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Serving the Needs of Young Children with Social, Emotional, and Behavioral Needs: A Commentary

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Accumulating evidence documenting the long-term benefits of preschool attendance fuels hope that improving access to high quality early childhood education (ECE) can improve the school adjustment and attainment of all children, particularly those who are most vulnerable (Yoshikawa et al., 2013). Participation in high-quality ECE is linked with a host of long-term academic and mental health benefits, including improved school adjustment and a decreased need for special education services (National Institute of Child Health and Human Development Early Child Care Research Network, 2000; Peisner-Feinberg et al., 2001). Unfortunately, many ECE programs are only mediocre in quality (Child Care Aware of America, 2013), with insufficient opportunities for professional development to help teaching staff implement evidence-based practices that effectively address children's mental health needs. This is a particularly time-sensitive concern, as an increasing proportion of American children are at-risk for school readiness delays, due to increases in the numbers of preschool children growing up in low income families (44%) in the United States (National Center for Children in Poverty, 2011). Children growing up under these conditions are particularly likely to experience heightened exposure to stress and adversity that produces delays in development of the social-emotional and self-regulation skills needed for school success (Blair & Raver, 2012).

For these reasons, the focus of this special issue is particularly important and timely. Developing and testing preschool interventions that address the social, emotional, and behavioral needs of young children who have mental health issues is a national priority. In this commentary, we highlight key issues that emerged across the four papers included in

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this special issue, including common ground and areas of distinction across the programs. We celebrate the progress made in this area over the past two decades that is reflected in these papers, and focus on critical steps in this domain for future research and practice.

Multi-faceted Approaches to Preschool Intervention

As the emphasis on early academic learning is accelerating in the U.S., so are concerns that the social-emotional and behavioral needs of preschool children are receiving inadequate support. Particularly during the past 15 years, U.S. kindergartens have become increasingly academic in focus (Bassok, Latham, & Rorem, 2016), amplifying pressures on preschool programs to emphasize school readiness in terms of proficiency around early language, literacy, and numeracy. Correspondingly less attention has focused on children's social-emotional development, behavioral adjustment, and mental health promotion.

From a developmental standpoint, the preschool years are a crucial time to support social-emotional development. Normatively, social-emotional and self-regulation skills undergo substantial growth between the ages of 3–6, promoting school readiness by increasing children's capacities to meet the social and behavioral demands of school (Denham & Burton, 2003). Developing the social–behavioral skills that support positive relationships with others and that foster active learning engagement is particularly important in preschool. Children who enter kindergarten able to get along with others, follow classroom rules and routines, pay attention, and persist at challenging tasks are more likely to enjoy school, graduate from high school, and find productive and sustained employment when compared with their peers who lack these skills (Jones, Greenberg, & Crowley, 2015). In contrast, significant behavior problems and discipline difficulties in preschool are the leading cause of preschool suspension and expulsion (Gilliam & Shahar, 2006), and children who enter kindergarten exhibiting high rates of off-task behavior show lasting achievement deficits (McClelland, Acock, & Morrison, 2006).

Given the importance of social, emotional, and behavioral development during preschool, interventions to support positive development and school adjustment may have unique developmental leverage when implemented during the preschool years (Feil, Walker, Severson, Golly, Seeley, & Small, 2009). If ECE interventions successfully reduce preschool behavior problems and enhance productive classroom engagement, they may prevent future school maladjustment and reduce risk for a negative cascade of academic and social difficulties that might otherwise occur after formal school entry (McClelland et al., 2006).

The preschool interventions described in this special issue represent four valuable approaches to promoting the social, emotional, and behavioral skills needed to support engaged learning behaviors and healthy relationships with teachers and peers. Notably, they have both common and distinctive features, illustrating variations that exist among evidence-based approaches to supporting social-emotional development in the preschool years. In the following sections, we discuss two key characteristics evident in the designs of these programs and consider implications for future research: 1) the relative emphasis on promoting social-emotional competencies versus reducing challenging behaviors, and 2) implicit versus explicit skill building approaches.

Promoting competencies vs. reducing challenging behaviors

The four interventions described in this special issue all focus on promoting teaching strategies in preschool classrooms to improve child social, emotional, and behavioral competencies and reduce challenging behavior problems and associated mental health difficulties. At the same time, they vary considerably in the relative emphasis they place on strategies designed to foster new competencies in children versus those designed to help teachers manage, redirect, and reduce children's challenging behaviors. The broadest set of teaching strategies is evident in the Pyramid Model (Hemmeter, Snyder, and Fox, this issue) which includes strategies to promote social emotional competence as well as reduce challenging behaviors across multiple tiers of intervention. The model targets the promotion of child social-emotional competence, defined broadly to include self-regulation skills (e.g., learning to regulate one's emotions, behaviors, and attention), cognitive skills (e.g., developing the language and reasoning skills needed to support flexible problem-solving), and interpersonal skills (e.g., learning how to get along with others and establish friendships). This definition is similar to others offered by developmental and educational scientists, such as the one included in the Jones and Doolittle (2017) introduction to a recent Future of Children volume devoted to social-emotional learning. These authors define the domain as "children's ability to learn about and manage their own emotions and interactions in ways that benefit themselves and others, and that help children and youth succeed in schooling, the workplace, relationships, and citizenship." The authors further noted that "to effectively manage emotions and social interactions requires a complex interplay of cognitive skills, such as attention and the ability to solve problems; beliefs about the self, such as perceptions of competence and autonomy; and social awareness, including empathy for others and the ability to resolve conflicts" (page 3). In the Pyramid Model, the teaching strategies designed to promote child competencies include teaching social skills, emotional expression, problem-solving, and friendship skills, along with supporting play and extending conversations.

The Pyramid Model also includes teaching strategies designed to reduce behavior problems, such as providing rules, routines, and clear directions, and structuring transitions. Thus, the Pyramid Model is focused primarily on promoting social-emotional competencies for all children in the classroom, with a secondary focus on individualized behavior management for children with persistent challenging behaviors. The other interventions described in this special issue focus specifically on children at high risk due to elevated rates of behavior problems. Correspondingly, they emphasize reductions in challenging behaviors as a primary intervention goal, with a secondary focus on social-emotional skill promotion. The other interventions are also more targeted than the Pyramid Model in that they operate at the secondary and tertiary level of the Pyramid Framework focusing on a subset of students in the classroom.

Closest to the approach of the Pyramid Model is the LOOK program (Learning to Objectively Observe Kids; Downer et al., this issue) which also provides teachers with a menu of intervention strategies. These include classroom management strategies, such as modifying classroom activities and transitions and increasing behavioral cues and contingencies, and also include strategies to foster relationships and strengthen social skills

(e.g., teacher-child relationship building, supporting emotion regulation, problem-solving skills, and friendship skills). BEST in CLASS (Sutherland, Conroy, McLeod, Algina, & Wu, this issue) and First Step to Success (Seeley et al., this issue) both focus primarily on enhancing behavior management in the classroom to reduce child externalizing behaviors and promote the positive behaviors needed to replace problem behaviors. Neither specifically includes social-emotional skill training in the classroom, although First Step to Success includes skill training in sessions with parents (e.g., communication, cooperation, limit-setting, friendship making; Seeley et al., this issue). In each of these programs, it is anticipated that reducing the challenging behaviors of identified target children is a critical step in promoting their capacity for positive engagement in classroom activities and social interactions.

The degree to which these programs have similar versus different effects associated with their differential emphases on social-emotional skill promotion versus challenging behavior reduction is unknown. One might anticipate the strongest impact on the primary intervention target (either social-emotional skill promotion or reduced behavior problems), with secondary impacts on the secondary target, but cross-over effects may also occur. For example, programs such as the Pyramid Model that primarily emphasize the promotion of social-emotional competencies may reduce problem behaviors as more adaptive behaviors replace problem behaviors. Similarly, interventions that primarily emphasize classroom strategies to reduce challenging behaviors such as BEST in CLASS and First Steps to Success may increase positive social skills as child problem behaviors are redirected and replaced with adaptive alternatives. In other words, these different program emphases may result in similar benefits for children. The findings reported in this special issue provide some support for this kind of cross-over influence. For example, for the sample studied here, First Step to Success promoted both significant reductions in externalizing problems and significant improvements in social functioning. The LOOK intervention promoted significant reductions in teacher-rated negative task engagement and peer disruption, along with significant improvements in peer interactions.

This is an issue that requires further study. A better understanding of the similar and differentiated patterns of benefits children derive from different intervention approaches could help refine and improve the impact of interventions designed to enhance social, emotional, and behavioral functioning. Research is needed to understand how these different interventions attain their impact, and whether the relative impact of these different intervention emphases varies as a function of child's pre-intervention characteristics or ECE context. Conceptually, optimal ECE practice would include universal, tier 1 programming designed to promote the social, emotional, and behavioral competencies of all students (e.g., the Pyramid Model) along with more intensive tier 2–3 programming for children with social, emotional, or behavioral needs (e.g., the other intervention models included in this special issue.) However, research is needed to document the validity of this conceptual model in practice. Findings from BEST in CLASS and LOOK presented in this special issue suggest that, in some cases, tier 2–3 interventions may have spillover effects for all children in the classroom as a function of the improved teaching strategies they facilitate.

Implicit versus explicit support for social-emotional learning

A second dimension on which these interventions vary has to do with the degree to which they provide implicit versus explicit support for social-emotional learning. In an implicit approach, teaching strategies focus on helping teachers create a positive classroom environment that fosters children's skill development (OPRE, 2016). It is anticipated that growth in social-emotional competencies occur in the context of a classroom that provides sensitive-responsive adult-child interactions, prosocial peer play opportunities, and multiple positive behavioral supports. In contrast, an explicit approach to social-emotional learning involves the provision of organized lessons that include instruction in skill concepts (often using stories or puppet role plays), structured practice opportunities to practice specific skills (often using role plays or structured games or activities), and performance feedback.

Conceptually, implicit supports for social-emotional development may be most important during the preschool years. During these early childhood years, children rely on the guidance and external supports provided by teachers and parents to regulate their emotions and behaviors (Bear, 2010; Bernier, Carlson, & Whipple, 2010). Children model the social and emotional coping strategies used by adults around them and gradually (over time) internalize the external regulatory supports provided by these adults to internally regulate themselves (Harter & Bukowski, 2012).

At the same time, there are also developmental reasons to anticipate stronger intervention effects when explicit social-emotional skill training strategies are combined with implicit external supports. The preschool years represent a period of rapid development in areas such as mental representation, language, and planning skills which create new opportunities for children to gather and organize information about their own and others' emotions, intentions, social roles, and social expectations. These developing social-cognitive and executive function skills enhance their ability to learn social-emotional skills from instruction, models, and feedback, as well as from behavioral supports (see also Bierman & Torres, 2016; Harter & Bukowski, 2012). Emerging language and executive function skills allow children to increasingly use their knowledge about what they should do (e.g., "use your words") to control and guide their behavior (e.g., inhibit aggression, focus attention) (Greenberg, 2006).

The intervention programs described in this special issue focus primarily on implicit approaches to supporting the development of child social-emotional and behavioral competencies, although there is some attention to explicit skill building in the menus of the Pyramid Model and LOOK interventions. Although not a focus of the four programs described in this issue, several formal social-emotional learning curricula have been developed for preschool classrooms, representing an explicit approach to social-emotional skill promotion. These programs focus on promoting child social, emotional and self-regulation skills through short lessons in which teachers present skill concepts with stories, pictures, and puppets, and help children practice skills in planned activities. Teachers are also taught generalization strategies such as emotion coaching and the use of problem-solving dialogue, designed to support student skill acquisition and performance in their everyday classroom interactions (for reviews see Bierman & Motamedi, 2015; McClelland et al., 2017). Relative to the interventions featured in this special issue, curriculum-based

social-emotional learning programs often emphasize the emotional and cognitive foundations of social-emotional learning. For example, the Emotions-Based Prevention Program (EPB; Izard et al., 2008) focuses on teaching children to recognize different emotional expressions and to understand the contexts and events that elicit different emotions. Findings from an initial randomized trial of the program supported the hypothesis that this kind of affective education would improve emotion knowledge and emotion regulation, thereby reducing aggression and increasing children's social competence (Izard et al., 2008). Similarly, comprehensive social-emotional learning programs, such as the Preschool PATHS Curriculum (Domitrovich, Cortes, & Greenberg, 2007) include classroom lessons design to teach the social-cognitive skills thought to underlie effective self-control, emotion regulation, and social problem-solving. Teachers also receive training in strategies to cue and reinforce the behavioral display of these skills throughout the day. Preschool PATHS has been evaluated in five randomized trials, producing gains in child emotion knowledge, social problem-solving skills, social competence, and learning engagement, as well as reductions in teacher-rated aggression (Bierman et al., 2008; Domitrovich et al., 2007; Fishbein, Domitrovich, Williams, Gitukui, Shapiro, & Greenberg, 2016; Hamre, Pianta, Mashburn, & Downer, 2012; Morris, Mattera, Castells, Bangser, Bierman, & Raver, 2014). Other comprehensive SEL preschool programs that similarly use classroom lessons to build children's emotional competence and social-cognitive skills, along with activities to practice have also shown benefits in rigorous trials, including Al's Pals (Lynch, Geller, & Schmidt, 2004), Second Step Early Learning Program (Upshur, Heyman, & Wenz-Gross, 2017), and the *Dinosaur School Social Skills and Problem Solving Program* (Webster-Stratton, Reid, & Stoolmiller, 2008).

Additional research is needed to better understand the similarities and differences in the impact of implicit versus explicit approaches to boosting social, emotional, and behavioral competencies. Rarely are these two approaches included in the same study to provide an opportunity for comparison. In one exception, the Head Start Cares study (Morris et al., 2014) included a program focused primarily on the provisions of implicit supports via positive teacher management training (the Incredible Years teacher training program) and an explicit social-emotional curriculum (Preschool PATHS). Although the effects of these two programs were not compared directly, both had similar effects relative to a "usual practice" control group, improving children's emotion knowledge, social problem-solving skills, and social behaviors. Additional research is needed to determine the degree to which programs using implicit vs. explicit intervention strategies have similar or different effects, and whether there is any advantage to combining these two intervention strategies to optimize child benefits.

Variations in Intervention Support: Coaching Versus Consultation

As research on the effectiveness of evidence-based interventions in early childhood education settings is expanding, so is evidence regarding the importance of implementation for achieving effects when these programs are disseminated and replicated in community settings (Durlak & Dupree, 2008). Individual and organizational factors influence the delivery of interventions and the level of fidelity achieved (Domitrovich et al., 2009). In early childhood settings, it is particularly important to consider the readiness of teachers as

implementers and the readiness of the program to support staff as they conduct interventions (Wanless & Domitrovich, 2015). Relative to teachers in the K-12 grades, ECE teachers are less likely to have college degrees or specialized training; many do not have even a two-year child development associate degree (Zaslow et al., 2010). In addition, although Head Start and public pre-kindergartens often provide their teaching staff with regular professional development supports, including in-service presentations and supervision, these kinds of supports are often unavailable in other ECE settings. Yet, as reflected in the four interventions featured in this special issue, the teacher's understanding of and capacity to implement the targeted teaching strategies is central to program impact. For this reason, the professional development supports used to foster high-quality intervention delivery in ECE settings are particularly critical for program success.

Each of the interventions in this special issue include intensive professional development supports for preschool teachers – both group workshops and individual work with teachers. However, the programs vary in how they conceptualize and organize the structure of the individualized professional development supports, representing models of coaching versus consultation to varying degrees. The First Steps to Success and BEST in CLASS models each emphasize coaching, focusing individualized sessions with teachers around a specific set of teaching strategies that are the same for all teachers. In contrast, the Pyramid Model and LOOK intervention both tailor the coaching process to a sub-set of strategies customized for each individual teacher, using a consultation process with embedded coaching activities.

There are some important differences in the underlying theories and aims of coaching versus consultation, but there are also areas of overlap and commonality (Knight, 2009; Perry, Allen, Brennan, & Bradley, J, 2010). Coaching and consultation models share the assumption that teachers are the primary agent of change in the intervention, and the quality of teacher implementation of intervention-based teaching strategies is the key mechanism of action that drives child outcomes. As a result, if the quality of the classroom environment and teacher-student interactions are improved then children's social, emotional and behavioral skills will improve as well. Coaching and consultation models also assume that traditional workshop and lecture formats are not sufficient to attain high-quality teacher practices and sustain them over time. Rather, both models utilize repeated discussion between teachers and another professional over a period of time to support change in teacher practices. Lastly, rather than relying on teacher's report of classroom activities, both models assume that observation of classroom practices and feedback from an outside professional is a source of valuable information and a critical element in the change process.

There are also important characteristics that distinguish coaching from consultation models. As reflected in the First Steps to Success (Seeley et al., this issue) and BEST in CLASS (Sutherland et al., this issue) interventions, coaching models use a prescribed curriculum of practice with elements presented in a particular sequence for teachers and coaches to follow. The coach's role is to train (e.g., explain, model, practice with, and provide feedback to) teachers on the key instructional practices of the curriculum and help them apply these practices effectively in their classrooms. Training and performance feedback occur through discussion and regular meetings between the teacher and a professional; coaching is

concluded when the training sequence is complete or when teachers can successfully implement the curriculum without additional support. Conversely, the LOOK (Downer et al., this issue) and Pyramid Model (Hemmeter et al., this issue) interventions include consultation processes and feature a menu of teaching strategies. Initial performance data on the teacher and classroom, along with consultant-teacher discussion is used to identify areas for coaching focus. Strategies selected from the menu as targets for coaching represent areas of weakness in a particular teacher's initial performance (as in the Pyramid Model) or areas of particular need for identified children (as in the LOOK intervention.) In the consultation process, there is an emphasis on building a strong, positive working relationship between the professional development provider and the teacher, in order to facilitate the kind of open communication needed for accurate self-reflection and personal insight, collaborative goal-setting, and progress monitoring.

Coaching is embedded in the consultation process to various degrees in these two programs. Following the identification of target skills that are tailored to meet the needs of individual teachers and corresponding collaborative goal-setting, the Pyramid Model uses coaching methods (e.g., instructions, modeling, observation, performance feedback) to help teachers strengthen skill performance in classroom settings (Snyder, Hemmeter, & Fox, 2015). The LOOK model also includes coaching elements (e.g., online learning modules, observations, and performance feedback) to build teacher skills, but places a heightened emphasis on improving teacher self-reflection and insight, hoping to increase positive attitudes toward children with challenging behaviors and feelings of self-efficacy. In both of these programs, consultation is provided through a cyclical process of assessment and evaluation of practices, action planning and coaching to improve areas of weakness or needs, and reevaluation to determine next steps.

By tailoring coaching foci, the consultation model seeks to be efficient rather than comprehensive, recognizing existing teacher strengths and providing just the amount of help needed to address a particular teacher's needs. Some consultation models, such as the Georgetown model of early childhood mental health consultation (Hunter, Davis, Perry, & Jones, 2016), also focus on teacher well-being and mental health by providing emotional support to teachers. This includes discussing emotional frustrations that can emerge in certain teacher-student interactions, co-teacher interactions and/or classroom events, and the impact on the teacher's behavior in the classroom the classroom environment. While this type of teacher focus may at times be a part of coaching conversations, it is not always an explicit element or considered as integral to the model as it is in some consultation models (Hunter et al., 2016).

Coaching and consultation are not mutually exclusive models of professional development, and interventions may be characterized by the degree to which they emphasize consultation processes (relationship-building, performance data collection and evaluation, performance feedback and target strategy selection) versus coaching (training and practice of specific teaching strategies; see also Downer et al., this issue). While both coaching and consultation models have promising findings, future research is needed to refine the different components that distinguish the two models and to identify which particular components are most needed and most effective in various contexts.

Promising New Directions

Each of the intervention studies in this special issue featured novel elements that represent particularly promising strategies for moving forward the development of effective ECE programming and therefore warrant further expansion and evaluation. These include: 1) involving parents in ECE interventions, 2) testing mechanisms of intervention action, and 3) scaling for broad diffusion and flexible implementation.

Involving parents

Of the four interventions included in the special issue, two (Pyramid Model and First Steps to Success) include parents. In the Pyramid Model, parent-focused strategies emphasize communication and family engagement. First Steps to Success includes a more extensive and explicit set of coaching sessions for parents focused on empowering parents to more effectively support the social-emotional and behavioral development of their children at home. In general, research is needed to identify effective strategies for involving parents in ECE interventions and understanding the effects of different kinds of parent involvement.

Developmentally, there are good reasons to expect improved outcomes if ECE programs effectively involve parents as partners. Parents influence child social-emotional and behavioral development extensively during early childhood, and parent training is a well-established evidence-based intervention for children with challenging behaviors (Bornstein, 2002; Morris, Robinson, Hays-Grudo, Claussen, Hartwig, & Treat, 2017). In addition to the studies included in this special issue, several other studies have documented positive benefits for ECE-based interventions that involve parents in systematic and intensive ways. For example, rigorous randomized trials have shown that behavior management training with parents and teachers reduces challenging behaviors in preschool (Webster-Stratton, Reid, & Hammond, 2001) and providing parent discussion groups along with teacher-focused professional development supports promotes child mental health and academic performance in prekindergarten and after the transition into elementary school (Brotman et al., 2016). Similarly, fostering positive parent-teacher collaboration (Sheridan, Marvin, Knoche, & Edwards, 2008) and promoting parent support for learning during home visits promote children’s social adjustment and later academic performance (Bierman, Heinrichs, Welsh, Nix, & Gest, 2017).

However, effectively engaging parents is a challenge. The First Steps to Success paper (this issue) noted that it was difficult to recruit and maintain parent engagement, and the parent component of the intervention was more difficult to implement with fidelity than the classroom program. In general, the parent-focused studies described here recruit only 30% to 50% of the eligible preschool parent sample. Together, these findings suggest considerable potential for improving program impact by involving parents, but in addition, they document the need for additional research to explore strategies that might foster greater parent engagement in these kinds of ECE-based interventions.

Testing mechanisms of intervention action

Evidence-based interventions are guided by logic models that articulate the theory of change supporting the intervention and that describe how the intervention is expected to produce beneficial child outcomes. As illustrated by the BEST in CLASS study included in this special issue, this logic model can be tested by including measures designed to evaluate the hypothesized mechanisms of change. Specifically, BEST in CLASS included a measure assessing the quantity and quality of teacher use of the targeted teaching strategies. This allowed them to document the positive impact of their professional development supports, by demonstrating associations with increases in these teacher behaviors. In addition, they evaluated the degree to which increases in these teacher behaviors mediated intervention-related reductions in child problem behaviors, thereby evaluating the logic model underlying BEST in CLASS. Interestingly, only quality of teacher strategy use and not quantity of strategy use (assessed as adherence) mediated intervention effects on reduced externalizing behaviors; neither mediated intervention effects on reduced problem behaviors measured more broadly. Although these findings validated the logic model for BEST in CLASS in terms of child externalizing problems, they suggest the intervention is working in alternative, unmeasured ways to support broader behavioral improvements in children.

Research that carefully assesses the logic model of ECE interventions and tests their mechanisms of action is critical to inform and refine intervention design (see also Griffin, 2010). A better understanding of how best to promote changes in teacher attitudes and behaviors will improve the efficiency and impact of interventions; testing the hypothesized links between improved teaching strategies and child outcomes will help identify the critical intervention elements and characteristics of implementation needed to promote optimal benefits for children. Particularly given current pressures to emphasize academic school readiness in preschool programming, studies that identify the most efficient strategies for boosting child social-emotional development and behavioral adjustment are needed. Research suggests that the amount of high-quality intervention that children receive as well as the amount of professional development support teachers are given are two important factors predicting child benefits (Zhai et al., 2010). More knowledge regarding the critical features promoting optimal outcomes for teachers and children alike could guide program developers in improving intervention design.

Scaling for broad diffusion and flexible implementation

ECE settings are varied and often decentralized. An important next step is to organize intervention and professional development materials in a way that can scale up programs for use in the wide range of ECE center-based programs that exist, and that can support preschool teachers and child-care providers who have low levels of formal education and training. The papers in this special issue feature several novel strategies designed to support the broad diffusion of evidence-based practices with high implementation fidelity.

One important element for successfully scaling up the implementation of social-emotional programming in ECE settings involves measures that assess progress and program fidelity. In addition to measures designed to assess the fidelity of specific interventions (such as the BEST in CLASS) measures, two additional measures included in this special issue target

classroom interactions more broadly, in order to evaluate the effects of coaching and consultation programs: the Teaching Pyramid Observation Tool (TPOT; Hemmeter et al., this issue) and the Individualized Classroom Assessment Scoring System (InCLASS; Downer, Booren, Lima, Luckner, & Pianta, 2010) used in the LOOK program study (Downer et al., this issue). In addition, the Preschool Mental Health Climate Scale (PMHCS; Gilliam, 2008) has been used in many early childhood mental health consultation evaluations to evaluate classroom climate indicators that are often the focus of classroom consultation. These are all good examples of the kinds of tools that are needed to aid in the broad diffusion of ECE interventions. However, each of these measures vary in their focus (e.g., TPOT and PMHCS are whole classroom measures whereas InCLASS assesses individual teacher-child interactions), amount of training required and difficulty of obtaining reliability. In addition, each of these measures focuses on global constructs that are the focus of change in coaching and consultation programming (e.g. transitions, rules and routines and teacher-student interactions), but they may not be as sensitive to change in the short-term while consultation and coaching is ongoing. The capacity to test intervention mechanisms of change and to use these measures as progress monitoring tools to improve the quality of intervention implementation may be enhanced by combining more global measures of classroom process with measurement of more proximal indicators of teacher behavior change (e.g. use of reinforcement, effective nonverbal prompts, effective planned ignoring) (Mathis & Hartz, unpublished manuscript). Additional research is needed in this important area.

Intervention scaffolding and the use of technology

Another intervention element that affects the scalability of ECE interventions has to do with the intervention delivery system. Three of the interventions described in this special issue deliver interventions in person, with varying levels of professional development support. For example, in First Steps to Success (Seeley et al., this issue), coaches introduce and implement the classroom program for a period of time before turning over program implementation to the teacher. In BEST in CLASS (Sutherland et al., this issue) and the Pyramid Model (Hemmeter et al., this issue), coaches observe classroom practices and provide in-person feedback and coaching. In contrast, all aspects of the professional development support provided in the LOOK intervention (Downer et al., this issue) are conducted on-line including the initial training, video review of classrooms, consultation meetings, and modeling of targeted practices (via videos.) Clearly, delivering interventions on-line has the potential to be a cost saving and efficient way to support classroom teachers, with considerable potential for wide diffusion. However, research that evaluates the effectiveness of different aspects of on-line professional development is needed, particularly research that compares in-person with on-line coaching and consultation to determine relative effectiveness in engaging teachers and promoting knowledge and skill acquisition.

Summary

Currently, 69% of American four- and five-year-olds are enrolled in some kind of center-based early childhood education (ECE) program (U.S. Department of Education, 2012), and 43 of the 50 United States offer state-funded prekindergarten programs (NAEYC, 2016).

This creates an important opportunity for the early promotion of social, emotional, and behavioral competencies and early intervention to remediate behavior problems and address emerging mental health concerns. Importantly, high-quality ECE has the potential to build early social, emotional, and behavioral competencies associated with positive mental health and future school adjustment, thereby deflecting vulnerable children from early trajectories of risk (Yoshikawa et al., 2013). During the past 15 years important new research has demonstrated the power of preschool interventions to promote the development of social, emotional, and behavioral competencies in early childhood, and to reduce challenging behaviors that indicate early risk. This special issue highlighted four of these evidence-based programs. The fact that these multiple tier 1 and tier 2–3 programs are showing positive effects on children's social-emotional development and behavioral control is cause for celebration.

In addition, the studies included in this special issue illuminate a number of important issues for future study. These include tackling the critical issue of how best to support the broad diffusion and high-quality implementation of existing programs to support child social-emotional development and mental health, as well as additional research that can enlighten the mechanisms of action of these various approaches to intervention, and address questions about what works best for whom under what conditions. Such research promises to inform ongoing preschool intervention design and implementation, optimizing benefits for teachers, children, families, and schools.

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