

Developing Emotional Competence in Preschoolers: A Review of Regulation Research and Recommendations for Practice

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Regulation has been implicated in the development of emotional and behavioral disorders in childhood. Indeed, emotion dysregulation is one of the most common reasons families seek psychological services and behavioral supports. Interventions to support children with regulatory difficulties may be enhanced if they are informed by basic psychological research on the topic. This paper includes a review of basic regulation research conducted over the last 20 years. This research base about the positive development of regulatory skills is then related to the treatment of emotion regulation deficits, emphasizing the role that school psychologists and school-based interventions may play in supporting appropriate regulatory strategies for young children.

Keywords: emotion regulation, early childhood development, emotional competence, emotional development, emotional control, emotion

One of the most common reasons for seeking childhood psychological services is difficulty with emotion regulation (Linscott & DiGiuseppe, 1994). Katz and Gottman (1995) define emotion regulation as “children’s ability to deal with having a strong negative or positive emotion and organize themselves in the service of an externally imposed goal” (p. 84). That is, the practice of recognizing emotions and developing the skills needed to manage reactions to them. Although emotion regulation deficits are not considered a disorder in their own right, they often are associated with a host of disorders across early ages. When children receive treatment for emotion regulation deficits, it typically is provided within the context of treatment for behavioral disorders (e.g., Oppositional Defiant Disorder, Conduct Disorder), mood disorders (e.g., Major Depressive Disorder), anxiety disorders (e.g., Separation Anxiety Disorder, Generalized Anxiety Disorder), or other disorders of childhood.

Over the last 20 years, basic research on the topic of emotion regulation has increased significantly (Eisenberg, 2002). Despite an overall increase in the amount of research available from various fields of psychology (e.g., clinical, social), there currently is a paucity of applied literature that draws on this basic research base to inform treatment and intervention development for children with emotion regulation issues. Thus, a review of basic research may help provide useful information for school psychologists responsible for developing appropriate interventions to support children with disorders related to emotion dysregulation (Eisenberg, Fabes, Guthrie et al., 1996).

According to Thompson (1994), “Emotion regulation consists of the extrinsic and intrinsic processes

responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish their goals” (pp. 27-28). A host of psychological systems are thought to be regulated, and a subset of these are assumed to become self-regulating as part of normal development. These systems include control of emotions, reactions to failure and disappointment, and most forms of moral and achievement activities. Indeed, when certain systems fail to demonstrate self-regulation, psychologists often assume that normal development has been disrupted. As such, studying function as well as dysfunction in emotion regulation informs the clinical practice of school psychology. That is, interventionists may benefit from a better understanding of how systems work when they are functioning well, by examining the basic research literature, and when they are disrupted, by examining the applied literature. Here, the developmental literature for both regulation and dysregulation of emotion is reviewed and the implications for both assessment and intervention with preschool children are discussed.

The Development of Emotion Regulation

A review of the empirical studies of regulation from infancy through preschool produces considerable material on which to base assessment and intervention practices for preschool children. Basic research on regulation has identified a number of factors that influence the development of these processes at different ages, particularly biobehavioral processes, individual differences in temperament, and interpersonal processes (i.e., modulation of emotion in one person through the activity of another; see Tobin & Graziano, 2006, for a detailed review). Each of these areas are reviewed briefly to provide school psychologists with foundational knowledge related to the development of emotion regulation in children, as well as to provide opportunities to address problems in emotion regulation as it relates to preschool education.

During infancy, regulation focuses on biobehavioral processes such as biological rhythmicity, security, and synchronicity with a caregiver. In particular, vagal tone, a physiological measure of the inhibitory influence of the parasympathetic branch of the autonomic nervous system on the heart (responsible for slowing the heart rate and decreasing blood pressure), has been consistently linked to regulatory processes through its role in soothing and restoring calmness in the body (Katz & Gottman, 1995). For example, Calkins, Smith, Gill, and Johnson (1998) reported that negative control behavior by mothers (e.g., negative control: scolding, anger expressions, derogatory remarks, threats, no's; physical control: restricting child's movement, pulling, pushing, picking child up, hand slapping; and verbal control: directing the child's activity, telling the child what to do) was related to poor child physiological regulation (as measured by vagal tone), less adaptive emotional regulation, and noncompliant behavior. It appears that these early infant-mother dyad influences not only shape children's developing characteristic physiological response style (Bornstein & Suess, 2000), but also may result in the child's difficulty to respond appropriately to a variety of emotion-eliciting stimuli. Lower baseline vagal tone in infants and toddlers is predictive of later difficulties in social interactions that require reciprocal engagement (Porges, Doussard-Roosevelt, Portales, & Greenspan, 1996) and the development of anxious and depressed symptoms in preschool and early elementary years (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996). Consistent with these findings, Calkins (1997) found that toddlers who had ongoing suppressions in vagal tone during emotionally evocative situations (i.e., the ability to regulate physiological function to meet external demands, referred to as the vagal brake) engaged in more behavioral regulation during emotion-eliciting tasks.

Regulatory differences can also be measured at the hormonal level. The stress response typically involves a cascade of hormones produced by the adrenal cortex. The presence of elevated levels of these

hormones in the blood (including and especially, cortisol) is usually interpreted as the result of stress. In a study linking basic biological processes to emotion regulation, Gunnar, Mangelsdorf, Larson, and Hertzgaard (1990) found that infants who displayed more distress than their peers during laboratory tests showed greater adrenocortical activity. Similarly, Spangler, Schieche, Ilg, Maier, and Ackermann (1994) found that elevated blood cortisol was more frequently observed among children of highly insensitive mothers, suggesting a role for maternal behavior in infant behavioral regulation. Evidence from human and animal studies clearly shows that in stressful situations, the presence of familiar others, especially if there is close physical contact, reduces the levels of stress hormones in infants.

Related to basic biological factors, the development of self-regulatory processes is largely influenced by individual differences in temperament. Stifter and Braungart (1995) suggested a connection to both individual differences in temperament (self-soothing during decreasing negative arousal) and interaction with caregivers (communicative behavior during increasing distress). Additionally, Goldsmith, Buss, and Lemery (1997) found that toddler and preschool displays of positive emotion share significant environmental influence, whereas emotion regulation was related to both environmental and genetic influence. Blackford and Walden (1998) found that temperament is more closely related to regulation and responsiveness to differences in communication from a parent. "Effortful control," the ability to ignore a dominant response in favor of a subdominant response (Rothbart & Bates, 1998), has also been linked to young children's emotion. Researchers found that effortful control in preschoolers is related to regulation of negative affect (Kochanska & Knaack, 2003; Kochanska, Murray, & Harlan, 2000), as well as positive affect (Kieras, Tobin, Graziano, & Rothbart, 2005).

The importance of the relationship with a caregiver in developing emotion regulation skills is also evident as early as infancy. Walden and Baxter (1989) found that older infants demonstrated regulation through social referencing of a parent. Yet another study found that securely attached infants demonstrated greater parent-oriented regulation relative to infants who were less securely attached to one or both parents (Diener, Mengelsdorf, McHale, & Frosch, 2002). Based on a sample of 223 children, Vondra, Shaw, Swearingen, Cohen, and Owens (2001) concluded that attachment classification, though not always stable between infancy and preschool, provides the most valuable information about child functioning.

The influence of both temperament and relationship with caregivers continues to be important as predictors of functioning throughout early childhood. Feldman, Greenbaum, Yirmiya, and Mayes (1996) found that patterns of synchrony between mothers and infants predicted verbal and general IQ at age two. In addition, research demonstrated that preschoolers high in the temperamental dimension of effortful control were unlikely to experience high levels of negative emotional arousal in response to peer interactions (Fabes et al., 1999). Moreover, when interactions were of elevated intensity, highly regulated preschoolers were likely to show socially competent responses. Rubin, Coplan, Fox, and Calkins (1995) reported similar links between temperament and peer relations.

Recent research suggests that biobehavioral processes associated with cardiovascular function may relate to basic regulatory processes and contribute to the development of subsequent regulatory processes in other domains. It is unclear whether poor vagal suppression is simply a marker of regulatory dysfunction or dysfunctions in the vagal response system cause emotional dysregulation. Basic biological results also suggest that parent-child relationships play an important role in the development of young children's physiological systems and may provide an additional target of assessment and intervention modalities. Adding more complexity, the presence of strong biological precursors of regulation does not exclude social and interpersonal influences. Even in infancy, individual differences in temperament and interper-

sonal relations, especially with caregivers, can influence developing regulatory systems. Thus, it is vital that school psychologists are aware of the bidirectional effects among interpersonal processes, temperament, and basic biological functioning within a developing system. As an interventionist, it is helpful to highlight the important role that adult-child relationships play in the healthy development of biological and temperamental systems.

Taken together, these results suggest that regulation is not a single process or set of processes. Further, basic researchers provide knowledge to inform clinical practice that is within the bounds of current treatment methods. That is, school psychologists have the assessment tools and interventions available to address both within-child and interpersonal processes of emotion regulation. These findings suggest a need for greater communication between the scientific community and practitioners so that the specific findings of basic research may be used to full advantage in treatment.

Measuring Regulation

Basic psychological research has provided multiple methods of measuring regulation in preschool children. These methods vary considerably in their feasibility for practicing school psychologists. For example, physiological measures are frequently used as indicators of regulation in early childhood; however, most school psychologists do not have the time, financial resources, or training to assess children's vagal tone, blood chemistry, or electroencephalography (EEG) activity. Fortunately, regulation researchers have developed several other methods to assess regulation processes in early childhood. Of course, no single assessment measure or method is all-encompassing, and it is generally better practice to orient assessment to referral concerns, but these methods are likely to provide valuable information for practicing school psychologists. Table 1 provides examples of regulation measures for preschool aged children. Although this list is not comprehensive, it provides several research-based options for use by school psychologists.

One common assessment method that is used frequently by school psychologists is rating scales completed by knowledgeable adult informants such as parents and teachers. When determining which ratings scales to use, however, most school psychologists tend to rely heavily on established clinical measures such as the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2004) and the Behavior Assessment System for Children (BASC-2; Reynolds & Kamphaus, 2004) without much consideration of the valuable measures available from basic developmental research. Several such measures exist to assess regulation within a preschool population. For example, Rothbart and colleagues (Putnam & Rothbart, 2007; Rothbart, Ahadi, Hershey, & Fisher, 2001) have generated several temperamental measures of regulation in preschoolers including an Effortful Control factor on the Children's Behavior Questionnaire. Their extensive research has generated instruments that parents use to rate a child's behavior over the last 6 months using 7-point Likert-type scales.

Building on Rothbart's work, Eisenberg and Fabes (1995) adapted one of the Rothbart measures to study social competence, regulation, and emotionality. These researchers also developed vignettes to assess children's emotion regulation based on parents' reported expectations for their children's behavior. Similarly, Block and Block (1980) generated yet another parent-report measure of regulation by assessing Ego Control and Ego Resiliency using a Q-sort method.

Emotion regulation in preschoolers has also been measured using observational or behavioral methods. One of the earliest and best known measures of regulation is delay of gratification tasks (Mischel & Baker, 1995; Mischel & Ebbesen, 1970). During these tasks, children's ability to wait for a

TABLE 1. *Selected List of Research-Based Regulation Measures*

Measure	Approx. Administration Time	Relevant References
Questionnaire Methods		
Emotion Regulation subscale of the CBCL 1 1/2 – 5	10-20 minutes	Achenbach & Rescorla (2004)
Emotional Self-Control Content Scale of the BASC-2	10-20 minutes	Reynolds & Kamphaus (2004)
Children's Behavior Questionnaire Standard form (195 items) Short form (94 items) Very short form (36 items)	60 minutes 30-40 minutes 10-15 minutes	Rothbart et al. (2001) Putnam & Rothbart (2007)
Observation Methods		
Delay of Gratification	15 minutes	Mischel & Baker (1995); Mischel & Ebbesen (1970)
Effortful Control Behavioral Tasks	1-3 minutes each; 30-40 minutes for total battery	Kochanska & Knaack (2003); Kochanska et al. (1997); Kochanska et al. (2000)
Lack of Control Scale		Caspi et al. (1995); Henry et al. (1999)

desirable object (e.g., candy) and their regulation methods (e.g., looking away, distraction) are recorded and coded. According to Metcalfe and Mischel (1999), the ability to shift attention from the tempting object and delay gratification is a measure of emotion regulation. Furthermore, children's ability to delay gratification in the preschool years may be related to adaptation to kindergarten (McIntyre, Blacher, & Baker, 2006). In a study examining children's social and behavioral adaptation to kindergarten, McIntyre et al. found that children's latency to touch a desired toy during a delay of gratification laboratory task at age 36 months predicted teacher reports of behavior problems and quality of student-teacher relationships at school entry when children were 5 or 6 years old.

Building on Mischel's work, Kochanska and colleagues (Kochanska, Coy, & Murray, 2001; Kochanska & Knaack, 2003; Kochanska et al., 2000; Kochanska, Murray, & Coy, 1997) developed a series of activities to assess effortful control in preschoolers. These activities involve a child performing tasks such as moving an animal at various speeds across a game board, whispering, walking a straight line slowly, and resisting the temptation of candy. Children's behaviors are recorded and coded as indicators of effortful control.

Another early observational measure of regulation was developed in 1975. Reported by Caspi, Henry, McGee, Moffitt, and Silva (1995), the Lack of Control observational measure is used to assess

regulation in preschool children. Henry, Caspi, Moffitt, Harrington, and Silva (1999) found that Lack of Control scores in preschool interacted with school attendance in predicting criminal behavior in males during adolescence. That is, school attendance served as a protective factor from later criminal activity for boys with high Lack of Control scores.

Measures generated by developmentalists are readily available and may be easily integrated into a multi-method, multi-setting, multi-informant assessment, particularly in evaluations of preschool children. Considering emotion regulation as both a target of assessment and intervention may be particularly important for school psychologists who support young children with or at-risk for behavior disorders. Evidence suggests that self-regulation, specifically effortful control, delay of gratification, and negative emotional responses, may predict externalizing and internalizing disorders (e.g., Eisenberg, Fabes, Guthrie et al., 1996). Furthermore, children who use effective strategies to modulate negative emotional and behavioral responses are more likely to develop social competence (Eisenberg, Fabes, Karbon et al., 1996). Although children's development is undoubtedly affected by genetic and environmental influences (including parenting), implementing school-based interventions that target the development of prosocial behavior, self-control, and problem solving may foster children's emotion regulation and decrease the likelihood of developing emotional or behavioral disorders.

IMPLICATIONS FOR PRACTICE

From the available research examining the relation of emotion regulation and dysregulation to children's behavioral and social developmental trajectories, it is evident that young children who do not develop regulatory control are likely to exhibit emotional and behavioral problems in both school and community settings. These difficulties may emerge as students negotiate the preschool – kindergarten transition. In a recent study, a nationally representative sample of kindergarten teachers reported that over half of their students had a difficult time adjusting to school (Rimm-Kaufman, Pianta, & Cox, 2000). Top concerns included difficulties following directions and working independently (Rimm-Kaufman et al.), both of which may be related to children's ability to self-regulate.

In light of school entry difficulties, early childhood education programs that equip young children with school readiness skills have been increasingly emphasized. As an example, the National Education Goals Panel Document *Ready Schools* states that all children should have access to high quality and developmentally appropriate preschool programs in preparation for their transition to formal schooling. The foremost goal is that “all children in America will start school ready to learn” (National Education Goals Panel, 1998, p.1).

The early childhood education and school readiness national trends include frameworks for addressing the social and emotional development of young children in home and school settings (Brooks-Gunn, Berlin, & Fuligini, 2000). Furthermore, there is increasing advocacy and empirical support for implementing preventive and early intervention services for young children with behavioral concerns and poor social-emotional competence using a Positive Behavior Support (PBS) approach (Joseph & Strain, 2003; Lynch, Geller, & Schmidt, 2004; Webster-Stratton & Reid, 2003).

Embedded within national trends and the empirical literature are important contextual factors that must be considered when developing early social-emotional interventions for young children. Critical among those factors are the development of programs based on a resiliency framework that incorporate risk reduction of antisocial behaviors (e.g., noncompliance, defiance, aggression), enhancement of protective factors, and direct teaching of affective and behavioral skills necessary for the development of positive social-emotional well-being (Joseph & Strain, 2003; Miller, Brehm, & Whitehouse, 1998).

For example, research has demonstrated that the establishment of problem-solving skills, healthy coping mechanisms, and self-discipline (to name a few) during the preschool years, along with the involvement of a caring, competent adult predicts more favorable outcomes for children (e.g., Born, Chevalier, & Humblet, 1997; Cowen, Wyman, Work, & Iker, 1995; Rutter, 1987; Werner, 1993). These findings are consistent with the basic research literature and highlight the importance of both within-child and interpersonal processes in the development of regulatory skills and biological systems.

Although parent-child relationships are often identified in the developmental literature as crucial for children's socioemotional development, the importance of early student-teacher relationships cannot be underestimated. Evidence suggests that positive student-teacher relationships in kindergarten predict academic and sociobehavioral adjustment across the elementary school years (Hamre & Pianta, 2001). In addition, a large body of research supports the use of PBS techniques for teaching and maintaining appropriate behavior in children (e.g., Eber, Sugai, Smith, & Scott, 2002; Sugai, Horner, & Gresham, 2002) that can be implemented effectively within preschool settings (e.g., Fox & Little, 2001). Closer examination of such research not only suggests that a host of environmental factors may help buffer young children from negative influences, but also emphasizes the positive role that parents and early educational environments have in the development of socially and emotionally competent children. Therefore, it is essential for social-emotional programming during preschool years to incorporate parent support/training that coincides with the establishment of positive early educational environments that utilize PBS strategies.

Parent Support/Training

According to a number of parent surveys, corporal punishment such as spanking, slapping, grabbing, and shoving is used with more than 90% of children in the United States and is most commonly used with young children (Giles-Sims, Straus, & Sugarman, 1995). Such findings are staggering when considering that early hostile or negative parent interactions are associated with increased defiance and disobedience during later development (Keenan & Shaw, 1995). Consideration of parent support, therefore, will need to incorporate instruction that targets increased caregiver sensitivity and appropriate behavior management skills.

The basic research reviewed clearly identifies caregiver-child interactions as vital to the development of children's emotion regulation. An important aspect of these interactions is parental sensitivity. It includes timely and appropriate responding to a child's efforts to interact, participating in activities and games that involve turn-taking, and interacting in ways that are equally rewarding for both parent and child. Helping parents learn how to interact may include providing opportunities to engage in play routines (playing games) or other transactions that involve turn-taking in which each partner plays a role that encourages the other in ways that are mutually reinforcing (e.g., *peek-a-boo*, *pat-a-cake*). As children grow older, the context of these interactions, and subsequent training opportunities for parents, may build upon socially mediated conflicts that children encounter. In this regard, the parent may need encouragement in helping, guiding, and reassuring the child as to the most appropriate method for resolving a particular conflict. Within these situations, it may be effective to offer parenting groups that discuss children's ongoing social-emotional problems where information is provided and problems are discussed. Essentially, parents are trained on how to react to their child. From this perspective, parent training involves a contextualized approach (i.e., parent-child interactions). Such parent training programs can be readily incorporated into early childhood education programs (e.g., McIntyre & Phaneuf, (in press) 2007) and include aspects supported by findings from the basic and applied literature.

In addition to promoting positive parent-child interactions, efforts must be taken to support parents in using discipline effectively (Webster-Stratton, 1990). A complete review of specific strategies is not within the scope of this discussion, rather a collection of themes is provided so readers can develop trainings that coincide with the particular needs of families. First, any discipline trainings should begin with a review of the developmental needs of young children at various age levels. Along with a discussion of the developmental needs of children, parents should be oriented to the differences in parenting styles. Second, trainings should incorporate discussions/activities that examine the functions (motives) behind negative behavior(s) observed in young children. Within such discussions, it may be helpful to signal how “punishing” children may serve to maintain problematic behaviors. Such programmatic approaches will begin to elucidate the difference between discipline and punishment. Third, training components should incorporate information on “how to” practice positive discipline in the home by arranging consistent consequences to increase appropriate behavior or decrease inappropriate behavior (e.g., positive reinforcement, differential reinforcement). Finally, trainings should include opportunities for troubleshooting common or specific problems that families encounter.

One example of an evidence-based parent training program that incorporates positive, preventive strategies as well as dealing with childhood challenging behavior is the *Incredible Years* program (Webster-Stratton, 1990; 2001). The Division 12 (clinical psychology) task force of the American Psychological Association deemed Webster-Stratton’s *Incredible Years* series as one of two well-established psychosocial treatments for childhood conduct problems (Brestan & Eyberg, 1998) based on effect sizes, sampling, methodology, treatment integrity, and a host of other criteria (Lonigan, Elbert, & Johnson, 1998). Webster-Stratton’s program (www.incredibleyears.com) offers a number of programs targeted at parents, teachers, and children (see Webster-Stratton, 2000, for a review).

Overall, programs that provide families with support/training with regard to sensitivity and discipline procedures have demonstrated promising outcomes (e.g., Brooks-Gunn et al., 2000; Yoshikawa, 1995) and are in line with data provided by basic emotion regulation researchers. Moreover, parents who receive support are more emotionally accommodating, less detached, and have more positive interactions with their children than control group families (Love et al., 2002). Despite evidence that parent training as a treatment approach is often effective within home settings, similar improvements at school and with peers have been less encouraging (e.g., Webster-Stratton, 1990). More recent efforts at developing social-emotional competence in young children have turned to early educational environments that utilize prevention and early intervention strategies.

Early Education Environments

Although early education environments cannot adjust the basic biological foundations of poor emotion regulation, such environments can provide more opportunities for students to learn the necessary skills for developing positive social-emotional health. For example, early education environments can be used as resources to teach young children with regulation difficulties directly how to understand their emotions, as well as adjust their reactions to various environmental stimuli. In order to support early intervention and prevention efforts, many professionals are working to establish systems of PBS within preschool settings. For example, Stormont, Lewis, and Buckner (2005) described how features of PBS could be adapted and implemented with early childhood educational environments (e.g., programs serving children age 3 years to kindergarten). In addition, Fox, Dunlap, and Cushing (2002) outlined the logical extension of PBS systems to a preschool level. Essentially, such extensions have advocated for a three-tiered model of service delivery that incorporates increasing the intensity of instruction to the level

of student need (similar to recent suggestions for the use of Response to Intervention, RtI). Embedded within each tier is a set of instructional practices or evidence-based approaches designed to improve student outcomes, as well as frequent, ongoing assessments of student skills that are collected to monitor systematic efforts.

At the universal level (Tier I), all young children should receive sufficient concentration of positive feedback from teachers and caregivers (Shores, Gunter, & Jack, 1993; Sugai et al., 2002). Therefore, the foundation of an effective early educational program is the time spent building a strong, positive relationship between educators and children, as well as with families. Investing time and attention in getting to know children parallels information presented regarding early parent-child interactions. That is, children notice responsive, caring adults and are more likely to pay attention to what a teacher says and does. Activities may include organized time to engage in frequent, positive adult-child interactions, as well as opportunities to review basic skills in a fun, interactive manner. Of critical importance at this level is classroom environment. Specifically, early educators will need to maintain a predictable schedule, minimize transitions, provide visual reminders of rules, give time and attention for appropriate behavior, use positive reinforcement to promote appropriate behavior, provide choices where appropriate, and maximize children's engagement to minimize problem behaviors (see Lawry, Danko, & Strain, 1999, for a complete review). Consistent with findings from both basic and applied research literature, the combination of positive relationships and classroom preventive practices decreases the likelihood of inappropriate behavior.

At the secondary level (Tier II), social-emotional curricula should be adopted and implemented for those children who do not respond positively to universal strategies. In fact, some children may need explicit instruction to ensure they develop competence in emotional literacy, interpersonal problem-solving, and friendship skills (Webster-Stratton & Reid, 2003). Teaching children skills such as how to play with other children, recognizing and expressing feelings, exercising self-control, and negotiating conflict situations may result in fewer displays of inappropriate behavior. Specifically, early educators may want to incorporate lessons that: (a) teach feelings directly through pairing pictures of emotional expressions with a feeling word, (b) provide practice in recognizing emotions through games (e.g., Feeling Face Bingo), and (c) engage in instruction that allows children to observe a model and then role play specific skills related to social problem-solving (e.g., making coping statements, exploring solutions to problems) and friendship making skills (e.g., sharing, turn taking, giving compliments). As is the case with all instruction, effective teaching at the second tier requires careful planning and the adoption of specified curricula. For a complete review of evidenced-based, social-emotional curricula, see Joseph and Strain (2003). Most importantly, early educators should be attentive and offer praise/reinforcement to children when they are engaged in socially competent behavior such as following directions, helping friends, and sharing.

Even when educators are responsive, implement preventive strategies, and explicitly teach skills, a few children may continue to display poor social-emotional competence and/or challenging behavior(s). At this point (tertiary level, Tier III), assessment-based interventions will need to be planned and implemented by a team of individuals in home, early education, and community settings. Most important to this level is the completion of a functional behavior assessment (FBA) that identifies factors related to the child's challenging behavior. When performed by a team of individuals, a complete FBA leads to the development of a behavior support plan that will include: (a) strategies to prevent problematic behavior(s) from occurring, (b) techniques for teaching new skills (e.g., social skills groups), and (c) changes in how family members and/or teachers respond to problematic behavior(s) (Horner, 2000). The

team then implements this comprehensive plan at home and in preschool settings and monitors changes in the problem behavior, as well as the development of important social skills or other child outcomes.

Role of School Psychologists

Given the critical contexts in the early childhood field (e.g., national focus on school readiness and early intervention services), it may be necessary for many school psychologists to extend their expertise to preschool populations. At the most simplistic level, school psychologists can offer their expertise and knowledge regarding early childhood development by consulting/collaborating with local early childcare agencies/centers. Such support to local agencies/centers could assist with planning of interventions in collaboration with pre-kindergarten and kindergarten teachers, Head Start personnel, child care providers, administrators, parents, and community members. This level of involvement would allow for greater ease in transition for preschool programs to kindergarten classrooms. At a more direct level, school psychologists can organize, develop, and implement parent training programs that focus on positive parent-child interactions, behavior management skills, and child guidance procedures, and offer such programs in conjunction with systems that are already established. Furthermore, school psychologists could be part of a school-based team that helps preschool agencies within or outside of their local school district with the incorporation of PBS principles. Because school psychologists understand the importance of designing interventions with contextual fit in mind, using prevention and early intervention approaches, and collecting data for monitoring progress, they stand at the forefront of assisting families and educators with the design, implementation, and evaluation of early care curricula and interventions.

In conclusion, basic research exploring children's regulation, including emotion displays, delay of gratification, effortful control, and adult-child interactions, may be particularly useful in developing early interventions to promote preschool students' social competence and to decrease emotional and behavioral disorders. Although early childhood populations are not often the emphasis of school psychologists' efforts, school psychologists may be in a unique position to provide both direct and indirect support to families and early childhood educators. In so doing, school psychologists may assist with the national priority of school readiness for all children.

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