher self-efficacy. As indicated in Figure 1, BEST in CLASS is delivered to teachers through training and performance-based coaching, with the coaching hypothesized to have the greatest impact on teacher instructional behavior. Within our current research, the performance-based coaching component of the intervention is delivered by research staff; however, outside of the research context, we foresee this coaching component being provided by school personnel.

BEST in CLASS Intervention Model

BEST in CLASS provides teachers with strategies that they can implement in early childhood classroom settings throughout the school day with focal children, as well as with other children in their classrooms. Positive outcomes for children are achieved through a focus on enhancing teachers' knowledge, skills, comfort level, and use of effective instructional practices. This emphasis on developing teacher competence, as opposed to discrete child skills, supports the development of a prosocial classroom (Jennings and Greenberg, 2009). In other words, BEST in CLASS has the potential to target the needs of young children with chronic problem behavior that may lead to EBDs, promote positive teacher–child interactions, enhance the overall classroom atmosphere, and improve teachers' sense of self-efficacy related to their ability to manage the behavior of the children in their classroom.

The BEST in CLASS intervention model was developed using an iterative process and included the development and refinement of training content, materials and processes, and evaluation procedures. The BEST in CLASS intervention includes two stages. The first stage is a 6-hour professional development session that is designed to provide teachers with increased knowledge about effective teaching practices (i.e., introduction of the BEST in CLASS teacher learning modules) designed to work with children at risk for EBDs. The second stage (i.e., performance-based coaching) provides ongoing support for teachers to develop mastery and optimize their use of these effective instructional practices as they implement them in their classrooms. During the development process, components were piloted with a group of early childhood teachers, quantitative (i.e., teacher and child measures, treatment integrity) and qualitative (i.e., focus groups, social validity data, and verbal and written feedback) data were collected, literature reviews were conducted, and refinements to the model were made. The content, training materials and processes, and evaluation procedures resulting from this process will be discussed in the next section.

Content. The BEST in CLASS model comprises eight teacher learning modules that include the selected effective instructional practices, home-school communication, background and supplementary information, and a coaching module that includes specific information and procedures for conducting the performance-based coaching component of the intervention. The eight teacher learning modules are: (a) *Basics of Behavior and Development*, (b) *Rules, Expectations, and Routines*, (c) *Behavior Specific Praise*, (d) *Precorrection and Active Supervision*, (e) *Opportunities to Respond and Instructional Pacing*, (f) *Teacher Feedback*, (g) *Home-School Communication,* and (h) *Linking and Mastery*. Each of these modules will be described in the following paragraphs.

The *Basics of Behavior and Development* module provides an introduction to the BEST in CLASS approach and a shared understanding of terms and concepts to support learning and mastery of the content in the remaining modules. This includes information on the BEST in CLASS framework; definitions and examples of key behavioral terms and principles; and information about individual differences and age-appropriate social, emotional, and behavioral development.

The *Rules, Expectations, and Routines* module provides instruction on how to design, implement, and promote compliance with three global strategies that set the stage for an organized classroom in which all children and adults have a shared understanding of appropriate child behavior and expectations. Used effectively, rules, expectations, and routines can prevent problem behavior by teaching children how to meet behavioral expectations, significantly impacting child outcomes (Emmer & Stough, 2001; Gable, Hester, Rock, & Hughes, 2009; Mayer, 1995, 1999; Witt et al., 2004).

Next, the module *Behavior Specific Praise* describes how to create and deliver contingent and consistent behavior-specific praise statements, a form of verbal feedback that indicates approval and explicitly identifies the behavior that the teacher would like to see increased. Behavior-specific praise can serve as a strong reinforcer, increasing children's use of appropriate behaviors (Gable et al., 2009; Smith, Lewis, & Stormont, 2011; Stormont, Smith, & Lewis, 2007; Sutherland, Wehby, & Copeland, 2000) and providing critical opportunities for positive teacher–child interactions (Rathel, Dragsow, & Christle, 2008; Sutherland et al., 2000; Wehby, Symons, & Shores, 1995).

The module *Precorrection and Active Supervision* provides instruction on how to use two antecedent-based intervention strategies that can prevent many predicatable problem behaviors (Colvin et al., 1997; DePry & Sugai, 2002: Lewis, Colvin, & Sugai, 2000; Smith et al., 2011; Stormont et al., 2007). Precorrection is a reminder of the appropriate behavior or response provided prior to entry into the situation in which the error typically occurs and can teach children to be successful in situations in which they repeatedly make social, behavioral, or pre-academic errors, whereas active supervision involves physically moving around and visually scanning the environment, regularly

interacting with children, and using proximity control (Colvin et al., 1997; DePry & Sugai, 2002; Lewis et al., 2000; Smith et al., 2011).

The module *Opportunities to Respond and Instructional Pacing* describes how to create and implement varied, high-quality OTRs with appropriate instructional pacing, which can increase children's engagement and learning and decrease disruptive behavior (Stichter et al., 2009; Sutherland et al., 2003; Sutherland & Wehby, 2001b). This focus on children's involvement in learning opportunities also increases critical positive instructional interactions between teachers and children, which typically occur infrequently for children with problem behavior (Sutherland et al., 2003; Sutherland & Wehby, 2001b).

Next, *Teacher Feedback* presents two forms of feedback, corrective and instructive, that can be used to respond constructively to incorrect and correct behaviors and responses, thereby increasing opportunities for learning, the likelihood of future correct responding, and positive instructional interactions (Hattie & Timperley, 2007; Konold, Miller, & Konold, 2004). Corrective feedback is a response to a child's incorrect behavior or response that identifies the incorrect response, explicitly states the alternative correct behavior or response, and provides the child with an additional opportunity to respond (Hattie & Timperley, 2007), whereas instructive feedback is provided following a child's correct response or behavior by acknowledging the correct response and providing additional related or novel information (Konold et al., 2004; Werts, Caldwell, & Wolery, 2003: Werts, Wolery, Holcombe, & Gast, 1995).

Home-School Communication focuses on the critical role that teachers can play in promoting caregiver involvement in addressing children's problem behavior positively and proactively (Dunlap & Fox, 2007; Dunlap et al., 2006). Caregivers' collaboration with school personnel in efforts to address chronic problem behaviors is essential because of the significant reciprocal interactions between children's behavior and development and the family context, and the unique knowledge that families possess about their children (Dunlap & Fox, 2007; Dunlap et al., 2006; Fox, Dunlap, & Powell, 2002). This module provides strategies for enhancing relationships and communication with caregivers and sharing behavior-related information and strategies with caregivers.

Finally, *Linking and Mastery* provides teachers with additional support for using the BEST in CLASS strategies in efficient, meaningful sequences. Research indicates that many of the strategies in the BEST in CLASS model are associated with one another and tend to occur in particular sequences. For instance, praise statements and OTRs are highly and positively correlated (Sutherland, Wehby, & Yoder, 2002). Furthermore, teacher praise is likely to be followed by OTRs (Sutherland et al., 2002). In other words, teachers appear to find children's correct responses reinforcing and follow them with praise statements and additional OTRs (Sutherland et al., 2002). Other research indicates that behavior-specific praise is most effective when used in combination with active supervision behaviors and OTRs (Gable et al., 2009). This module also provides tips for teachers on how to ensure generalization and maintenance of the BEST in CLASS strategies after the direct support of the coaching component has been removed.

The BEST in CLASS *Coaching* module is used to guide the 14-week coaching component of the intervention that begins following the initial professional development training session. This module includes procedures for conducting BEST in CLASS coaching, as well as guidelines, completed samples, and ready-to-use materials for all coaching activities. Additionally, mastery criteria and checkout assessments are included to ensure that coaches are prepared to implement the model. The coaching period consists of 1 week focusing on support modules (*Basics of Behavior and Development* and *Home-School Communication*); 2 weeks each for (a) *Rules, Expectations, and Routines*, (b) *Behavior Specific Praise*, (c) *Precorrection and Active Supervision*, and (d) *Opportunities to Respond and Instructional Pacing*; 3 weeks for *Teacher Feedback*, and 2 weeks for *Linking and Mastery*.

Weekly classroom-based coaching visits include an observation session and follow-up coaching meeting provided by coaches trained in the BEST in CLASS coaching model. The observation session begins with a 10-minute in-vivo coaching session (i.e., coach provides modeling or prompting), followed by the collection of (a) 15-minutes of direct observational data per focal child (using the *Teacher–Child Interaction Direct Observation System*; Sutherland, Conroy, Abrams, Vo, & Ogston, 2012); (b) anecdotal data including specific quotations from teachers of appropriate strategy usage, missed opportunities, and child responses; and (c) a brief (1- to 2-minute) video clip of the teacher interacting with focal children. The BEST in CLASS coach then summarizes the direct observational data in standardized bar graphs (one per focal child), and completes portions of the appropriate BEST in CLASS Weekly Coaching Plan, including written summaries of the graphical, anecdotal, and video data collected.

Next, the teacher and coach have a 20- to 30-minute face-to-face coaching meeting to review and complete the Weekly Coaching Plan. This includes (a) reviewing teachers' assignments and progress from the previous week; (b) asking teachers to assess their performance for the day on their goals (semi-standardized goals related to target strategies from the current module, determined at the previous coaching meeting); (c) reviewing the anecdotal, graphical, and video data; (d) asking teachers to re-assess their performance in light of the feedback provided; and (e) planning for the following week (new assignments, strategies, goals). This coaching model was based on the literature and was specifically designed for use with the BEST in CLASS model. It incorporates a variety of types of evidence-based performance feedback, including verbal, written, and graphical feedback; in-vivo coaching; guided self-reflection; and self-evaluation (Barton, Kinder, Casey, & Artman, 2011; Rathel et al., 2008; Sutherland & Wehby, 2001a).

Although a coaching role may not be appropriate for some school psychologists, they may assist school teams in adopting the model by serving in a leadership role. This might include conducting the initial training session, collecting or training others to collect and interpret data, monitoring treatment integrity, providing follow up consultation to teachers and coaches, monitoring child progress, and providing support in cases in which an individualized (i.e., Tier 3) intervention may be necessary.

Training Materials and Processes.   The BEST in CLASS delivery approach (i.e., the use of a professional development training session and follow-up performance-based coaching) increases the likelihood that teachers will become competent in using the BEST in CLASS strategies, as well as maintain these newly acquired skills after external support is removed. As indicated in the professional development literature, short-term professional development opportunities alone (e.g., 1-day workshops or trainings) do not tend to lead to significant changes in teacher behavior or child outcomes, whereas ongoing professional development programs, including follow-up support (e.g., coaching), can lead to increases in the fidelity of implementation of evidence-based practices by teachers and associated child outcomes (Kretlow & Bartholomew, 2010; Perry, Dallas Allen, Brennan, & Bradley, 2010; Yoon, Duncan, Lee, Scarloss, & Shapely, 2007).

The BEST in CLASS intervention content is delivered through the professional development session and the 14-week coaching process using several manualized training materials and processes. The primary intervention materials include the BEST in CLASS *Teacher Manual*, the *BEST in CLASS Coaching Manual*, and the *BEST in CLASS Professional Development Presentation*. The *BEST in CLASS Teacher Manual* includes the eight teacher learning modules and serves as a primary resource for teachers and BEST in CLASS coaches as they work collaboratively to optimize the teacher's implementation of the strategies contained within each learning module. This manual is provided to BEST in CLASS coaches as the primary source for the content that they will help teachers master during the coaching period. Coaches learn this content by reading and completing all activities in the *BEST in CLASS Teacher Manual*. Teachers receive their *BEST in CLASS Teacher Manual* at

the initial professional development session, are expected to read and complete assigned activities according to the predetermined coaching cycle in preparation for their weekly coaching visits, and use the manual as a reference and resource during and following the intervention period.

The *BEST in CLASS Coaching Manual* contains the coaching module, which includes background information, general guidelines, specific procedures, forms, and exemplars to guide coaches in providing consistent, high-integrity BEST in CLASS coaching to teachers. Background information includes an introduction to the intervention model and information on coaching, including the role of the coach in helping teachers optimize their use of the BEST in CLASS strategies. General guidelines include the timelines and the order of events for the coaching period, how to organize and maintain coaching materials, and important reminders about working with teachers and children in school settings. Forms include BEST in CLASS Weekly Coaching Plans for each of the 14 weeks of the intervention period (blank forms and completed samples), as well as a coaching contract, contact forms, and forms for scheduling and tracking weekly coaching visits. The process for training individuals to become BEST in CLASS coaches includes reading the *Teacher* and *Coaching* manuals, receiving a 2-day training workshop (review of manuals, observation of model coaching procedures, and practice with feedback on coaching sessions), coaching assessments, and follow-up supervision until the coach meets mastery criteria.

The *BEST in CLASS Professional Development Training Presentation* is used to guide the initial professional development session provided to teachers prior to the coaching period. The materials include general procedures for conducting the training and a PowerPoint slideshow with presenter notes. The presentation is provided using both didactic and interactive learning activities, with multiple opportunities for interaction among teachers and between teachers and coaches, with an emphasis on familiarizing teachers with the BEST in CLASS strategies, building teacher excitement about the intervention, and building rapport between teachers and coaches.

PRELIMINARY FINDINGS

To examine the initial promise of the BEST in CLASS intervention model, we conducted a pilot investigation with a specific emphasis on examining teachers' implementation of the model (i.e., treatment integrity) and collateral child outcomes. We report these preliminary findings in the following sections. These data should be interpreted with caution, as they were collected in the context of a development project employing a within-subjects pretest–posttest design with small samples.

Teacher and Child Participants

A total of 10 early childhood teachers and 19 children (aged 3–5 years) served as participants in the pilot investigation. All teacher participants were female. Two teachers had a bachelor's degree and eight had master's degrees. The mean number of years of experience with preschool children was 10.1 (range, 3–34) years. Five teachers were Caucasian, 4 were African American, and 1 was Latina. All children in the project qualified for free or reduced lunch. Fourteen children were male, and 5 were female. Fourteen children (73.7%) were African American, 2 (10.5%) were Caucasian, 1 (5.3%) was Asian/Pacific Islander, and no information was available for 2 children (10.5%). All children scored as "at risk" for future development of EBDs, as indicated by the Early Screening Project (Walker, Severson, & Feil, 1995), and all scored within the normal range on the Battelle Developmental Inventory-2 Screening Test (Newborg, 2005).

Setting

The pilot investigation took place in 10 early childhood classrooms. The mean number of children per classroom was 17.0 (range, 13–18). Nine classrooms were early childhood classrooms

for high-risk children (e.g., Head Start, state-funded preschool initiative), whereas one classroom was a university-based preschool classroom serving neighborhood children from high-risk families, as well as the children of university students and employees.

Measures

Data on teachers' adherence (quantity) and competence (quality) of implementation of the BEST in CLASS intervention model were collected using a researcher-developed treatment integrity measure. The treatment integrity measures were administered through direct observation 288 times across the implementation of the intervention (i.e., baseline, module completion, posttest, and maintenance).

Collateral child outcome data were collected using several standardized measures. To examine changes in problem behaviors, social skills, and interactions between the teachers and children, the Caregiver–Teacher Report Form (C-TRF; Achenbach & Rescorla, 2000), the Social Skills Rating Scale (SSRS; Gresham & Elliot, 1990) and the Student–Teacher Relationship Scale–Short Form (STRS-SF; Pianta, 1992; Pianta & Hamre, 2001) were administered to child participants in a pretest–posttest design (i.e., prior to the beginning of the intervention and following intervention completion). In the following section, we will first report data on the teachers' implementation (i.e., treatment integrity), followed by preliminary child outcomes.

Teachers' Implementation of BEST in CLASS Model

To examine the teachers' ability to implement the BEST in CLASS model with integrity, we collected data on both teachers' adherence and competence of delivery. The treatment integrity measures included 12 items representing the instructional strategies that comprise the BEST in CLASS model, rated on a 7-point scale on two dimensions—adherence (how closely an intervention is delivered according to its specified procedures) and competence (the level of skill and responsiveness with which an intervention is delivered). Our preliminary results indicate that the adherence with which teachers delivered the intervention components increased across time, corresponding with the specific components on which they were receiving individualized coaching. Specifically, adherence ratings increased from pretest to posttest for all items, with significant mean increases ($p < .05$) for seven of the 12 items on the measure. The competence with which teachers delivered the intervention components also increased across time, corresponding with the specific components on which they were receiving coaching. Competence ratings increased from pretest to posttest for 11 of the 12 items, with significant mean increases ($p < .05$) for four of the 12 items on the measure.

Preliminary Child Outcomes

To examine preliminary child outcomes, we employed several standardized measures, including the C-TRF (Achenbach & Rescorla, 2000), the SSRS (Gresham & Elliot, 1990), and the STRS-SF (Pianta, 1992; Pianta & Hamre, 2001). Inter-rater reliability is .60 (Achenbach & Rescorla, 2000) for the C-TRF and ranges from .82 to .95 for the SSRS. The STRS-SF has demonstrated adequate internal consistency for Closeness ($\alpha = .72$) and Conflict ($\alpha = .82$) with a Greek sample of kindergarten children (Tsigilis & Gregoriadis, 2008), although to our knowledge, psychometrics for this measure are not available for children similar to those in our study. All measures were administered at the start of the intervention and again after intervention completion.

Problem Behaviors

The C-TRF (Achenbach & Rescorla, 2000) was used to examine child outcomes in the area of problem behaviors, including externalizing and internalizing behaviors. Significant decreases were

found for Externalizing Problems ($p = .000$; $d = -1.03$), Internalizing Problems ($p = .01$; $d = -0.59$), and Total Problems ($p = .001$; $d = -0.95$).

Social Competence

The SSRS (Gresham & Elliot, 1990) was employed to examine child outcomes in the area of social competence. A significant decrease was found for Problem Behaviors ($p = .000$; $d = -1.00$), whereas a significant increase was found for Social Skills ($p = .001$; $d = 0.95$).

Student–Teacher Relationships

The STRS-SF (Pianta, 1992; Pianta & Hamre, 2001) was administered to examine changes in teacher–child relationships. Our preliminary data indicated that teacher–child relationships improved from pretest to posttest. Specifically, a significant increase was found for Closeness ($p = .002$, $d = 0.99$), whereas a significant decrease was found for Conflict ($p = .004$; $d = -0.63$).

In summary, these preliminary data suggest that teachers can implement the BEST in CLASS model with high levels of integrity and that it has promise for improving interactions between teachers and young children with problem behavior, as well as for promoting the positive developmental outcomes of these young children.

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH DIRECTIONS

As described in this article, the BEST in CLASS intervention model was designed to provide professional development to early childhood teachers to become competent at implementing effective instructional practices in their classrooms. One critical aspect, particularly related to school psychologists, is the performance-based coaching component. Historically, school psychologists have provided consultation to teachers in the area of behavior management strategies. With the changing role of school psychologists and the increase in the number of children attending early childhood programs, many who are at an elevated risk for EBDs, school psychologists are being asked to address the needs of these young children and their teachers on an increasingly frequent basis. Unfortunately, data indicate that training and consultation alone do not always result in teachers' use of effective practices (Wickstrom, Jones, LaFleur, & Witt, 1998), especially with integrity (Lane, Bocian, MacMillan, & Gresham, 2004). Teachers' implementation of instructional and behavioral strategies within the classroom requires not only the knowledge and skills of these tactics, but also a "contextual fit" and ongoing support (e.g., coaching; Kratochwill, Elliott, & Stoiber, 2002; Zins & Erchul, 2002). The use of ongoing coaching has been demonstrated to increase teachers' high-integrity implementation of effective practices to address the social and emotional needs of young children in their classrooms (Fox, Hemmeter, Snyder, Binder, & Clarke, 2011). Building collaborative relationships (Green, Everheart, Gordon, & Getman, 2006) and the use of performance-based coaching (Noell, Witt, Gilbertson, Rainer, & Freeland, 1997), as incorporated into the BEST in CLASS model, are particularly effective in increasing teachers' sustained use of evidence-based practices. Whereas some school psychologists are well positioned to implement the coaching component of interventions such as BEST in CLASS, their other responsibilities might not allow them the time to serve in this role. Instead, school psychologists can play critical leadership roles on school teams adopting models like BEST in CLASS by providing support with various aspects of coaching and progress monitoring, as well as providing follow-up consultation after teachers have completed the intervention. As school psychologists are increasingly called on to help teachers and children in early childhood settings, the BEST in CLASS model provides a manualized process for use and demonstrates initial promise in changing teachers' use of effective practices and children's development of prosocial behaviors.

In summary, this article describes the theoretical framework and empirical basis, development process, and overall model of the BEST in CLASS intervention. The BEST in CLASS intervention was designed in response to the growing need for early childhood teachers to have the knowledge and skills to effectively work with young children who demonstrate chronic problem behaviors and are at increased risk for the development of EBDs. As indicated, the BEST in CLASS intervention provides direct instruction and ongoing coaching to early childhood teachers in the use of effective instructional strategies that increase the likelihood that children in their classrooms will display prosocial and adaptive behaviors and decrease the likelihood that they will display problem behaviors. Our preliminary data demonstrate that the BEST in CLASS intervention model holds promise for increasing teachers' skills in the implementation of these effective practices, as well as collateral changes in children's social, behavioral, and developmental skills. In essence, these data suggest that BEST in CLASS is a feasible classroom-based intervention designed for use in early childhood settings. Although promising, these findings should be viewed with caution due to the nonexperimental nature of the research to date. To address this limitation, the next step is to establish the efficacy of the BEST in CLASS intervention model using a randomized controlled trial. Over the next 4 years, efficacy data will be collected across 240 early childhood classrooms with three high-risk children in each classroom across two research sites. With more data being collected on the BEST in CLASS intervention model, our goal is provide school psychologists and other school-based personnel with an effective tool for use when working with young children who demonstrate chronic problem behaviors and their teachers in school-based early childhood settings.

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